



New connection on: : 12-07-2018 : 03:08:03 - Last disconnection on: : 12-07-2018 : 01:01:43

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 6] temperature and flow and heat+ and resistance and capacitor

Results in EPODOC 0

[SS 7] temperature and flow and heat+

Results in EPODOC 13

[SS 8] ..v

[EPODOC: SS 8] temperature and wall and flow

Results in EPODOC 22.963

[SS 9] 8 and resistance and capacitor

Results in EPODOC 8

[SS 10] ..v

[EPODOC: SS 10] 8 and time

Results in EPODOC 3.158

[SS 11] 10 and sensor

Results in EPODOC 372

[SS 12] 11 and power

Results in EPODOC 38

[SS 13] ..v

[EPODOC: SS 13] temperature and resistance and capacitor

Results in EPODOC 4.426

[SS 14] 14 and wall

Non-existent or invalid SS number(s).

- Check with the command ..HI. When searching for numbers, use quotes e.g. "4" W WHEEL? *ERROR*
(-100803)

[SS 14] 13 and wall

Results in EPODOC 59

[SS 15] 14 and sensor

Results in EPODOC 6

[SS 16] ..v

[EPODOC: SS 16] temperature and thermal and resis+ and capacitor and calc+

Results in EPODOC 15

[SS 17] ..v

[EPODOC: SS 17] temperature and flow and wall

Results in EPODOC 1

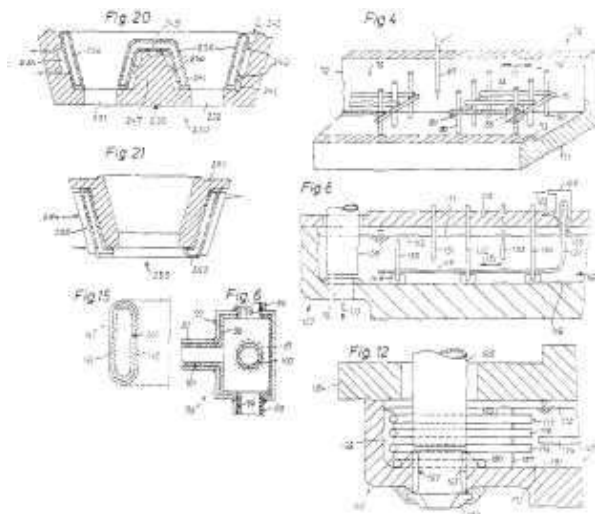
[SS 18] ..v

[EPODOC: SS 18] ..li



1/1 © EPODOC / EPO

PN - [GB1310603](#) A 19730321
PR - DE19691917450 19690403
AP - GB19700013729 19700320
DT - *
CCI - [F28D15/04](#) ; [C03B5/2356](#) ;
[C03B7/06](#) ; [F28D15/0233](#)
PA - HEYEHERMANN
TI - CONTROL OF
THE TEMPERATURE OF GLASS
MELTS
AB - 1310603 Regulating glass
melt temperatures; heat pipes
HERMANN HEYE 20 March
1970 [3 April 1969] 13729/70
Headings F4B and F4U [Also



in Division C1] The temperature of a glass melt during passage from a melting tank to a gob delivery ring of a feeder head is controlled by fitting the feeder head with a heat pipe, i. e. a closed heat transfer system which comprises a hollow chamber containing a capillary structure holding a heat transfer medium and which incorporates a closed space within which the heat transfer medium can **flow** when vaporized, as when one part of the melt is hotter than the rest, the vaporized medium flowing away from the hotter region to condense in another region and the capillary structure returns the condensed medium to the region of vaporization. As shown in Figs. 12 and 15 the gob feeder head 168 is provided with a heat pipe 197 in the feeder orifice 183, the pipe 197 consisting of inner and outer cylindrical walls 198, 199 joined to form a closed annulus, the internal surfaces of which are covered by a continuous capillary structure 200 holding the heat transfer medium. The **wall** 198 adjacent the glass melt will act as the vaporizing region and **wall** 199 as a condenser region. The feeder head 168 further includes ring shaped heat pipes 177 to 180, pipe 180 on base 191 of the feeder having a relatively narrow opening facing the forehearth 167 and pipes 177 to 179 being semicircular with arms extending parallel to the sides of the forehearth 167. The forehearth 167 may also be provided with heat pipes (173), 174 and (175) below

the surface 170 of the glass melt. The structure in the forehearth may include metal plates, one on the base of the forehearth and the other raised in the melt, each traversed by a network of heat pipes. As shown in Figs. 20 and 21, the gob delivery rings 230 and 250 are provided with heat pipes 236 and 252. The single gob delivery ring 250 has the heat pipe 252 surrounding its housing **wall** 251 and being itself surrounded by a temperature control device 254 with control medium passing through its hollow interior 255. The double gob ring 230 comprises a ceramic housing 235 forming two orifices 231, 232 and the pipe 236 is a dish-shaped structure covering all the internal surface of the ring 230. Temperature controls may be provided, as on the left hand side where a channel 238 is provided through which control medium may **flow** or on the right hand side where the structure 236 rests on spacer lugs 240 forming hollow chambers 241 through which molten glass may **flow** as in the direction 242 and leaving through a vent 245 in the crown of the structure 236 over the central boss 247 of housing 235. As shown in Fig. 8 the forehearth 105 is provided with longitudinal heat pipes 117, (118), (119) in the melt 111 having upturned ends 121 passing through the cover-plate 110 and surrounded by a sheath 123, which can be filled with molten glass, and a temperature control device 125 through which air or like

