

Title (en)

FUEL INJECTION SYSTEM AND METHOD FOR FILLING AND/OR VENTING A FUEL INJECTION SYSTEM

Title (de)

KRAFTSTOFFEINSPRITZSYSTEM SOWIE VERFAHREN ZUR BEFÜLLUNG UND/ODER ENTLÜFTUNG EINES KRAFTSTOFFEINSPRITZSYSTEMS

Title (fr)

SYSTÈME D'INJECTION DE CARBURANT ET PROCÉDÉ POUR REMPLIR ET/OU PURGER UN SYSTÈME D'INJECTION DE CARBURANT

Publication

EP 2635785 B1 20150408 (DE)

Application

EP 11761060 A 20110921

Priority

- DE 102010043255 A 20101103
- EP 2011066404 W 20110921

Abstract (en)

[origin: WO2012059268A1] The invention relates to a fuel injection system, in particular to a common rail injection system, comprising a pre-supply pump (1) and a high-pressure pump (2), wherein the high-pressure pump (2) is used to apply a high pressure to the fuel and comprises at least one pump element having a first valve, which is used as inlet valve (3), and a second valve, which is used as an outlet valve (4). According to the invention, the pre-supply pump (1) is an electrical fuel pump, by means of which a pre-supply pressure can be achieved, which is equal to or greater than the total opening pressure of both valves (3, 4) of the pump element such that rapid filling and/or venting can be effected during the initial start in the vehicle plant or when restarting after an empty tank. The invention further relates to a method for filling and/or venting such a fuel injection system.

IPC 8 full level

F02D 41/30 (2006.01); **F02M 37/08** (2006.01); **F02M 59/44** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

F02D 33/006 (2013.01); **F02D 41/062** (2013.01); **F02D 41/3082** (2013.01); **F02M 37/08** (2013.01); **F02M 59/447** (2013.01); **F02M 59/462** (2013.01); **F02M 59/464** (2013.01); **F02M 63/0225** (2013.01); **F02M 2200/60** (2013.01)

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 102010043255 A1 20120503; CN 103189631 A 20130703; CN 103189631 B 20160914; EP 2635785 A1 20130911; EP 2635785 B1 20150408; WO 2012059268 A1 20120510

DOCDB simple family (application)

DE 102010043255 A 20101103; CN 201180052170 A 20110921; EP 11761060 A 20110921; EP 2011066404 W 20110921