

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE HAVING AN INJECTION SYSTEM, INJECTION SYSTEM DESIGNED TO CARRY OUT A METHOD OF THIS TYPE, AND INTERNAL COMBUSTION ENGINE HAVING AN INJECTION SYSTEM OF THIS TYPE

Title (de)

VERFAHREN ZUM BETREIBEN EINER BRENNKRAFTMASCHINE MIT EINEM EINSPRITZSYSTEM, EINSPRITZSYSTEM, EINGERICHTET ZUR DURCHFÜHRUNG EINES SOLCHEN VERFAHRENS, UND BRENNKRAFTMASCHINE MIT EINEM SOLCHEN EINSPRITZSYSTEM

Title (fr)

PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN MOTEUR À COMBUSTION INTERNE COMPRENANT UN SYSTÈME D'INJECTION, SYSTÈME D'INJECTION CONÇU POUR LA MISE EN UVRE D'UN TEL PROCÉDÉ ET MOTEUR À COMBUSTION INTERNE COMPRENANT UN TEL SYSTÈME D'INJECTION

Publication

**EP 3665377 A1 20200617 (DE)**

Application

**EP 18752738 A 20180807**

Priority

- DE 102017214001 A 20170810
- EP 2018071435 W 20180807

Abstract (en)

[origin: WO2019030245A1] The invention relates to a method for operating an internal combustion engine (1) having an injection system (3) which has a high-pressure accumulator (13), high pressure in the high-pressure accumulator (13) being controlled via a suction throttle (9) on the low-pressure side, acting as a first pressure control element in a first high-pressure control loop (25). During normal operation, a high-pressure disturbance variable is produced by means of a pressure regulating valve (19, 20) on the high-pressure side, acting as an additional pressure control element, via which fuel is re-directed from the high-pressure accumulator (13) into a fuel reservoir (7), the at least one pressure regulating valve (19, 20) being controlled, during normal operation, on the basis of a set volumetric flow rate (Vs) for the fuel to be re-directed. According to the invention, a temporal development of the set volumetric rate (Vs) is sensed and the set volumetric flow rate (Vs) is filtered, a time constant (Tv) for the filtering of the set volumetric flow rate (Vs) being selected as a function of the sensed temporal development.

IPC 8 full level

**F02D 41/38** (2006.01); **F02D 41/14** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP US)

**F02D 41/1401** (2013.01 - EP); **F02D 41/3845** (2013.01 - EP US); **F02D 41/3863** (2013.01 - EP US); **F02M 63/025** (2013.01 - EP); **F02D 41/3854** (2013.01 - EP); **F02D 2041/1422** (2013.01 - EP); **F02D 2041/1431** (2013.01 - EP); **F02D 2041/1432** (2013.01 - EP); **F02M 63/025** (2013.01 - US)

Citation (search report)

See references of WO 2019030245A1

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 102017214001 B3 20190207**; CN 111051673 A 20200421; CN 111051673 B 20220729; EP 3665377 A1 20200617; EP 3665377 B1 20220119; US 11208967 B1 20211228; US 2021381464 A1 20211209; WO 2019030245 A1 20190214

DOCDB simple family (application)

**DE 102017214001 A 20170810**; CN 201880051947 A 20180807; EP 18752738 A 20180807; EP 2018071435 W 20180807; US 201816635397 A 20180807