

Title (en)

METHOD FOR DETERMINING THE TEMPERATURE OF A MEASUREMENT SENSOR

Title (de)

VERFAHREN ZUR BESTIMMUNG DER TEMPERATUR EINES MESSFÜHLERS

Title (fr)

PROCÉDÉ DE DÉTERMINATION DE LA TEMPÉRATURE D'UNE SONDE DE MESURE

Publication

**EP 2092317 A1 20090826 (DE)**

Application

**EP 07821686 A 20071023**

Priority

- EP 2007061322 W 20071023
- DE 102006053808 A 20061115

Abstract (en)

[origin: WO2008058834A1] A method for determining the temperature of a measurement sensor (10) for determining an oxygen concentration in gas mixtures, in particular in exhaust gases of internal combustion engines, wherein a detection voltage (UD) which corresponds to the oxygen concentration and is provided by a Nernst measuring cell (12) is evaluated, and the measurement sensor is regulated to an operating temperature using a heating device (50), is characterized in that the internal resistance of the Nernst measuring cell (12) is determined in a first temperature range and is used to infer the temperature of the Nernst measuring cell, and in that the internal resistance of the heating device (50) is determined in a second temperature range and is used to infer the temperature of the Nernst measuring cell.

IPC 8 full level

**G01N 27/406** (2006.01); **G01K 7/18** (2006.01); **G01K 7/26** (2006.01); **G05D 23/24** (2006.01)

CPC (source: EP US)

**G01K 7/183** (2013.01 - EP US); **G01K 7/26** (2013.01 - EP US); **G01N 27/4067** (2013.01 - EP US); **G05D 23/2401** (2013.01 - EP US);  
**G01K 2205/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2008058834A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 102006053808 A1 20080521; DE 102006053808 B4 20210107;** CN 101535799 A 20090916; CN 101535799 B 20130424;  
EP 2092317 A1 20090826; JP 2009537839 A 20091029; JP 4814996 B2 20111116; RU 2009122509 A 20101220; RU 2453834 C2 20120620;  
US 2009308135 A1 20091217; US 8201998 B2 20120619; WO 2008058834 A1 20080522

DOCDB simple family (application)

**DE 102006053808 A 20061115;** CN 200780042362 A 20071023; EP 07821686 A 20071023; EP 2007061322 W 20071023;  
JP 2009511532 A 20071023; RU 2009122509 A 20071023; US 37436207 A 20071023