control medium can **flow**. U-shaped heat pipes 130 to 134 are located along the forehearth and extend to different depths in the melt. Temperature control devices can be provided on that part of the pipes extending outside the forehearth. In the melting tank and refining tank, the molten glass can be similarly homogenized by providing a series of heat pipes and as shown in Figs. 4 and 6, two heat pipe systems 75 and 76 may be used, each comprising a lattice of pipes 80, 81, 82 which may be in contact with each other or be fitted with connecting blocks 85, one of which is shown at 95 in Fig. 6, in which the heat pipes 80, 81, 82 are sealingly connected to a housing 97 covered internally by a capillary structure 98 which is connected to the capillary structures 99, 100, 101 of the pipes 80, 81, 82 respectively, whereby the **flow** of the heat transfer medium in the pipes is facilitated. All heat pipes in contact with the glass melt may be covered or coated with a ceramic where there is danger of oxides of the metals used colouring the glass. The temperature ranges of different glasses are very variable such as for lead glasses from 1100-1300 C. and for Zr glasses from 1300-1650 C. The materials for the pipe casing and the capillary structure with the heat transfer medium used therewith, are as follows: Ti-Zr-Mo with Li; W with Li; W with Ag-suitable for high melting point glasses; Ta with Li; Mo with Na; W with Na; Nb (99%)-Zr with Li. The capillary structure may be wire mesh

with or without an annular
gap around the mesh.

[SS 18] ..fi

Select a database:

[SS 18] conductive and temperature and flow and sensor

Results in EPODOC 0

[SS 19] Thermal and conductivity and flow

Results in EPODOC 3.858

[SS 20] 19 and sensor and temperature

Results in EPODOC 203

[SS 21] 20 and wall

Results in EPODOC 14

[SS 22] ..v

[EPODOC: SS 22] ..li



1/14 © EPODOC / EPO

PN - [CN206208811U](#) U 20170531

PR - CN201621312714U 20161202

AP - CN201621312714U 20161202

DT - I

PA - CHENMINGSHU

TI - Metal coefficient of heat **conductivity** measuring device

AB - The utility model relates to a metal coefficient of heat **conductivity** measuring device, belong to solid physical properties test technical field, the device includes the heat source, survey metal heat -conducting unit and measuring unit, it is excellent for heat conduction to be surveyed the metal heat -conducting unit, its head is provided with the blind hole, its periphery is provided with the hot box, the heat source is for placing the heating pipe in the blind hole, be provided with two fixed orificess on the heat conduction stick outer **wall**, all install **temperature** measuring device, measuring unit includes the spiral pipe of suit in heat conduction stick afterbody, the spiral pipe both ends are heat transfer import and heat transfer export respectively, heat transfer import external connection has the water tank, heat transfer export external connection has waste water recycle box and heat transfer water collection device, heat transfer import department installs a water **temperature sensor**, the 2nd water **temperature sensor** and **flow** control valve are installed in proper order to the heat transfer exit, the utility model

provides a measuring device measures metal coefficient of heat **conductivity** based on the steady -state method, stabilize the **thermal** field establish comparatively rapid, heat through calculating the water exchange and then try to achieve coefficient of heat **conductivity**.

2/14 © EPODOC / EPO

PN - [JP2014153310](#) A 20140825

PNFP - JP6128877B B2 20170517

PR - JP20130025649 20130213

AP - JP20130025649 20130213

DT - I

FI - G01K1/16; G01K1/20; G01K13/02

FT - 2F056/DA03; 2F056/DA09; 2F056/WF03; 2F056/WF05

PA - (A)
AZBIL CORP

TI - (A)
TEMPERATUREDETECTING DEVICE

AB - (A)
PROBLEM TO BE SOLVED: To provide a **temperature** detecting device capable of being made compact and measuring spatial **temperature** with high accuracy.SOLUTION: A **temperature** detecting device comprises: a main body part 11 attached to a **wall** surface; a cover 12 for forming space where air can be circulated between the main body part 11 and the cover 12; a **flow** pass formation part 13 for forming a **flow** pass of the air within the space while comprising a member with high **thermal conductivity**; and a **temperature sensor** 14 disposed tightly close to the **flow** pass formation part 13 within the space.

