

22 Documents

Publication numbers	Title	Current assignees
CA2973801 A1	Determination of the thermal resistance of a wall	SAINT GOBAIN ISOVER
WO2014141730 A1	Gas sensor	HITACHI AUTOMOTIVE SYSTEMS
CN103364437 A	Wireless networking-based one-time rapid detection and evaluation method for building heat consumption of building group	COMPUTING CENTER OF SHANDONG PROVINCE
WO2007111052 A1	Fluid identifying device and fluid identifying method	MITSUI MINING & SMELTING
JP08015189 A	Method and apparatus for measuring thermal resistance	KYOTO ELECTRONICS MANUFACTURING, ...
CN103115940 A	Contact thermal resistance measuring device capable of adjusting loading force and temperature within wide range	XI'AN JIAOTONG UNIVERSITY
WO201237631 A1	Fuel composition identification system and method and fluid composition identification method	ROBERT BOSCH
WO200695719 A1	Gas sensor	PANASONIC
CN102353695 A	Method for measuring heat storage coefficient based on thermoelastic damping theory	SHAOXING UNIVERSITY
CN1815211 A	Portable rock-soil heat physical characteristic detection instrument based on ground-source heat pump and method thereof	GROUND SOURCE HEAT PUMP INSTITUTE S
WO200184088 A1	Device for measuring physical quantity, method of manufacture thereof, and vehicle control system using device for measuring physical quantity	HITACHI, ...
CN104458798 A	In-situ test method for high-pressure low-temperature heat conductivity coefficients and heat transfer coefficients	DALIAN UNIVERSITY OF TECHNOLOGY
CN102539470 A	Integrated detection system for thermal performance of lower-medium vacuum compound insulation pipeline and application of integrated detection system	BEIJING INSTITUTE CIVIL ENGINEERING & ARCH
CN202393723U U	Device for measuring thermal conductivity factor of high-temperature composite insulating pipeline with air layer	BEIJING INSTITUTE CIVIL ENGINEERING & ARCH
CN104990952 A	Equivalent thermal conductivity measurement method and equipment for wall material	CHINA BUILDING MATERIAL TEST & CERTIFICATION XI
CN102565125 A	Integrated detection system for thermal performance of high-temperature air composite insulation pipeline and application of integrated detection system	BEIJING INSTITUTE CIVIL ENGINEERING & ARCH
CA2970214 A1	System for fluid pumping	DEKA PRODUCTS
WO200786585 A1	Fluid identification device and fluid identification method	MITSUI MINING & SMELTING

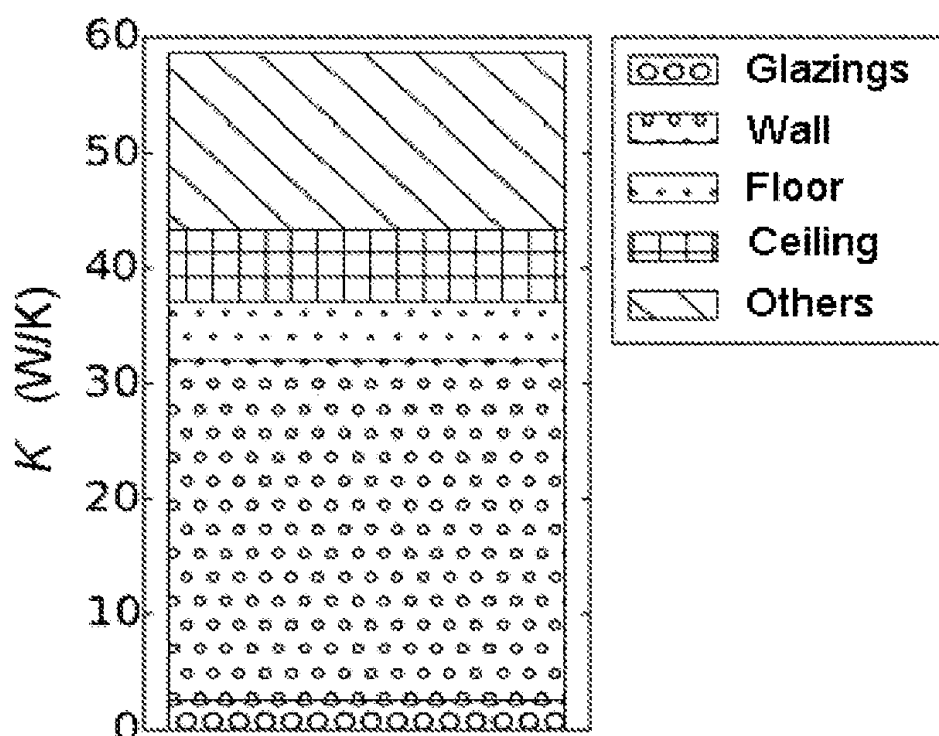
Publication numbers	Title	Current assignees
WO8604674 A1	Heat detecting element	DAIKIN INDUSTRIES
CA2991157 A1	Thermal dynamic response sensing systems for heaters	WATLOW
US20090061489 A1	Microfluidic devices with integrated resistive heater electrodes	CANON US LIFE SCIENCES
ES2308942 A1	Novel sustainable building model	EDIFICIOS SOSTENIBLES GETECH

Family 1/22 - FAMPAT - ©Questel

Title

(EP3254092)

Determination of the thermal resistance of a wall

Images**Publication data including kind & date**

CA2973801	A1	2016-08-11	CA2973801
WO2016124870	A1	2016-08-11	WO2016124870
FR3032529	A1	2016-08-12	FR3032529
AR103625	A1	2017-05-24	AR-103625
BR112017016854	A1	2017-08-15	BR112017016854
AU2016214236	A1	2017-09-21	AU2016214236
KR20170110093	A	2017-10-10	KR20170110093
CN107257922	A	2017-10-17	CN107257922
MX2017010038	A	2017-10-27	MX2017010038
IN201717025410	A	2017-11-10	IN201717025410
EP3254092	A1	2017-12-13	EP3254092
US2018017511	A1	2018-01-18	US20180017511
BR112017016854	A2	2018-03-27	BR112017016854
JP2018509613	A	2018-04-05	JP2018509613

**Abstract**

(EP3254092)

Said method, which aims to determine a quantity representative of the thermal resistance of a separation wall between a first medium and a second medium, comprises the following steps: -over at least two successive time periods D_k corresponding to different heating powers P_k for heating the first medium, carrying out a measurement campaign measuring the heat flow through the wall q_k and the temperature in the first medium T_{1k} at short time intervals, in addition to the determination of the temperature in the second medium T_{2k} at short time intervals; -determining the value of the

quantity representative of the thermal resistance of the wall, by converging: a thermal model expressing the time variation of the temperature in one medium separated from another medium by a wall, depending on the heat flow through the wall, the temperature in the other medium and physical parameters of the wall from which the quantity representative of the thermal resistance of the wall can be calculated; and the measured change T_{1k} in temperature in the first medium as a function of time.

Inventors

ALZETTO FLORENT

MEULEMANS JOHANN

PANDRAUD GUILLAUME

Latest standardized assignees - inventors removed

SAINT GOBAIN ISOVER

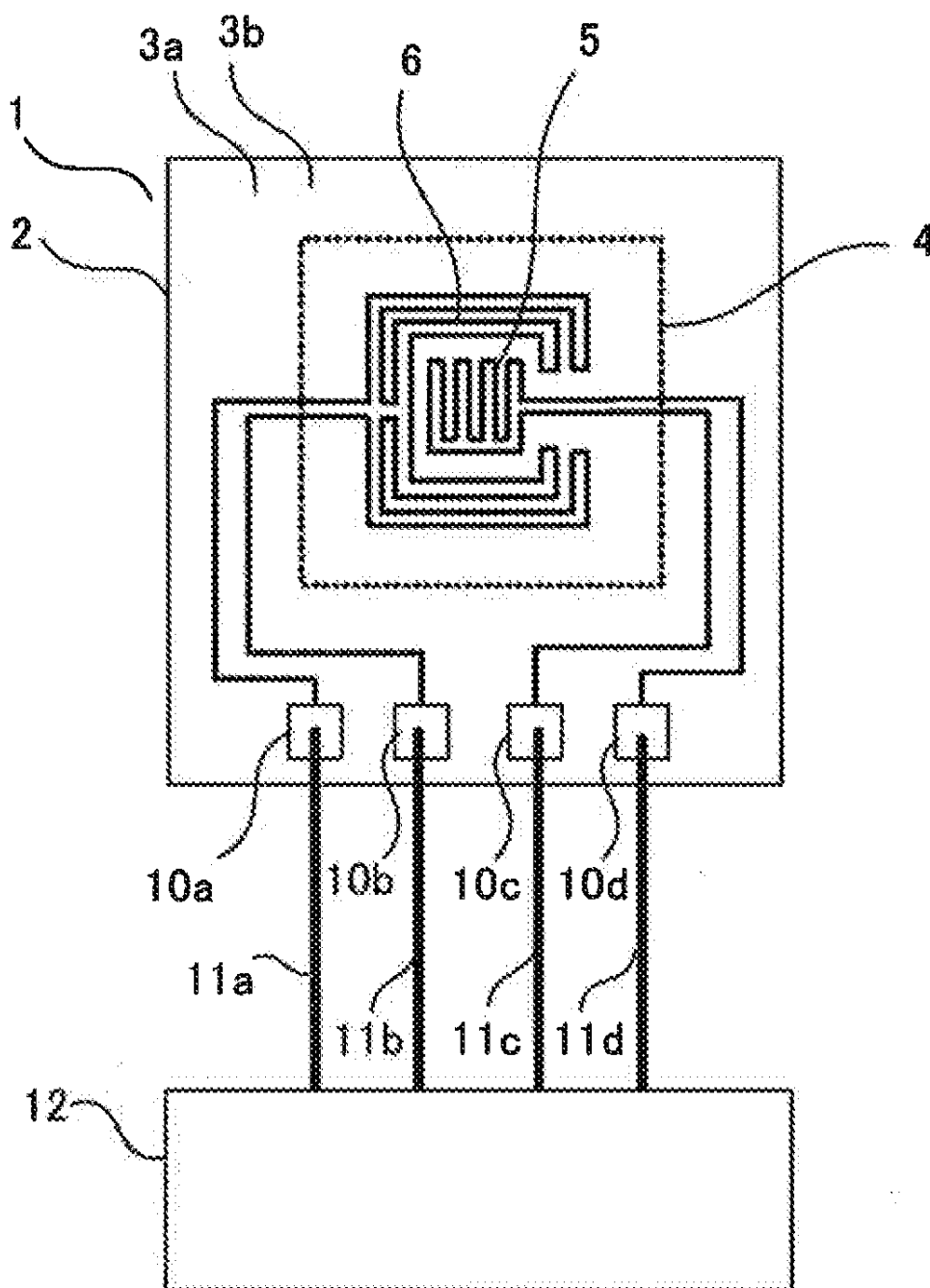
Family 2/22 - FAMPAT - ©Questel

Title

(EP2975385)

Gas sensor

Images



Publication data including kind & date

WO2014141730	A1	2014-09-18	WO2014141730				
JP2014178214	A	2014-09-25	JP2014178214				
CN105074442	A	2015-11-18	CN105074442				
EP2975385	A1	2016-01-20	EP2975385				
US2016033433	A1	2016-02-04	US20160033433				
JP6012515	B2	2016-10-25	JP6012515				
EP2975385	A4	2016-10-26	EP2975385				
CN105074442	B	2017-08-25	CN105074442B				

Abstract

(EP2975385)

In order to prevent deterioration and a breakdown of a sensor element when the sensor element is activated in a state where liquid is attached thereto, and to remove the liquid in a short **period** of time with lower power consumption, there is provided a gas sensor including a first heating element and a second heating element that is formed around the periphery

of the first heating element and has a wider forming area than the first heating element, and measuring a gas amount by heating the first heating element to a predetermined temperature, in which the second heating element is heated when the gas sensor is activated, and the first heating element is heated to the predetermined temperature after a heat value of the first heating element is restricted for a predetermined **period** of time.

