

15 Documents

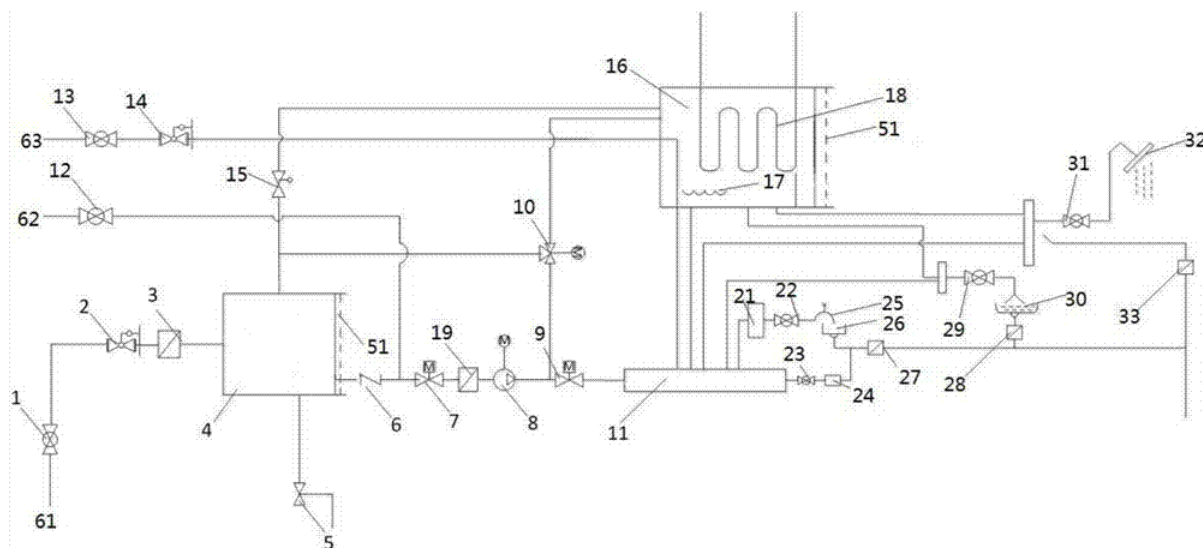
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CN105385852 A	Treating method for extracting potassium through industrial residue straw ash	HUAIAN CHUCHENG CEMENT
CN104595913 A	Ash fertilizer firing device	ZHEJIANG UNIVERSITY OF SCIENCE AND TECHNOLOGY

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Title

(CN105253055)

Motor home primary water and grey water integrated utilization system

Images**Abstract**

(CN105253055B)

The invention discloses a motor home primary water and grey water integrated utilization system comprising a primary water system and a grey water integrated utilization system; the primary water system comprises a cold water system and a hot water system; the cold water system is connected with clean water outside the motor home, and filters, purifies and stores the water so as to serve various daily life water in the motor home; the hot water system uses various heating devices so as to heat up the clean water, thus providing hot water needed for motor home daily life; the grey water integrated utilization system can store various life waste water and rainwater collected by a rainwater collector outside the motor home, and can use a filter to purify the water, so the purified water can be supplied to the motor home for reutilization. The motor home primary water and grey water integrated utilization system combines clean water collection, storage, filtering, heating, utilization, reprocessing with reutilization process, thus realizing integration utilization of the motor home water system, reducing water consumption, and improving motor home water system stability and safety factors.

Inventors

KONG QINGJIE

ZHAI XIAOHUI

WANG JIAHE

ZHOU RONG

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WANG SHENGQUN

WU QIAN

Latest standardized assignees - inventors removed

HOHAI UNIVERSITY

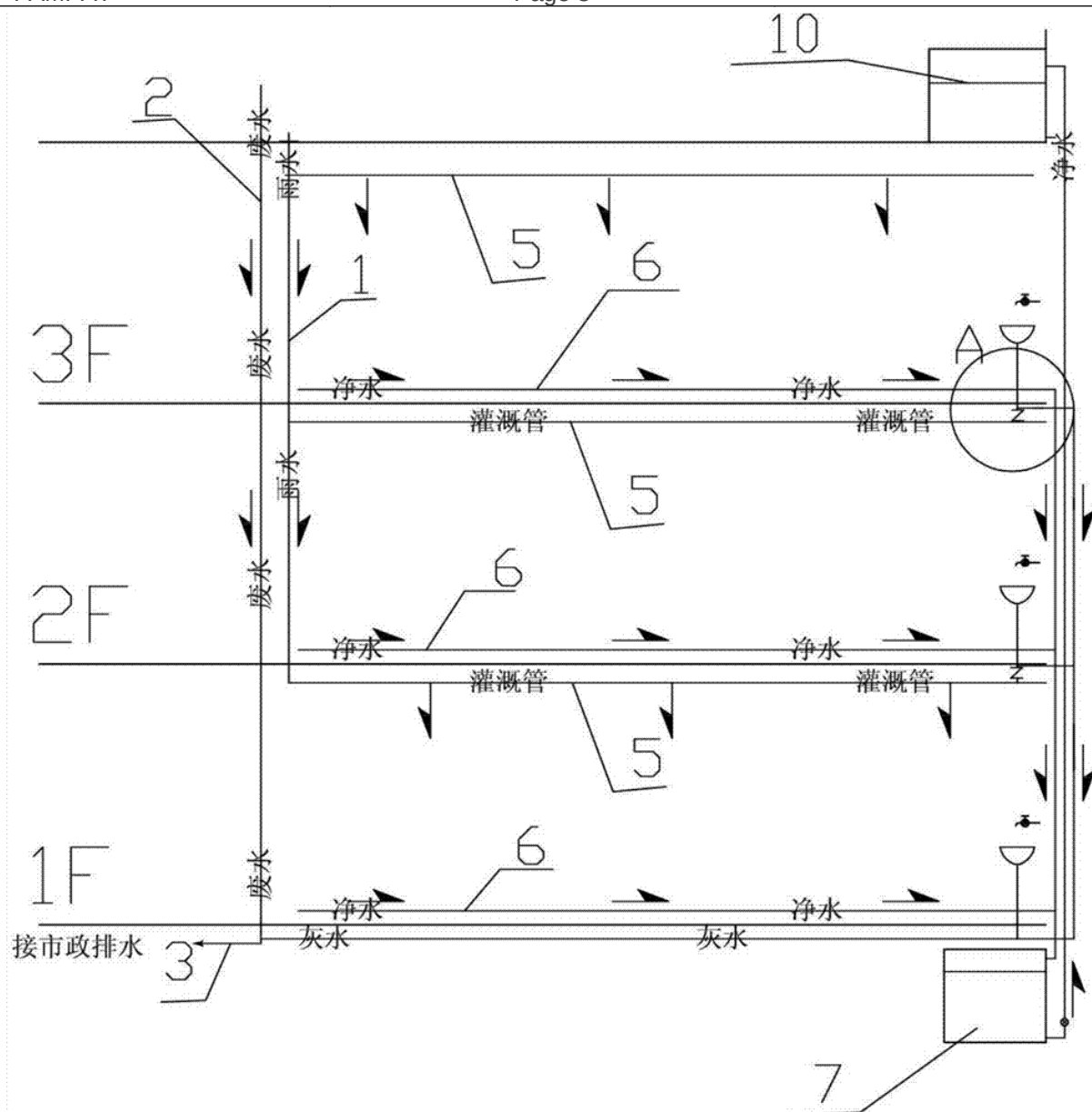
Family 2/15 - FAMPAT - ©Questel

Title

(CN207048195U)

