

Title (en)  
SENSOR

Title (de)  
MESSFÜHLER

Title (fr)  
CAPTEUR

Publication  
**EP 1658489 A1 20060524 (DE)**

Application  
**EP 04738764 A 20040623**

Priority  
• DE 2004001315 W 20040623  
• DE 10337840 A 20030818

Abstract (en)  
[origin: WO2005017515A1] The invention relates to a sensor, especially a gas sensor for determining the concentration of a gas constituent in a gas to be measured, said sensor comprising a sensor element (11) protruding from a housing (12) with an end section (111) thereof exposed to the measuring gas on the measuring gas side, and a protective tube (14) which comprises gas through openings (18, 19), is fixed to the housing (12), and slipped over the end section (111) on the measuring gas side. The aim of the invention is to prevent the condensation of water vapour contained in the gas to be measured in the measuring chamber enclosed by the housing (12) and the protective tube (14), and thus the creation of drops of water on the hot sensor element (11). To this end, the protective tube (14) and/or the sensor element (11) are thermally isolated from the housing (12). The thermal isolation is carried out, for example, by means of a flange sleeve (28) consisting of poorly heat-conducting material that separates the protective sleeve (14) from the housing (12) by means of a flange (282), and is inserted into the region between the housing (12) and the end section (111) of the sensor element, on the measuring gas side, with a sleeve section (281) thereof.

IPC 1-7  
**G01N 27/407**

IPC 8 full level  
**G01N 27/407** (2006.01)

CPC (source: EP US)  
**G01N 27/4077** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005017515A1

Designated contracting state (EPC)  
DE ES FR IT

DOCDB simple family (publication)  
**WO 2005017515 A1 20050224**; DE 10337840 A1 20050317; DE 10337840 B4 20131205; EP 1658489 A1 20060524; JP 2007502424 A 20070208; JP 4686458 B2 20110525; US 2008223110 A1 20080918; US 8001827 B2 20110823

DOCDB simple family (application)  
**DE 2004001315 W 20040623**; DE 10337840 A 20030818; EP 04738764 A 20040623; JP 2006523512 A 20040623; US 56938804 A 20040623