3/14 © EPODOC / EPO

PN - [WO2012049417](#) A2 20120419

PNFP - WO2012049417 A3 20120719

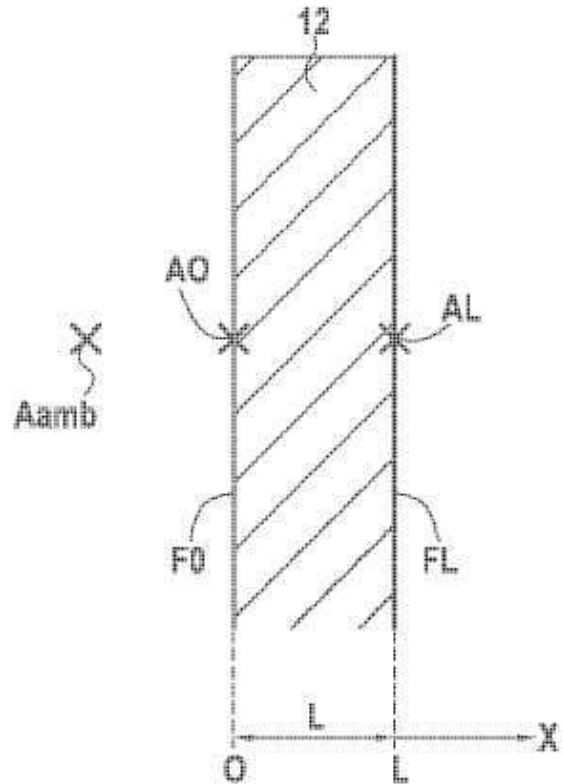
PR - FR20100058266 20101012

AP - WO2011FR52367 20111011

DT - **

CT - |EP| ISR (A3)
[XP025085279](#) A[Y];
[XP012038857](#) A[Y];
[US5940784](#) A 19990817
[Y] (EL-HUSAYNI HANI A [US])
[Y] 10,17
* abstract *
* column 4, line 60 -
column 5, line 63 *
* figure 1A *;
[XP027597602](#) A[Y];
[XP027060495](#) A[A];
[XP024523021](#) A[A]

CTNP - |EP| ISR (A3)
[Y] - CUCUMO M ET AL, "A
method for the experimental
evaluation in situ of the wall
conductance", ENERGY AND
BUILDINGS, LAUSANNE, CH,
vol. 38, no. 3, doi:DOI:[10.1016](#)
[/J.ENBUILD.2005.06.005](#), ISSN
0378-7788, (20060301),
pages 238 - 244, (20060301),
XP025085279
[Y] 1-18
* abstract *
* page 239, column right,
paragraph 2 - page 241,
column right, paragraph 1 *
* figures 4,7 *
[Y] - ZAWILSKI B M ET AL,
"Dynamic measurement
access, a new technique for
fast thermal conductivity
measurement", REVIEW OF
SCIENTIFIC INSTRUMENTS, AIP,
MELVILLE, NY, US, (20011001),
vol. 72, no. 10, doi:[10.1063/1.](#)
[1400148](#), ISSN 0034-6748,
pages 3937 - 3939,
XP012038857
[Y] 1-18
* page 3937, column left,
paragraph 2 *
* page 3938, column right,
paragraphs 1,2 *
* figures 1,2 *



[Y] - LUO C ET AL,
 "Determining the thermal
 capacitance, conductivity and
 the convective heat transfer
 coefficient of a brick wall by
 annually monitored
 temperatures and total heat
 fluxes", ENERGY AND
 BUILDINGS, LAUSANNE, CH,
 vol. 43, no. 2-3, ISSN 0378-
 7788, (20101007), pages 379
 - 385, (20110112),
 XP027597602

[Y] 18

* Section 2 *

* figure 1 *

[A] - ZUKOWSKI M ET AL,
 "Experimental and numerical
 investigation of a hollow
 brick filled with perlite
 insulation", ENERGY AND
 BUILDINGS, LAUSANNE, CH,
 vol. 42, no. 9, ISSN 0378-
 7788, (20100320), pages
 1402 - 1408, (20100320),
 XP027060495

[A] 1-18

* Sections 2.1, 2.2, 3 et 4 *

* figures 2, 4, 6 *

[A] - PENG C ET AL, "In situ
 measuring and evaluating the
 thermal resistance of
 building construction",
 ENERGY AND BUILDINGS,
 LAUSANNE, CH, vol. 40, no. 11,
 doi:DOI: [10.1016/J.ENBUILD.
 2008.05.012](https://doi.org/10.1016/j.enbuild.2008.05.012), ISSN 0378-7788,
 (20080101), pages 2076 -
 2082, (20080606),
 XP024523021

[A] 1-18

* the whole document *

CCI - [G01N25/18](https://doi.org/10.1016/j.enbuild.2008.05.012)

PA - (A2 A3)
 INST FRANCAIS DES SCIENCES
 ET TECHNOLOGIES DES
 TRANSPORTS DE
 L'AMENAGEMENT ET DES
 RESEAUX [FR]; NASSIOPOULOS
 ALEXANDRE [FR]; BOURQUIN
 FREDERIC [FR]

TI - (A2 A3)
 DEVICE AND METHOD FOR

IDENTIFYING THE **THERMAL
CONDUCTIVITY** AND/OR HEAT
CAPACITY OF A **WALL**

AB

- (A2 A3)
Device (10) for identifying the **thermal conductivity** k and/or the heat capacity C of a planar **wall**, comprising:
first and second **temperature** sensors (A0, AL), placed on the two sides of the **wall**; a third **temperature sensor**, delivering a measurement of the ambient **temperature** neighbouring the first side of the **wall**; a data acquisition system, for acquiring the measurements delivered by the sensors; and data processing means, able to determine the **conductivity** coefficient k and/or the heat capacity C of the **wall** based at least on the information delivered by said sensors in the absence of **temperature** regulation of or heat **flow** to one or the other of the sides of the **wall**. The **thermal conductivity** and/or the heat capacity are thus determined based only on measurement of easily measured quantities, i.e. surface or ambient temperatures.

