

8 Documents

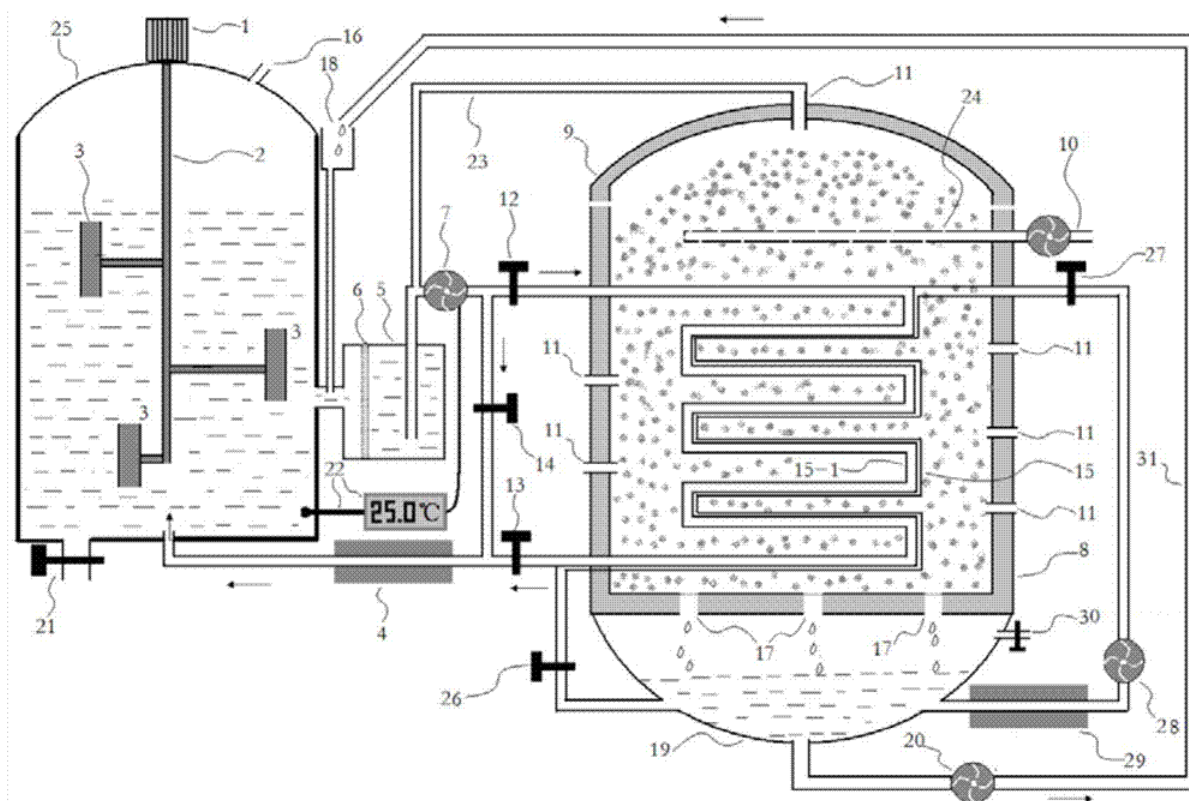
Publication numbers	Title	Current assignees
CN104893970 A	Three-step technology biogas fermentation apparatus, and biogas fermentation method using apparatus	LAIFENG JINQI VINE TEA BIOLOGY
CN206368168U U	Biogas digester	CHONGQING WANGNONG FEED
CN102756901 A	Automatic fermentation residue conveying appliance for methane tank	JIAXING VOCATIONAL TECHNOLOGY COLLEGE
CN101451103 A	Fire stop machine for biogas pool	ZHAO ZHENHU
EP2419701 A1	Device for measuring an ultra low gas flow	BIOPROCESS CONTROL SWEDEN
CN201125242U Y	Fire stop device for methane tank	ZHAO ZHENHU
CN102761134 A	Small gas-fired generation grid-connected unit with automatic intermittent working function	MENG GUONING
CN1053106 A	Miniature electric generating set with methane as energy source	KUNMING CITY AGRICULTURE ADMINISTRATION

Family 1/8 - FAMPAT - ©Questel

Title

(CN104893970)

Three-step technology biogas fermentation apparatus, and biogas fermentation method using apparatus

Images**Publication numbers with kind code & date**

CN104893970	B	2017-08-08	CN104893970B
CN104893970	A	2015-09-09	CN104893970

**Abstract**

(CN104893970)

The invention relates to the technical field of rural biogas production, and concretely relates to a biomass energy production technology with biogas as a main product. The invention provides a high-efficiency and energy-saving three-step technology biogas fermentation apparatus, and a biogas fermentation method using the apparatus in order to overcome the defects of low efficiency, restriction of production by seasons, and great reduction of the output of the biogas due to low temperature in winter of present rural traditional biogas fermentation methods. The apparatus is characterized in that a pool is divided into three pools on the basis of traditional one-pool fermentation, the three pools are used to respectively carry out specific biochemical reactions, and the three pools are a solid fermentation pool, an acetic acid fermentation pool and a biogas fermentation pool respectively. The three-step technology biogas fermentation apparatus has the advantages of scientific and reasonable design, high energy utilization and conversion rate, and substantial economic benefit, and is especially suitable for being used in low temperature seasons.

