

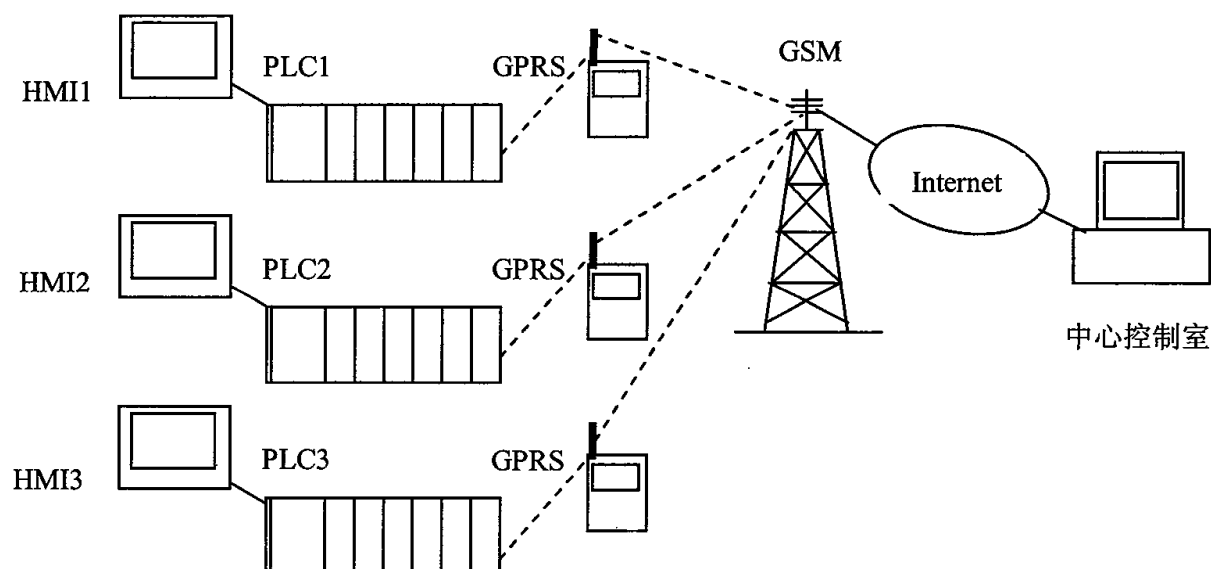
10 Documents

Publication numbers	Title	Current assignees
CN202012902U U	PLC control device for oil field fuel oil gas injection boiler	LIAOHE OIL EXPLORATION CNPC, ...
CN202649769U U	Sterilization boiler control system	XIAMEN NEWLUKE ROBOT TECHNOLOGY
CN110597175 A	Waste heat boiler vibration control system and method	ZIJIN COPPER INDUSTRY
CN206488351U U	Methyl alcohol boiler intelligence control system	SHANXI YUNENG TECHNOLOGY DEVELOPMENT
KR101738091 B1	System for controlling air-fuel ratio and nitrogen oxide through analysis of boiler exhaust gas in real time	DAELIM ROYAL ENP
KR101678425 B1	Smart waste heat recovery device and smart waste heat recovery method through two-loop highest cycle for chimney	HIGHEST
CN108803466 A	Online detection system and method for energy efficiency of industrial boiler	HUIZHOU INSPECTION INSTITUTE GUANGDONG INSTITUTE OF SPECIAL EQUIPMENT INSPECTION & RESEARCH
CN107568748 A	Processing system of coconut milk beverage and application method of processing system	GUANGDONG SHENGHETANG HEALTH FOOD
EP2870220 A1	Chain drag carbonizer, system and method for the use thereof	AEMERGE
CN106184684 A	Automatic-controlled movable LNG fuel tank gas supply system for vessel	SHANGHAI HENGTUO INDUSTRIAL DEVELOPMENT, ...

Family 1/10 - FAMPAT - ©Questel

Title

(CN202012902U)

PLC control device for oil field fuel oil gas injection **boiler****Images****Publication numbers with kind code & date**[CN202012902](#)

U

2011-10-19

CN202012902U

**Abstract**

(CN202012902)

The utility model relates to the automatic **PLC** (Programmable Logic Controller) control technical field, in particular to a **PLC** control device for an oil field fuel oil gas injection **boiler**; parameter sensors of the temperatures, pressures, etc. of each parts of the fuel oil gas injection **boiler** are in connection with a **PLC** analog quantity input module; a switching value is in connection with a **PLC** digital quantity input module; a **PLC** analog quantity output module and a digital quantity output module control corresponding execution mechanisms; The serial ports of the **PLC** are in connection with a touch screens (Human Machine Interface); a GPRS (General Packet Radio Service) communication module collects **PLC** data and transmits the data to a management control center through a mobile GSM network. The **PLC** control device raises the automation degree of the fuel oil gas injection **boiler**, and ensures the safe and stable operation of the fuel oil gas injection **boiler**; meanwhile the **PLC** control device controls a plurality of sites, performs concentrate scheduling management on the plurality of sites and raises efficiency.