Inventors

NAKANO HIROSHI

MATSUMOTO MASAHIRO

ASANO SATOSHI

ONOSE YASUO

Latest standardized assignees - inventors removed

HITACHI AUTOMOTIVE SYSTEMS

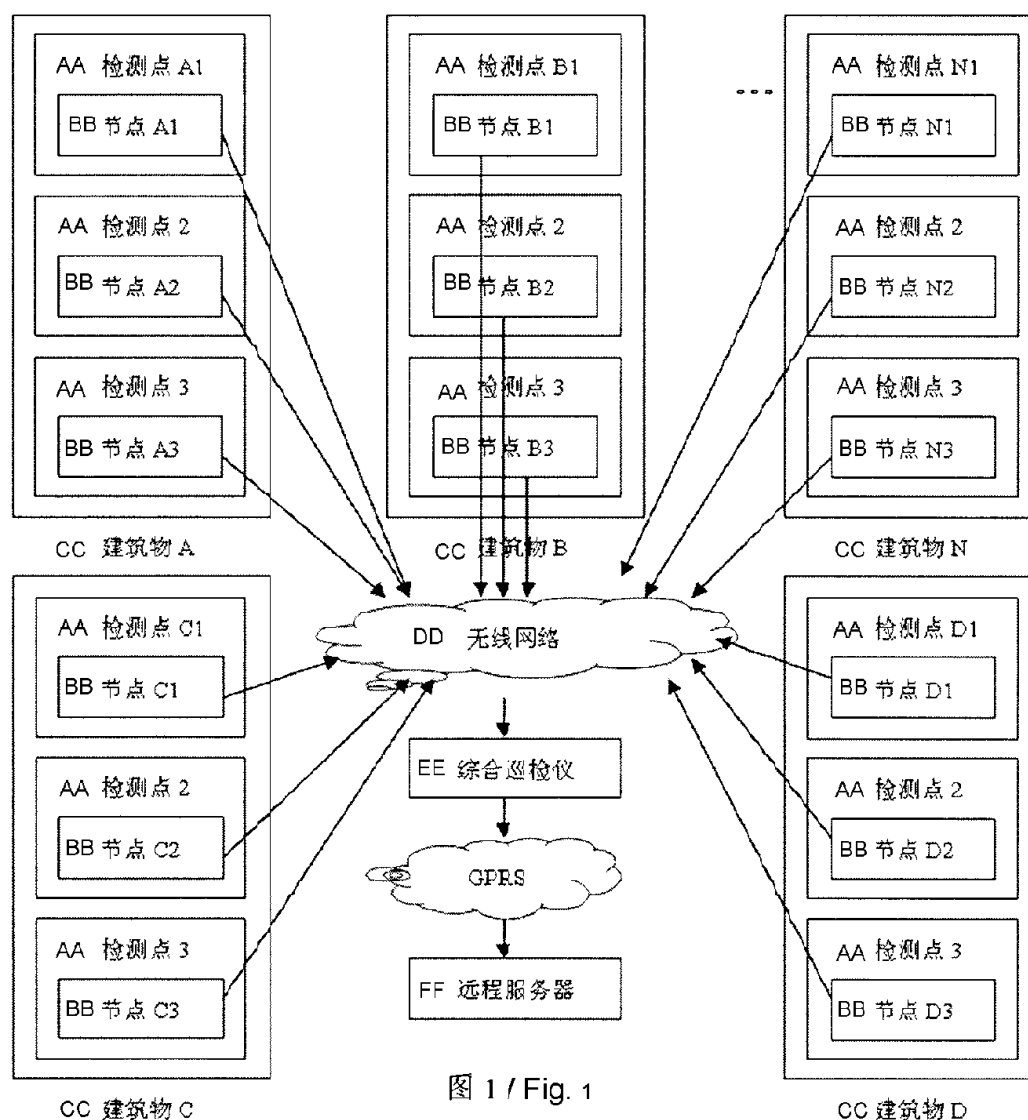
Family 3/22 - FAMPAT - ©Questel

Title

(WO201503291)

Wireless networking-based one-time rapid detection and evaluation method for building heat consumption of building group

Images



AA Detection point
 BB Node
 CC Building
 DD Wireless network
 EE Comprehensive inspection instrument
 FF Remote server

Publication data including kind & date

CN103364437	A	2013-10-23	CN103364437
WO2015003291	A1	2015-01-15	WO201503291
CN103364437	B	2015-05-13	CN103364437B



Abstract

(WO201503291)

A wireless networking-based one-time rapid detection and evaluation method for building heat consumption of a building group comprises: a) determining buildings to be detected and a detection main body; b) arranging a thermotechnical detection node device; c) establishing a communications channel; d) collecting data by using the thermotechnical detection node device; e) acquiring thermotechnical data by using a comprehensive inspection instrument; f) receiving the data by using a remote server; g) calculating a thermal resistance value and a heat transfer coefficient of the detection main body; and h) determining whether the thermal resistance value and the heat transfer coefficient are in line with energy-saving

standards. The comprehensive inspection instrument uses a data automatic retroactive method, and the remote server determines data availability according to a sliding time window. The heat consumption of the buildings is detected in an on-line manner, and the disadvantage of great blindness of off-line data acquisition is avoided, the working efficiency is improved, and energy needed by the devices is saved.

Inventors

CHENG GUANGHE

ZHENG XIAOSHI

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SUN XIANG

MENG QINGLONG

HAN LINGYAN

HAO FENGQI

HAN LUYUE

Latest standardized assignees - inventors removed

COMPUTING CENTER OF SHANDONG PROVINCE

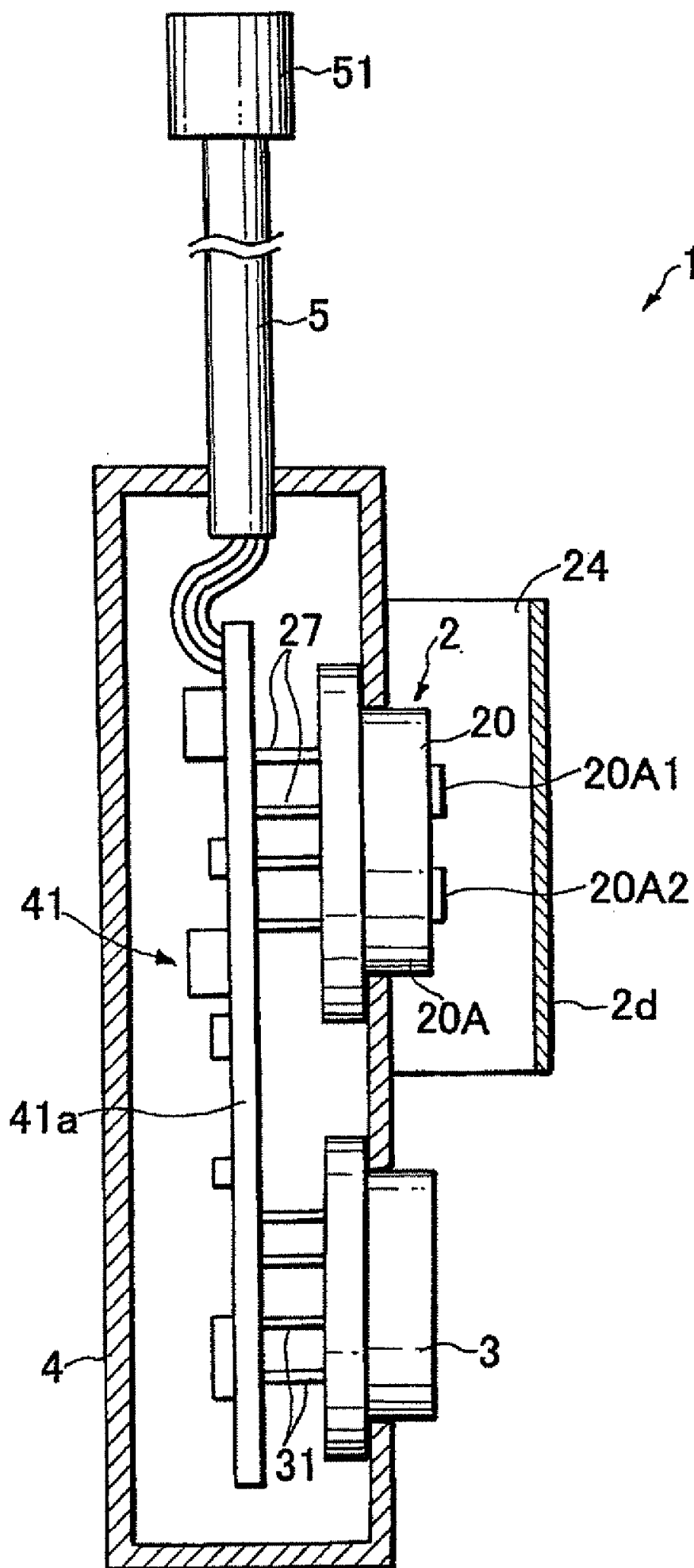
Family 4/22 - FAMPAT - ©Questel

Title

(EP2009431)

Fluid identifying device and fluid identifying method

Images



Publication data including kind & date

WO2007111052	A1	2007-10-04	WO2007111052				
JP2007292730	A	2007-11-08	JP2007292730				
EP2009431	A1	2008-12-31	EP2009431				
US2010294021	A1	2010-11-25	US20100294021				

Abstract

(EP2009431)

The present invention provides a fluid identification device of long life. Identification of an identification target fluid is carried out by using at least two liquid type detection parts each of which is equipped with both of a temperature detector and a heating element, selecting electrical conduction to any one of the heating elements, and identifying the identification target fluid based on a fluid temperature detection signal of the temperature detector in the fluid detection part not including the heating element whose electrical conduction has been selected and an output of the fluid type detection circuit.