4/14 © EPODOC / EPO

- PN - [EP2042845](#) A1 20090401
- PNFP - EP2042845 B1 20110518
- PR - EP20060017393 20060822; DE20051040277 20050824
- AP - EP20080021894 20060822
- DT - **
- CT - || STSE (A1)
[WO2004036116](#) A2 20040429 [X] (CLYDE BERGEMANN GMBH [DE], et al)
[X] 1-14
* the whole document *;
[US6485174](#) B1 20021126 [X] (ALBRECHT MELVIN JOHN [US], et al)
[X] 1-14
* the whole document *;
[US4779994](#) A 19881025 [X] (DILLER THOMAS E [US], et al)
[X] 1
* abstract *;

XP000287850 A[A]	
CTNP	- STSE (A1) [A] "INTEGRAL PLUG-TYPE HEAT-FLUX GAUGE", NTIS TECH NOTES, US DEPARTMENT OF COMMERCE. SPRINGFIELD, VA, US, (199201), ISSN 0889-8464, pages 34,1 - 2, XP000287850 [A] 1-14 * figure 1 *
CCI	- G01K7/02 ; G01K17/20
PA	- (A1 B1)
	CHEMIN GMBH [DE]
TI	- (A1 B1)
	Device and method for measuring the specific heat flow on a membrane wall for optimising the boiler layout and the boiler operation
AB	- (A1) The heat flow sensor consists of at least two contact points (7, 8) arranged respectively on a pipe (3) and spacing bar (4) of the membrane wall (2) made of ferrous material such as low alloyed steel. A respective Constantan wire (10a, 10b) is connected at each point so that the metal of the membrane wall itself forms part of two thermocouples with the wires. The contact points are spaced at a distance appropriate for the measurement of the temperature difference. The thermal conductivity of the individual components, i.e. the pipe, bar and refractory lining (11), the heat transfer from the pipe into the boiling water (13), and the specific heat flux on the membrane wall are all taken into account in presenting the measured differential voltages as heat flow units on the display device (9). An independent claim is included for a method for designing and testing of the heat transfer performance in wall regions of thermal power plants.

5/14 © EPODOC / EPO

PN	- JPH0253287 A 19900222
PR	- JP19880204100 19880816
AP	- JP19880204100 19880816
DT	- I
FI	- G11B25/04&101K; G11B33/12&M
PA	- NIPPON ELECTRIC ENG
TI	- MAGNETIC DISK DEVICE
AB	- PURPOSE:To always keep a head disk assembly HDA almost at a constant temperature by employing the double structure of the outer wall of the HDA, and circulating a heat conducting medium by a circulator with a heat exchanger. CONSTITUTION:The title device is equipped with the head disk assembly HDA in the outer wall of double structure of which the heat conducting medium whose thermal conductivity is larger than that of water is injected, and the circulator which performs the heat exchange of the heat conducting medium, and a control part 3 judges the cooling or the heat insulation of the HDA 10 based on data from an operation detector 1 and a temperature sensor 2 in the inside of the HDA 10. In other words, when a temperature is less than a regulated value in a stopping state, the flow 12 of the medium sent from the circulator 9 is switched to a heater part 5 by a switch 8, and it is circulated in the inside of double structure, which performs the heat insulation. Also, when the device is operated and the temperature in the inside of the HDA 10 rises, the flow 12 is switched to a cooling part 7 side by the switch 8, then, the HDA 10 is cooled. In such a way, it is possible to keep the

internal **temperature** of the HDA 10 constant.

6/14 © EPODOC / EPO

- PN - [JPH0287020](#) A 19900327
- PR - DE19883820853 19880621
- AP - JP19890154776 19890619
- DT - I
- CT - || STSE (A)
[JPS5343574](#) A 19780419 [] (RION CO)
- CCI - [G01F1/684](#) ; [G01F1/69](#)
- FI - G01F1/68; G01F1/68&103A; G01F1/68&103B; G01F1/69&A; G01F1/69&B; G01P5/12&C
- FT - 2F035/EA08
- PA - TESUTOTAAMUMESUTEHINIUKGMBH
- TI - ELECTRIC TYPE **FLOW** MEASURING **SENSOR**
- AB - PURPOSE: To measure a **flow** rate without affected by the **flow** direction of a fluid by incorporating an electric resistor inside a rotation-symmetrical body of a good **thermal conductivity**. CONSTITUTION: The **sensor** comprising a rotation-symmetrical body 10 having the surface of rotation symmetry type which is exposed to the continuous **flow** of a fluid and which exchanges heat with the fluid and an electric resistor 14 which reaches to a preset **temperature** when a current is applied, obtains a **flow** rate of fluid by measuring the current supplied. The rotation-symmetrical body 10 comprises the surface formed of a material of good **thermal conductivity** and a pocket-like hole 12 at the center of which the electric resistor 14 is incorporated, and, the electric resistor 14 in the hole maintains a good **thermal conductivity** to the **wall** surface of the hole. The electric resistor 14 comprises an NTC resistor or a metal film resistor, and connected to the **wall** surface of the pocket-like hole 12 with a bonding agent of a conductive metal (for example, silver).