Inventors

DONG JINGZHOU

LEI CAN

WANG LIN

WANG FANG

ZHENG XIAOJIANG

Latest standardized assignees - inventors removed

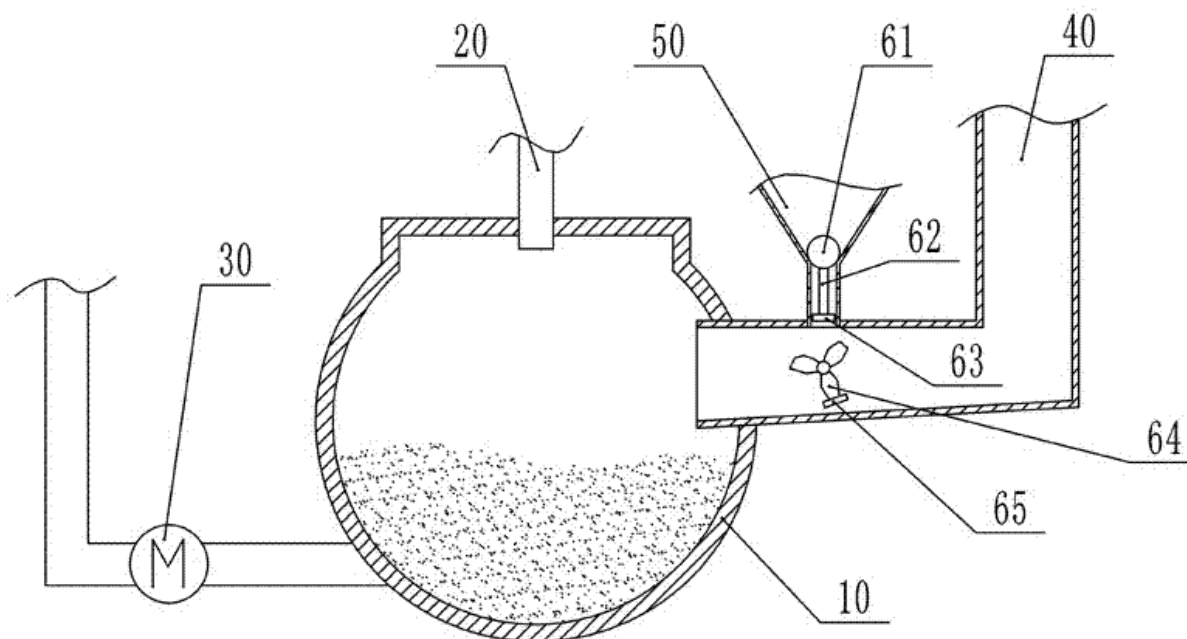
LAIFENG JINQI VINE TEA BIOLOGY

Family 2/8 - FAMPAT - ©Questel

Title

(CN206368168U)

Biogas digester

Images**Publication numbers with kind code & date**[CN206368168](#)

U

2017-08-01

CN206368168U

**Abstract**

(CN206368168)

This patent application belongs to with collecting the fermentation gas field, specifically discloses a biogas digester, including the cell body, be equipped with inlet pipe and blast pipe on the cell body, still include the fungus workbin, the inlet pipe is including the vertical section and slope section that communicate each other, the fungus workbin is the infundibulate, and fungus workbin and slope section intercommunication, be equipped with in the fungus workbin and be used for controlling the the control unit that the fungus workbin was opened and was closed, the control unit includes connecting rod, first magnet and is used for the ball sealer of sealed fungus workbin, the connecting rod is connected between ball sealer and first magnet, be equipped with the rabbling mechanism in the slope section, the rabbling mechanism includes axis of rotation and a plurality of puddler, the axis of rotation is rotated and is connected on the inlet pipe, the puddler is fixed in the axis of rotation, is equipped with the second magnet that excludes with first magnet on one of them puddler. Compare with traditional biogas digester, our case is because the setting of fungus workbin, has increased the content of bacterium in the cell body to the effectual production efficiency that has improved marsh gas.