Rainwater and gray water leverage system for a building

Images



Abstract

(CN207048195U)

The present utility model discloses a comprehensive utilization system for a building rainwater and gray water, the slope of the roof of the building body be set conveniently collect rainwater, lying on the side provided with the water conduit and the overflow pipe, municipal storm water pipe network connected to the overflow pipe, each layer of the body of the building wall is provided with a planting, planting wall comprises a wall body, body is provided on the wall planting module, above the planting module is provided with a drip irrigation conduit, its bottom is provided with a clean water collection tube, the bottom reservoir connected to the clean water collecting pipe and the floor, with the water conduit connected the drip irrigation conduits; each layer of the occupants of the home washing machines, sinks and shower rooms through ducts with municipal storm water pipe network connected to a sewage pipe, the sewage pipe while dropping a branch line to the next layer of the drip irrigation tubes are connected, with the drip tube connected to a branch pipeline is provided with a check valve; roof of the building body is provided with a water storage tank, a reservoir of water within the water storage tank to be drawn into the pump through the bottom floor, the water storage tank bottom outlet pipe, household toilet flush water pipes are connected to each tier. The effect of recycling grey water and rainwater obtain a combined.

Inventors

LU YAO

CHEN CHEN

CHEN XIN

GUO XIYANG

SUN ZHULONG

Latest standardized assignees - inventors removed

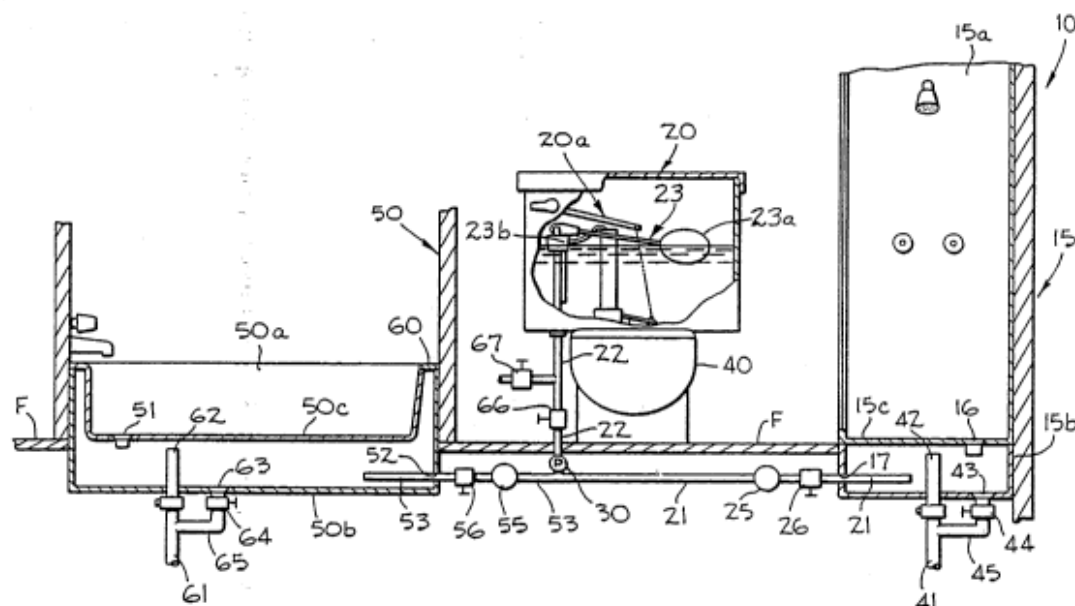
CHONGQING UNIVERSITY

Family 3/15 - FAMPAT - ©Questel

Title

(CA2020824)

Arrangement for reusing gray water

Images**Abstract**

(CA2020824)

An arrangement for sensing gray water in which a bathtub, shower stall, self-contained toilet bowl or the like is constructed with respective false bottom gray water collecting tanks. The gray water collected in the collecting tanks is conducted to a flush tank for flushing a toilet bowl. A pump responsive to the level of the water in the flush tank is operated for conducting gray water into the flush tank. **Rain** water advancing through downspouts may also be stored in the collecting tanks as gray water. The bath tub, the shower stall and the self-contained toilet bowl are self-contained units which can be employed respectively or in combination with one or more of the described units.

Inventors

BARUH BRADFORD G

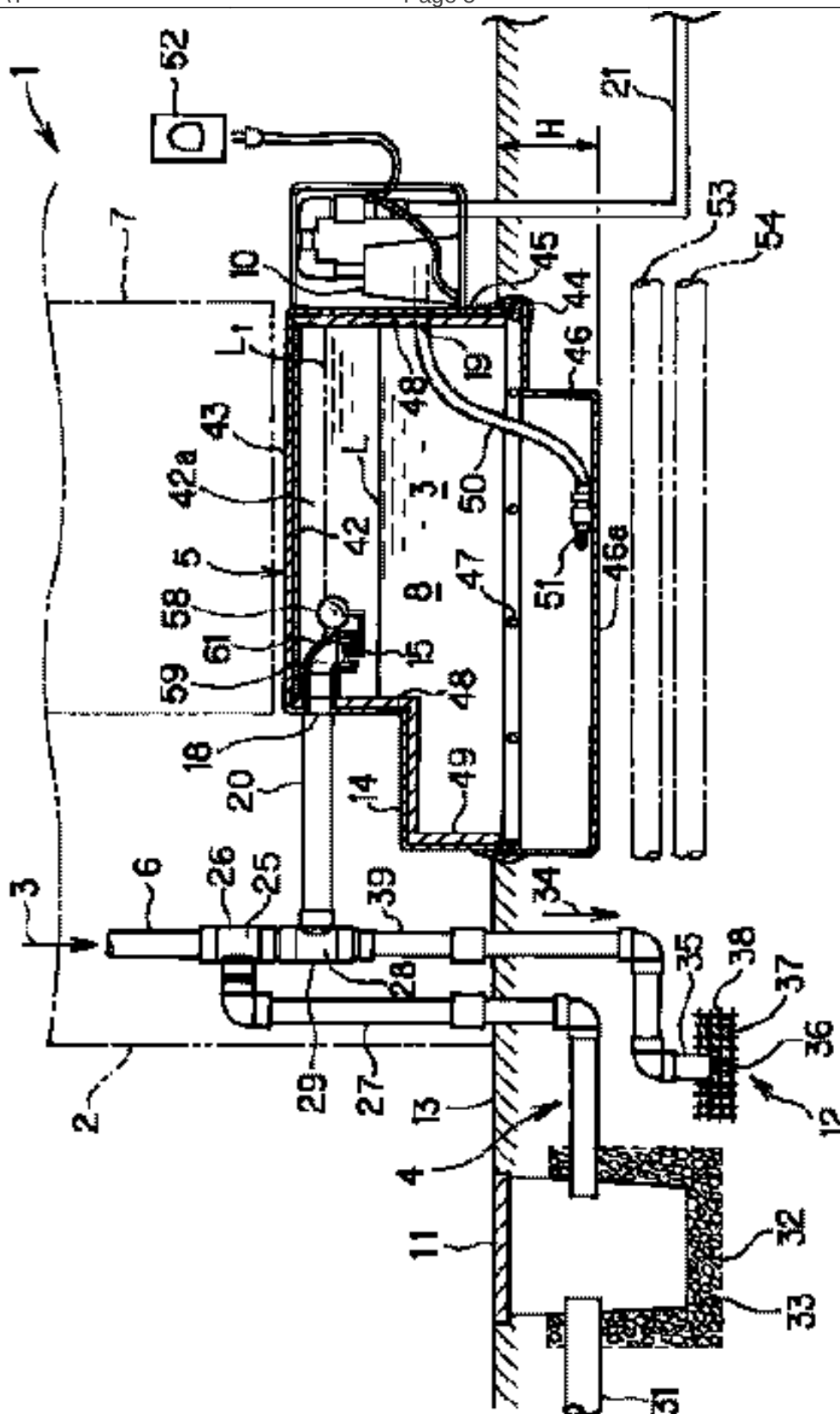
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Title