7/14 © EPODOC / EPO

- PN - [JP2000227015](#) A 20000815
- PR - JP19990026522 19990203
- AP - JP19990026522 19990203
- DT - I
- FI - F01M11/00&H
- FT - 3G015/BB03; 3G015/BB06; 3G015/BB11; 3G015/CA07; 3G015/DA05; 3G015/DA10; 3G015/EA00; 3G015/FA01; 3G015/FA03; 3G015/FB08; 3G015/FC05; 3G015/FC09; 3G015/FC11
- PA - TOYOTA MOTOR CORP
- TI - OIL PAN
- AB - PROBLEM TO BE SOLVED: To provide an oil pan for displaying sufficient heat insulation performance to stored lubricating oil for an internal combustion engine. SOLUTION: The contact of the end part 60a of an oil **temperature sensor** 60 exposed on a boundary surface A with lubricating oil bends the **sensor** 60 in an arrow X direction. At that time, a heat insulation cover 50 connected with the **sensor** 60 and a wire 64 rotates in an arrow Y1 direction with a journal part 62 as a rotating shaft to be made into an opened condition, to make to **flow** down lubricating oil accumulated in an upper chamber 44 into a lower chamber 46. A lower side main

body 42, a baffle plate 48, and the cover 50 have their insides of the double vacuum **wall** structure and extremely low **thermal conductivity**. The inside of the body 42 is sealed by a baffle plate 48 and the cover 50 usually, thereby displaying high heat insulating performance to the inside lubricating oil.

8/14 © EPODOC / EPO

PN - [GB1227095](#) A 19710331

PR - US19680767735 19681015

AP - GBD1227095 19690922

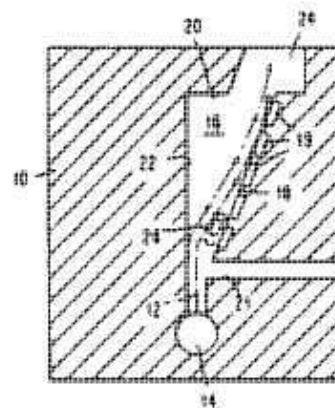
DT - **

CCI - [F15C1/04](#) ; [G01K1/00](#)

CCA - [Y10T137/2065](#) ;
[Y10T137/2267](#) ;
[Y10T137/2273](#)

AB - 1,227,095. 227, 095.
 Sensing **temperature**.
 INTERNATIONAL BUSINESS
 MACHINES CORP. Sept.22,
 1969 [Oct. 15, 1968], No.
 46505/69. Heading G1D. [Also
 in Divisions F4 and G3] A
 fluidic **temperature** sensing
 device for use in a cooling
 system, comprises a chamber
 16 into which a stream of
 cooling fluid is directed from
 a nozzle 12, the chamber
 having a **wall** 18 of
 good **thermal conductivity**
 which diverges from the
 direction of undisturbed **flow**
 of fluid from the nozzle, the
 stream adhering to the **wall**
 18 until it reaches a
 given **temperature** when it
 will become detached from
 the **wall** 18 and impinge on
 a **wall** 20 which sets up
 turbulence causing the
 stream to return to the **wall**
 18, the net result being that
 below the given **temperature**
 the **flow** will be along the **wall**
 18 to a channel 24, and above
 the given **temperature**
 oscillation of the fluid stream
 between positions of
 adherence and non-
 adherence to the **wall** 18 will
 occur. The **wall** 18 may be
 comprised of components 19
 to be cooled, the device then