Inventors

YU LINDING

Latest standardized assignees - inventors removed

CHONGQING WANGNONG FEED

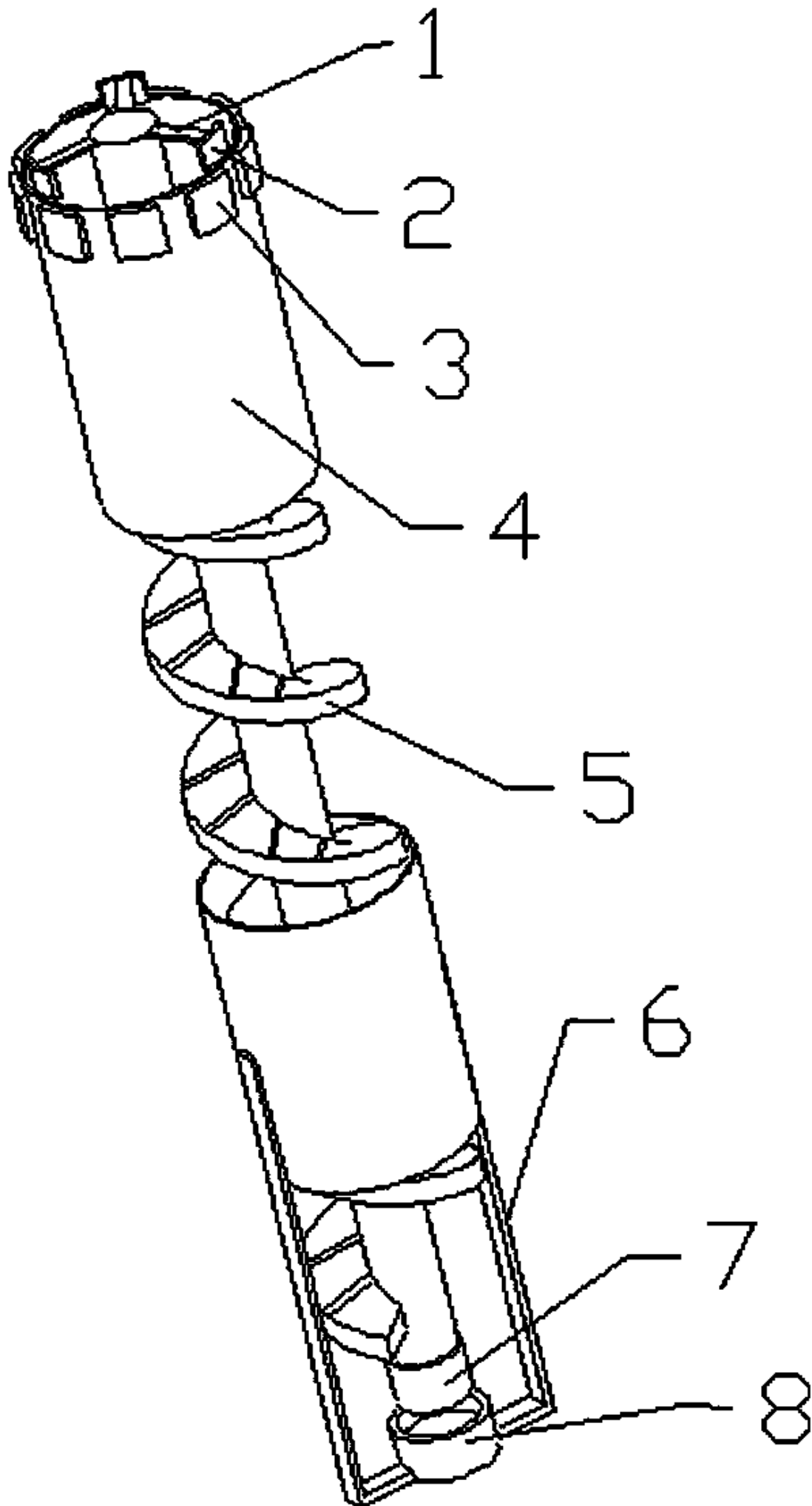
Family 3/8 - FAMPAT - ©Questel

Title

(CN102756901)

Automatic fermentation residue conveying appliance for methane tank

Images



Publication numbers with kind code & date

CN102756901	B	2015-12-09	CN102756901B
CN102756901	A	2012-10-31	CN102756901

**Abstract**

(CN102756901)

The patent refers to the field of 'transport or storage devices; shop conveyer systems; pneumatic tube conveyers'. An automatic fermentation residue conveying appliance for a methane tank comprises blade rods, strong magnets, electromagnets, a cylinder body, a screw rod, fixing rods, a round magnet and a concave magnet, wherein the screw rod is mounted in the cylinder body, the three blade rods are mounted at the upper part of the screw rod, the strong magnets are arranged on the blade rods, and the electromagnet are mounted on the outer wall of the cylinder body and correspond to the strong magnets in position; the round magnet is mounted at the lower part of the screw rod, the concave magnet is arranged under the round magnet and fixed with the cylinder body through the fixing rods; nine electromagnets are provided; the blade rods are made of titanium bar alloy; the polarities of the contact surfaces of both the round magnet and the concave magnet are opposite, and the round magnet and the concave magnet are in clearance fit; the conduction and polarities of the electromagnets are controlled by a singlechip system; the fixing rods are U-shaped and are made from tungsten lanthanum iron alloy; and protruding semicircular stainless steel cross-bars are arranged on the screw panel of the screw rod. After the automatic fermentation residue conveying appliance is well mounted, residues in the methane tank can be quickly conveyed upwards through rotation of the screw rod, and the automatic fermentation residue conveying appliance has a long service life and is easy to seal as the outlet is planar.