(JP2002039427)

Float type water cut-off device and water storing apparatus with water cut-off device

Images



Abstract

(JP2002039427)

PROBLEM TO BE SOLVED: To provide a float type water cut-off device capable of automatically stopping flow of rainwater when the water level of a water storing tank for storing rainwater or the like reaches a designated level, and a water storing tank with the water cut-off device. **SOLUTION:** In the float type water cut-off device 15 connected to an inflow port 18 of a kitchen door step 5 for storing rainwater 3, when the water level L of stored rainwater 3 rises to a designated level L1, a passage 59 is blocked by buoyancy of a float 58 to stop flow of rainwater, and when the water level of rainwater is lowered, the passage 59 is opened by the dead load of the float 58 to allow the rainwater to flow.

Inventors

TAKEUCHI NORIO

TSUKAMOTO AKIRA

Latest standardized assignees - inventors removed

TAKIRON

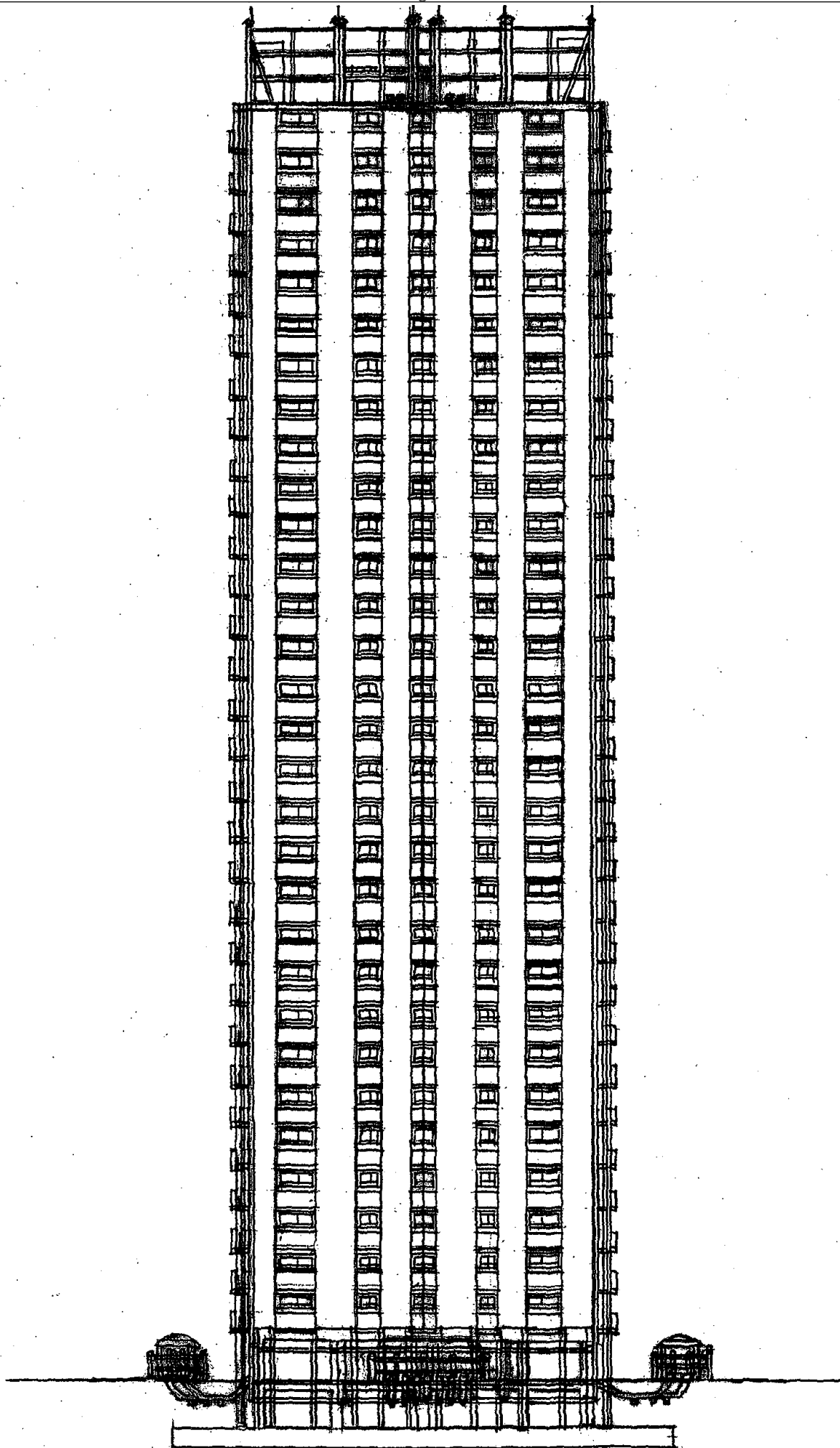
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Title

(CN102364016B)

Self-air-supply ash-filtering cooling silencing closable fireproof tall building with solar warming water heater

Images



(CN102364016B)

The invention discloses a self-air-supply ash-filtering cooling silencing closable fireproof tall building with a solar warming water heater. An air supply system consists of a blind window with self-cleaned glass, a spraying water pipe, an air inlet main pipe which extends to an underground garage and then is sealed at a roof, air inlet branch pipes and valve covers which extend to each room, a stainless wind energy fan which extends from the underground garage to a place which is 6 m higher than the roof or a pipe orifice with a rain shade, an air exhaust main pipe of which the lower end is sealed, and air exhaust branch pipes and the valve covers which extend to each room. A heat preservation system consists of an internal door, windows, rolling gates which are arranged outside the windows, anti-theft fences, a heat preservation layer which is arranged on the external wall, an air relative isolation layer which is arranged outside the heat preservation layer, and a ceramic partition wall which is arranged outside the air relative isolation layer. Preferably, the solar warming water heater which is arranged on a shelf is connected with an indoor electric water heater and metal pipes under the floor to form a heat collection system. The invention has the advantages that: a livable environment which is dustless, quiet, warm in winter, cool in summer and fresh in air is created; and when a fire alarm is given, the doors, the windows, air inlet pipelines and air outlet pipelines are closed to eliminate a chimney effect, and with no need of escaping, people can wear gas masks, carry oxygen bottles and hold fire extinguishers to effectively extinguish fire.