FIG. 1



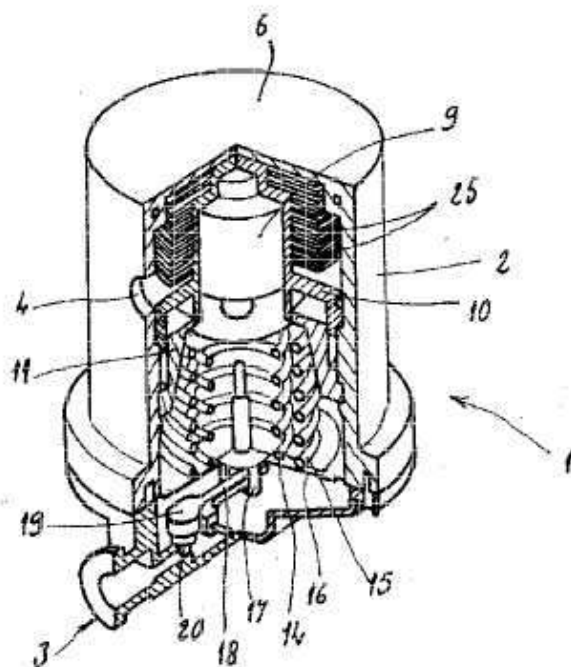
giving an indication if the **temperature** of these devices rises above a desired limit. Alternatively the device may be simply used as a **temperature sensor**, the **temperature** of the **wall** 18 controlling the device. A control port 21 is provided and in an alternative embodiment the **wall** 20 is replaced by a feedback channel leading to a point opposite the port 21. It has been found that with the **wall** 20 the frequency of oscillation is not fixed, but with a feedback channel, the frequency is determined by the length of the channel. Also, increasing the length of the **wall** 18 increases the **temperature** at which detachment of the fluid stream occurs.

9/14 © EPODOC / EPO

PN - [FR2849224](#) A1 20040625
 PNFP - FR2849224 B1 20070112
 PR - FR20020016554 20021223
 AP - FR20020016554 20021223
 DT - *; Rep
 CT - || STSE (A1)
[US6341620](#) B1 20020129
 [XY] (MUTTER HEINZ [CH])
 [X] 1,2,6-13
 * the whole document *
 [Y] 3-5,14-16;
[US4417689](#) A 19831129
 [YA] (SASAKI AKIRA [JP])
 [Y] 3-5,14-16
 * column 3, line 33 -
 line 48; figure 1 *
 [A] 1,2,6-13;
[US5755213](#) A 19980526
 [A] (GARDNER JR WILLIAM M
 [US], et al)
 [A] 1-16
 * the whole document *

CCI - [G05D23/023](#)

CCA - [Y10T137/7797](#) ;



[Y10T137/7737](#) ;
[Y10T137/8275](#) ;
[Y10T137/783](#) ;
[Y10T137/7727](#)

- PA - (A1 B1)
CLESSE IND [FR]; GAZ DE
PETROLE [FR]
- TI - (A1)
Gas supply pressure
regulator compensating **flow**
rate for **temperature** and
altitude,
contains **temperature sensor**
in path of gas flowing through
it
- AB - (A1)
The deformable **temperature sensor** is located within the
regulator body, in the path of
gas passing through it. Heat
exchange is facilitated
between **temperature sensor**
(9) and gas **flow**. A sealed
enclosure (8) with fins (25)
surrounds the **temperature sensor**. A **thermal** conductor
intervenes between enclosure
and **sensor**. The **temperature sensor**
has an internal,
deformable **wall**. It contains a
variable volume component.
The main actuator comprises
a thrust rod (12) resting
against a main spring (14).
The rod is part of
the **temperature sensor** and
contacts the internal,
deformable **wall**. The body
has a lateral **wall** with an
inlet opening (4) and an
outlet opening (5) for
gas **flow**. The body cover is
designed with a gas inlet,
internal line and outlet to
user apparatus. The
regulation mechanism is
controlled by movement of
the diaphragm (16). The body,
in low **thermal conductivity**
material, is covered by an
insulating jacket. A spring-
loaded auxiliary actuator
(15) takes into account

pressure variation resulting from altitude. It has a spring at one end resting against an adjustable ring (11), and at the other, against the moving diaphragm (16). The regulator body has an opening giving access to the threaded ring from the exterior.