Inventors

WEN MINJIE

XIANG TIANYONG

DAN SHENGDAO

CHEN YE

ZHOU QING

Latest standardized assignees - inventors removed

JIAXING VOCATIONAL TECHNOLOGY COLLEGE

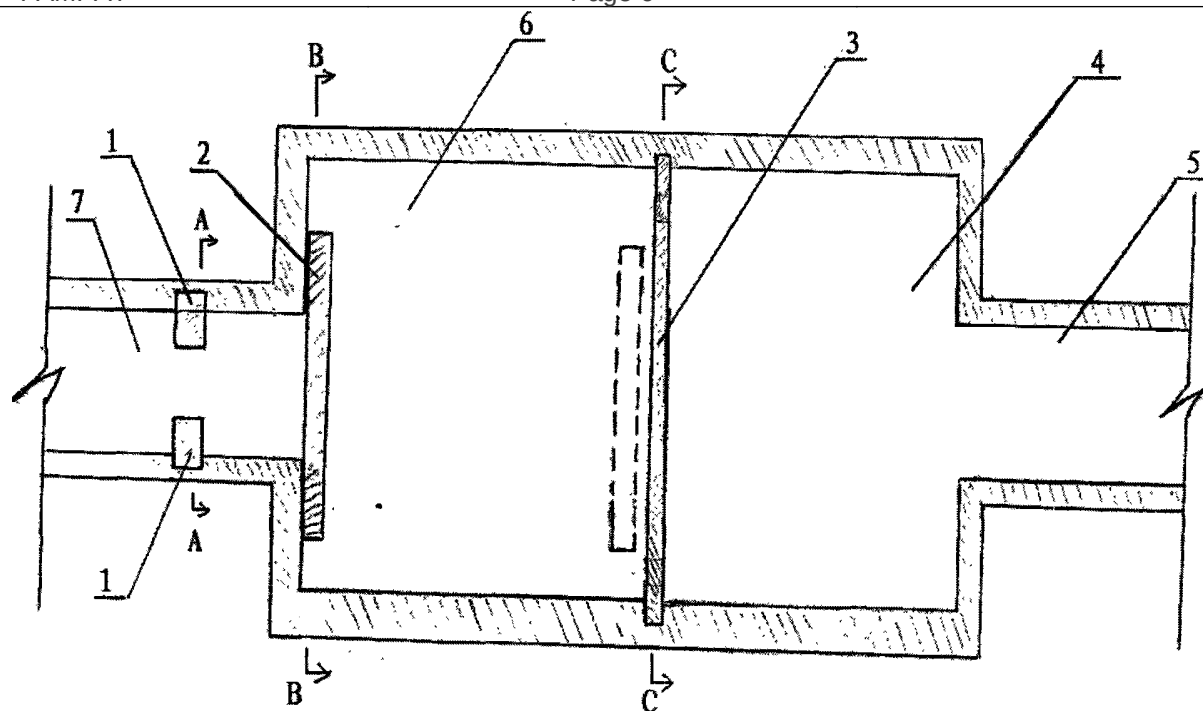
Family 4/8 - FAMPAT - ©Questel

Title

(CN101451103B)

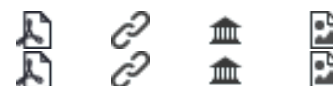
Fire stop machine for biogas pool

Images



Publication numbers with kind code & date

CN101451103	B	2011-11-23	CN101451103B
CN101451103	A	2009-06-10	CN101451103



Abstract

(CN101451103)

The invention relates to a fire arrestor for a biomass pool, which belongs to the technical field of the structure of the fire arrestor for the biomass pool. The fire arrestor for the biomass pool comprises an air inlet pipe (7), an air inlet chamber (6) which is communicated with the air inlet pipe (7), an air outlet chamber (4) which is communicated with the air inlet chamber (6), and an air outlet pipe (5) which is communicated with the air outlet chamber (4). The fire arrestor for the biomass pool is characterized in that an inner arm of the air inlet pipe (7) is provided with a magnetic ring (1); the inside of the air inlet chamber (6) is provided with a flat thin magnet (2); and a filter plate (3) is arranged between the air inlet chamber (6) and the air outlet chamber (4). The fire arrestor for the biomass pool has reasonable design, is safe, simple and convenient to use, can effectively avoid explosion caused by tempering of the air inlet pipe of the biomass pool, and guarantees the life security and the property security of biomass users and staffs.

