



ALERTA TECNOLÓGICA



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ENERGÍA SOLAR FOTOVOLTAICA

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- **Cooling system and the internet technology based on photovoltaic module according to the control method.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109861641	China	Xuzhou College of Industrial Technology	2019-01-24

Resumen:

The present invention discloses a photovoltaic assembly cooling system for the internet-based technology, comprising a horizontal table, there is arranged a photovoltaic solar panel array above the horizontal table; photovoltaic solar panel array includes at least a 1st column parallel distribution of photovoltaic solar panel, 2nd column photovoltaic solar panels, solar panels and 4th 3rd column photovoltaic solar panel photovoltaic column; the present invention is simple in configuration, in a photovoltaic solar module in extreme weather exposure of the active cooling mechanism which is activated , effective cooling of the photovoltaic array is instantly, avoiding exposure to photovoltaic cells being damaged; 1st order to cool the robot travels straight rail, 1st bent rail, a straight rail 2nd, 3rd 2nd bend curve guides and the right rail; and the 1st menstruating straight rail, and a 3rd 2nd straight rail of the rail to engage the pump during its straight, thereby causing the cooling water tank robot in a fully away to complete the photovoltaic solar panel is enabled upon the track strips of an array of uniformly impregnated throughout the cooling water mist, forced cooling effect is achieved.

- **Photovoltaic solar panel fixed clamping device operation method.**



Publicación	País de origen	Solicitante	Fecha de prioridad
CN109830569	China	Henan Yaoye Power Engineering	2019-02-01

Resumen:

A photovoltaic solar panels are stationary clamping device operating method, a photovoltaic solar panels are stationary clamping device comprises a fixed platform, the clamping assembly, and a lift assembly emissions processing unit, a fixed platform is disposed on a 1st fixing groove, and the 1st pass to the other side of the vertical fixing slot fixed platform, fixed platform 2nd fixing grooves formed at the top, and the 2nd to the fixed platform by vertically fixing groove bottom, 2nd fixing grooves bilaterally symmetrical clamping assembly is provided with a respective one group, are arranged on a fixed platform emissions processing unit, is provided with a lifting assembly fixed platform bottom middle position; reducing the number of times of transfer, improve the work efficiency; photovoltaic solar panels to facilitate tightening is performed, the ease of manufacture, while contributing to a photovoltaic solar panel damage; facilitating the removal of waste and debris collection is performed, improvement of processing quality.

- **Photovoltaic solar panel maintenance device operating method.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109772768	China	Henan Yaoye Power Engineering	2019-02-01

Resumen:

A photovoltaic solar panel maintenance operation of the apparatus method, a photovoltaic solar panel maintenance apparatus includes a cabinet, a mounting



plate, a drive motor, a fixed bearing, a battery, the rubber sheet, a cleaning station, a fixed suction cup, a drive shaft, the cleaning assembly, a connecting arm, an upright plate, 2nd slider and a moving roller, the top side of the upright cabinet is mounted through bolts, one side of the upright plate is provided with a tether, the tether is disposed outside the cleaning assembly, the cleaning assembly includes an enclosure, a cleaner, the hose is attached, the mounting plate, a cylinder, a piston rod, the push plate, the suction tube, dust port, connecting rod, the cleaning brush and the 1st slide, the inside of the enclosure through a bolt fitted with a mounting plate, mounting plate through bolt is attached to the top of the cylinder, the photovoltaic solar panel maintenance device, simple structure, it is possible to clean the dust photovoltaic solar panels, and good cleaning effect, it is possible to effectively improve the lifetime of the photovoltaic solar panels.

