

Title (en)

Method to balance the cylinders of a combustion engine with sensors for each cylinder

Title (de)

Vorrichtung zur Zylindernbalancierung einer Brennkraftmaschine mit einem Sensor für jeden Zylinder

Title (fr)

Système pour équilibrer des cylindres dans un moteur à combustion interne avec un capteur par cylindre

Publication

EP 1593825 B1 20070926 (EN)

Application

EP 04101924 A 20040505

Priority

EP 04101924 A 20040505

Abstract (en)

[origin: EP1593825A1] The invention relates to a method to balance the cylinders of a combustion engine with cylinder-individual sensors (3), wherein these sensors (3) are balanced themselves by adjusting their gains or offsets. The sensors (3) are balanced by balancing the engine (1) with a single sensor (6) in the operating region where this is possible and then adapting the sensor gains or offsets to get balanced readings from the cylinder-individual sensors (3). Once this has been done, the engine (1) can be balanced in the whole operating range. The balancing may be done, for example, based on the indicated mean effective pressure (IMEP) or the cylinder-individual heat release. <IMAGE>

IPC 8 full level

F02D 41/14 (2006.01); **F02D 35/02** (2006.01); **F02D 41/00** (2006.01); **F02D 41/24** (2006.01); **F02D 41/34** (2006.01)

CPC (source: EP)

F02D 35/023 (2013.01); **F02D 41/0085** (2013.01); **F02D 41/2474** (2013.01); **F02D 35/021** (2013.01); **F02D 35/022** (2013.01);
F02D 35/025 (2013.01); **F02D 2041/285** (2013.01)

Cited by

CN108071512A; KR101030161B1; DE102006032172A1; DE102006032172B4; US7853393B2; US7894977B2; WO2008003600A1;
WO2007137912A1; US9541018B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1593825 A1 20051109; EP 1593825 B1 20070926; DE 602004009154 D1 20071108; DE 602004009154 T2 20080911

DOCDB simple family (application)

EP 04101924 A 20040505; DE 602004009154 T 20040505