Inventors

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Latest standardized assignees - inventors removed

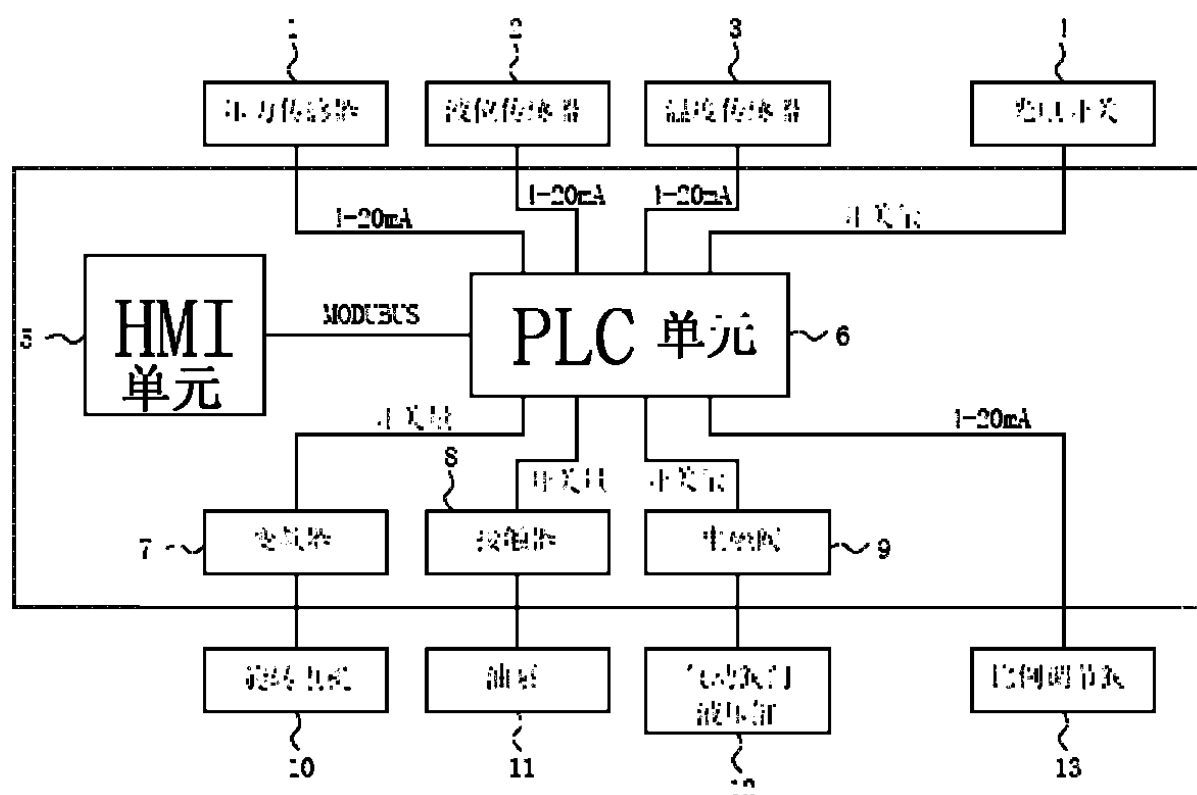
LIAOHE OIL EXPLORATION CNPC

CHINA NATIONAL PETROLEUM

Family 2/10 - FAMPAT - ©Questel

Title

(CN202649769U)

Sterilization **boiler** control system**Images****Publication numbers with kind code & date**

CN202649769

U

2013-01-02

CN202649769U

**Abstract**

(CN202649769)

The utility model relates to an automatic control system, especially to an automatic control system of the food industry. A sterilization **boiler** control system provided by the utility model is formed by a control unit arranged inside a control cabinet. The control unit comprises a programmable logic controller (**PLC**) unit and a human machine interface (**HMI**) unit connected to the **PLC** unit. A signal collection port of the **PLC** unit is connected with ports of a pressure sensor, a liquid level sensor, a temperature sensor and a photoelectric switch of the sterilization **boiler**; and a signal control port of the **PLC** unit is also connected to a rotating electrical machine, an oil pump, a pneumatic valve hydraulic cylinder of the sterilization **boiler** respectively by a frequency converter unit, a contactor unit and an electromagnetic valve unit and is directly connected to a proportioning valve. According to the utility model, the provided sterilization **boiler** control system is used for carrying out segmentation control on the operation of the sterilization **boiler**.