- **Photovoltaic solar panel of the automatic cleaning device.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109590245	China	University Huanghuai	2019-02-18

Resumen:

The present invention relates to the field of photovoltaic solar panel technology, in particular a photovoltaic solar panel of the automatic cleaning device, comprising a fixed base, a support frame and the frame. The present invention drives the cleaning brush is moved by an electric extendable rod and a linear motor, and further allows the photovoltaic solar panel cleaning brush for cleaning the surface, and the 1st water pump, water pump and three-way solenoid valve under the action of 2nd, 1st it starts operating the water pump, allowing the chamber to a photovoltaic solar panel surface to be wetted in the water, using a cleaning brush for cleaning the surface of the photovoltaic solar panel 1st-order, 1st and then stops operating the water pump,



water pump actuation 2nd, solar panel solar panel cleaning with the cleaning agent instead of water in the chamber, using a cleaning brush for cleaning the surface of the photovoltaic solar panel 2nd-order, 2nd-water pump is stopped last, 1st pump started, using water is flushed to the photovoltaic solar panels, photovoltaic solar panel cleaning brush for cleaning the surface of the 3rd order.

- **Separate type portable power generation system.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109861364	China	Ningbo Green Light Energy	2019-01-04

Resumen:

The present invention discloses a method for segregating a portable power generating system, the field of solar energy systems involving off-net, comprising a control box, a storage battery and photovoltaic solar panels splitter, the splitter has a plurality of storage batteries of the battery interface, a battery interface is provided with a prevention module, a control box is provided with a control circuit, the control circuit includes a voltage-current sampling module, the microprocessing modules, surge power supply modules, input-output control module and the load output modules, input modules and a prevention module is electrically connected to the voltage-current sample output control module, the microprocessor module is electrically connected to power supply module and the input-output control module to the zener, the output control module is electrically connected to the input load output modules, input-output module is electrically connected to the photovoltaic solar panels, regulated power supply module is electrically connected to the voltage-current sampling module, the microprocessing modules, input-output control module



and the load output module, the present invention is suitable for use in remote or generalization and poor areas.

- **Small household power supply energy storage system based on photovoltaic combining equation.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109713780	China	Qingdao Haoshi Hi Technology High Technology	2019-01-28

Resumen:

The present invention discloses a power supply battery energy storage system based on a small household photovoltaic coupling type, comprising a housing, battery body, and a control system for photovoltaic solar panels, with the inner surface of the outer casing surface of the body is fixedly connected battery, a photovoltaic solar panel to the battery body through an output terminal electrically connected to an input of a wire harness, the housing of the battery body with a top surface and located on the front side arcing protection plate is fixedly connected with through bolts, arcing protection plate between the two sides of the inner surface of the elastic supporting block fixedly connected with an X-type, the present invention relates to an energy storage device technology field. The storage system based on a small household power supply for the photo-voltaic coupling type, an enclosure with a right angle, the apparatus can be placed at a corner, with the mounting plate, which cooperate with the socket insert, such that the housing can be fixed easily for, convenient installation, and which does not occupy too much space placed in a corner, arcing protection plate with a smooth arcing surfaces, making the device are also attractive.



- **Pressure inlet and drainage deep formula natural.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109699567	China	Zou Quanming	2019-01-04

Resumen:

The present invention discloses a deep formula natural pressure inlet and drainage, the present invention are, including terrestrial, into the drain pipe, and an apparatus for monitoring a control valve, the middle portion of the deepwell fixedly connected with the ground surface, an inner side of the drain pipe is connected with an embedded deep wells, on the other side connected with connecting rods embedded inside of the deep wells, on the other side of the top end movably connected with the drain pipe into the intake head, one side of a fixing screw extending through a fixing plate is connected, fixed plate assists in securing the drain pipe, improves the stability of the intake pipe, the telescopic rod capable of changing the height of the camera, battery box capable of storing electrical energy, electrical energy provided to the apparatus, a camera head capable of deep wells are sometimes monitored, LED lamp can provide the operator with a light source, light energy into electric energy to the photovoltaic solar panel can, from time to aid in the deep well by monitoring apparatus for monitoring, thus improving the device's intelligence, control valve helps to control ingress and egress of water, the controllability is improved drain pipe inlet, the foreground has a wide development in the future.