Inventors

ZHAO ZHENHU

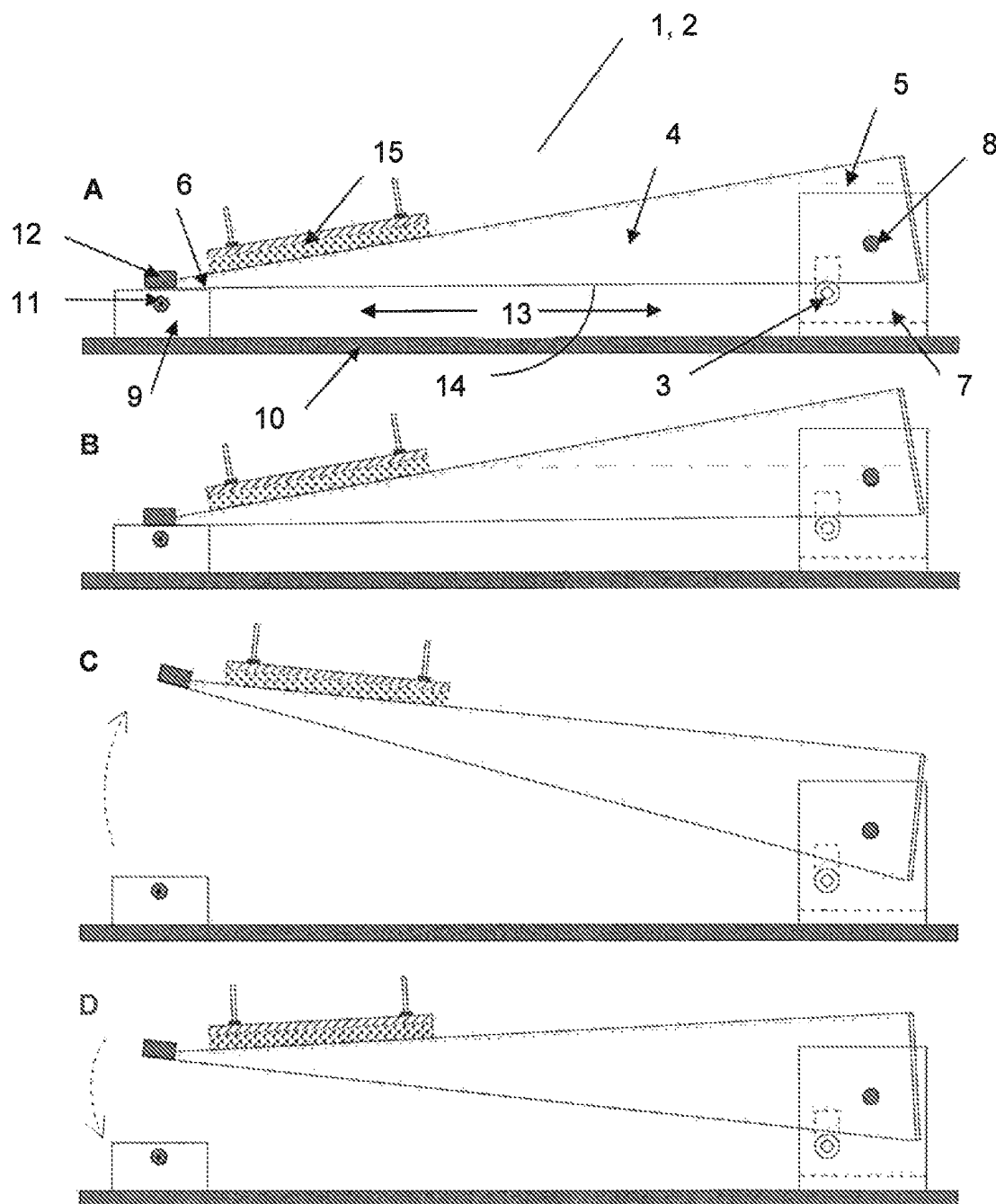
Family 5/8 - FAMPAT - ©Questel

Title

(EP2419701)

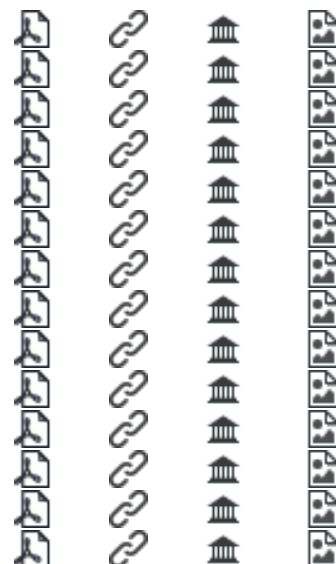
Device for measuring an ultra low gas flow

Images



Publication numbers with kind code & date

EP2419385	B1	2019-08-07	EP2419385
EP3521249	A1	2019-08-07	EP3521249
EP2419701	A4	2018-02-28	EP2419701
IN289685	B	2017-11-24	IN-289685
BRPI1006731	A2	2017-06-13	BR201006731
US8871498	B2	2014-10-28	US8871498
EP2419385	A4	2014-08-27	EP2419385
CN102395864	B	2013-06-12	CN102395864B
IN7220/DELNP/2011	A	2012-12-21	IN2011DN07220
BRPI1006731	A1	2012-11-20	BR201006731
CN102438958	A	2012-05-02	CN102438958
CN102395864	A	2012-03-28	CN102395864
US20120064565	A1	2012-03-15	US20120064565
US20120064616	A1	2012-03-15	US20120064616



