

Title (en)
METHOD FOR CONTROLLING AND REGULATING AN INTERNAL COMBUSTION ENGINE

Title (de)
VERFAHREN ZUR STEUERUNG UND REGELUNG EINER BRENNKRAFTMASCHINE

Title (fr)
PROCÉDÉ DE COMMANDE ET DE RÉGULATION D'UN MOTEUR À COMBUSTION INTERNE

Publication
EP 2705237 B1 20180627 (DE)

Application
EP 12719266 A 20120427

Priority
• DE 102011100187 A 20110502
• EP 2012001815 W 20120427

Abstract (en)
[origin: WO2012150020A1] Proposed is a method for controlling and regulating an internal combustion engine (1) having a common rail system and having a passive pressure limiting valve (11) for discharging fuel out of a rail (6) into the fuel tank (2), in which method, in a first stage, the pressure limiting valve (11) is set as open when the rail pressure, proceeding from a steady-state rail pressure, exceeds a first threshold value and subsequently falls below a second threshold value within a first critical time, wherein the first threshold value characterizes a higher pressure level than the steady-state rail pressure and the second threshold value characterizes a lower pressure level than the first threshold value, and in which method the opening duration of the opened pressure limiting valve (11) is monitored.

IPC 8 full level
F02D 41/22 (2006.01); **F02D 41/38** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)
F02D 41/22 (2013.01 - KR); **F02D 41/221** (2013.01 - EP US); **F02D 41/38** (2013.01 - KR); **F02D 41/3863** (2013.01 - EP US);
F02M 41/16 (2013.01 - US); **F02M 63/00** (2013.01 - KR); **F02D 2041/224** (2013.01 - EP US); **F02D 2041/227** (2013.01 - EP US);
F02D 2041/228 (2013.01 - EP US); **F02D 2250/31** (2013.01 - EP US); **F02M 63/005** (2013.01 - EP US)

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)
DE 102011100187 B3 20121108; CN 103635677 A 20140312; CN 103635677 B 20170829; EP 2705237 A1 20140312;
EP 2705237 B1 20180627; KR 101791541 B1 20171120; KR 20140033380 A 20140318; US 2014123950 A1 20140508;
US 9347409 B2 20160524; WO 2012150020 A1 20121108

DOCDB simple family (application)
DE 102011100187 A 20110502; CN 201280021312 A 20120427; EP 12719266 A 20120427; EP 2012001815 W 20120427;
KR 20137032002 A 20120427; US 201214115188 A 20120427