Inventors

MAKINO TSUTOMU

KOIKE ATSUSHI

Latest standardized assignees - inventors removed

MITSUI MINING & SMELTING

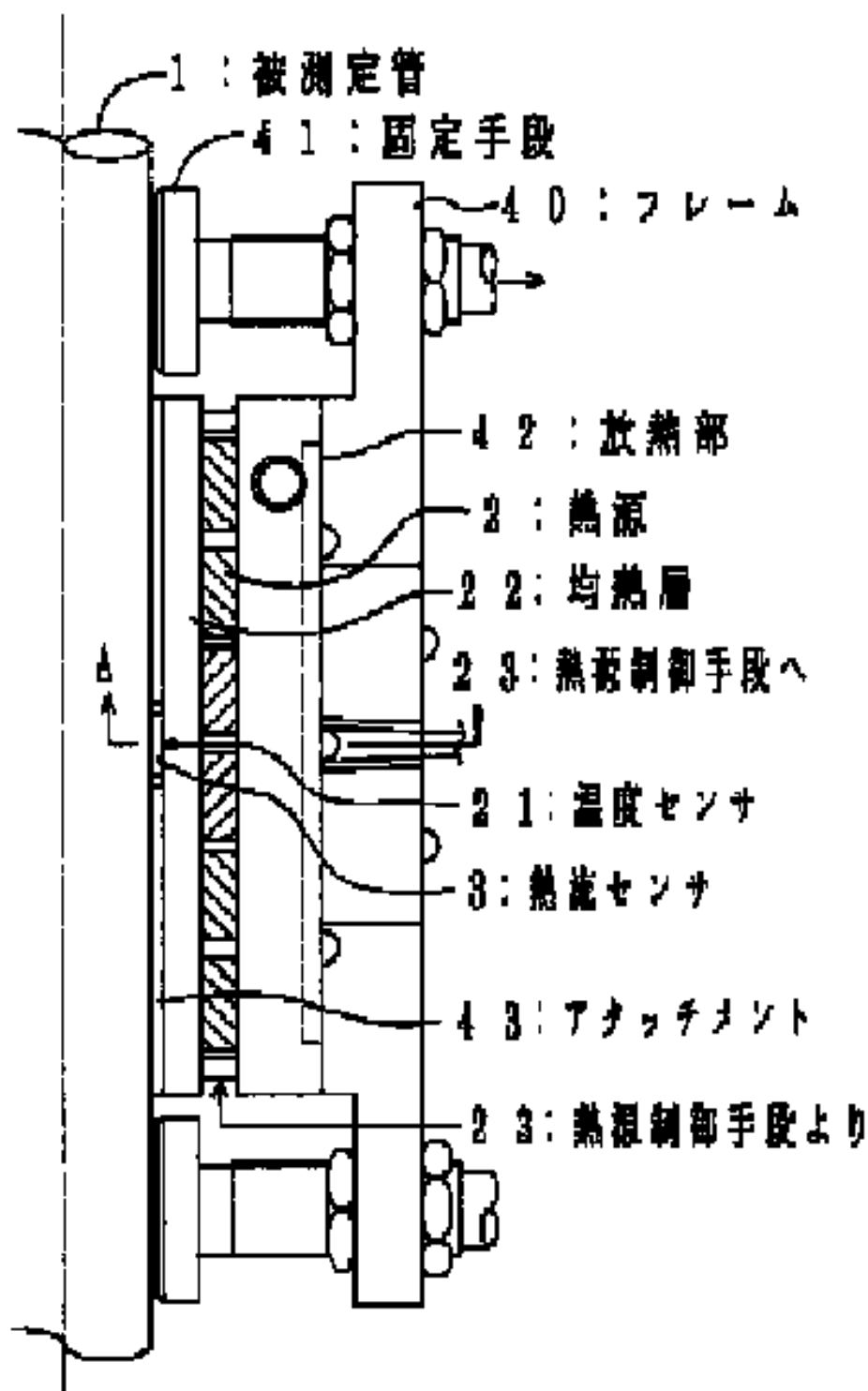
Family 5/22 - FAMPAT - ©Questel

Title

(JP08015189)

Method and apparatus for measuring thermal resistance

Images



Publication data including kind & date

JPH0815189	A	1996-01-19	JP08015189
JP3152837	B2	2001-04-03	JP3152837



Abstract

(JP3152837)

PURPOSE: To improve the measuring accuracy of a thermal resistance, to simplify the measuring operation, and to allow it to be applied to a tube of various structures or a flat heat exchanging wall in a method and an apparatus for measuring the resistance in which the quantity of adhered scale or slime to the inner surface of the tube to be measured is specified. **CONSTITUTION:** The temperature of fluid F flowing in a tube 1 to be measured and the temperature of a heat source 2 disposed near the tube 1 to be measured are detected by a temperature sensor 21 to measure the temperature

difference of the both, and the heat flow rate to be transferred between the tube 1 to be measured and the source 2 is measured by a heat flow sensor 3, and the resistance of the tube 1 to be measured is calculated based on the difference and the flow rate.

Inventors

NIISATO HIROHIDE

KANOU KIYOTSUGU

NAKAJIMA EISAKU

Latest standardized assignees - inventors removed

KYOTO ELECTRONICS MANUFACTURING

KYUSHU ELECTRIC POWER

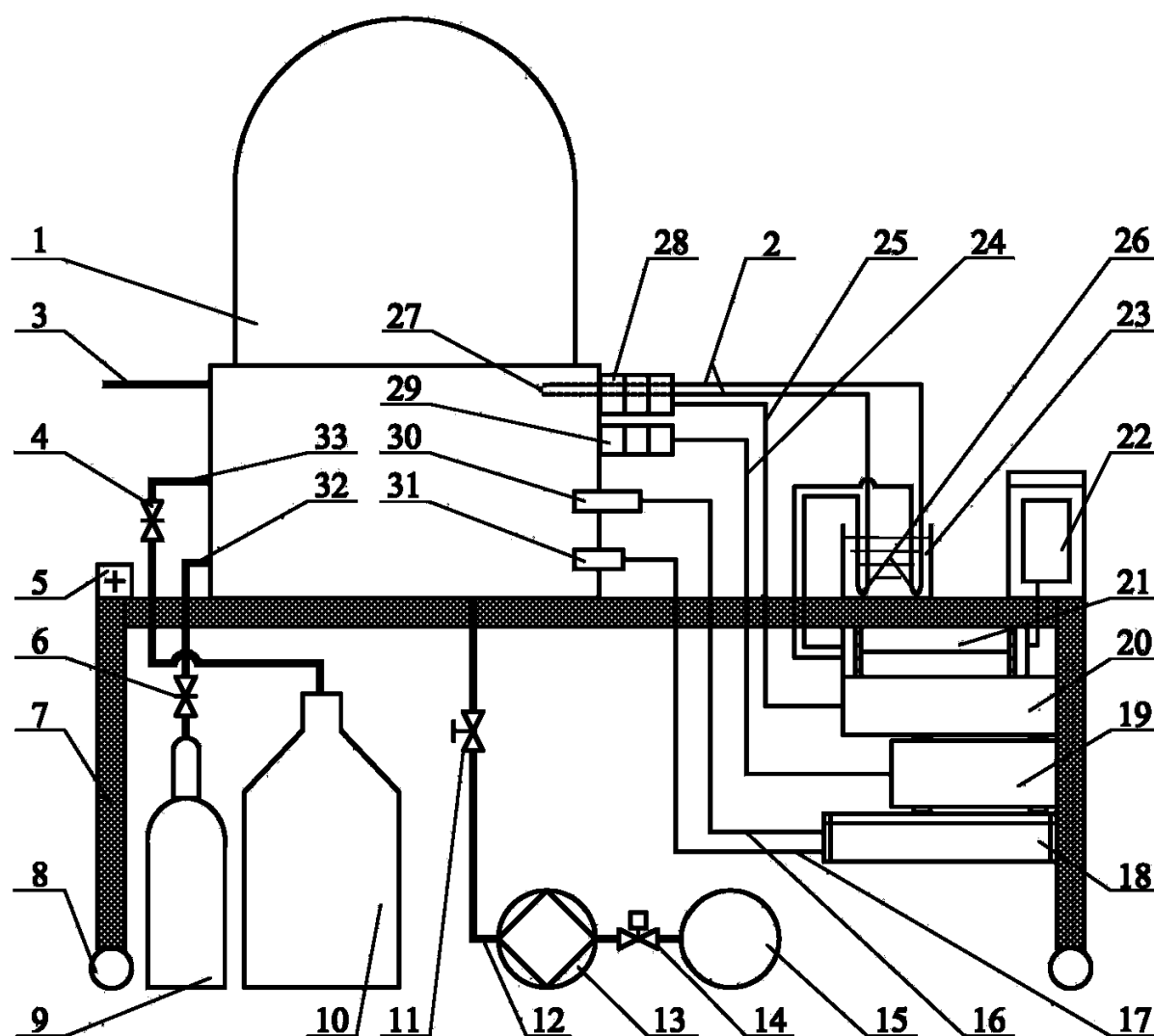
Family 6/22 - FAMPAT - ©Questel

Title

(CN103115940B)

Contact thermal resistance measuring device capable of adjusting loading force and temperature within wide range

Images



Publication data including kind & date

CN103115940	A	2013-05-22	CN103115940
CN103115940	B	2015-01-14	CN103115940B



Abstract

(CN103115940B)

The invention discloses a contact thermal resistance measuring device capable of adjusting the loading force and the temperature within a wide range. The contact thermal resistance measuring device comprises a measuring unit, wherein the

This invention refers to a fuel composition identification system and method (2) for an automotive vehicle combustion engine. The system comprises at least a fuel heating resistor (3) arranged in any position in the fuel tank or along the fuel line, in direct contact and exchanging heat with the fuel (2), an electronic control unit (4) connected to the resistor (3), which applies constant power values during time intervals (t_n) to the resistor (3), and the metering device (6) for a heating resistor parameter (3) between the current sent to the resistor (3) and the surface temperature of the resistor that sends the measured values to the electronic control unit (4), and monitors the current values measured in the heating resistor (3) during each time interval t_n , and when the electronic control unit (4) detects a variation in the value of the heating resistor current in the course of the time interval (t_n), it identifies the fuel composition corresponding to the critical heat flow resulting from the power applied to the resistor during that time interval. The method comprises the steps of applying constant power values during time intervals (t_n) to the fuel heating resistor (3); heating fuel in contact with the heating resistor (3) through exchanging heat between the heating resistor and the fuel (2); measuring a heating resistor parameter (3) between the current sent to the resistor (3) and the surface temperature of the resistor; monitoring the heating resistor parameter values (3) measured in the course of each time interval (t_n), and when a variation in the resistor parameter value is detected in the course of the time interval (t_n); identifying the fuel composition corresponding to the critical heat flow resulting from the power applied to the resistor during that time interval.

