

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM BETRIEB EINES VERBRENNUNGSMOTORS

Title (fr)

PROCÉDÉ POUR FAIRE FONCTIONNER UN MOTEUR À COMBUSTION INTERNE

Publication

EP 3234325 A1 20171025 (DE)

Application

EP 15807931 A 20151210

Priority

- DE 102014226259 A 20141217
- EP 2015079269 W 20151210

Abstract (en)

[origin: WO2016096607A1] The invention relates to a method for operating an internal combustion engine (1, 20), in which method fuel is supplied to the internal combustion engine by means of a rotary pump (7, 9), and in which method the speed of the pump and/or the electrical current for feeding the pump (pump current) is controlled in accordance with a requirement variable, taking into account a determination specification, in particular a family of characteristics. In the event of a change of operating mode into an overrun mode, a calibration is carried out and the speed of the pump (7, 9) is detected and is maintained during the calibration step at a substantially unchanged level. Once the triggering pressure for a calibration valve (18), arranged on the high-pressure side of the pump, has been reached, the pump current is detected and the determined speed and the determined pump current are used to calibrate the determination specification. The method according to the invention permits a calibration in the overrun mode without alteration to the speed of the fuel pump. This prevents a variable behaviour of the fuel pump which might irritate the driver of a motor vehicle and produce undesired operating conditions.

IPC 8 full level

F02D 41/12 (2006.01); **F02D 41/24** (2006.01); **F02D 41/30** (2006.01); **F02D 41/38** (2006.01)

CPC (source: CN EP US)

F02D 41/123 (2013.01 - CN EP US); **F02D 41/2432** (2013.01 - CN EP US); **F02D 41/3082** (2013.01 - CN EP US);
F02D 41/38 (2013.01 - CN EP US); **F02D 41/3809** (2013.01 - CN EP US); **F02M 37/08** (2013.01 - EP US); **F02D 2041/389** (2013.01 - US)

Citation (search report)

See references of WO 2016096607A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102014226259 A1 20160623; DE 102014226259 B4 20161222; CN 107002575 A 20170801; CN 107002575 B 20210720;
EP 3234325 A1 20171025; US 10794319 B2 20201006; US 2017284330 A1 20171005; WO 2016096607 A1 20160623

DOCDB simple family (application)

DE 102014226259 A 20141217; CN 201580067270 A 20151210; EP 15807931 A 20151210; EP 2015079269 W 20151210;
US 201715623528 A 20170615