

Title (en)

Method and device for operating an internal combustion engine

Title (de)

Verfahren und Vorrichtung zum Betreiben einer Brennkraftmaschine

Title (fr)

Méthode et dispositif de fonctionnement d'un moteur à combustion interne

Publication

EP 2071165 B1 20120711 (DE)

Application

EP 09154708 A 20070319

Priority

- EP 07727053 A 20070319
- DE 102006012656 A 20060320

Abstract (en)

[origin: WO2007107540A2] During the operation of an internal combustion engine, a check is made whether the internal combustion engine functions in an error-free manner in relation to the engine noise (ER). If the internal combustion engine does not function in an error-free manner in relation to the engine noise (ER), a current value of a cylinder-specific fuel quantity in a cylinder (Z1-Z4) of the internal combustion engine is determined. A check is made whether a current injected cylinder-specific fuel quantity in one of the cylinders (Z1-Z4) is too low or too high to check (CHECK) the relevant cylinder (Z1-Z4) with respect to a cylinder-specific motor speed N_CYL, by comparing a current value (MF_CYL_AV) of the cylinder-specific injection quantity in the relevant cylinder (Z1-Z4) with a stored reference value (MF_CYL_REF) of the cylinder-specific injection quantity of the relevant cylinder (Z1-Z4) at the current operating point of the internal combustion engine. A check (CHECK) with respect to the cylinder-specific motor speeds (N_CYL) of one of the cylinders (Z1-Z4) is deactivated (DEACT), if the current injected cylinder-specific fuel quantity in the relevant cylinder (Z1-Z4) is too low or too high to check (CHECK) the relevant cylinder (Z1-Z4) with respect to the cylinder-specific motor speed N_CYL.

IPC 8 full level

F02D 41/14 (2006.01)

CPC (source: EP US)

F02D 41/0085 (2013.01 - EP US); **F02D 41/1498** (2013.01 - EP US); **F02D 41/0002** (2013.01 - EP US); **F02D 41/16** (2013.01 - EP US); **F02D 41/22** (2013.01 - EP US)

Cited by

WO2022194416A1

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 102006012656 A1 20070927; EP 1999358 A2 20081210; EP 2071165 A2 20090617; EP 2071165 A3 20110316; EP 2071165 B1 20120711; US 2009326787 A1 20091231; US 7962277 B2 20110614; WO 2007107540 A2 20070927; WO 2007107540 A3 20080117

DOCDB simple family (application)

DE 102006012656 A 20060320; EP 07727053 A 20070319; EP 09154708 A 20070319; EP 2007052575 W 20070319; US 29350307 A 20070319