EP2419385	A1	2012-02-22	EP2419385				
EP2419701	A1	2012-02-22	EP2419701				
SE533578	C2	2010-10-26	SE-533578				
WO2010/120229	A1	2010-10-21	WO2010120229				
WO2010/120230	A1	2010-10-21	WO2010120230				
SE0950240	A1	2010-10-15	SE200950240				

Abstract

(EP2419701)

The present invention discloses a measuring device 1 for measuring an ultra low gas flow, working by the principle of liquid displacement, wherein the measuring device 1 comprises at least one cell 2 comprising a gas inflow means 3, a gas compartment means 4 with a predefined inner geometric physical volume and active volume, the gas compartment means 4 having one gas accumulating end 5 and one lifting end 6, the gas compartment means 4 also defining a geometric gas collecting point inside of the gas compartment means 4 during a gas filling cycle, the geometric gas collecting point moving further and further from the gas accumulating end 5 to the lifting end 6 during the gas filling cycle, and wherein the cell 2 comprises a holding means 7 having a pivoting element 8 enabling the gas compartment means 4 to pivot upwards when the geometric gas collecting point is positioned at the lifting end 6 and the lifting force is larger than the down-pressing force at the lifting end 6, thereby releasing all of the accumulated gas in the gas compartment means 4, and then pivoting back to its initial standby position for new receipt and storage of gas during another gas filling cycle until next releasing sequence, and wherein the cell 2 also comprises a sensor means 9 provided to generate a signal and/or change the state of a signal when the gas compartment means 4 is not in its initial standby position, wherein the gas storing capacity of the inside of the gas compartment means 4 is larger at the gas accumulating end 5 than at the lifting end 6 and wherein the gas accumulating end 5 has a higher vertical position than the lifting end 6 at the initial standby position.

Inventors

LIU JING

Latest standardized assignees - inventors removed

BIOPROCESS CONTROL SWEDEN

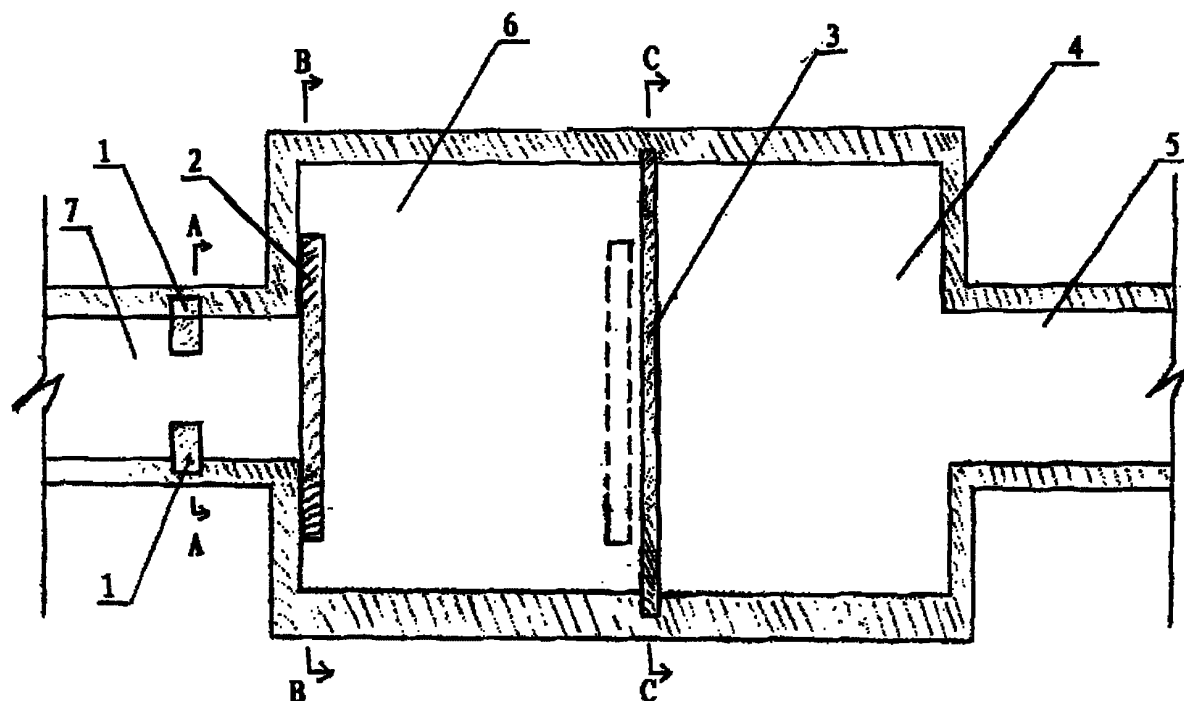
Family 6/8 - FAMPAT - ©Questel

Title

(CN201125242U)

