

Title (en)

METHOD FOR DIAGNOSING THE CONDITION OF AN ENGINE FUEL SUPPLY SYSTEM

Title (de)

VERFAHREN UND SYSTEM ZUR DIAGNOSE DES ZUSTANDES EINES KRAFTSTOFFVERSORGUNGSSYSTEMS

Title (fr)

PROCEDE POUR DIAGNOSTIQUER L'ETAT D'UN SYSTEME D'ALIMENTATION EN CARBURANT D'UN MOTEUR

Publication

EP 2215344 A2 20100811 (FR)

Application

EP 08853230 A 20081105

Priority

- FR 2008051990 W 20081105
- FR 0708131 A 20071120

Abstract (en)

[origin: WO2009068777A2] The invention relates to a method for diagnosing the condition of a system for supplying fuel to a fuel injected controlled-ignition internal combustion engine (1), of the type comprising an electric control device (6) that makes use of an oxygen probe (8) for closed-loop regulation of the value of the air/fuel ratio admitted to the combustion chambers of said engine (1), and according to which the signal delivered by said oxygen probe (8) is analyzed, characterized in that it consists in a) deducing from said signal, the change in the effective injection time making it possible to regulate the richness of the exhaust gases leaving the engine; b) calculating $CRITERION = \sqrt{CRITERION1 + CRITERION2 + CRITERION3}$; c) comparing CRITERION against predetermined minimum and maximum threshold values THRESHOLD_MIN and THRESHOLD_MAX; d) diagnosing a defective condition when CRITERION is outside of the window contained between THRESHOLD_MIN and THRESHOLD_MAX.

IPC 8 full level

F02D 41/14 (2006.01)

CPC (source: EP US)

F02D 41/1495 (2013.01 - EP US); **F02D 41/0042** (2013.01 - EP US); **F02D 41/047** (2013.01 - EP US); **F02D 41/1454** (2013.01 - EP US); **F02D 41/187** (2013.01 - EP US); **F02D 2041/1422** (2013.01 - EP US); **F02D 2041/225** (2013.01 - EP US)

Citation (search report)

See references of WO 2009068777A2

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

FR 2923864 A1 20090522; **FR 2923864 B1 20100226**; AT E507383 T1 20110515; DE 602008006596 D1 20110609; EP 2215344 A2 20100811; EP 2215344 B1 20110427; JP 2011503440 A 20110127; JP 5183747 B2 20130417; KR 101520946 B1 20150515; KR 20100106407 A 20101001; RU 2010125264 A 20111227; RU 2484276 C2 20130610; US 2010313641 A1 20101216; US 8011232 B2 20110906; WO 2009068777 A2 20090604; WO 2009068777 A3 20091001

DOCDB simple family (application)

FR 0708131 A 20071120; AT 08853230 T 20081105; DE 602008006596 T 20081105; EP 08853230 A 20081105; FR 2008051990 W 20081105; JP 2010534521 A 20081105; KR 20107013597 A 20081105; RU 2010125264 A 20081105; US 74311108 A 20081105