Inventors

GUO HOUDE

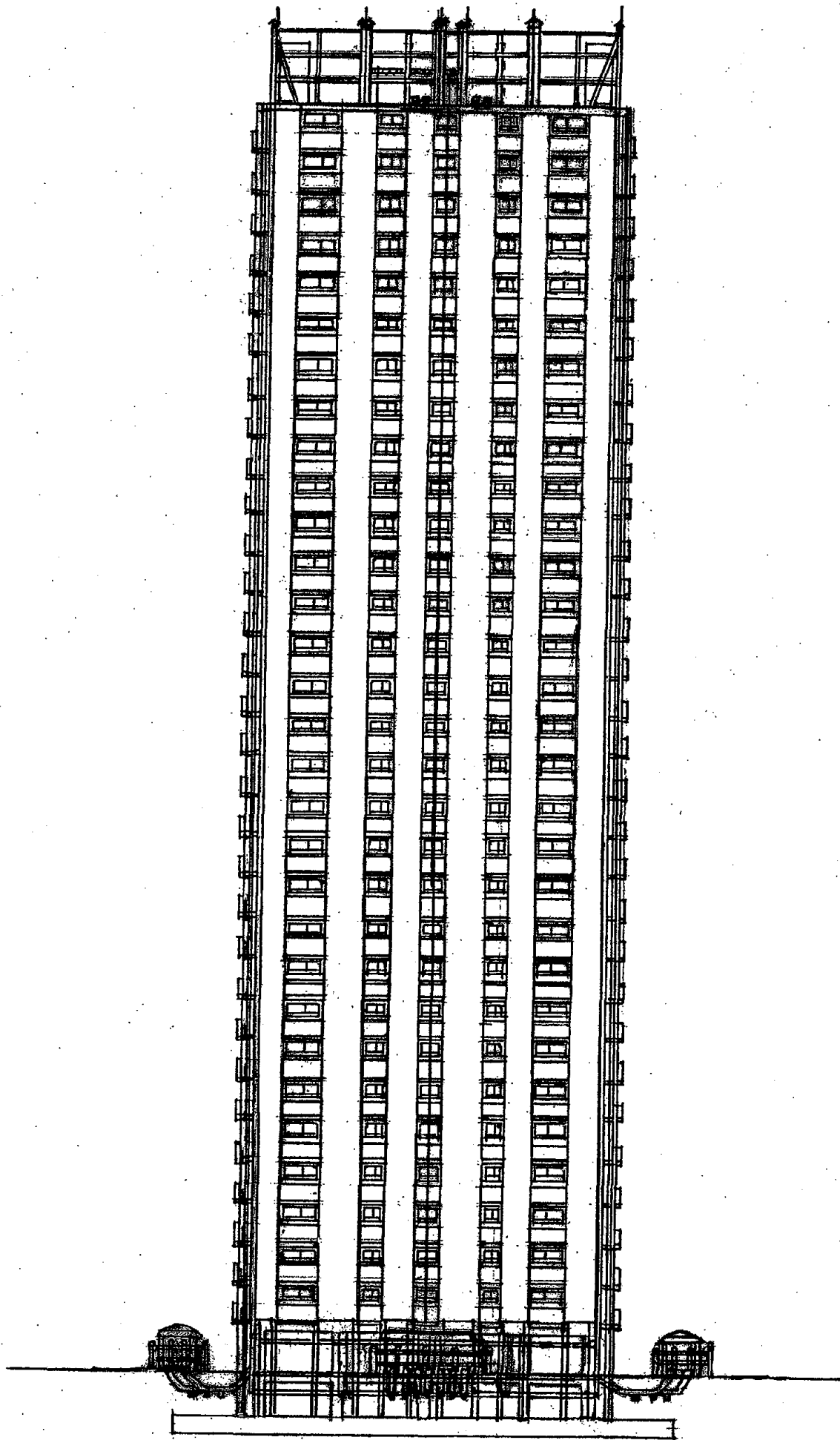
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Title

(CN202164860U)

Self-air-supply dust-filter temperature-reduction mute sealed fireproof high building with solar warming water heater

Images



Abstract

(CN202164860U)

Provided is a self-air-supply dust-filter temperature-reduction mute sealed fireproof high building with a solar warming water heater. An air supply system is composed of a self-cleaning glass blind window, a spray water pipe, an air inlet main pipe, air inlet branch pipes, valve covers, a stainless steel wind energy fan or a pipe opening with a **rain** cover, an air outlet main pipe, air outlet branch pipes and valve covers, wherein the air inlet main pipe extends into an underground garage and then to a building roof sealing opening, the air inlet branch pipes extend into rooms, the stainless steel wind energy fan or the pipe opening with the **rain** cover extends from the underground garage to the **6**-meter building roof, the lower end of the air outlet main pipe is sealed, and the air outlet branch pipes extend into rooms. A thermal insulation system is composed of a built-in door, a door, a window, a roller shutter door outside the window, an anti-theft railing, a thermal insulation layer and an outer ceramic partition wall, wherein the thermal insulation wall is arranged on an outer wall. A heat collection system is composed of the solar warming water heater, an indoor electric water heater and an underground metal pipe which are connected, wherein the outmost solar warming water heater is placed on a shelf. Thus, environment which is free of dust, silent, warm in winter and cool in summer, fresh of air and suitable for living is created. When a fire accident happens, the door, the window, the air outlet pipes are closed to eliminate the chimney effect. Users can wear breathing masks, carry oxygen bottles and hold fire extinguishers to effectively put out fire, thereby avoiding escaping.

