

Title (en)
METHOD FOR TESTING AT LEAST THREE SENSORS, WHICH DETECT A MEASURABLE VARIABLE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
VERFAHREN ZUR ÜBERPRÜFUNG WENIGSTENS DREIER SENSOREN, DIE EINE MESSGRÖSSE IM BEREICH EINER BRENNKRAFTMASCHINE ERFASSEN

Title (fr)
PROCEDE PERMETTANT DE CONTROLER AU MOINS TROIS CAPTEURS DESTINES A DETECTER UNE GRANDEUR DE MESURE RELATIVE A UN MOTEUR A COMBUSTION

Publication
EP 1561019 A1 20050810 (DE)

Application
EP 03776812 A 20031020

Priority

- DE 0303517 W 20031020
- DE 10249344 A 20021023
- DE 10341454 A 20030909

Abstract (en)
[origin: WO2004040104A1] The invention relates to a method for testing at least three sensors (191, 192, 193, 194, 195), which detect a measurable variable for an internal combustion engine (100). A measurement for the sensor signal (S1, S2, S3, S4, S5) of the respective sensor (191, 192, 193, 194, 195) to be tested is compared with a reference signal (M, S1, S2, S3, S4, S5), which is obtained from at least some of the sensor signals (S1, S2, S3, S4, S5) of the sensors (191, 192, 193, 194, 195) to be tested. A sensor (191, 192, 193, 194, 195) is identified as defective by means of a comparison of the measurement for the sensor signal (S1, S2, S3, S4, S5) with the reference signal (M, S1, S2, S3, S4, S5). The reference signal (M, S1, S2, S3, S4, S5) is formed, for example, from a mean value (M) of the measurement of the sensor signals (S1, S2, S3, S4, S5) of at least some of the sensors to be tested (191, 192, 193, 194, 195), whereby the individual sensor signals (S1, S2, S3, S4, S5) can be weighted differently by means of correction factors (K1, K2, K3, K4, K5) during the formation of the mean value. The sensors (191, 192, 193, 194, 195) are for example, temperature sensors or pressure sensors, which can be located in an induction zone (105) of the internal combustion engine (100), in the internal combustion engine (100) itself, in an exhaust gas zone (110) and/or in an exhaust gas post-treatment system (115).

IPC 1-7
F01N 11/00; G01K 15/00

IPC 8 full level
F01N 7/00 (2006.01); **F02D 41/22** (2006.01); **G01K 15/00** (2006.01); **F01N 11/00** (2006.01)

CPC (source: EP US)
F02D 41/222 (2013.01 - EP US); **G01K 15/00** (2013.01 - EP US); **F01N 11/00** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US);
F02D 2200/0414 (2013.01 - EP US); **F02D 2200/0606** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)
See references of WO 2004040104A1

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
WO 2004040104 A1 20040513; EP 1561019 A1 20050810; JP 2006504113 A 20060202; JP 4490913 B2 20100630;
US 2006137436 A1 20060629; US 7275425 B2 20071002

DOCDB simple family (application)
DE 0303517 W 20031020; EP 03776812 A 20031020; JP 2005501795 A 20031020; US 53278305 A 20051212