10/14 © EPODOC / EPO

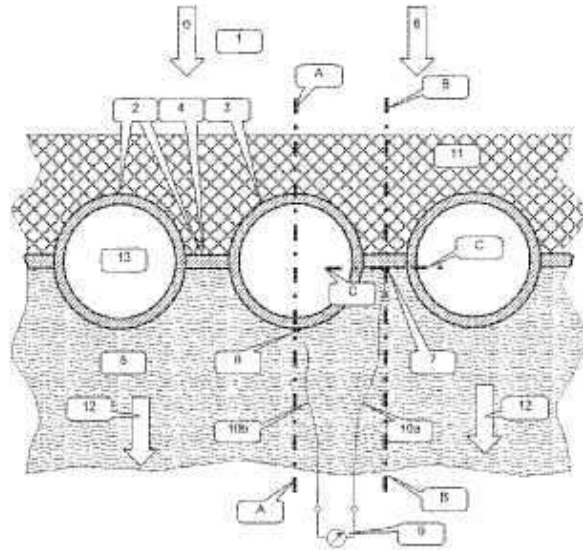
- PN - [EP0347732](#) A2 19891227
- PNFP - EP0347732 A3 19900822
- PR - DE19883820853 19880621
- AP - EP19890110758 19890614
- DT - *; Rep
- CT - || STSE (A3)
[GB1571303](#) A 19800716 [X] (HAWKER SIDDELEY DYNAMICS ENG);
[FR2152470](#) A1 19730427 [Y] (SODERA [FR]);
[US3754201](#) A 19730821 [A] (ADAMS R)
- CTNP - || STSE (A3)
[Y] SOVIET JOURNAL OF INSTRUMENTATION AND CONTROL, Nr. 8, August 1967, Seiten 41-43; R.I. VILENKINA et al.: "ST1-30 Thermistors for flow velocity measurement of gases and liquids",
[Y] INTERNATIONAL CONGRESS ON INSTRUMENTATION IN AEROSPACE SIMULATION FACILITIES, Williamsburg, 22.-25. Juni 1987, Seiten 83-91, IEEE; W.F. NG et al.: "A combination probe for high-frequency unsteady aerodynamic measurements in transonic wind tunnels",
- CCI - [G01F1/684](#) ; [G01F1/69](#)
- PA - (A2)
TESTOTERM MESSTECHNIK GMBH CO [DE]
- TI - (A2)
Electrical **flow sensor**.
- (A3)
ELECTRICAL **FLOW SENSOR**
- AB - (A2)
An electrical **flow sensor** is described, the rotationally symmetric surface of which is exposed to an inflowing fluid for measuring the speed of the fluid. The rotationally symmetrical surface is formed by a body of material with good **thermal conductivity**, in the interior of which an electrical resistor is arranged in a blind hole. The electrical resistor is in good **thermal** contact with the **wall** of the blind hole. By supplying current to it, it is regulated to a predetermined **temperature**, the current supplied being measured and being used as a measure of the **flow** velocity. <IMAGE>

11/14 © EPODOC / EPO

- PN - [EP1760441](#) A1 20070307
- PNFP - EP1760441 B1 20081217
- PR - DE20051040277 20050824
- AP - EP20060017393 20060822

DT	- *; Rep
CT	- STSE (A1) WO2004036116 A2 20040429 [X] (CLYDE BERGEMANN GMBH [DE], et al) [X] 1-15 * the whole document *; US6485174 B1 20021126 [X] (ALBRECHT MELVIN JOHN [US], et al) [X] 1-15 * the whole document *; US4779994 A 19881025 [X] (DILLER THOMAS E [US], et al) [X] 1 * abstract *; XP000287850 A[A]
CTNP	- STSE (A1) [A] "INTEGRAL PLUG-TYPE HEAT-FLUX GAUGE", NTIS TECH NOTES, US DEPARTMENT OF COMMERCE. SPRINGFIELD, VA, US, (199201), ISSN 0889-8464, pages 34,1 - 2, XP000287850 [A] 1-15 * figure 1 *
CCI	- G01K7/02 ; G01K17/20
PA	- (A1 B1) CHEMIN GMBH [DE]
TI	- (A1 B1) Device and an associated method for capturing the specific heat flow on a membrane wall in order to optimize the operation of a boiler.
AB	- (A1) The heat flow sensor consists of at least two contact points (7, 8) arranged respectively on a pipe (3) and spacing bar (4) of the membrane wall (2) made of ferrous material such as low alloyed steel. A respective Constantan wire (10a, 10b) is connected at each point so that the metal of the membrane wall itself forms part of two thermocouples with the wires. The contact points are spaced at a distance appropriate for the measurement of the temperature difference. The thermal conductivity of the individual components, i.e. the pipe, bar and refractory lining (11), the heat transfer from the pipe into the boiling water (13), and the specific heat flux on the membrane wall are all taken into account in presenting the measured differential voltages as heat flow units on the display device (9). An independent claim is included for a method for designing and testing of the heat transfer performance in wall regions of thermal power plants.

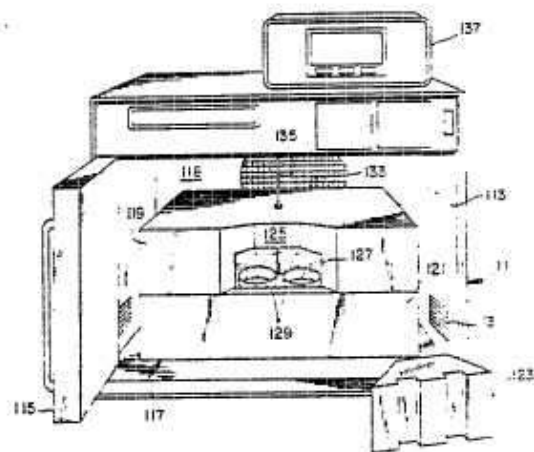
- PN - [DE102005040277](#) A1
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- PNFP - DE102005040277 B4
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- PR - DE20051040277 20050824
- AP - DE20051040277 20050824
- DT - **
- CT - || STSE (B4)
[US6485174](#) B1 20021126 [] (ALBRECHT MELVIN JOHN [US], et al)
[US4779994](#) A 19881025 [] (DILLER THOMAS E [US], et al)
[WO2004036116](#) A2
20040429 [] (FRACH MANFRED [DE], et al)
- CCI - [G01K7/02](#) ; [G01K17/20](#)
- PA - (A1 B4)
CHEMIN GMBH [DE]
- TI - (A1)
Specific heat **flow sensor** for membrane **wall** of e.g. steam generator, comprises at least two thermocouple junctions formed by Constantan wires connected to dissimilar metal of pipes and spacing bars for measuring **temperature** difference
- Specific heat **flow sensor** for membrane **wall** of e.g. steam generator, comprises at least two thermocouple junctions formed by Constantan wires connected to dissimilar metal of pipes and spacing bars for measuring **temperature** difference
- AB - (A1)
The heat **flow sensor** consists of at least two contact points (7, 8) arranged respectively on a pipe (3) and spacing bar (4) of the membrane **wall** (2) made of ferrous material such as low alloyed steel. A respective Constantan wire (10a, 10b) is connected at each point so that the metal of the membrane **wall** itself forms part of two