Inventors

LEPSCH FERNANDO

ITALICO MOREIRA COLETTI TULIO

DE OLIVEIRA JUNIOR FERNANDO

Latest standardized assignees - inventors removed

ROBERT BOSCH

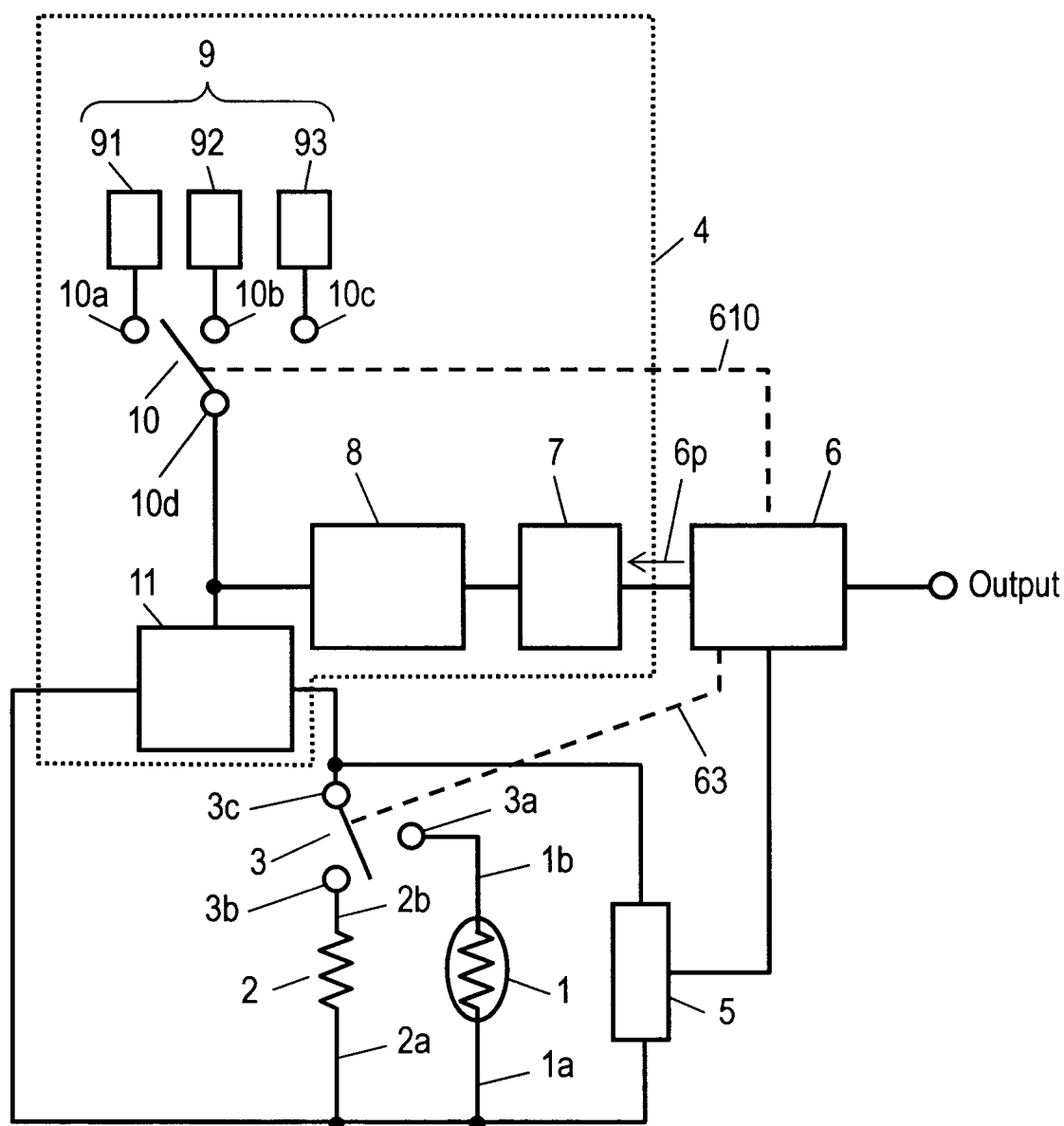
Family 8/22 - FAMPAT - ©Questel

Title

(EP1857814)

Gas sensor

Images



Publication data including kind & date

WO2006095719	A1	2006-09-14	WO200695719
JP2006250535	A	2006-09-21	JP2006250535
EP1857814	A1	2007-11-21	EP1857814
US2009133472	A1	2009-05-28	US20090133472
US7631537	B2	2009-12-15	US7631537
JP4692026	B2	2011-06-01	JP4692026
EP1857814	A4	2011-09-14	EP1857814



Abstract

(EP1857814)

There is provided a highly accurate gas sensor by improving an S/N ratio of a circuit. One ends (1a), (2a), of heat generating element (1) and reference resistor (2) brought into contact with a detected gas are commonly connected, and respective contacts of first switch (3) are respectively connected to respective sides of other terminals (1b), (2b). First switch (3) is connected with power source apparatus (4) for supplying a current to heat generating element (1) or reference resistor (2). Voltage measuring portion (5) for measuring a voltage across both ends generated across both ends of heat generating element (1) or reference resistor (2) is connected in parallel with heat generating element (1) or reference resistor (2) when first switch (3) is switched. Operating portion (6) switches first switch (3) to a side of reference resistor (2) and switches first switch (3) to the side of heat generating element (1) by a predetermined timing by determining a

condition of controlling power source apparatus (4) for supplying at least 3 stages of step-like currents to heat generating element (1) from the voltage across both ends generated at reference resistor (2). Heat generating element (1) is continuously supplied with successively at least 3 stages of step-like currents to carry out operation of inputting the voltage across both ends of heat generating element (1) in correspondence with magnitudes of the respective currents to operating portion (6) by way of voltage measuring portion (5) and calculating and outputting a concentration of a detected gas by making the current off.

Inventors

TADA MASAKI

SHOJI RIHITO

Latest standardized assignees - inventors removed

PANASONIC

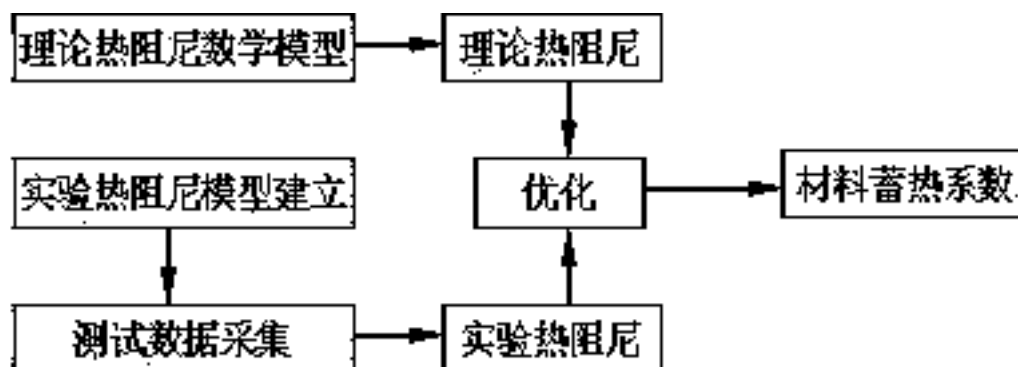
Family 9/22 - FAMPAT - ©Questel

Title

(CN102353695B)

Method for measuring heat storage coefficient based on thermoelastic damping theory

Images



Publication data including kind & date

CN102353695	A	2012-02-15	CN102353695
CN102353695	B	2015-05-13	CN102353695B
CN104792817	A	2015-07-22	CN104792817
CN104792817	B	2017-06-27	CN104792817B



Abstract

(CN102353695B)

The invention discloses a method for measuring a heat storage coefficient based on a thermoelastic damping theory, which comprises the following steps: 1) establishing a theoretical damping model; 2) establishing an experimental damping model by collecting test data; 3) optimizing the theoretical damping model in a step 1) and the experimental damping model in a step 2) to obtain the heat storage coefficient, so that only the changing relation of thermal flow and temperature on the surface is required for measuring, the thermal flow and temperature on the other surfaces are not required for measuring, the heat storage coefficient of certain surface of the material can be calculated without measuring the material density, thermal conductivity coefficient and specific heat capacity, so that the moisture content, penetrability and damage degree of the material can be easily obtained from the measured heat storage coefficient, the whole measuring process takes short time and easy procedure, the measuring method can be used in laboratory experiments and field detection of engineering.

Inventors

SHEN JIBAO

Latest standardized assignees - inventors removed

SHAOXING UNIVERSITY

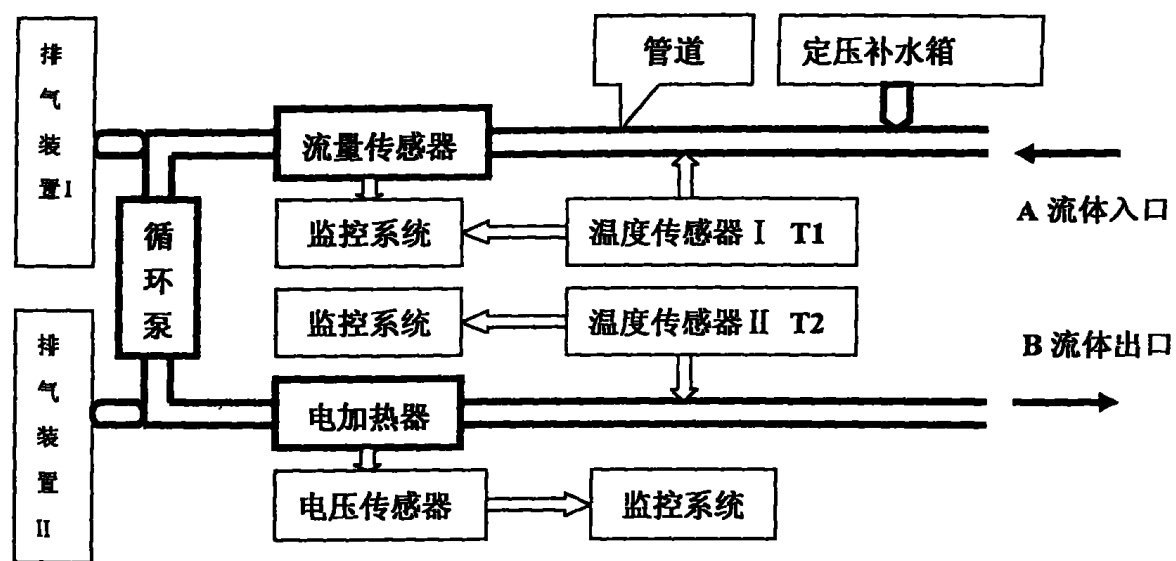
Family 10/22 - FAMPAT - ©Questel

Title

(CN1815211)

Portable rock-soil heat physical characteristic detection instrument based on ground-source heat pump and method thereof

Images



Publication data including kind & date

CN1815211

A 2006-08-09 CN1815211



Abstract

(CN1815211)

Present invention discloses a portable cliff soil heat physical property tester and method. It solves mismeasurement problem of underground cliff heat physical property in current ground source heat pump system design. It contains portable cliff soil heat physical property tester based on ground source heat pump, at least one flow sensor, at least one exhaust I, at least one water circulating pump, at least one exhaust II, at least one electric heater, at least one temperature sensor II set in pipe exit end, wherein flow sensor and temperature sensor I connected with monitored control system, voltage sensor and temperature sensor II connected with monitored control system, electric heater connected with EPS through monitored control system.