- **Residential neighborhoods clean energy system and its operation method.**



Publicación	País de origen	Solicitante	Fecha de prioridad
CN109861627	China	Electric Power Research Institute of State Grid Shandong Electric Power	2019-03-29

Resumen:

The present invention discloses a residential neighborhoods clean energy system and its operating method, relating to a clean energy system primarily. A solar power module including: solar photovoltaic module includes photovoltaic solar panels, solar panel connected to the photovoltaic inverters; powered modules: three phase ac circuit for an electric module; pumped storage modules: on the top of the building is positioned at the pumped storage module to a sink, the sink generator set and pumping; adjusting the camera module: adjusting the camera module is a synchronous adjusting the camera; intelligent control module. The present invention has the advantages of: a level difference which effectively utilizes residential buildings, water turbine converts electrical energy to be stored; effectively utilizing the residential building facades facing the sun, a solar photovoltaic panel is mounted, saving the area of land; draws power from the power distribution network can function with the pumped storage phasing, improves scheduling flexibility of the grid.

- **Solar moxibustion.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109846707	China	Guo Qing	2019-01-30

Resumen:



The present invention relates to a solar moxibustion, effectively solving the "fire" of the bearing life as sunlight with moxibustion and a "light with moxibustion" false or true condition problem of treatment of the human binding cake, solar condenser lens support frame is provided with a solar photovoltaic solar panel tracking means and the condenser lens, a condenser lens condensing surfaces towards the sun tracking device is provided with a solar energy condenser, photovoltaic solar panels connected to the motor, the solar energy condenser lens mounted on the radiometer, solar light-condensing surface of the condenser lens are disposed in front of the mirror support frame, the mirror support frame is provided with the solar concentrating mirror with a reflective surface to cooperate with an adjustable mirror, a mirror mounted directly above the moxibustion micropores frequency-modulated carrier, moxibustion is positioned on the carrier frequency modulated pores moxibustion cake, moxibustion cake are arranged on take the board, disposed on the treatment bed below the treatment of the positive holes take the board, online testing system is mounted above the spectral treatment wells, the present invention scientific and reasonable structure, convenient to use, and good effects.

- **Base station in a wireless sensor network of an RF charge.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109819533	China	Shandong Xiaodouding Internet of Things Technology	2019-04-02

Resumen:

The present invention discloses a base station in a wireless sensor network RF charge, includes a base, a housing, a top cover, a radio-frequency wireless transmitter and a control panel, disposed above the top of the base, are provided



with posts at corners of the bottom end position, the top end of the housing is provided at a central position base, power is provided within the housing cavity, is arranged at the bottom of the cavity at a center position of the power, the power of the battery side is provided with a cavity bottom of the retainer, the retainer is provided on the power of the radio-frequency wireless transmitter over an inner wall cavity, the housing is provided at the tip of the center position posts, LED lamps are mounted on the outer wall of the pillar side, both sides of the tip are provided with a solar panel support housing, a control panel of the housing above the miniature camera is provided with a surface. The present invention not only improves the energy saving performance of a base station in the time of use, prolonging the service life of the base station, but also enhances the usage convenience of the base station.

- **Photovoltaic sun tracking system.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109728772	China	Zhejiang Astronergy New Energy Development	2019-01-09

Resumen:

The present invention provides a photovoltaic solar tracking system, comprising a plurality of photovoltaic solar tracking device, at least one connecting member and the driving parts: a photovoltaic solar tracking device includes a bottom panel of the spindle and fixedly provided with a fixing member, the actuator member and at least one of the poles is provided with a bearing, the shaft is disposed in the bearing, through the transmission member and the inner bearing can be rotated to take power; a plurality of photovoltaic solar tracking devices are interconnected through a drive component and may transmit a power connecting member; drive member of



the drive member is connected to either a photovoltaic solar tracking device which can output power. The photovoltaic solar tracking system having a plurality of photovoltaic solar tracking device, need only be in one of the driving member is disposed, through connection element transferring power to the remaining photovoltaic solar tracking device, thereby realizing a tracking angle of incidence of sunlight photovoltaic system as a whole, in a simplified structure and also enhance the field-driven adaptive, reduced production and maintenance costs.

