

Title (en)

ENGINE STATE PARAMETER ESTIMATION COMPRISING THE MEASUREMENT OF THE INTERNAL PRESSURE OF A CYLINDER

Title (de)

SCHÄTZUNG DER STATUSPARAMETER EINES MOTORS MIT MESSUNG DES INNENDRUCKS EINES ZYLINDERS

Title (fr)

ESTIMATION DE PARAMETRES D'ETAT D'UN MOTEUR PAR MESURE DE LA PRESSION INTERNE D'UN CYLINDRE

Publication

**EP 2195519 B1 20121003 (FR)**

Application

**EP 08837795 A 20080819**

Priority

- FR 2008051510 W 20080819
- FR 0758268 A 20071012

Abstract (en)

[origin: WO2009047412A1] The invention relates to a system for estimating the state parameters of an internal combustion engine (2), including: at least one cylinder (3), a moving piston (4) driven by means of a crankshaft (6), means (20, 21) for measuring temporal variations in the angle of the crankshaft and the internal pressure of the cylinder, at least one physical model (231) for calculating a plurality of intermediate temporal variables from said crankshaft angle and cylinder internal pressure measurements and from a measurement of at least one state parameter of the engine, a means (24) for creating tables of discretised temporal variables from the intermediate temporal variables, and a learning model (28) for estimating at least one state parameter of the engine (2) from said tables of discretised temporal variables.

IPC 8 full level

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

CPC (source: EP)

**F02D 35/023** (2013.01); **F02D 41/1405** (2013.01); **F02D 41/2451** (2013.01); **F02D 41/2432** (2013.01); **F02D 41/2477** (2013.01); **F02D 2200/1012** (2013.01)

Cited by

CN105488246A; WO2023220794A1

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

DOCDB simple family (publication)

**FR 2922262 A1 20090417**; **FR 2922262 B1 20100312**; EP 2195519 A1 20100616; EP 2195519 B1 20121003; WO 2009047412 A1 20090416

DOCDB simple family (application)

**FR 0758268 A 20071012**; EP 08837795 A 20080819; FR 2008051510 W 20080819