Inventors

蔡再嘉

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CAI GUOYONG

Latest standardized assignees - inventors removed

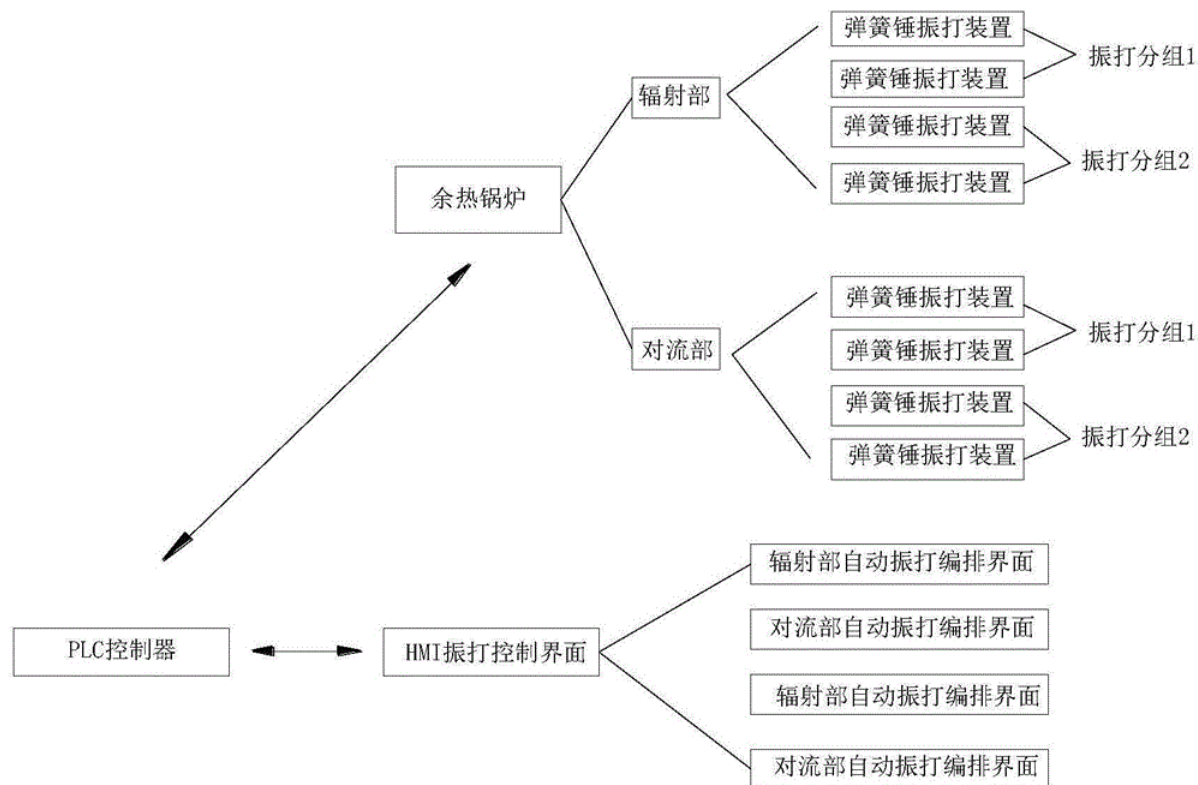
XIAMEN NEWLUKE ROBOT TECHNOLOGY

Family 3/10 - FAMPAT - ©Questel

Title

(CN110597175)

Waste heat boiler vibration control system and method

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

CN110597175

A

2019-12-20

CN110597175

**Abstract**

(CN110597175)

The invention discloses a rapping control system and method for a waste heat boiler, which comprises the following steps: waste heat boiler: a plurality of spring hammer rapping devices are arranged and divided into a plurality of rapping groups, and the rapping time and the interval time are independently adjustable; HMI rapping control device: the system is used for displaying an HMI rapping control interface, and the HMI rapping control interface comprises an automatic rapping arrangement interface; a PLC controller: the PLC controller is in communication connection with the HMI rapping control device and is used for storing the serial number of each spring hammer rapping device, receiving a control instruction sent by the HMI rapping control device, a rapping grouping command, a rapping time and interval time setting command of each group of rapping groups, and controlling each group of rapping groups to rapping in sequence according to the setting command. By the invention, technologists can perform marshalling adjustment on the boiler rapping equipment in real time according to different production periods and different working conditions and the ash deposition condition of the boiler, thereby achieving the effects of strengthening rapping, clearing away the ash deposition of the boiler and ensuring the smooth operation of the copper pyrometallurgical smelting production.

Inventors

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LIN FUKUN

CENG LINGTONG

QIU QINSHENG

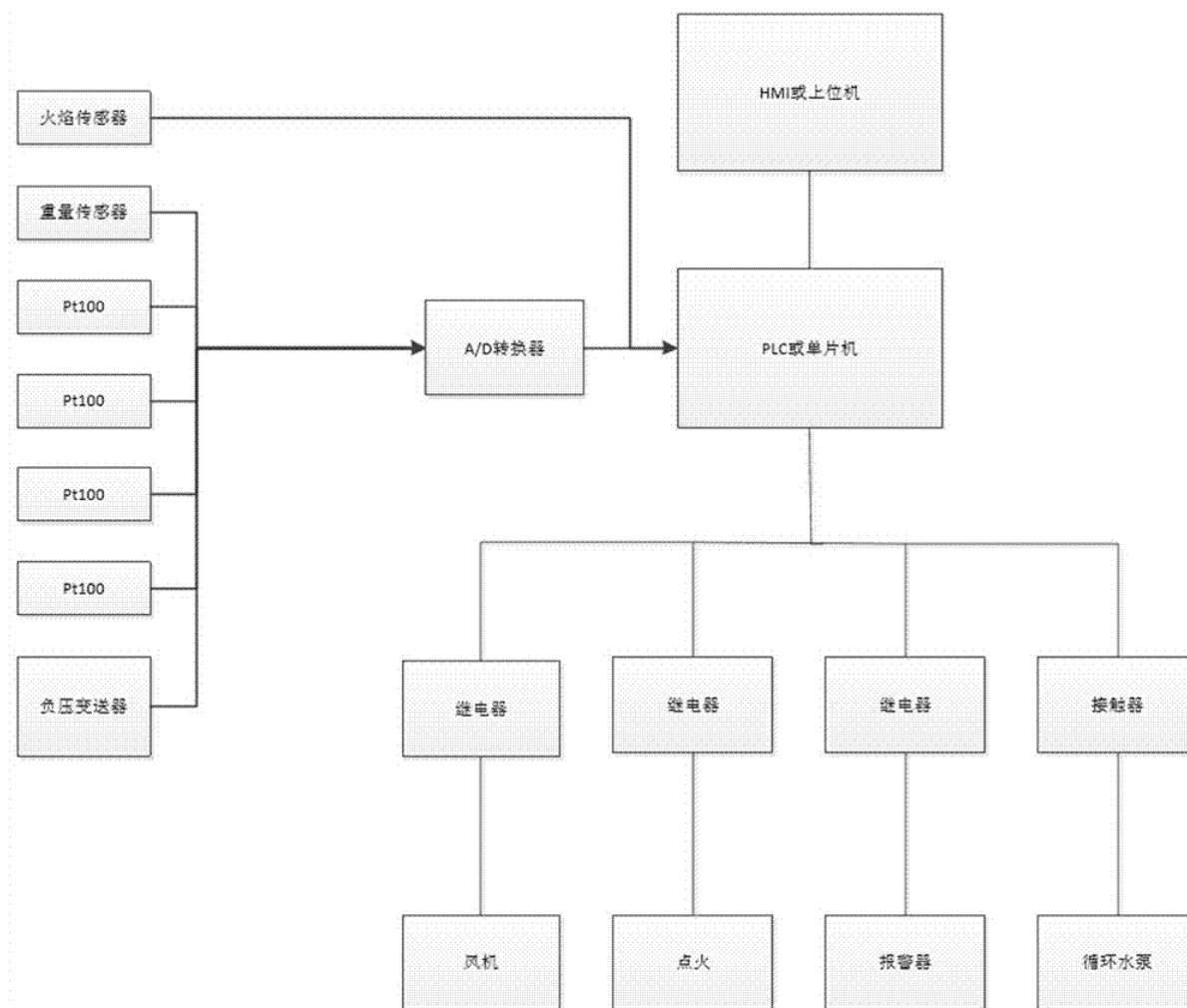
Latest standardized assignees - inventors removed