Inventors

LI XIAODONG YU

Latest standardized assignees - inventors removed

GROUND SOURCE HEAT PUMP INSTITUTE S

Family 11/22 - FAMPAT - ©Questel

Title

(EP1310774)

Device for measuring physical quantity, method of manufacture thereof, and vehicle control system using device for measuring physical quantity

Images

KR100499227	B1	2005-07-01	KR100499227				
US6988399	B1	2006-01-24	US6988399				
CN1268899	C	2006-08-09	CN1268899C				
EP1310774	B1	2006-08-23	EP1310774				
DE60030333	D1	2006-10-05	DE60030333				
DE60030333	T2	2007-10-11	DE60030333				
JP4101518	B2	2008-06-18	JP4101518				

Abstract

(EP1310774)

It is an object of the present invention to provide a simple-structure physical quantity detecting device whose resistance does not vary irrespective of use for long periods, a method for manufacturing thereof and a motor vehicle control system using the physical quantity detecting sensor to improve its reliability. An airflow sensor (20) is equipped with a heat generating resistor (12H) and a temperature measuring resistor (12C), formed on a semiconductor substrate (11). The heat generating resistor (12H) is formed in a thin-wall portion (11A). Both end portions of the heat generating resistor (12H) are connected through first lead conductors (13H1, 13H2) to electrodes (14H1, 14H2), respectively. A second lead conductor (15H1) connected to the electrode (14H1) extends to an outer circumferential portion of the airflow sensor (10). A second lead conductor (15H2, 15H3) connected to the electrode (14H2) also extend to the outer circumferential portion of the airflow sensor (10), but a disconnection portion (16) is made in the middle thereof to establish electrical non-conduction.

<IMAGE>

Inventors

WATANABE IZUMI

NAKADA KEIICHI

YAMADA MASAMICHI

Latest standardized assignees - inventors removed

HITACHI

HITACHI CAR ENGINEERING

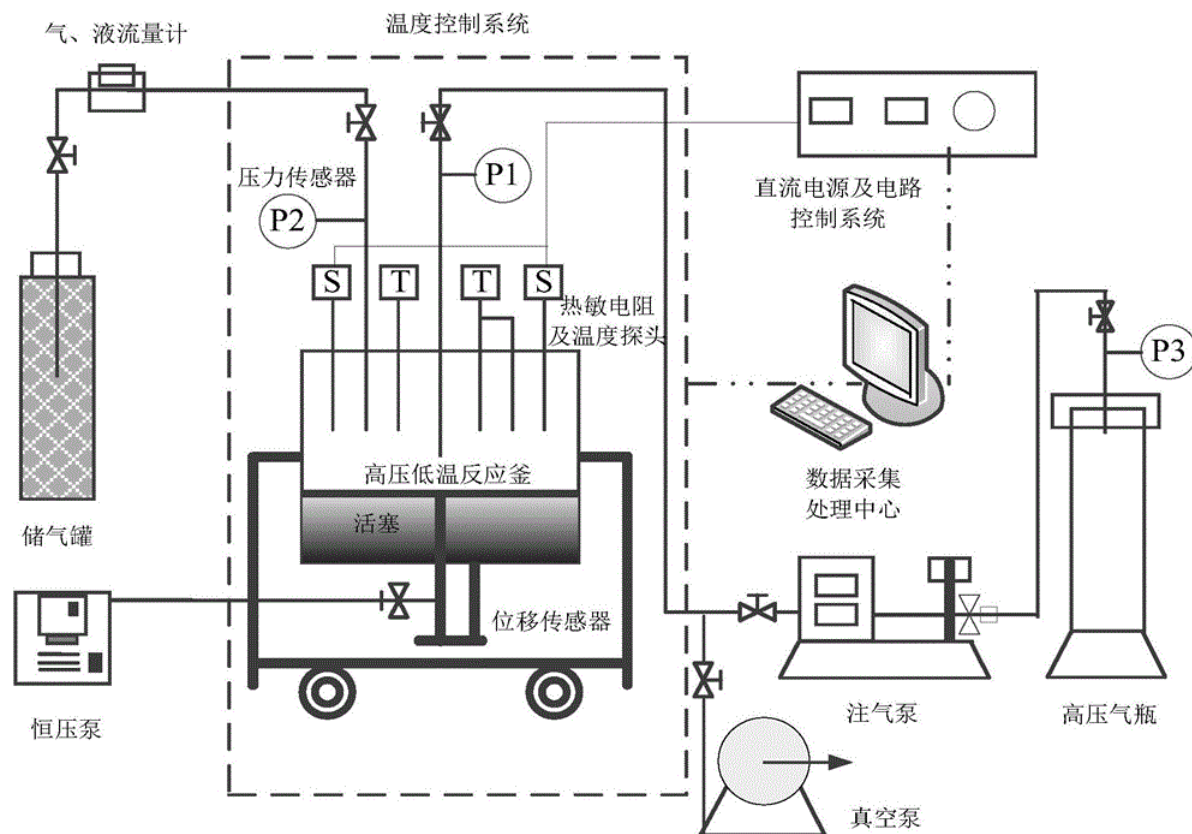
Family 12/22 - FAMPAT - ©Questel

Title

(CN104458798)

In-situ test method for high-pressure low-temperature heat conductivity coefficients and heat transfer coefficients

Images



Publication data including kind & date

CN104458798	A	2015-03-25	CN104458798
CN104458798	B	2017-01-18	CN104458798B



Abstract

(CN104458798B)

The invention discloses an in-situ test method for high-pressure low-temperature heat conductivity coefficients and heat transfer coefficients. The heat conductivity coefficients and the heat transfer coefficients of media are measured based on a point heat source thermistor method. The power of a thermistor is determined, and the heat conductivity coefficient and the heat transfer coefficient of a measured medium are obtained according to the resistance feedback and temperature attenuation data of the thermistor by utilizing a calculation model. The method comprises the following steps: correcting parameters of a thermistor measurement model; slowly extruding a to-be-measured medium by utilizing a piston on the lower part of a reaction kettle, and unifying the standard of to-be-detected samples; introducing reactive gas and controlling the pressure and temperature in a target range; and inputting the determined power value into the thermistor by virtue of a power input control system, acquiring the resistance value and temperature value of the thermistor by utilizing a data acquisition device, and finally, obtaining the heat conductivity coefficient and the heat transfer coefficient by utilizing the calculation model. According to the design of the invention, in-situ synthesis of different media under high pressure and at low temperature can be met, and in-situ measurement of the heat conductivity coefficients and heat transfer coefficients of multi-phase condition substances in different spaces and different time is realized.

Inventors

SONG YONGCHEN
CHENG CHUANXIAO
ZHAO JIAFEI
WANG BIN
YANG LEI
ZHU ZHAO

Latest standardized assignees - inventors removed

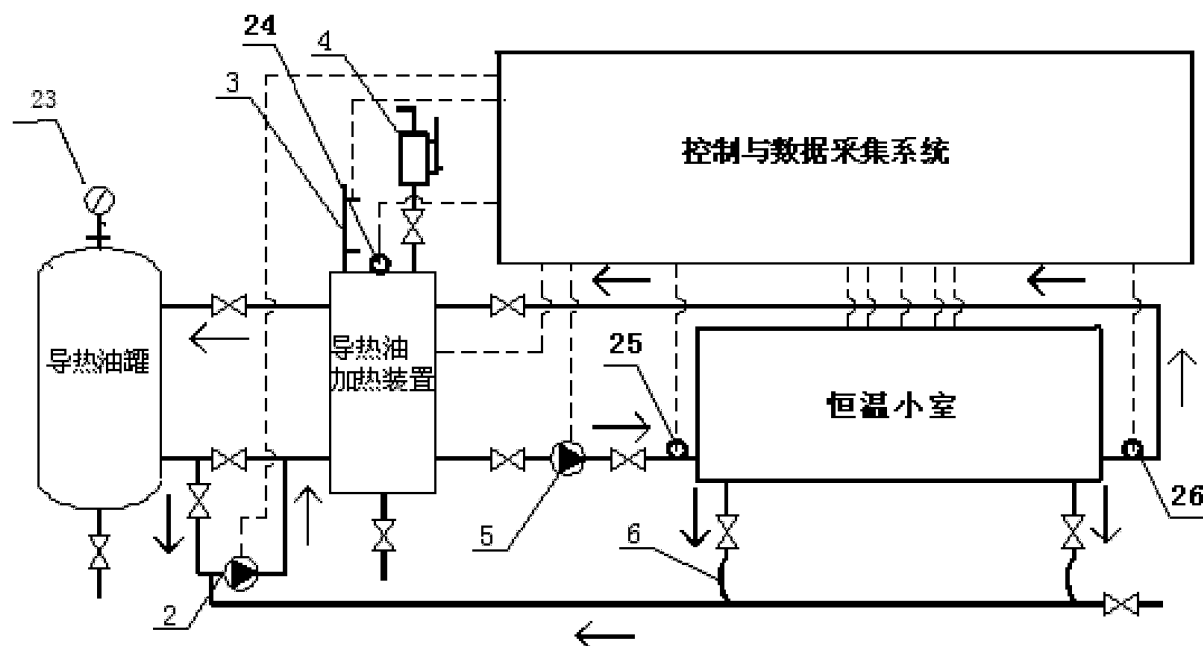
DALIAN UNIVERSITY OF TECHNOLOGY

Family 13/22 - FAMPAT - ©Questel

Title

(CN102539470)

Integrated detection system for thermal performance of lower-medium vacuum compound insulation pipeline and application of integrated detection system

Images**Publication data including kind & date**[CN102539470](#)

A

2012-07-04

CN102539470

**Abstract**

(CN102539470)

The invention discloses an integrated detection system for thermal performance of a lower-medium vacuum compound insulation pipeline and application of the integrated detection system. The integrated detection system is composed of a control and data acquisition system, a conduction oil circulating system and a constant temperature chamber, wherein the control and data acquisition system is used for acquiring data including the temperature, the output power of an electric heater, the heat flow and the like on one hand, and controlling the temperature of a working steel tube, adjusting the output power of the electric heater and controlling the pressure of a vacuum layer on the other hand; the conduction oil circulating system is used for providing conduction oil of a certain temperature for a test tube section; the constant temperature chamber is used for keeping the temperature of the test tube section in a certain range. The integrated detection system disclosed by the invention has the beneficial effects that: the parameters including the temperature, the output power of the electric heater and the heat flow and the like can be automatically recorded and controlled; and the test result is accurate and high in reliability, which is helpful for research on a heat-transfer mechanism of the insulation pipeline.

