

Title (en)

METHOD FOR OPERATING A FUEL INJECTION SYSTEM OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM BETREIBEN EINES KRAFTSTOFFEINSPRITZSYSTEMS EINER BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN SYSTÈME D'INJECTION DE CARBURANT D'UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2376762 A1 20111019 (DE)

Application

EP 09765102 A 20091207

Priority

- EP 2009066523 W 20091207
- DE 102008054513 A 20081211

Abstract (en)

[origin: WO2010066675A1] The invention relates to a fuel injection system (10) of an internal combustion engine that delivers fuel into a fuel rail (18) by means of a high-pressure pump (16). The amount of the delivered fuel is influenced by an amount control valve (30), which is actuated by an electromagnetic actuating device (34). A control signal fed to the electromagnetic actuating device (34) is defined by at least two parameters. It is proposed that a) in an adaptation method, wherein the second parameter is established, at least one first parameter of the control signal fed to the electromagnetic actuating device (34) is gradually changed from a starting value to an end value, wherein a closing or opening of the amount control valve (30) is at least indirectly no longer or only just detected, that b) afterwards, the first parameter is at least provisionally established based on the end value, and that c) the provisionally established first parameter is adapted based on at least one current operating variable of the fuel injection system (10) or the second parameter is adapted based on at least one current operating variable of the fuel injection system (10) and the provisionally established first parameter.

IPC 8 full level

F02D 41/20 (2006.01); **F02D 41/24** (2006.01); **F02D 41/38** (2006.01)

CPC (source: EP KR US)

F02D 41/1402 (2013.01 - KR); **F02D 41/20** (2013.01 - EP KR US); **F02D 41/2464** (2013.01 - KR); **F02D 41/2467** (2013.01 - EP KR US); **F02D 41/345** (2013.01 - KR); **F02D 41/3845** (2013.01 - EP KR US); **F02M 59/366** (2013.01 - KR US); **F02M 59/368** (2013.01 - EP KR US); **F02D 41/1402** (2013.01 - EP US); **F02D 2041/2027** (2013.01 - EP KR US); **F02D 2200/0602** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2010066675A1

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

DE 102008054513 A1 20100617; CN 102245880 A 20111116; CN 102245880 B 20141001; EP 2376762 A1 20111019; EP 2376762 B1 20121121; JP 2012511659 A 20120524; JP 5383820 B2 20140108; KR 101650216 B1 20160822; KR 20110106848 A 20110929; US 2011295493 A1 20111201; US 8925525 B2 20150106; WO 2010066675 A1 20100617

DOCDB simple family (application)

DE 102008054513 A 20081211; CN 200980149620 A 20091207; EP 09765102 A 20091207; EP 2009066523 W 20091207; JP 2011540043 A 20091207; KR 20117013329 A 20091207; US 200913139273 A 20091207