ZIJIN COPPER INDUSTRY

Family 4/10 - FAMPAT - ©Questel

Title

(CN206488351U)

Methyl alcohol **boiler** intelligence control system**Images****Publication numbers with kind code & date**[CN206488351](#)

U

2017-09-12

CN206488351U

**Abstract**

(CN206488351)

The utility model provides a methyl alcohol **boiler** intelligence control system, includes host computer or **HMI** touch -

sensitive screen, the next quick-witted **PLC** or singlechip, **PLC** or singlechip are connected with multichannel temperature sensor, vacuum changer, level sensor or weighing transducer, photoelectric sensor, AD converter and isolation relay electricity respectively, and the next quick-witted **PLC** or singlechip still are connected with fan switch, some firearm, water pump and control fuel supply's solenoid valve electricity respectively. The utility model discloses a methyl alcohol **boiler** intelligence control system to **PLC** or singlechip are the core, through sensor and each equipment of setting on key equipment or device or the controlling means who installs, match corresponding operating software, realize both having practiced thrift the manpower to the automatic control of methyl alcohol **boiler**, alleviate intensity of labour, have still reduced energy loss, keep indoor temperature to last in reasonable scope.

Inventors

杨永宁

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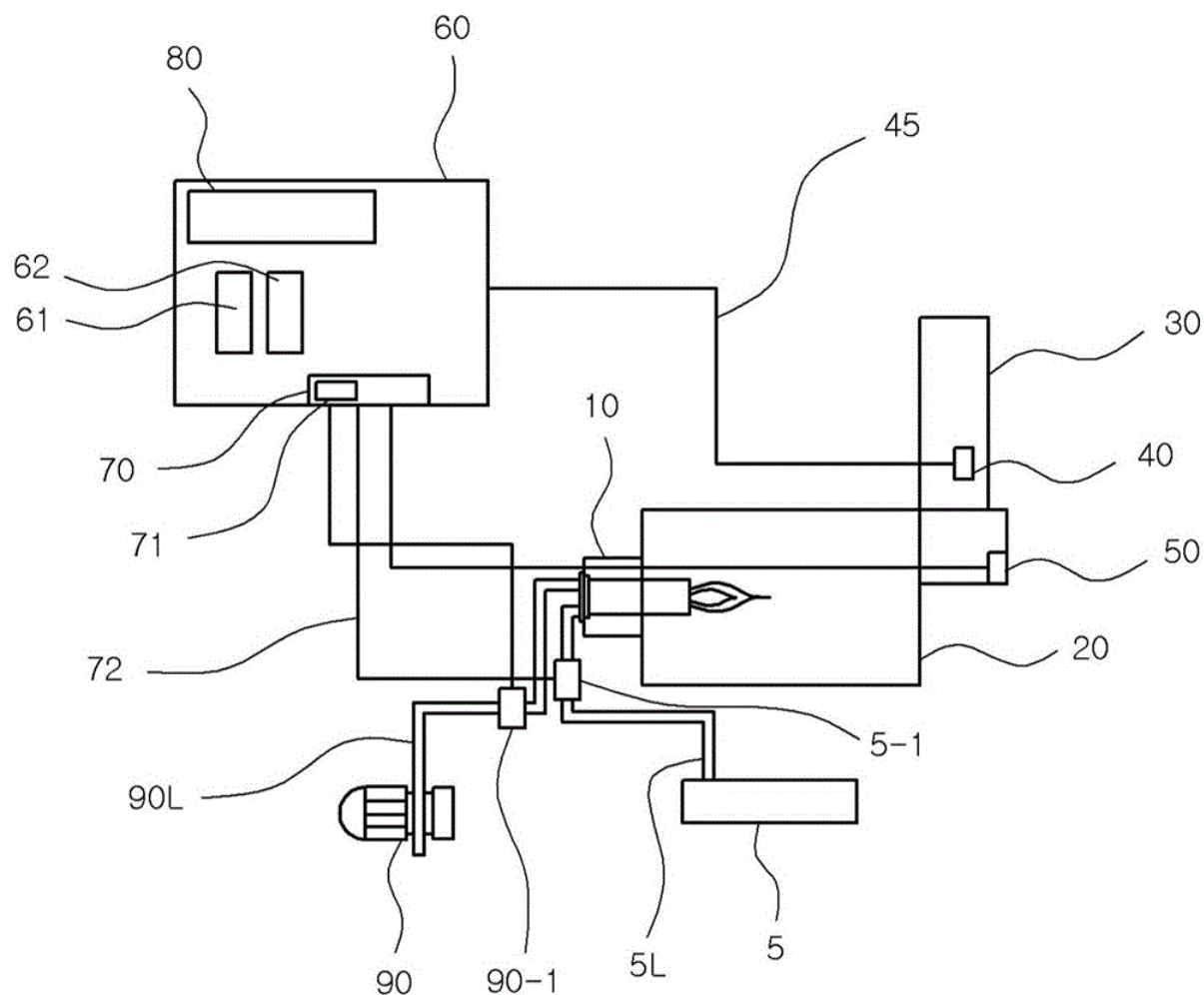
Latest standardized assignees - inventors removed

