

Title (en)

DEVICE FOR DETECTING THE COMBUSTION CHAMBER PRESSURE IN AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR ERFASSUNG DES BRENNRAUMDRUCKS BEI EINER BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF POUR DETECTER LA PRESSION DANS LA CHAMBRE DE COMBUSTION D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1725849 A1 20061129 (DE)

Application

EP 05707764 A 20050113

Priority

- EP 2005050123 W 20050113
- DE 102004011098 A 20040306

Abstract (en)

[origin: WO2005085787A1] The invention relates to a device for detecting the combustion chamber pressure in an internal combustion engine, which is configured in such a way that the combustion chamber pressure can be detected in a reliable, reproducible manner. To achieve this, a sheathed element (17) that is subjected to the combustion chamber pressure is fixed in a housing (13) of a heater plug (11) by means of a fixing member (22). A sensor (26) is fixed in the housing (13) of the heater plug (11) by means of a fixing element (29) that is located at a distance from said fixing member (22). Said sensor (26) detects the elastic, longitudinal extension of the housing (13), caused by the combustion chamber pressure, between the end of the fixing member (22) that faces the sensor (26) and the point at which the fixing element (29) is attached to the housing (13). The inventive device is preferably used in automotive construction.

IPC 8 full level

G01L 23/22 (2006.01)

CPC (source: EP US)

G01L 23/10 (2013.01 - EP US); **G01L 23/222** (2013.01 - EP US); **F23Q 2007/002** (2013.01 - EP US)

Citation (search report)

See references of WO 2005085787A1

Citation (examination)

- DE 10218544 A1 20021128 - DENSO CORP [JP]
- JP S5985932 A 19840518 - NIPPON SOKEN
- WO 2005040681 A1 20050506 - SIEMENS VDO AUTOMOTIVE [FR], et al

Citation (third parties)

Third party :

DE 10218544 A1 20021128 - DENSO CORP [JP]

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005085787 A1 20050915; DE 102004011098 A1 20050922; EP 1725849 A1 20061129; JP 2007527541 A 20070927;
US 2008028841 A1 20080207; US 7730771 B2 20100608

DOCDB simple family (application)

EP 2005050123 W 20050113; DE 102004011098 A 20040306; EP 05707764 A 20050113; JP 2007502317 A 20050113;
US 59192405 A 20050113