Title (en)
SYSTEM AND METHOD FOR A TEMPERATURE SENSOR USING TEMPERATURE BALANCE

Title (de)
SYSTEM UND VERFAHREN FÜR EINEN TEMPERATURSENSOR MIT TEMPERATURAUSGLEICH

Title (fr)
SYSTÈME ET PROCÉDÉ POUR UN DÉTECTEUR DE TEMPÉRATURE UTILISANT UN ÉQUILIBRE DE TEMPÉRATURE

Publication
EP 2307865 A1 20110413 (EN)

Application
EP 09790079 A 20090706

Priority
• US 2009049694 W 20090706
• GB 0813994 A 20080731

Abstract (en)
[origin: GB2462293A] A temperature sensing device 10 includes a probe 5 in contact with the body under test 6. The device 10 prevents heat transfer to or from the body under test 6 by delivering heat energy to or from the probe 5 using a thermal energy supply. The thermal energy supply can take the form of a heating/cooling source 3. The temperature sensing device 10 also includes a heat flux sensor 4. A temperature difference between the probe 5 and the heating/cooling source 3 drives a heat flux through the heat flux sensor 4, which generates a signal that passes through a feedback control circuit 2 which drives/controls the heating/cooling source 3 in response thereto. The temperature of the heating/cooling source 3 is measured via a thermometer element 7 and displayed on a thermometer display 1. Once the heat flux is zero, an indicator 8 is activated to indicate the temperature of the body under test 6 has been reached, the temperature being displayed on the thermometer display 1. A method for determining the temperature of a body under test is also disclosed.

IPC 8 full level
G01K 1/16 (2006.01)

CPC (source: EP GB)
G01K 1/16 (2013.01 - EP GB); **G01K 1/165** (2013.01 - EP GB); **G01K 1/18** (2013.01 - GB)

Citation (search report)
See references of WO 2010014354A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
GB 0813994 D0 20080910; **GB 2462293 A 20100203**; **GB 2462293 B 20121017**; CN 102112851 A 20110629; EP 2307865 A1 20110413; GB 201101465 D0 20110316; GB 2473796 A 20110323; JP 2012504750 A 20120223; WO 2010014354 A1 20100204

DOCDB simple family (application)
GB 0813994 A 20080731; CN 200980130614 A 20090706; EP 09790079 A 20090706; GB 201101465 A 20090706; JP 2011521160 A 20090706; US 2009049694 W 20090706