SHANXI YUNENG TECHNOLOGY DEVELOPMENT

Family 5/10 - FAMPAT - ©Questel

Title

(KR101738091)

System for controlling air-fuel ratio and nitrogen oxide through analysis of **boiler** exhaust gas in real time**Images****Publication numbers with kind code & date**

CN107676813

B

2019-05-14

CN107676813B



CN107676813

A

2018-02-09

CN107676813



KR101738091

B1

2017-05-19

KR101738091

Abstract

(KR101738091)

The present invention relates to a system for controlling an air-fuel ratio and nitrogen oxide through the analysis of **boiler** exhaust gas in real time.

The system for controlling an air-fuel ratio and nitrogen oxide through the analysis of **boiler** exhaust gas in real time comprises: a fuel pipe for supplying fuel; a burner connected to the fuel pipe through a line to spray a flame forward; an air blower for supplying air to the burner through a line; a **boiler** having the burner mounted therein to supply heat; an exhaust pipe connected to the **boiler** to discharge exhaust gas; a sensor module including a NO-x sensor installed in the exhaust gas to sense the amount of NO-x and O-2 contained in the exhaust gas, and having a sensor analysis function and a communication function; a proportional control electronic switch which is disposed between a rear end of the **boiler** and the exhaust pipe and enables proportional control of a selective catalytic reduction method (SCR) or a selective non-catalytic reduction method (SNCR) or proportional control of a scrubber in proportion to the amount of NO-x contained in the exhaust gas; a control unit including a **PLC** for controlling the amount of fuel supplied from the fuel pipe and air supplied from the air blower as a fuel damper motor controller and an air damper motor controller are attached thereto, and having functions of temporarily storing NO-x and O-2 values received through a communication module and transmitting the same to the **PLC**; a fuel damper motor installed in the line and connected to the fuel damper motor controller; and an air damper motor installed in the line and connected to the air damper motor controller.

The present invention is provided to achieve an optimum air-fuel ratio quickly and accurately and, at the same time, to provide NO-x reduction by analyzing exhaust gas in real time to measure and monitor the concentrations of NO-x and O-2 and transmitting the same to a **boiler** control device to adjust the mixture amount of fuel and air.

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Inventors

이병주

LEE, BYUNG-JOO

Latest standardized assignees - inventors removed

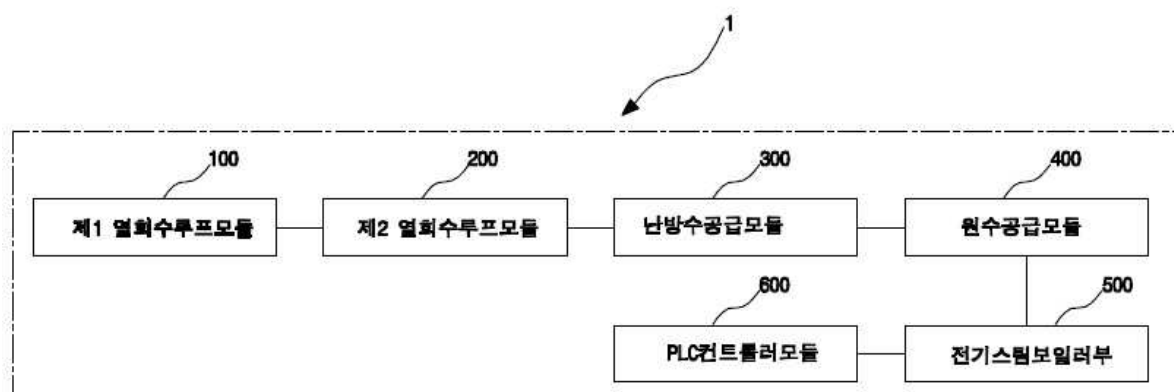
DAELIM ROYAL ENP

Family 6/10 - FAMPAT - ©Questel

Title

(KR101678425)

Smart waste heat recovery device and smart waste heat recovery method through two-loop highest cycle for chimney

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

KR101678425

B1

2016-11-22

KR101678425

**Abstract**

(KR101678425)

The present invention comprises: a first heat recovery loop module (100); a second heat recovery loop module (200); a heating water supply module (300); a raw water supply module (400); an electric steam boiler unit (500); and a PLC controller module (600). The purpose of the present invention is to provide the smart waste heat recovery method, and the smart waste heat recovery device through a two-loop highest cycle for a chimney improving economic efficiency.