- **Photovoltaic solar-driven buried integrally town sewage treatment apparatus.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109704501	China	Environment Planning & Design Research Institute	2019-02-25

Resumen:

The present invention discloses a photovoltaic solar-driven integrally buried sewage treatment apparatus n, belongs to the field of sewage treatment. A photovoltaic solar-driven integrally buried sewage treatment apparatus n, includes a filter tank and a purge device, the filter tank and a purge device are connected; the present invention through the filter tank for filtering sewage first, through the dirt collecting device for the filter in the course of recovery of the soil, so that the filter tank does not clog, filtration efficiency, and convenience is more convenient to clean dirt; also, through filtered sewage purifying apparatus further implementation of the cleaning implement, for purifying the sewage water is still unacceptable after the reflow through a pressurized water dispensing device is again purged, thereby ensuring that the purified sewage satisfy water quality requirements, but also to satisfy the



quality of the purified water and subjected to ultraviolet sterilization requirements, thereby achieving thorough cleaning.

- **Sponge city road drainage system.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109680787	China	Shenyang Jianzhu University	2019-01-31

Resumen:

The present invention relates to a sponge urban road drainage system, which belongs to the field of urban construction technology. A road surface at an angle, the rainwater collected in the sump, through the solar panel power generation, to drive the water pump. Water-absorbing tube is fixed within the catch basin, a water outlet pipe disposed in a lawn above, by adjusting the water pressure, spraying the lawn. An advantage of the present invention are achieved and the effect is to drain the rainwater of the rainwater filtered road, clean rainwater, lawns and the road surface. The present invention an energy-saving and environment-friendly, simple structure, convenient operation, a suitable promotion.

- **Lithium battery charging system and method based on a solar.**



Publicación	País de origen	Solicitante	Fecha de prioridad
CN109660005	China	Shenzhen Goldwan Electronic	2019-01-22

Resumen:

The present invention relates to the technical field of new energy technology, and a lithium battery charging system is disclosed that is based on solar energy and a method thereof, comprising receiving a solar power generation solar panel, and a charge controller for controlling the charging state is effective, and a lithium battery charging is necessary, a solar power generation principle: a solar cell panel P-type silicon substrate by the N-type silicon substrate and to be composed, N-type silicon substrate has a plurality of free electrons, and the P-type silicon substrate has a plurality of vacancies, N-type silicon substrate and a P-type silicon plates together, PN junction is formed at the joint. A lithium battery charging system according to the present invention is constructed by solar energy through, a lithium battery charging method is carried out through the system, during charging of the lithium battery can be well creation of an excessive voltage is avoided, over current, over-charged, if too high or low temperature, improving the useful life of the lithium battery, and preventing safety accidents from occurring, thereby effectively solving the lithium battery during charging in the introduction of a creation problem.

- **Outdoor building electrical cabinet having a bird - scaring function.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109600951	China	People Ele Appliance Shanghai	2019-01-10

Resumen:



The present invention discloses a method for building an outdoor electrical cabinet having a bird - scaring functions, including a bird control, the case cover, a radiator, a base and a cabinet, are installed on the top of the base cabinet, and is provided with a slot at the bottom of the cabinet at one end, between which there is hinged dust-proof net slot, one side of the cabinet through the hinge seat which there is hinged door, and a door mounted with one side of a bolt, with a control panel installed on the top of the other side of the cabinet, and the control panel is installed inside of a single chip, with a box cover installed on the top of the cabinet, and the flaps are mounted on both sides of the top end of the cylinder, the cylinder are mounted to the top end of the telescopic rod, and a telescopic rod is attached to the tip of the bird control, bird control are mounted to the top of the solar cell panel. Through the present invention installed with the heat sink, such that the device can rapidly dissipate heat, the temperature inside the electrical cabinet maintained at a desired horizontal line so that, the life of the appliance in an eye, so that is durable, is not susceptible to ageing.

