

Title (en)

METHOD AND APPARATUS FOR THE CONTINOUS ESTIMATION OF AIR-FUEL RATIO IN AN ENGINE'S CYLINDER

Title (de)

VERFAHREN UND VORRICHTUNG FÜR DIE KONTINUIERLICHE SCHÄTZUNG DES LUFT-KRAFTSTOFF-VERHÄLTNIS IN EINEM MOTORZYLINDER

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT D'ESTIMER EN CONTINU LA RICHESSE CYLINDRE D'UN MOTEUR

Publication

EP 2786004 A1 20141008 (FR)

Application

EP 12794388 A 20121026

Priority

- FR 1160865 A 20111128
- FR 2012052475 W 20121026

Abstract (en)

[origin: WO2013079839A1] The invention relates to a method enabling continuous estimation of the cylinder compression ratio of an internal combustion engine, said engine including a plurality of cylinders, at least one compression ratio measurement probe, a plurality of injectors connected to the cylinders, and a flow meter. The method according to the invention includes the following steps: calculating the simple compression ratio model (Φ_{Calc}) by means of the set fuel quantity (q_{Inj}) to be injected into a cylinder and from the measurement of the flow rate of intake air (Q_{air}); identifying and quantifying the possible variances and derivations of the compression ratio at stabilized and/or temporary operating points by means of at least one derivation identifier (3); and continuously correcting the calculated compression ratio (Φ_{Calc}) by using the previously determined derivation values.

IPC 8 full level

F02D 41/14 (2006.01); **F02D 41/24** (2006.01)

CPC (source: EP)

F02D 41/1458 (2013.01); **F02D 41/2454** (2013.01); **F02D 41/2477** (2013.01); **F02D 41/1454** (2013.01); **F02D 41/1461** (2013.01);
F02D 2041/1417 (2013.01)

Citation (search report)

See references of WO 2013079839A1

Cited by

EP2650516B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

FR 2983244 A1 20130531; FR 2983244 B1 20131220; EP 2786004 A1 20141008; EP 2786004 B1 20170920; WO 2013079839 A1 20130606

DOCDB simple family (application)

FR 1160865 A 20111128; EP 12794388 A 20121026; FR 2012052475 W 20121026