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Inventors

IM, BYEONG WAN

Latest standardized assignees - inventors removed

HIGHEST

Family 7/10 - FAMPAT - ©Questel

Title

(CN108803466)

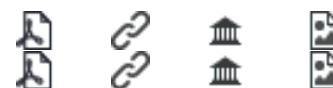
Online detection system and method for energy efficiency of industrial boiler

Images



Publication numbers with kind code & date

CN108803466	B	2019-07-09	CN108803466B
CN108803466	A	2018-11-13	CN108803466



Abstract

(CN108803466)

The present invention relates to a kind of Industrial **Boiler** efficiency on-line detecting system and methods, belong to Industrial **Boiler** monitoring technology field. The line detecting system includes Industrial **Boiler** on-site data gathering module and efficiency online monitoring and management and service information management module ; The detection method includes Industrial **Boiler** on-site data gathering step and efficiency online monitoring and management and service information management step. The Industrial **Boiler** efficiency on-line detecting system and method have the monitoring efficiency for largely improving Industrial **Boiler** parameters, reduce manpower and materials.

Inventors

刘福

吴海泓

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向南宏

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XIANG NANHONG

Latest standardized assignees - inventors removed

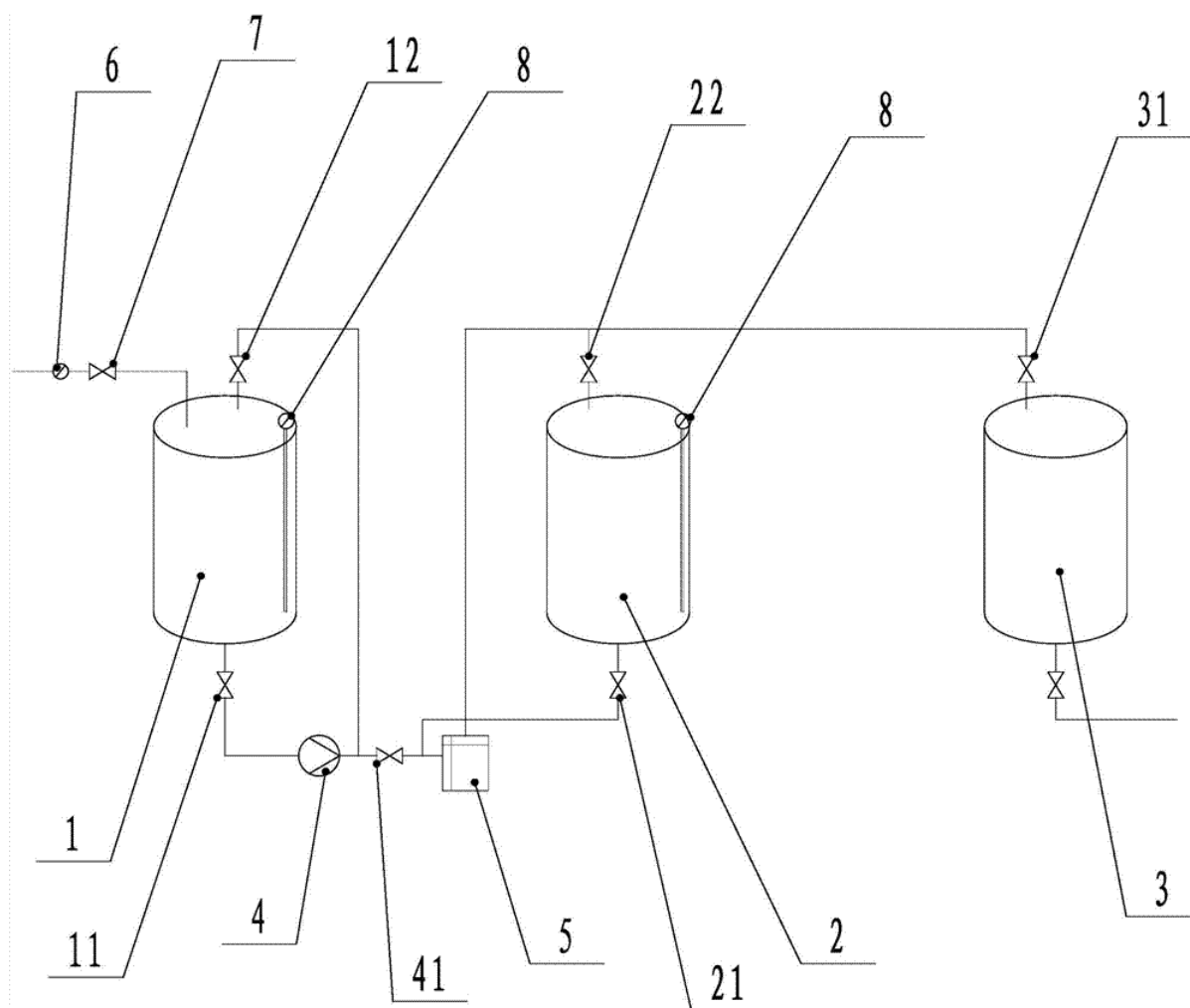
HUIZHOU INSPECTION INSTITUTE GUANGDONG INSTITUTE OF SPECIAL EQUIPMENT INSPECTION & RESEARCH