Fire stop device for methane tank

Images

**Publication numbers with kind code & date**

CN201125242

Y

2008-10-01

CN201125242U

**Abstract**

(CN201125242)

The utility model relates to a flame arrester for biogas digester which includes an intake pipe (7), an intake chamber (6) connected with the intake pipe (7), an outlet chamber (4) connected with the intake chamber (6), and an outlet pipe (5) connected with the outlet chamber (4). A most special of the flame arrester lies in that a magnetic ring is set on the inlet chamber (7) inner arm, a magnetic slice (2) is set on the inlet chamber (6) inside, a filtering board (3) is set between the inlet chamber (6) and the outlet chamber (4). The flame arrester for biogas digester has reasonable design, safety and convenient application, and can avoid explosion caused by backfire of biogas digester inlet pipe efficiently, protect the safety of the life and property of the user.

Inventors

ZHAO ZHENHU

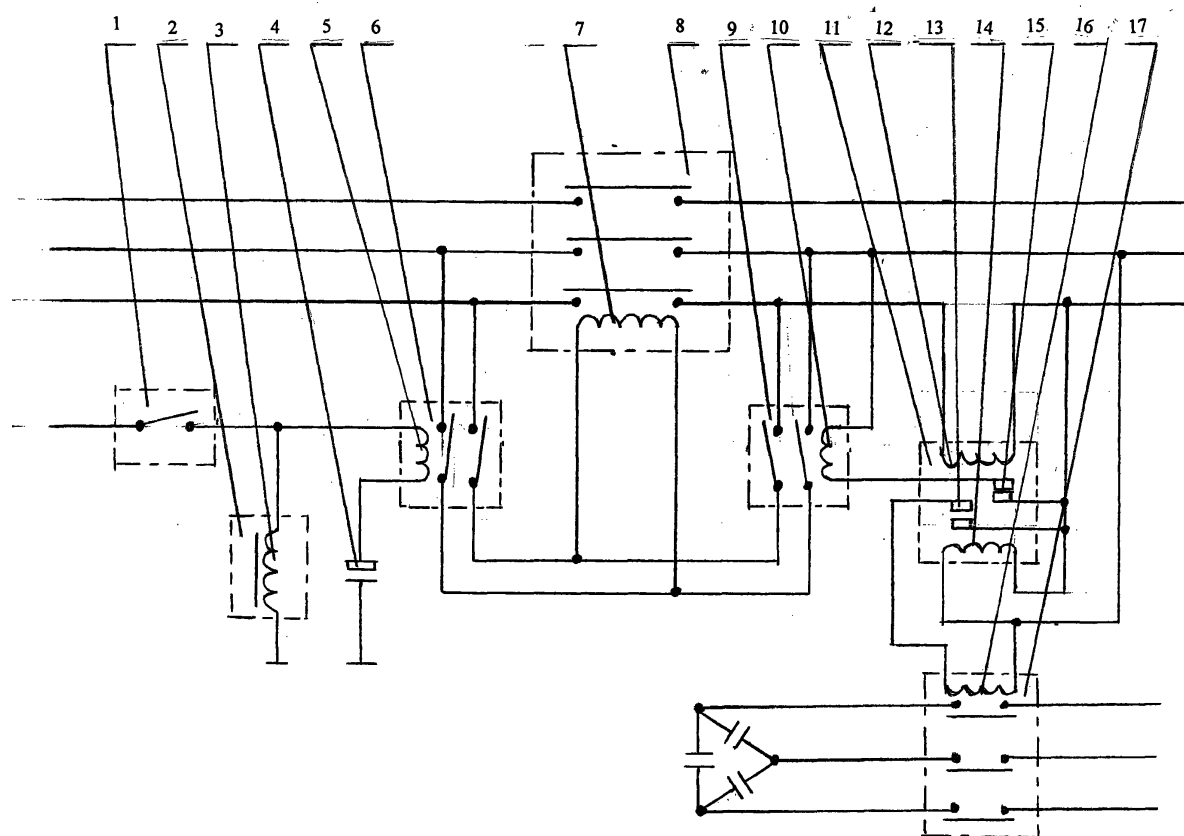
Family 7/8 - FAMPAT - ©Questel

Title

(CN102761134)

Small gas-fired generation grid-connected unit with automatic intermittent working function

Images

**Publication numbers with kind code & date**[CN102761134](#)

A

2012-10-31

CN102761134

**Abstract**

(CN102761134)

The patent refers to the field of 'circuit arrangements or systems for supplying or distributing electric power and systems for storing electric energy'. A small gas-fired generation grid-connected unit has the advantages of simple structure, reliability and low manufacture cost, has the functions of automatic starting, automatic grid-connected working and full-automatic intermittent working of automatic disconnection and stopping and is suitable for biogas and oilfield associated gas sources with extremely unstable output and inadequate output quantity.