Inventors

WEI NA

YAN SONG

DEYING LI

YONGZHENG SHI

Latest standardized assignees - inventors removed

BEIJING INSTITUTE CIVIL ENGINEERING & ARCH

Family 14/22 - FAMPAT - ©Questel

Title

(CN202393723U)

Device for measuring thermal conductivity factor of high-temperature composite insulating pipeline with air layer

Publication data including kind & date

CN202393723

U 2012-08-22

CN202393723U

**Abstract**

(CN202393723U)

The utility model discloses a device for measuring a thermal conductivity factor of a high-temperature composite insulating pipeline with an air layer. The device consists of a control and data collection system and a testing pipe section; and testing sections are optimized and testing points are arranged. The device disclosed by the utility model has the benefits that: 1) the device is applicable to measuring thermal resistances of various temperature structures of thermal pipelines under 550 DEG C, and the testing error is less than $\pm 5\%$; 2) all testing parameters can be automatically controlled and testing data can be automatically recorded by the control and data collection system; 3) the measurement on thermal resistances of various layers of the composite insulating structure with the air layer is fully taken into consideration and realized in temperature and testing point arrangements, the thermal loss of pipelines is monitored aiming at high-temperature heating mediums of above 300 DEG C, and electric heater output thermal power in measuring unit time is compared with the heat flow obtained by a heat flow meter; on the other hand, the distribution condition of the heat flow along a surface peripheral direction of a testing pipe section anticorrosion layer is obtained.

Inventors

WEI NA

YAN SONG

DEYING LI

YONGZHENG SHI

Latest standardized assignees - inventors removed

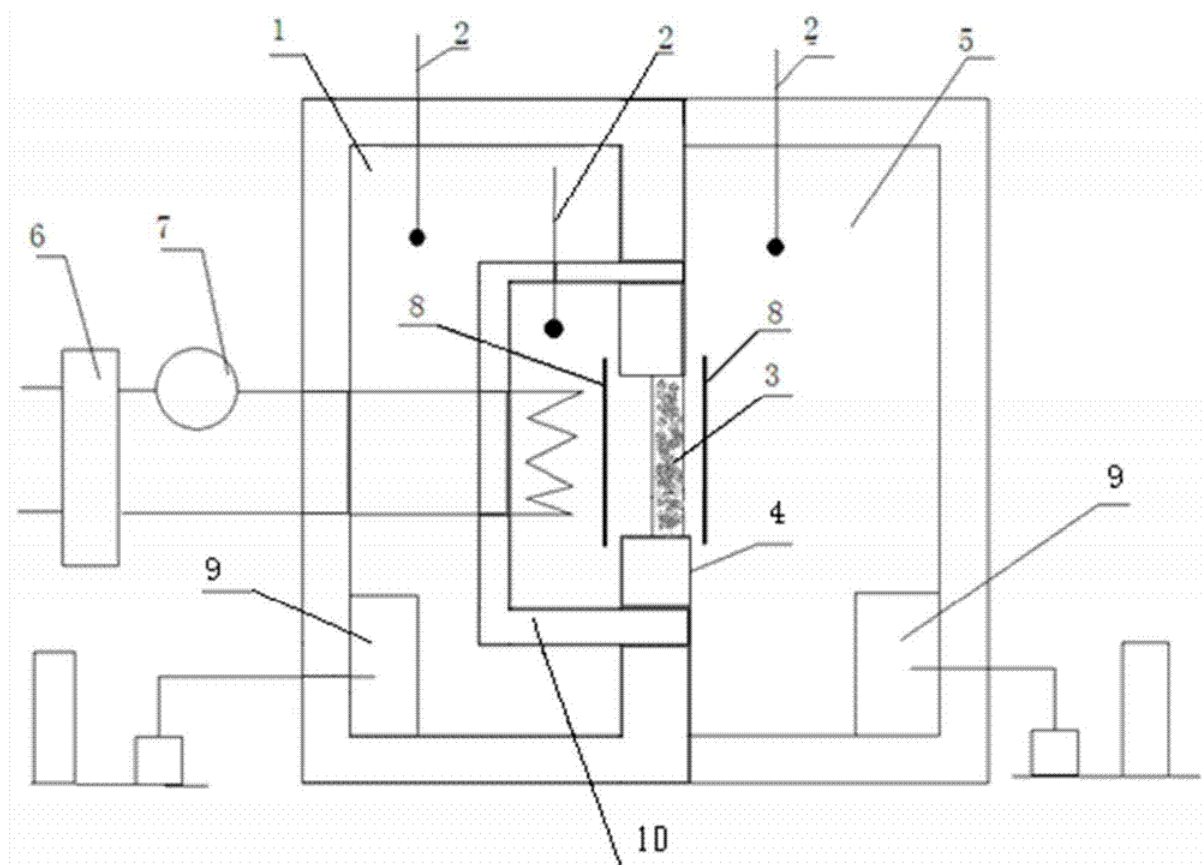
BEIJING INSTITUTE CIVIL ENGINEERING & ARCH

Family 15/22 - FAMPAT - ©Questel

Title

(CN104990952)

Equivalent thermal conductivity measurement method and equipment for wall material

Images

Publication data including kind & date

CN104990952	A	2015-10-21	CN104990952
CN104990952	B	2017-08-08	CN104990952B

**Abstract**

(CN104990952B)

The invention discloses an equivalent thermal conductivity measurement method for a wall material. The method comprises the following steps: placing a filling body in a sealed environment which provides a thermal environment for one side of the filling body and a cold environment for the other side of the filling body, and measuring the heat flux Q_T passing through the filling body after the temperature in the sealed environment is balanced; embedding a test piece to be measured into the filling body in a sealed manner, re-placing the filling body in which the test piece is embedded in the sealed environment in the step 1, measuring the heat flux Q_S passing through the filling body in which the test piece is embedded after the temperature in the sealed environment is balanced; acquiring the heat flux Q of a heater according to the heat fluxes Q_T and Q_S ; calculating to obtain the equivalent thermal conductivity λ_e according to the heat flux Q of the heater. The equivalent thermal conductivity measurement method solves the problems that a conventional equivalent heat conductivity measurement method is long in detection period, is greatly influenced by human and environmental factors and cannot truly and effectively reflect the energy-saving effect of a sample. The invention also discloses equivalent heat conductivity measurement equipment which is simple in structure and convenient to use.

Inventors

WANG BO

ZHOU XUAN

Latest standardized assignees - inventors removed

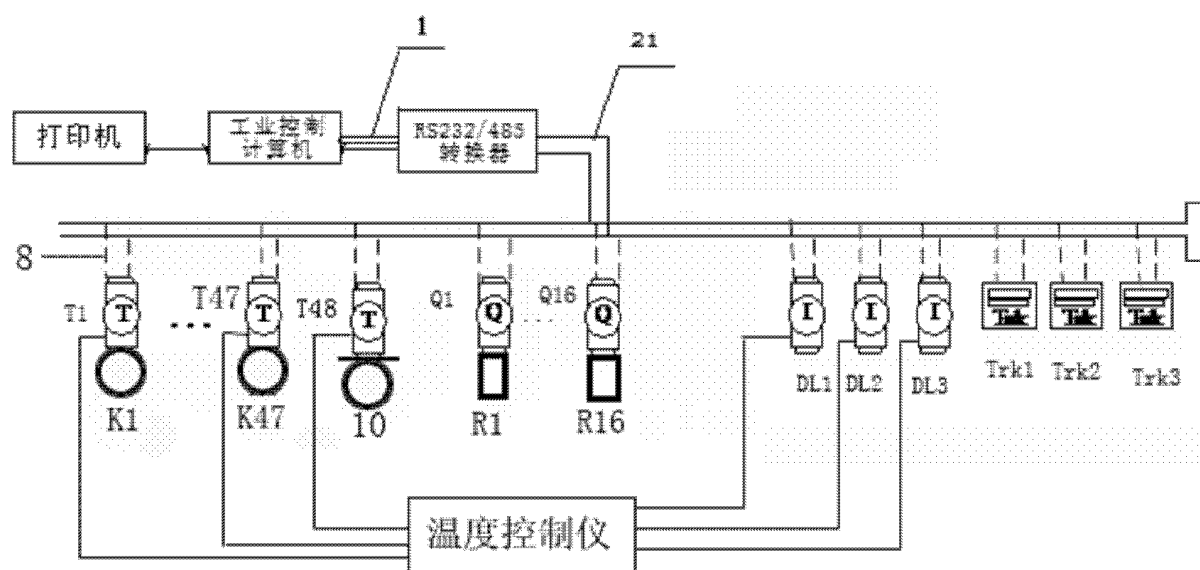
CHINA BUILDING MATERIAL TEST & CERTIFICATION XI

Family 16/22 - FAMPAT - ©Questel

Title

(CN102565125B)

Integrated detection system for thermal performance of high-temperature air composite insulation pipeline and application of integrated detection system

Images**Publication data including kind & date**

CN102565125	A	2012-07-11	CN102565125
CN102565125	B	2014-07-16	CN102565125B

**Abstract**

(CN102565125B)

The invention discloses an integrated detection system for thermal performance of a high-temperature air composite

insulation pipeline and application of the integrated detection system and belongs to the technical field of detection of thermal performance. The integrated detection system consists of a control and data acquisition system and a constant temperature cell, wherein the control and data acquisition system acquires temperature, current, electric energy, output power of an electric heater, heat flux and the like, and controls the temperature of an operating steel pipe and an auxiliary operating steel pipe and adjusts the output power of the electric heater and an auxiliary electric heater; and the constant temperature cell keeps the temperature of a test pipe section in a certain range. The invention has the advantages that: the temperature, current, electric energy, output power of the electric heater, heat flux and other parameters are automatically recorded and controlled, testing results are accurate and high in reliability, and the integrated detection system contributes to researching the heat transfer processes and mechanisms of the composite pipelines.