Family 8/10 - FAMPAT - ©Questel

Title

(CN107568748)

Processing system of coconut milk beverage and application method of processing system

Images**Publication numbers with kind code & date**[CN107568748](#)

A

2018-01-12

CN107568748

**Abstract**

(CN107568748)

The invention relates to a processing system of a coconut milk beverage and an application method of the processing system. The processing system comprises a first material cooking cylinder, a material storing cylinder and a PLC control device, wherein a water inlet pipe is connected to the first material cooking cylinder; a flowmeter and a feeding valve are mounted on the water inlet pipe; a first material cooking cylinder bleeder valve is connected to the upper end of the first material cooking cylinder, and a first material cooking cylinder returning valve is connected to the lower end of the first material cooking cylinder; a shearing pump is mounted between the first material cooking cylinder bleeder valve and the first material cooking cylinder returning valve; a shearing bleeder valve is also connected to the outlet end of the shearing pump; and a homogenizing machine is connected to the shearing bleeder valve. According to the processing system disclosed by the invention, working procedures of automatic shearing and high-pressure homogenizing can be realized by the processing system through the PLC control device, so that the mixing of materials is more sufficient, and granules of the materials are fine and uniform; and besides, corresponding valves can be automatically opened and closed by the processing system according to technological parameters, so that the liquid level, the temperature and the material cooking time are accurately controlled, the accuracy and the working efficiency of the technology are improved, and the processing system has high practicality.

Inventors

陆伟

LU WEI

Latest standardized assignees - inventors removed

GUANGDONG SHENGHETANG HEALTH FOOD

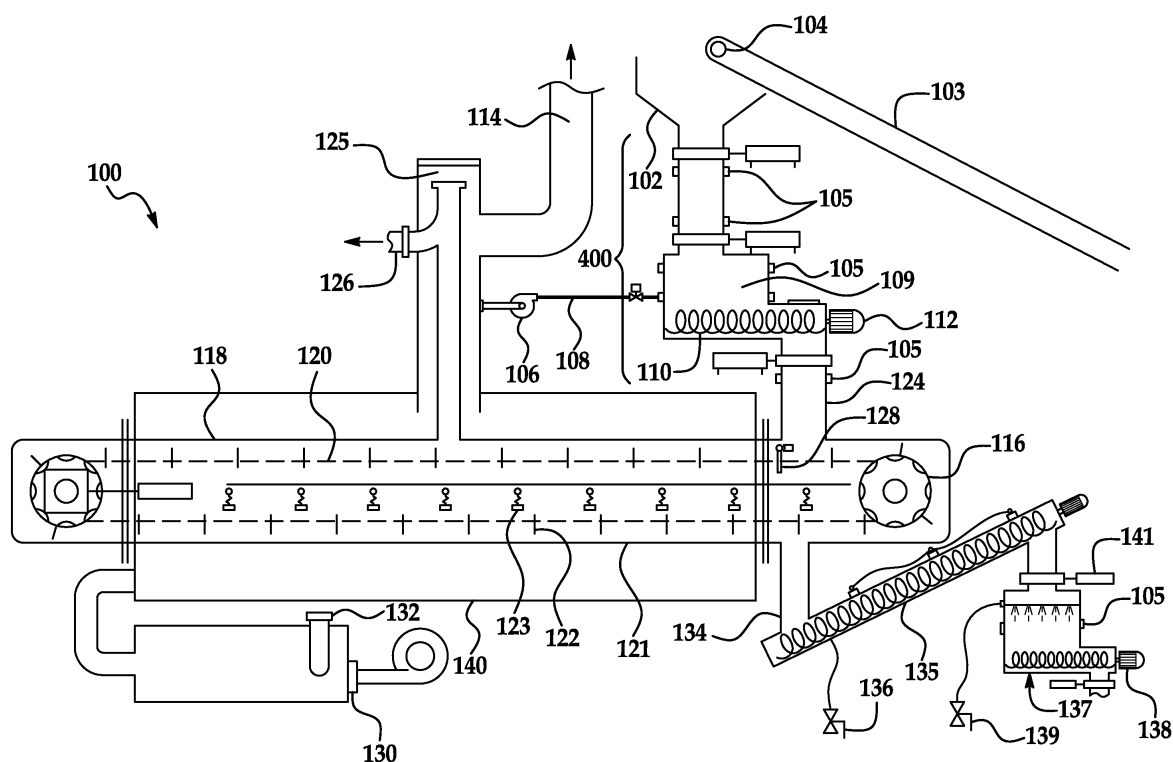
Family 9/10 - FAMPAT - ©Questel

Title

(EP2870220)

