

Title (en)

METHOD FOR OPERATING AN AUTOMATICALLY IGNITING INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM BETRIEB EINER BRENNKRAFTMASCHINE MIT SELBSTZÜNDUNG

Title (fr)

PROCEDE POUR FAIRE FONCTIONNER UN MOTEUR A COMBUSTION INTERNE A AUTO-ALLUMAGE

Publication

**EP 1611334 A1 20060104 (DE)**

Application

**EP 04711992 A 20040218**

Priority

- EP 2004001518 W 20040218
- DE 10316112 A 20030409

Abstract (en)

[origin: WO2004090311A1] The invention relates to a method for operating an automatically igniting internal combustion engine wherein an average gas temperature in the cylinder is determined during combustion in the combustion chamber in such a manner that a gradient of the average gas temperature is calculated. As a result, a nitrogen oxide raw emission of the internal combustion engine is determined from either a value of the gradient of the average gas temperature and/or from a maximum value of the average gas temperature in the cylinder. Subsequently, the motor parameters are adjusted in such a manner that an average gas temperature gradient, wherein less NO<sub>x</sub>-emissions are formed, is produced during combustion.

IPC 1-7

**F02D 35/02**; **F02D 21/08**; **F02D 41/14**; **F02D 43/00**

IPC 8 full level

**F02D 35/02** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP US)

**F02D 35/025** (2013.01 - EP US); **F02D 35/028** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US); **F02D 41/1462** (2013.01 - EP US); **F02D 35/023** (2013.01 - EP US); **F02D 2250/36** (2013.01 - EP US)

Citation (search report)

See references of WO 2004090311A1

Designated contracting state (EPC)

FR GB IT

DOCDB simple family (publication)

**WO 2004090311 A1 20041021**; DE 10316112 A1 20041028; EP 1611334 A1 20060104; EP 1611334 B1 20080514; JP 2006522888 A 20061005; US 2007157599 A1 20070712

DOCDB simple family (application)

**EP 2004001518 W 20040218**; DE 10316112 A 20030409; EP 04711992 A 20040218; JP 2006504431 A 20040218; US 55214004 A 20040218