Inventors

NA WEI

SONG YAN

LI DEYING

SHI YONGZHENG

Latest standardized assignees - inventors removed

BEIJING INSTITUTE CIVIL ENGINEERING & ARCH

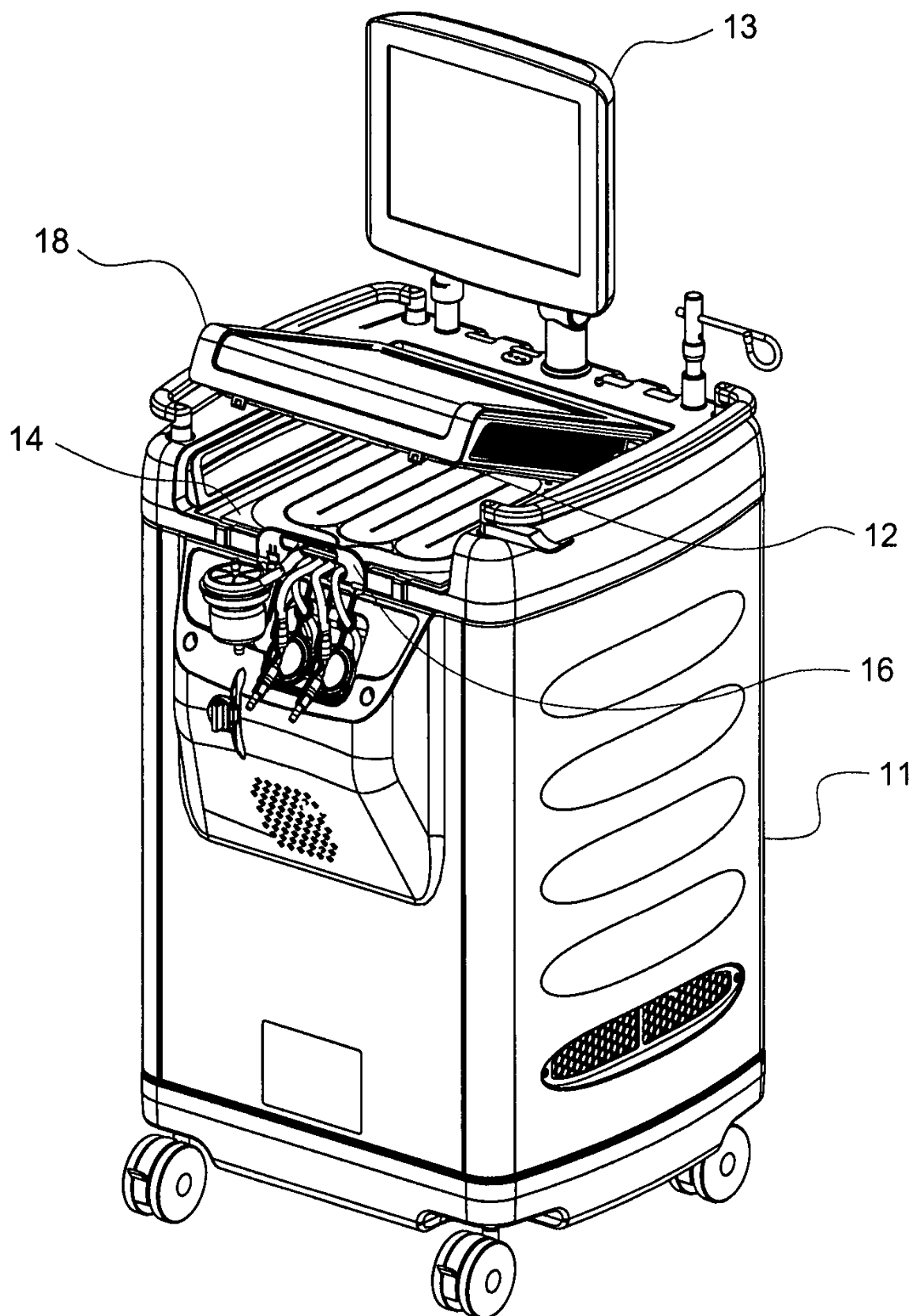
Family 17/22 - FAMPAT - ©Questel

Title

(EP2724736)

System for fluid pumping

Images

10**Publication data including kind & date**

CA2970214	A1	2007-10-25	CA2970214
CA2882654	A1	2007-10-25	CA2882654
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MX2008013266	A	2008-10-27	MX2008013266				
EP2010247	A1	2009-01-07	EP2010247				
JP2009533154	A	2009-09-17	JP2009533154				
US7794141	B2	2010-09-14	US7794141				
US2011218600	A1	2011-09-08	US20110218600				
US8292594	B2	2012-10-23	US8292594				
JP2013027783	A	2013-02-07	JP2013027783				
EP2586472	A1	2013-05-01	EP2586472				
US2013115105	A1	2013-05-09	US20130115105				
JP5469731	B2	2014-04-16	JP5469731				
EP2724736	A1	2014-04-30	EP2724736				
JP2014167291	A	2014-09-11	JP2014167291				
US8870549	B2	2014-10-28	US8870549				
US2015050166	A1	2015-02-19	US20150050166				
US8968232	B2	2015-03-03	US8968232				
JP5999717	B2	2016-09-28	JP5999717				
JP2017006696	A	2017-01-12	JP2017006696				
CA2882654	C	2017-06-13	CA2882654				
CA2648803	C	2017-06-20	CA2648803				
EP2586472	B1	2017-08-16	EP2586472				

Abstract

(EP2724736)

A reciprocating positive displacement pumping system has a rigid chamber wall to which a flexible membrane is attached defining a pumping chamber. An inlet and outlet allow liquid flow. A rigid limit structure limits the movement of the membrane and the maximum volume of the pumping chamber defining an actuation chamber. An actuation port through which a fluid under positive or negative pressure can communicate with the actuation chamber is configured to connect to a positive pressure fluid reservoir and a negative pressure fluid reservoir through a valving mechanism for controlling the flow of control fluid between the actuation chamber and each of the reservoirs. An actuation chamber pressure transducer measures the pressure of the actuation chamber and a controller integrates pressure information from the actuation chamber pressure transducer over time during a stroke to detect an aberrant liquid flow condition.

Inventors

KAMEN DEAN

DEMERS JASON

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TRACEY BRIAN

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WILT MICHAEL

LEONARD SCOTT

Latest standardized assignees - inventors removed

DEKA PRODUCTS

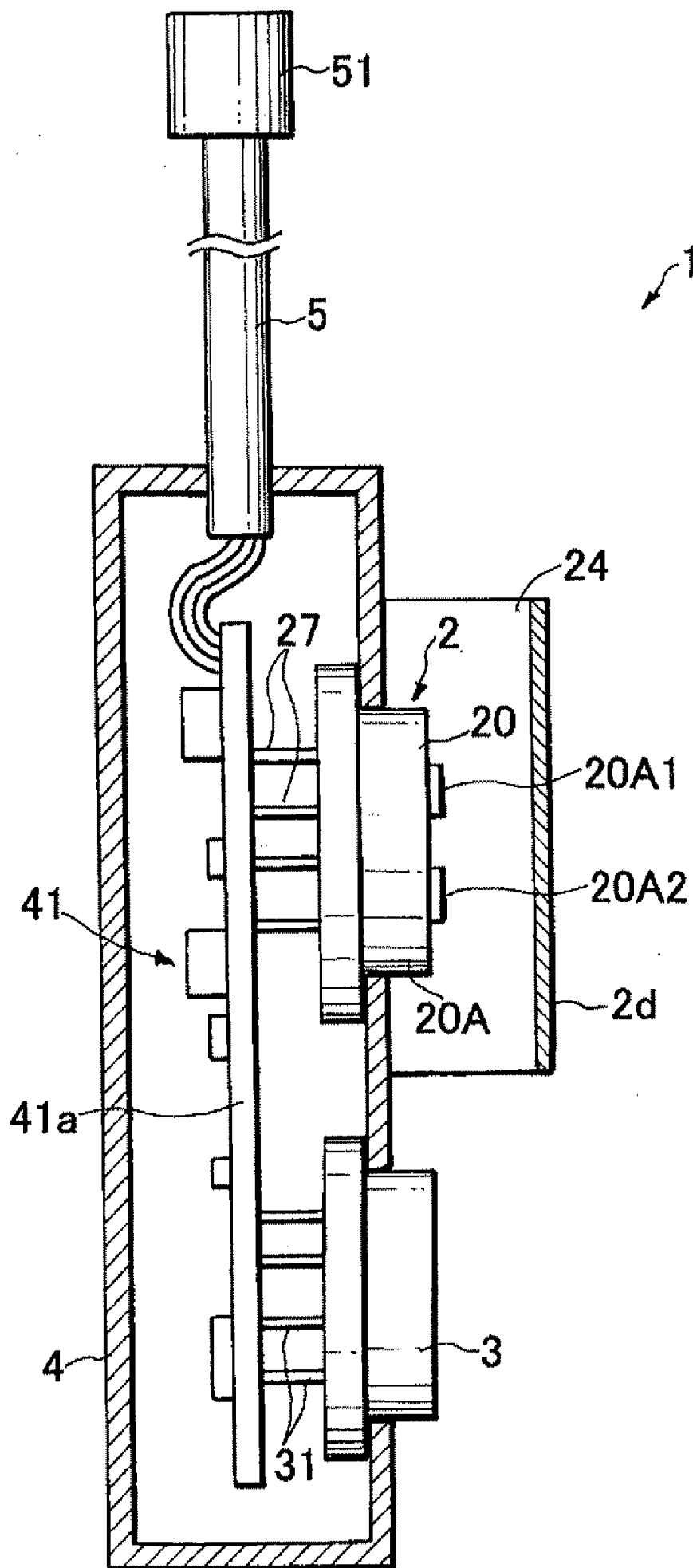
Family 18/22 - FAMPAT - ©Questel

Title

(EP1983336)

Fluid identification device and fluid identification method

Images



Publication data including kind & date

WO2007086585	A1	2007-08-02	WO200786585
CA2640675	A1	2007-08-02	CA2640675
JP2007225609	A	2007-09-06	JP2007225609
US2008184775	A1	2008-08-07	US20080184775
EP1983336	A1	2008-10-22	EP1983336
IN6746/DELNP/2008	A	2008-10-24	IN2008DN06746

**Abstract**

(EP1983336)

There is provided by the invention a fluid identification device capable of being mounted in single device constitution on a tank irrespective of the type of the tank. The fluid identification device of the invention is characterized in that a fluid detection part which is equipped with a temperature detector for fluid detection and a heating element disposed in the vicinity of the temperature detector for fluid detection and which is disposed on the identification target fluid side, a fluid detection circuit connected to the fluid detection part and an identification operation part which performs identification of an identification target fluid based on the output of the fluid detection circuit are contained in an container.

Inventors

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 NAKAMURA TOSHIMI
 YANAGI KIYOTAKA
 KUBOTA AKIKO

Latest standardized assignees - inventors removed

MITSUI MINING & SMELTING

Family 19/22 - FAMPAT - ©Questel

Title

(EP-214294)

Heat detecting element

Images

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JPH057557	Y2	1993-02-25	JP05007557Y
JPH057556	Y2	1993-02-25	JP05007556Y
DE3687295	T2	1993-07-22	DE3687295
JP1786111	C	1993-08-31	JP1786111
JPH0584423	B2	1993-12-01	JP93084423
JP1873525	C	1994-09-26	JP1873525



Abstract

(EP-214294)

A heat detecting element, in which the heat is supplied to a heating element to detect the thermal condition in the interior of a room on the basis of the temperature of the surface of the heating element. In this heat detecting element, the spectral radiation rate of the outer surface of the heating element is set substantially equal to that of the outer surface of the skin of a human body or clothes so as to render the radiant heat transfer rate of the heating element very close to that of a human body.