Inventors

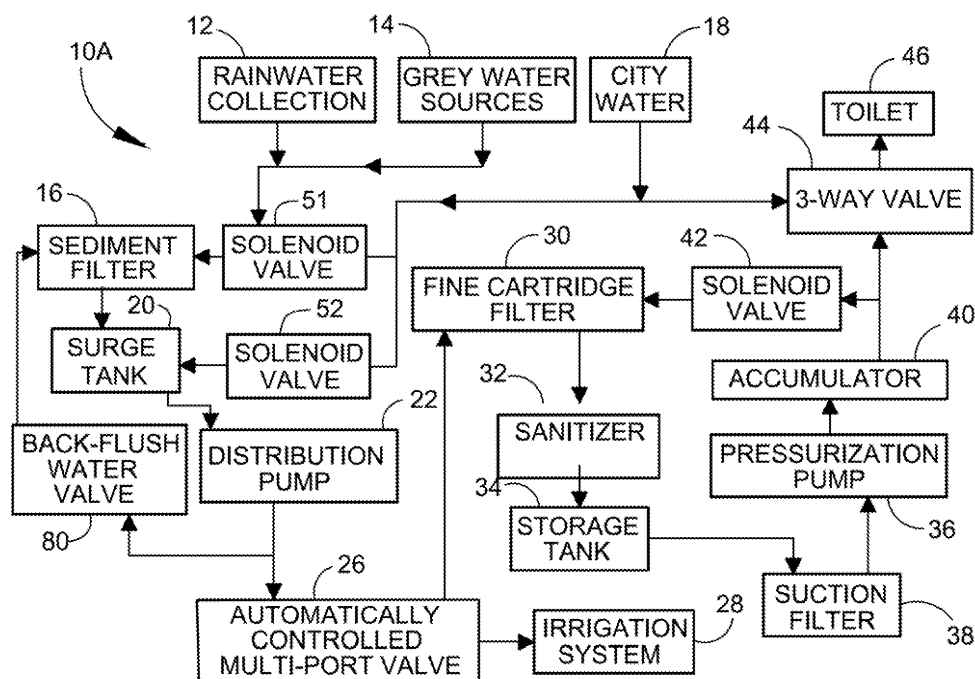
HOUE GUO

Family 7/15 - FAMPAT - ©Questel

Title

(US20120199220)

Grey water processing and distribution system

Images**Abstract**

(US20120199220)

The Grey Water Processing and Distribution System is a self-contained fully functional grey water collection, processing and dispersing system that runs on grey water collected from internal grey water sources and supplies filtered water to the house's landscaping irrigation system as well as filtered and sanitized flush water to the house's toilets and washing

machine for usage and requires standard local power. It incorporates a unique self-cleaning fine screen filter system. The central digital control unit monitors and runs the various system components and manages the house's landscaping irrigation system. The digital control unit also makes sure that the toilets are never without flush water and protects the irrigation system against under and over watering. The internal and external plumbing also allows for the system to be completely bypassed in the event of power failure or the introduction of undesirable contaminants into the grey water source stream.

Inventors

KNEPP JOHN E

DORIGO FRANCESCO

KNEPP ROBERT J

Latest standardized assignees - inventors removed

ADVANCED GREY WATER RECYCLING SYSTEMS

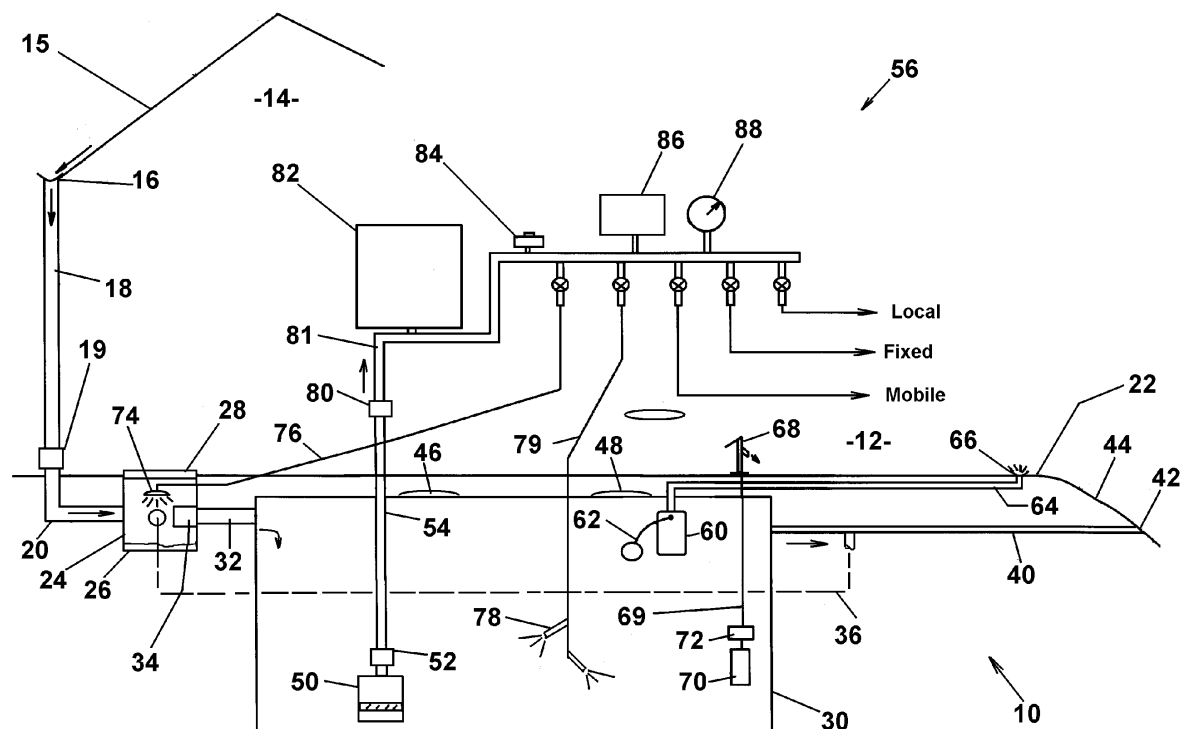
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Title

(US7534070)

Water collection and distribution system for yard maintenance

Images



Abstract

(US7534070)

A water collection and distribution system for yard maintenance includes a buried reservoir for collecting water from the roof of a structure and a submersed pump in the reservoir for supplying contained water to a pressurized manifold having outlets available for yard maintenance activities. One of the outlets is connected with a premix catch basin upstream of the reservoir in which additives may be mixed for storage in and dispensing from the reservoir. Another outlet is connected to spray nozzles in the reservoir for agitating the additive mixture. The system may also collect gray water from washing activities to supplement water for ground maintenance or for recycling to a flushing system for operation of toilets in the structure.