Inventors

MENG GUONING

Family 8/8 - FAMPAT - ©Questel

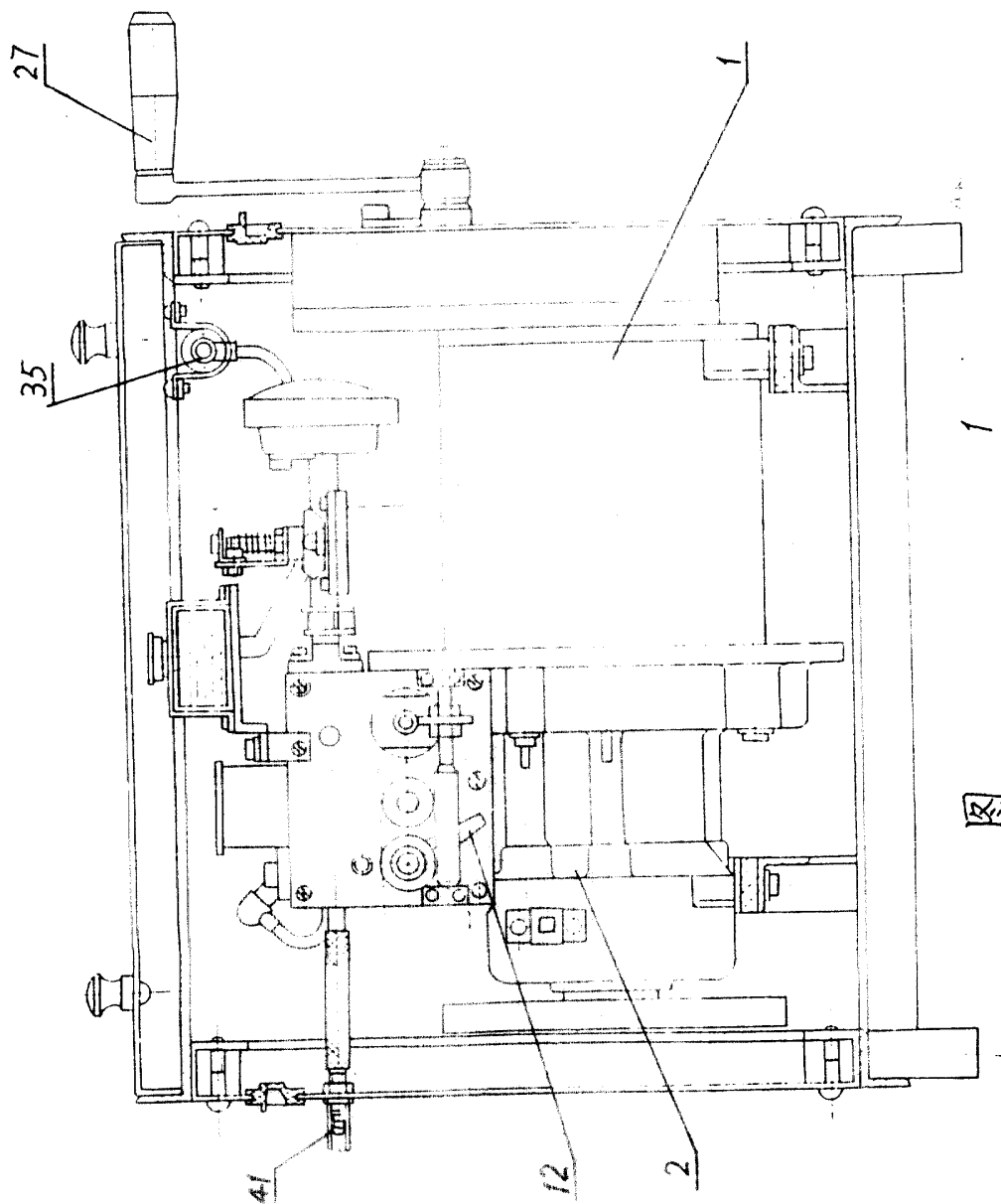
Title

(CN1020833C)

Miniature electric generating set with methane as energy source

Images

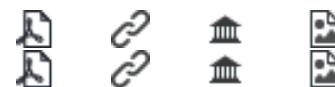
说明书附图



12

Publication numbers with kind code & date

CN1020833	C	1993-05-19	CN1020833C
CN1053106	A	1991-07-17	CN1053106



Abstract

(CN1053106)

The invention relates to the technical field of internal combustion engine-generator with methane fuel. It consists of a generator, a methane engine, a starter, and an ignition system. This methane engine-generator set of small size and light weight, about 17 kg, is designed of a rational structure, high capability of self-excitation, rapid establishment of excitation voltage, stable output frequency and automatic regulation of methane input depending on the load; it needs only a methane

generating pit with a normal output of 6-10 m³ to produce a.c. power of 300 w, 220 v, 50 Hz, at a consumption of only 0.4 m³ per hour. It can provide electric supply for a family of 1-3 people, thus satisfying the needs for electric supply of peasant families in rural area where electricity is not available.

Inventors

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LI PENG

Latest standardized assignees - inventors removed

KUNMING CITY AGRICULTURE ADMINISTRATION