- **Multi-module and a centralized control system and control method of a photovoltaic inverter motor.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109787292	China	East	2019-03-27

Resumen:



The present invention discloses a multi-module and a photovoltaic inverter system and control method controls the motor set, the system includes a system board and connected respectively to the CAN bus through Nth photovoltaic inverter module having a system board, a natural number larger than or equal to 2 N as; wherein, each of the photovoltaic inverter modules connected in parallel with the input of the DC side of the system, each of the photovoltaic inverter modules connected in parallel with the output of the AC side of the system. The present invention provides a multi-module and a photovoltaic inverter system and control method for the centralized control apparatus, a system for fault resilient high capacity is achieved through the use of each of the photovoltaic inverter module's individual panels flexibly control, there is no coupling relationship between each photovoltaic inverter module not only, without affecting each other, stable and reliable, and the structure is simple, low cost, has good application promotion value.

- **Smart photovoltaic tracking system with high accuracy multiple rows of linkage.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109739272	China	Kingshore New Resources Electric Jiangsu	2019-03-06

Resumen:

The present invention is a high-precision intelligent interlock a plurality of rows of the photovoltaic tracking system, comprising a main control system and a plurality of single-stage control unit, each of the single stage control unit is mounted on a track frame, the single-stage control unit includes a main control module, a driving module, power supply module, communication module and an information acquisition module, the main control system through the inverter current line carrier



communication mode with a single control unit connected to a communication module, a driving module, power supply module, communication module and main control module is electrically connected to both the information collection block, and wherein the drive module and the power supply module is electrically connected; the present invention high degree of automation, high power generation efficiency, low maintenance cost.

- **Method for networked automotive technology of the communication system.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109743688	China	Nantong Polytechnic College	2019-01-03

Resumen:

The present invention discloses a method for use in automobile technology networked communication of communication systems, includes a sensing module and a vehicle, the sensing module is electrically connected with a data acquisition module, a data acquisition module is electrically connected to an A/D converter, A/D converter is electrically connected with the ZigBee wireless module, in a ZigBee wireless module is electrically connected with the controller, the controller of a GPS locator is electrically connected with, GPS locator disposed in the interior of the vehicle, through a radio network controller is electrically connected with a backend server, a controller electrically connected with one power generation unit, the power generating device includes a solar panel. A communication system for use in automobile technology for the networked communication, through an electric connecting with a power generator set controller, electric power is generated for each class of sensor devices is reached, a solar panel mounted on a vehicle roof at,



clean energy can be used on the one hand, on the other hand to the roof of a vehicle sun-shading effect plays, thereby bringing the power-saving power supply having the advantages of having.

- **Multifunctional electric resistance measuring apparatus and measuring method.**

Publicación	País de origen	Solicitante	Fecha de prioridad
CN109613339	China	Nanjing University of Post & Telecommunications	2019-01-28

Resumen:

The present invention discloses a multifunctional electrical resistance measuring apparatus and measuring method, comprising a working circuit, ADC converter, a single chip, and a solar power supply module capacitive touch screen; by the ADC converter working circuit generates a voltage signal and convert collected through into a digital signal and transmitted to a single chip, the resistance value thereof is calculated, single-chip microcomputer determines the size of the signal, is provided with a full converter ADC as, there is no need to manually adjust the gear; single-chip microcomputer receives the measurement mode is selected by a capacitive touch screen, includes a serial, parallel mode, turn-on mode and normal mode, processing the input data in various ways. The present invention provides a multifunctional electric resistance measuring apparatus and measurement method, some of the calculations of the resistance measurement can be simplified operation, convenient for users to analyze the plurality of network of resistors with resistances, work efficiency is improved.

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