Inventors

URBAN MARK C

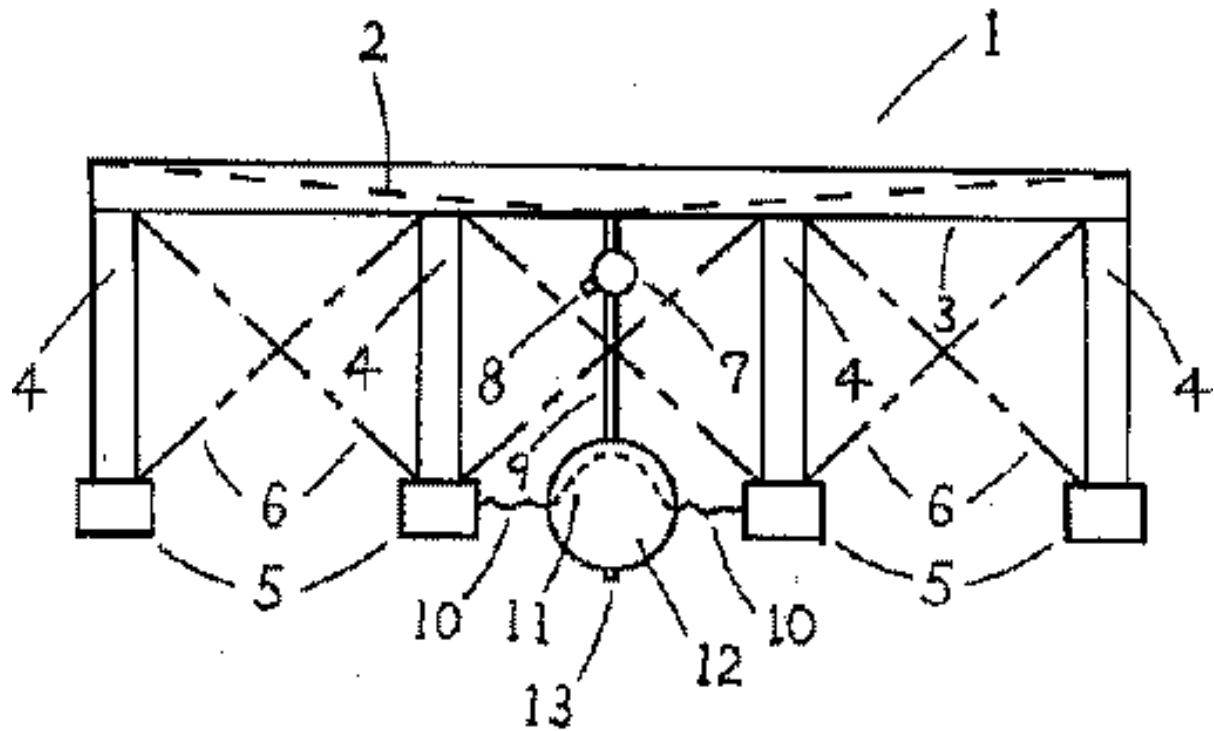
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Title

(JP2001146766)

Rainwater accumulation floating means

Images



Abstract

(JP2001146766)

PROBLEM TO BE SOLVED: To provide another means for obtaining fresh water for global shortage of the fresh water that is becoming a big problem as well as global warming in the future in terms of risk management, and to accumulate

rainwater falling on the sea and the surface of the sea to improve the degree of safety by increasing alternatives and the amount of acquisition of the freshwater. SOLUTION: As shown in a figure, a semi-submersible type floating means consisting of a lower hull (a submersible type buoyancy generation means) 5, a column (a post means) 4, a brace 6, and a deck 3 supports a funnel-shaped rainwater accumulation means 2 like an inversed quadrangular pyramid by the deck 3, and supports a nearly columnar water tank 12 by a mooring means 10. A flexible partition wall film 11 separates rainwater from seawater, and the weight of the water tank 12 in the seawater is nearly fixed, thus storing the rainwater in the water tank 12, and nearly horizontally supporting the rainwater accumulation means 2 and the water tank 12 by the semi-submersible type floating means without being affected by the amount of accumulation of the rainwater even when the sea becomes rough by typhoon and shower that can be set to a target, or the like.

Inventors

SUZUKI TOSHIYASU

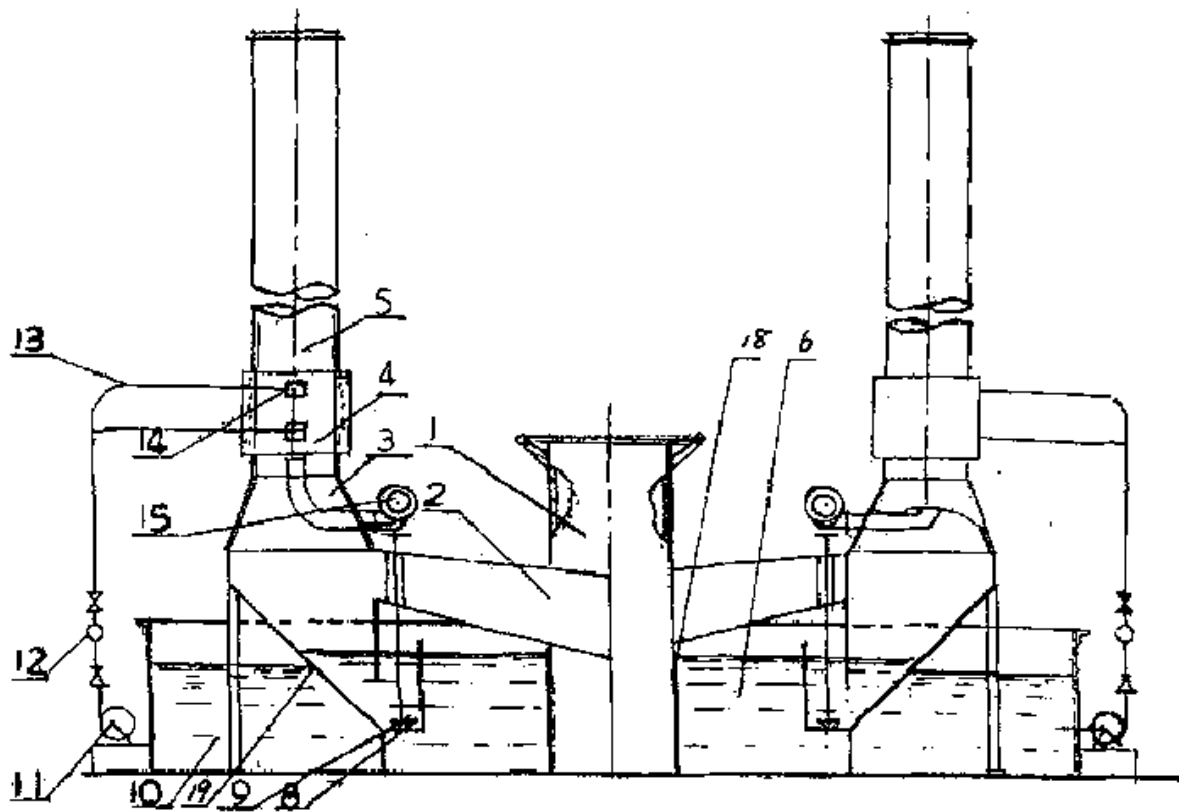
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Title

(CN2600720U)

Cement shaft kiln smoke diversion dust removing desulfurization device

Images



Abstract

(CN2600720U)

The utility model relates to a dedusting device of a dust cement plant chimney and is a cement shaft kiln dust shunt, dedust and desulphurization device. The utility model comprises an ash water precipitation body pool which is designed combining the platform area of the crown of the cement shaft kiln and a load bearing structure corresponding to each chimney. A hole for the extension of the chimney of the cement shaft kiln from the bottom of the pool and a peripheral steel-protecting sleeve are arranged in the pool. A spraying tower with a discharging chimney is arranged on the inner seat of the pool. The chimney of the cement shaft kiln is communicated and connected with an inclined upward diffusion flue. A clean water influx tank is arranged in the pool positioned behind the spraying tower, and is communicated and connected with the pool through a clean water backflow ditch positioned on the edges of the pool. The upper part of the spraying tower is connected with the clean water influx tank through a water distribution main pipe and a spraying circulated water pump. The utility model has the features of simpleness, practicability, and good effects of dust collecting and desulphurization.

