

Title (en)

INJECTION SYSTEM, AND METHOD FOR THE PRODUCTION OF AN INJECTION SYSTEM

Title (de)

EINSPIRZSYSTEM UND VERFAHREN ZUM HERSTELLEN EINES EINSPIRZSYSTEMS

Title (fr)

SYSTÈME D'INJECTION ET PROCÉDÉ DE FABRICATION

Publication

EP 2198147 A1 20100623 (DE)

Application

EP 08786832 A 20080804

Priority

- EP 2008060219 W 20080804
- DE 102007042466 A 20070906

Abstract (en)

[origin: WO2009033887A1] Disclosed is an injection system for injecting fuel, comprising: a controllable actuator that provides a working lift for indirectly actuating a valve pin; a pilot valve that is arranged in a valve chamber of the high-pressure zone and has a valve mushroom; a supply throttle that is disposed between a high-pressure connection and a control chamber of the high-pressure zone in order to supply the fuel, said control chamber encompassing a control piston; a first discharge throttle located between the control chamber and the valve chamber; a first sealing edge of the valve chamber, said first sealing edge forming a first sealing seat along with the valve mushroom when the valve is closed in order to seal the piston chamber and the valve chamber from each other; a second sealing edge of a piston chamber that has a valve piston, said second sealing edge forming a second sealing seat along with the valve piston during a maximum working lift of the actuator in order to at least substantially seal the piston chamber and the valve chamber from each other; and a second discharge throttle that connects the piston chamber (6) to the low-pressure zone (ND) between the first and the second sealing edge (16, 18). According to the invention, d1 > d2 > d3, d1 being the minimum diameter of the first discharge throttle, d2 being the minimum diameter of the second discharge throttle, and d3 being the minimum diameter of the supply throttle.

IPC 8 full level

F02M 47/02 (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 63/0015** (2013.01 - EP US); **F02M 63/004** (2013.01 - EP US); **F02M 63/0043** (2013.01 - EP US);
F02M 63/0077 (2013.01 - EP US); **F02M 63/0078** (2013.01 - EP US); **F02M 2200/16** (2013.01 - EP US); **F02M 2200/28** (2013.01 - EP US);
F02M 2200/315 (2013.01 - EP US); **F02M 2547/003** (2013.01 - EP US); **Y10T 29/49405** (2015.01 - EP US)

Citation (search report)

See references of WO 2009033887A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009033887 A1 20090319; CN 101849098 A 20100929; CN 101849098 B 20120620; DE 102007042466 B3 20090409;
EP 2198147 A1 20100623; US 2010192911 A1 20100805; US 8459232 B2 20130611

DOCDB simple family (application)

EP 2008060219 W 20080804; CN 200880115626 A 20080804; DE 102007042466 A 20070906; EP 08786832 A 20080804;
US 67691808 A 20080804