Chain drag carbonizer, system and method for the use thereof

Images



Publication numbers with kind code & date

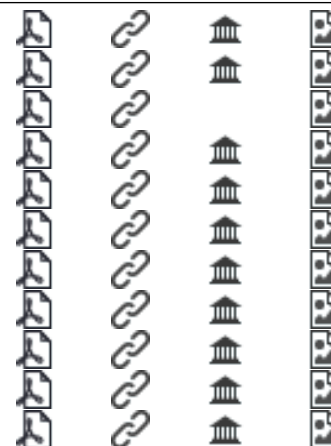
US20180056262

A1 2018-03-01

US20180056262



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MX2015000007	A	2016-04-25	MX2015000007
EP2870220	A4	2016-03-09	EP2870220
JP2015531796	A	2015-11-05	JP2015531796
EP2870220	A1	2015-05-13	EP2870220
US20140348710	A1	2014-11-27	US20140348710
US8801904	B2	2014-08-12	US8801904
CA2878333	A1	2014-01-09	CA2878333
US20140008206	A1	2014-01-09	US20140008206
WO2014/008100	A1	2014-01-09	WO201408100



Abstract

(EP2870220)

A drag chain carbonizer is provided with a system and methods for anaerobic thermal transformation processing to convert waste into various solid carbonized products and varied further co-products. The drag-chain carbonizer includes an adjustable bed depth mechanism, a heating mechanism, a pressure management mechanism, and a chain tensioning mechanism containing at least one position sensor for communication of an actuator position to at least one programmable logic controller (PLC). Carbonaceous waste is transformed into useful co-products that can be re-introduced into the stream of commerce at various economically advantageous points. Depending upon the input materials and the parameters selected to process the waste, including real time economic and other market parameters, the system adjusts co-products output to reflect changing market conditions.

Inventors

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Latest standardized assignees - inventors removed

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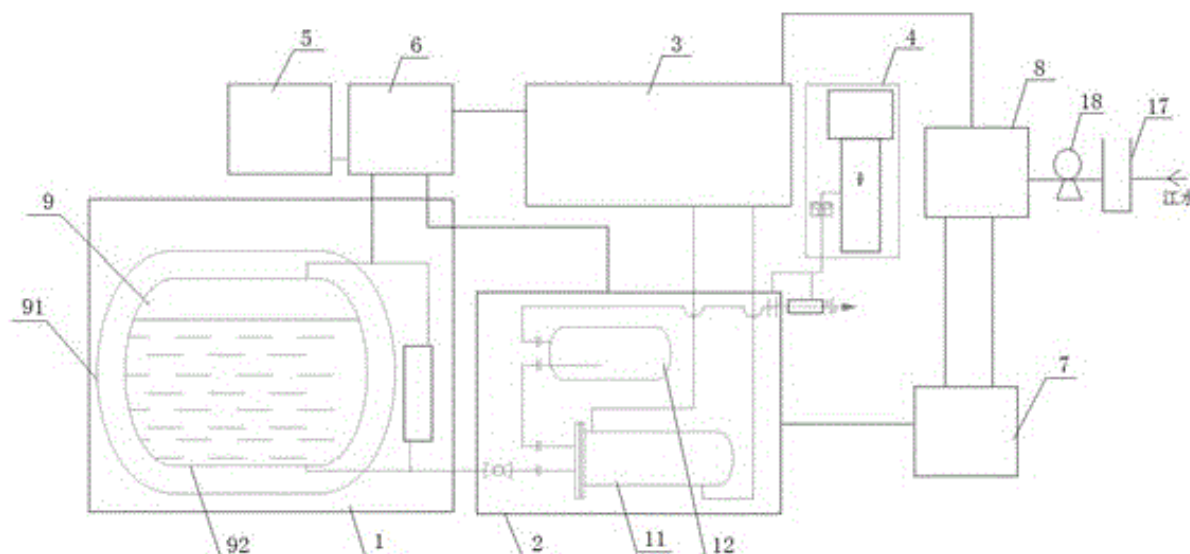
Family 10/10 - FAMPAT - ©Questel

Title

(CN106184684)

Automatic-controlled movable LNG fuel tank gas supply system for vessel

Images



Publication numbers with kind code & date

[CN106184684](#) B 2019-03-29 CN106184684B



CN106184684

A

2016-12-07

CN106184684

**Abstract**

(CN106184684)

The invention discloses an automatic-controlled movable LNG fuel tank gas supply system for a vessel. The gas supply system comprises an LNG fuel tank, a gasification unit, a river water heating circulation system, a ventilation spreading device, an LNG fuel control monitoring system, a valve piece, an LNG pipe system, a dual-fuel main engine and a heat exchanger, wherein the LNG fuel tank comprises an LNG storing tank and a frame; the LNG fuel storing tank is fixed in the frame; the gasification unit comprises a water bath vaporizer and a buffer tank; and the LNG storing tank is connected with the water bath vaporizer through quick connectors. According to the automatic-controlled movable LNG fuel tank gas supply system disclosed by the invention, on-site charging is not needed, so that the number of times for on-site charging of the vessel is reduced, and risk of accidental leakage is greatly reduced; and besides, performance parameters of each component in the LNG fuel system are dynamically monitored by the LNG fuel control system, and are displayed on a man-machine interface in a driving cab and a man-machine interface in an LNG fuel control tank in a central control room.

Inventors

张晖

ZHANG HUI

于丰杰

YU FENGJIE

王亚鸿

WANG YAHONG

郭正华

GUO ZHENGHUA

Latest standardized assignees - inventors removed

SHANGHAI HENGTUO INDUSTRIAL DEVELOPMENT

DALIAN YUCHAI ENERGY