Inventors

GUAN YUNBIAO

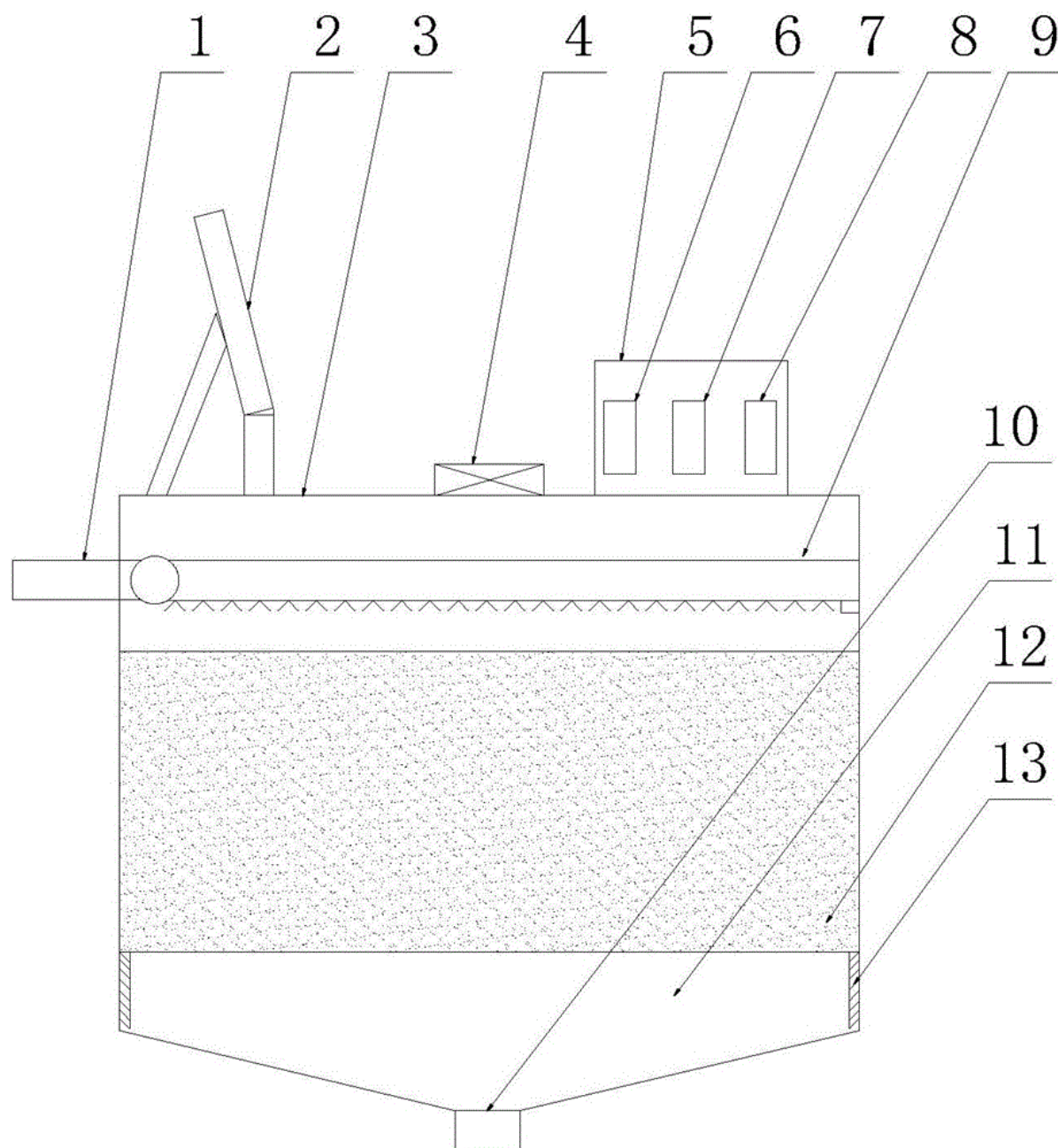
GUAN CHUNYAN

Family 11/15 - FAMPAT - ©Questel

Title

(CN106242027)

A spraying type solar energy sewage purifying device

Images**Abstract**

(CN106242027)

The invention belongs to the technical field of **rain** water treatment and relates to a spraying type solar energy sewage purifying device. The device is characterized in that the device comprises an aerobiotic biochemical tank and a solar energy oxygen supplying apparatus, the solar energy oxygen supplying apparatus is disposed at the top of the aerobiotic biochemical pool, the aerobiotic biochemical pool comprises a tank body, water spraying pipes and a biological filler, the water spraying pipes are fixedly mounted to the upper inside part of the tank, and the filler fills the middle and upper inside part of the tank. The device is scientific and reasonable in structure design, has advantages of uniform water feeding distribution, uniform biological filler loading, long service lifetime of the biological filler, good treating effects, capability of

disposed on the upper. The present utility model falling off the dust adhered to the bag, the larger particles within the flue ash separated in advance, good dust removal effect.

Inventors

SHEN HONG

Latest standardized assignees - inventors removed

SANYUAN HOLDING HANGZHOU THERMAL POWER

Family 13/15 - FAMPAT - ©Questel

Title

(CN107646556)

Technology for rotation of rice and *Corydalis saxicola* Bunting in rocky mountainous areas**Abstract**

(CN107646556)

The invention belongs to the technical field of crop planting, and particularly relates to a technology for rotation of rice and *Corydalis saxicola* Bunting in rocky mountainous areas. The technology comprises the following steps: 1, land selection and soil preparation: selecting a land parcel which is low-lying, even and fertile, is wet in spring, summer and autumn and has certain irrigation conditions; 2, selection of a drought-resistant hybrid rice variety; 3, Hanyubaomu seed dressing and dry seedling raising technology; 4, careful field harrowing and sufficient application of a base fertilizer; 5, in-time planting; 6, field management; 7, rice harvesting; 8, *Corydalis saxicola* Bunting seed and seedling culture; 9, soil preparation; 10, permanent planting; 11, field management; and 12, collection and processing. The technology provided by the invention has the following beneficial effects: 1, the fundamental transformation of the planting structure of food crops in mountainous areas can be realized, thereby solving the problem of refined grains for peasants in the mountainous areas with no rice field; 2, based on the climate features of short solar radiation time and coolness in the mountainous areas, late autumn, winter and spring in which the temperature is not too high and heavy rain hardly happens are selected to perform open culture, thereby satisfying the requirements of the *Corydalis saxicola* Bunting for illumination and temperature, saving the cost of rain shelter and sun shade facilities, and achieving the effects of labor saving and effort saving; and 3, the output of unit land area is greatly increased, the yield of the rocky mountainous dry land is increased from about 200 kilograms of corns per mu to 400 kilograms of rice per mu, and the per mu yield is increased by one time; and the planting of the *Corydalis saxicola* Bunting can produce about 80 kilograms of hay per mu, the per mu value is 12800 Yuan based on the current market value of 160 Yuan per kilogram, and such a high output is rare for the rocky mountainous areas. Thus, the technology provided by the invention has important practical meanings for accelerating the income increase speed of the peasants and accelerating the accurate poverty alleviation process in the mountainous areas.