thermocouples with the wires. The contact points are spaced at a distance appropriate for the measurement of the **temperature** difference. The **thermal conductivity** of the individual components, i. e. the pipe, bar and refractory lining (11), the heat transfer from the pipe into the boiling water (13), and the specific heat flux on the membrane **wall** are all taken into account in presenting the measured differential voltages as heat **flow** units on the display device (9). An independent claim is included for a method for designing and testing of the heat transfer performance in **wall** regions of **thermal** power plants.

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19890118; US19890298554
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- AP - DE19904000515 19900110
- DT - **
- CT - (A1)
[US4565669](#) A []; [US4307277](#)
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- CCI - [H05B6/6455](#) ; [B01J19/126](#) ;
[B01L7/00](#) ; [C03B5/08](#) ;
[C03B37/15](#) ; [G01N1/44](#) ;
[G01N31/12](#) ; [H05B6/64](#) ;
[H05B6/66](#)
- CCA - [B01J2219/1218](#) ;
[F27D1/0009](#) ;
[F27D2099/0028](#) ;
[F27M2003/11](#)
- PA - (A1 C2)
CEM CORP [US]
- AB - (A1)
An apparatus for analyzing
materials for ash content
includes a walled chamber
118 which retains microwave

FIG. 7



radiation therein, a source of microwave radiation, such as a magnetron, for radiating onto chamber contents, and an ashing furnace 117 in the chamber, which includes a heat resistant **wall** 119, 121 of low **thermal conductivity**, which is transmissive of microwave radiation, and a microwave absorptive material 127, e.g. of silicon carbide, which is capable of being heated by microwave radiation to an ashing **temperature**. The furnace includes a passageway through it for air and gaseous combustion products and a door 123 in a front **wall** thereof. Air **flow** helps to cool the furnace **wall** exterior. The operation of the furnace and the ashing **temperature** are preferably controlled by a combination of a **temperature sensor**, preferably a thermocouple, and a control mechanism 137 which turns a magnetron on and off, respectively, as the **temperature** in the furnace cavity falls below or rises above that desired during use of the apparatus in the ashing process. Also claimed are an ashing container 129, figs 7-9 which is heat resistant, walled, light weight, microwave transmissive and porous, and of quartz microfibers that are held in desired walled container form, and a process for manufacturing such container by shaping a non woven sheet about mandrel (145). Cereals, polymers, sludges, sediments, coal, paper and building materials may be analysed. <IMAGE>

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PN	- EP1892510 A1 20080227
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DT	- *; Rep
CT	- STSE (A1) EP0124483 A2 19841107 [XY] (MESINVEST NV [NL]) [X] 1-3,5,9-12 * abstract * * pages 3-6,9 * [Y] 4,6; US3373611 A 19680319 [X] (TROTT DAVID H) [X] 1,3 * column 3, line 13 - line 31 * * column 4, line 28 - line 35 * * figures 2,3 *; DE1951140 A1 19700514 [Y] (TEXAS INSTRUMENTS INC) [Y] 4 * page 3, paragraph 4; figure 2 * * page 4, line 14 - line 19 *; US3851529 A 19741203 [YA] (ANDREWS R, et al) [Y] 6 * abstract * * column 1, line 49 - line 57 * * column 4, line 16 - line 20 * [A] 1; DE476684 C 19290524 [A] (THERMEX SA) [A] 1 * page 1, line 1 - line 8 * * page 2, line 40 - line 45 * * figure 1 *; US2254570 A 19410902 [A] (HAILEY ROBERT W) [A] 3 * page 2, column 2, line 25 - line 32; figures 4,5 *
CCI	- A47J45/068 ; A47J27/62 ; G01D11/24 ; G01D11/26 ; G01K5/70
CCA	- A47J2202/00 ; G01K2207/06
PA	- RUEEGER SA [CH]
TI	- Temperature measuring device
AB	- The device has a thermometer with a temperature sensor (1) and an indicator disc (3) housed in a casing closed by a transparent plate (9). The casing comprises an upper casing (10) with the indicator disc, and a bimetallic lower casing (2) with the sensor and a lateral wall . A thermal insulation body (6) is provided between the upper casing and the lower casing, and has a structure and material satisfying one of properties such as reduced thermal mass, strong capacity for absorption of heat under effect of infra-red radiation or heat flow and high thermal conductivity .