Inventors

KOBAYASHI, MASAHIRO KANAOKA FACTORY, SAKAI PLANT
 KOBAYASHI, NOBORU KANAOKA FACTORY, SAKAI PLANT
 TORIKOSHI, KUNIKAZU KANAOKA FACTORY, SAKAI PLANT
 UEMURA, SHIGEHIO KANAOKA FACTORY, SAKAI PLANT

Latest standardized assignees - inventors removed

DAIKIN INDUSTRIES

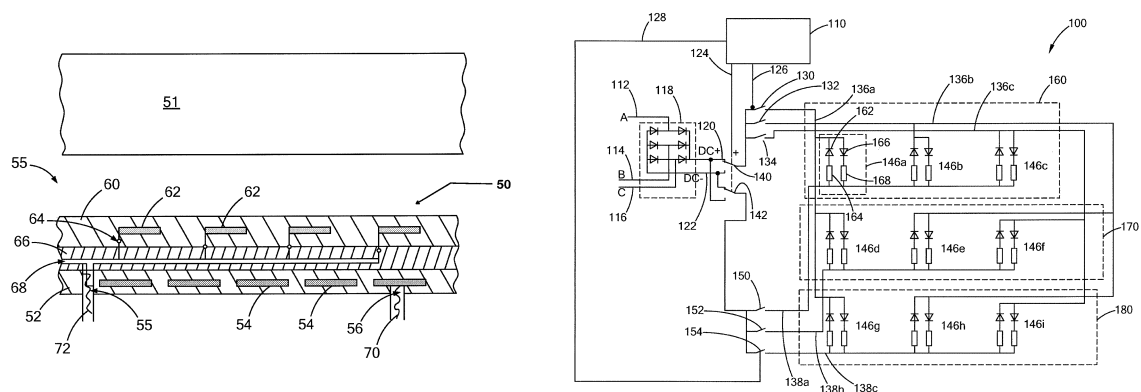
Family 20/22 - FAMPAT - ©Questel

Title

(EP3213598)

Thermal dynamic response sensing systems for heaters

Images



Publication data including kind & date

CA2991157	A1	2013-03-07	CA2991157
CA2847596	A1	2013-03-07	CA2847596
CA2847444	A1	2013-03-07	CA2847444
CA2847437	A1	2013-03-07	CA2847437
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US2013161305	A1	2013-06-27	US20130161305				
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IL231258	B	2017-08-31	IL-231258				
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KR101868130	B1	2018-06-18	KR101868130				
US10002779	B2	2018-06-19	US10002779				

Abstract

(EP3213598)

A heater system includes a heater assembly, an imaging device and a control system. The heater assembly includes a plurality of heating zones. The imaging device acquires an image of the heater assembly. The control system determines variations in the plurality of heating zones based on the thermal image.

Inventors

STEINHAUSER LOUIS P

Latest standardized assignees - inventors removed

WATLOW

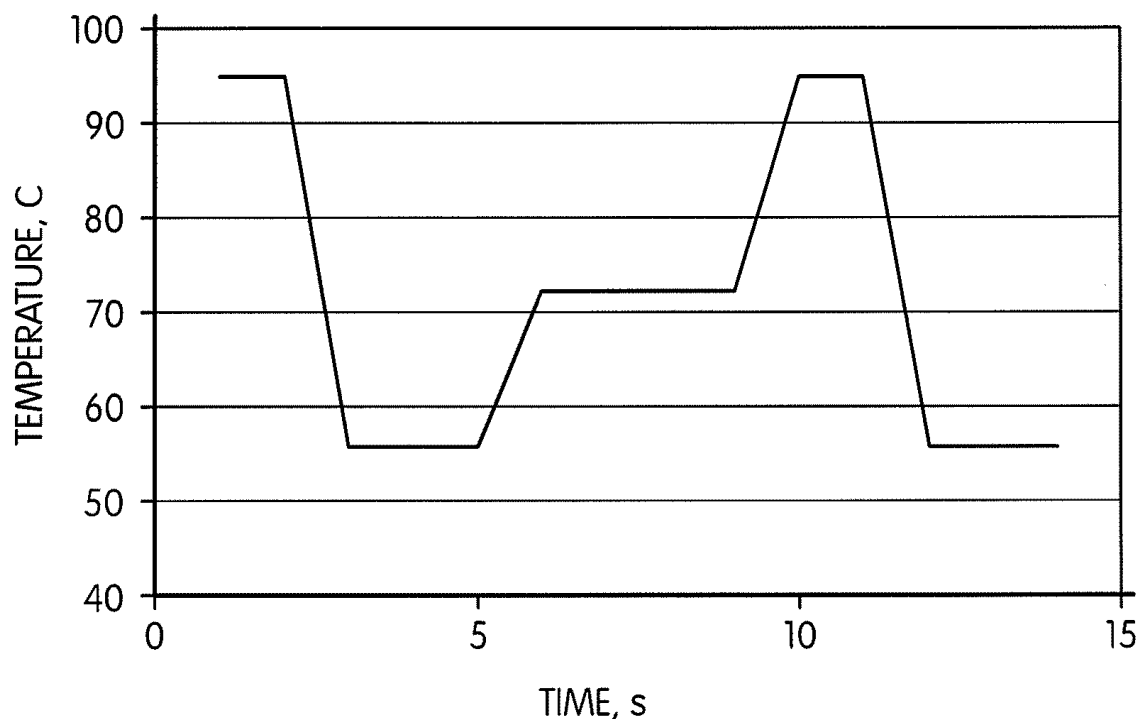
Family 21/22 - FAMPAT - ©Questel

Title

(WO200932087)

Microfluidic devices with integrated resistive heater electrodes

Images



Publication data including kind & date

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US2009060795	A1	2009-03-05	US20090060795
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US2011077897	A1	2011-03-31	US20110077897
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US2013218513	A1	2013-08-22	US20130218513
US9221056	B2	2015-12-29	US9221056
US9267852	B2	2016-02-23	US9267852
US2016129446	A1	2016-05-12	US20160129446
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US9823135	B2	2017-11-21	US9823135
US9829389	B2	2017-11-28	US9829389
US9873122	B2	2018-01-23	US9873122



Abstract

(WO200932087)

The invention relates to methods and devices for control of an integrated thin-film device with a plurality of microfluidic channels. In one embodiment, the microfluidic device includes a microfluidic chip comprising a first zone having a plurality of microfluidic channels and a second zone having a plurality of microfluidic channels, wherein the microfluidic channels in the first and second zones are in fluid communication. The microfluidic device further comprising a thin-film heater in thermal communication with each of the microfluidic channels in the first and second zones. The microfluidic device also

includes a control system configured to independently control the temperature of each of the thin-film heaters using pulse width modulation (PWM) control signals that are optimized for each of the thin-film heaters.

Inventors

HANAGATA TAKAYOSHI

INOUE HIROSHI

DALE GREGORY A

HASSON KENTON C

OWEN GREGORY H

COURSEY JOHNATHAN S

Latest standardized assignees - inventors removed

CANON US LIFE SCIENCES

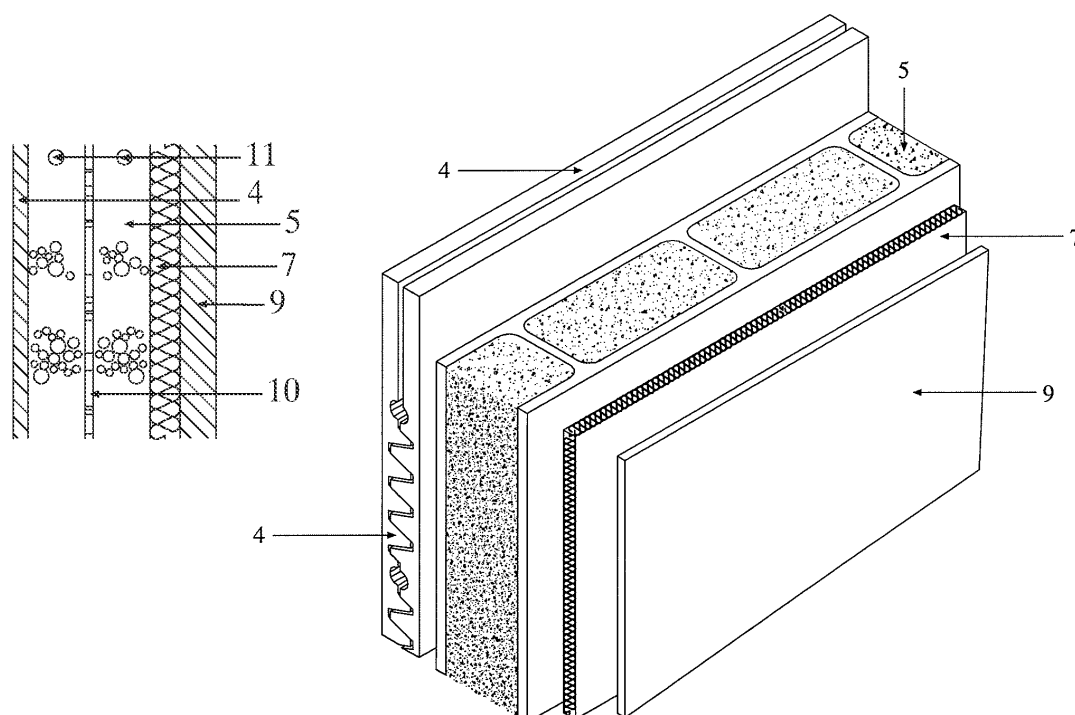
Family 22/22 - FAMPAT - ©Questel

Title

(EP2275752)

Novel sustainable building model

Images



Publication data including kind & date

ES2308942	A1	2008-12-01	ES2308942
ES2308942	B1	2009-09-22	ES2308942
WO2009121990	A1	2009-10-08	WO2009121990
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EP2275752	A4	2015-05-27	EP2275752				
BRPI0911081	A2	2015-10-06	BR200911081				
CN102057231	B	2015-12-02	CN102057231B				

Abstract

(EP2275752)

The present invention relates to a novel sustainable building, the outer enclosures, roofs and foundations of which form an envelope that is formed, with the exception of doors, windows and chimneys, by a central core (5) with a high heat storage capacity, by an inner liner or membrane (4) with a high thermal conductivity and which is in close contact with the central core, and by an outer thermally insulated and mechanically resistant surface (6).

Inventors

GARCÍA FERNANDEZ FELICIANO

Latest standardized assignees - inventors removed

EDIFICIOS SOSTENIBLES GETECH