Inventors

WEI JIAN

Family 14/15 - FAMPAT - ©Questel

Title

(CN105385852)

Treating method for extracting potassium through industrial residue straw ash

Abstract

(CN105385852B)

The invention discloses a treating method for extracting potassium through industrial residue straw ash. The treating method mainly includes the steps of material preparing, mixing, sediment filtering, certain thermotechnical technology water removing and the like; dry and wet straw ash can be used as the main raw material, and calcium chloride residues are used as the auxiliary material for extracting potassium materials; and residual sediment can be used for producing cement materials of building products. The treating method has the advantages that cement strength is high, concrete compatibility is good, the technology is advanced and reasonable, energy consumption is low, efficiency is high, investment is saved, cost is low, secondary pollution is avoided, and environmental protection is facilitated. According to an existing method for treating straw ash, the additional value is low, productivity is low, the dosage is small, and straw ash high in potassium

content cannot be used for building products. The treating method for extracting potassium through industrial residue straw ash is a good method for thoroughly overcoming the technical defects of straw ash, eliminating a large amount of straw ash and a large number of other industrial waste residues, lowering environment pollution and facilitating environment protection.

Inventors

TAN JILIN

HUA YUHAI

HUA JIANJUN

JIANG ZHAOGUANG

Latest standardized assignees - inventors removed

HUAIAN CHUCHENG CEMENT

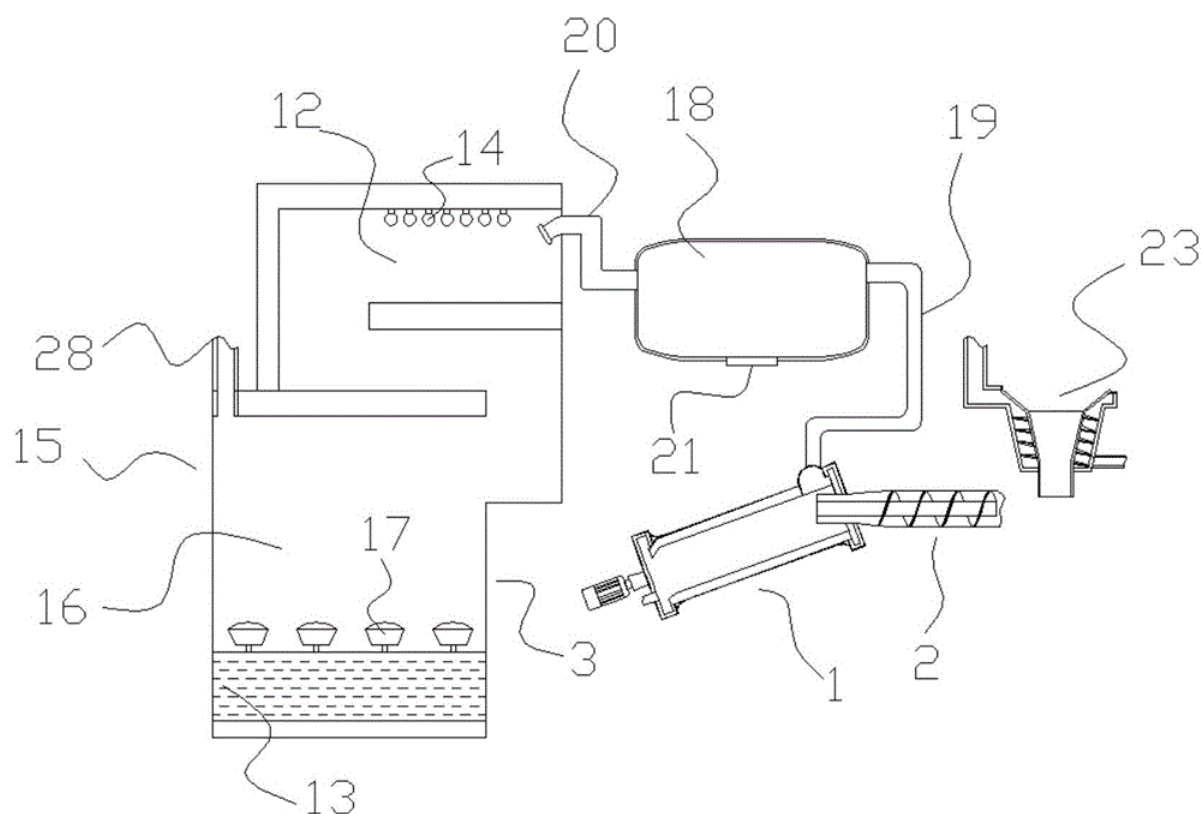
Family 15/15 - FAMPAT - ©Questel

Title

(CN104595913)

Ash fertilizer firing device

Images



Abstract

(CN104595913B)

The invention discloses an ash fertilizer firing device which can effectively carry out firing on wheat straw in a concentrating mode, a firing process is stable and efficient, full firing can be guaranteed, prepared ash fertilizer is high in purity, generated smoke can be effectively processed, and smoke pollution can be avoided. The ash fertilizer firing device comprises an incineration kiln, a feeding device and a smoke purifying device. An incineration inner cavity is arranged at the incineration kiln. The incineration kiln is oblique, and the angle between the incineration kiln and the horizontal plane is 10-60 degrees. A transmission shaft driven by a main motor is arranged in the incineration inner cavity. A plurality of material dispersing bodies for stirring materials are arranged on the transmission main shaft. An air inlet, a smoke outlet, a feeding opening and a material clearing opening-closing door are arranged on the incineration kiln. The ash fertilizer firing device has the advantages that separating effect is good, removing of solid particles and dust in smoke can be achieved, raw materials are subjected to drying through smoke waste heat, following firing effect is improved, a preheating structure is

arranged, and following incineration can be well and fully guaranteed.

Inventors

SUN YONGJIAN

ZHANG ZIJUAN

TAO CHANGHONG

HE YICHAO

Latest standardized assignees - inventors removed

ZHEJIANG UNIVERSITY OF SCIENCE AND TECHNOLOGY