

Title (en)

FUEL INJECTOR THE CONTROL VALVE ELEMENT OF WHICH COMPRISES A SUPPORT REGION

Title (de)

KRAFTSTOFFINJEKTOR, DESSEN STEUERVENTILELEMENT EINEN STÜTZBEREICH AUFWEIST

Title (fr)

INJECTEUR DE CARBURANT DONT L'ÉLÉMENT SOUPAPE DE COMMANDE PRÉSENTE UNE ZONE D'APPUI

Publication

EP 2235354 B1 20150708 (DE)

Application

EP 08871236 A 20081230

Priority

- EP 2008068341 W 20081230
- DE 102008005532 A 20080122

Abstract (en)

[origin: WO2009092507A1] The invention relates to an injector (1), in particular, a common-rail injector for injection of fuel into a combustion chamber of an internal combustion engine, with an injection valve element (11), adjustable between a closed position and an open position, controllable by means of a control valve (26), which has a control valve element (25), adjustable between a closed position and an open position by means of an actuator (27) which in the closed position is an at least almost pressure-equalised and which has a sealing line (34) which cooperates in a sealing manner in the closed position of the control valve element (25) with a control valve seat (28) and which is lifted off the control valve seat (28) in the open position and hence opens fuel flow from a high pressure region (37) to a low pressure region (9) of the injector (1). According to the invention, the control valve element (25) has a support region (40) extending over the sealing line (34) in a radial direction to the high pressure region (37).

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 63/007** (2013.01 - EP US); **F02M 63/0073** (2013.01 - EP US); **F02M 63/0077** (2013.01 - EP US); **F02M 63/008** (2013.01 - EP US); **F02M 2547/003** (2013.01 - EP US)

Citation (examination)

WO 2009016003 A1 20090205 - BOSCH GMBH ROBERT [DE], et al

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

DOCDB simple family (publication)

DE 102008005532 A1 20090723; CN 101925733 A 20101222; CN 101925733 B 20140702; EP 2235354 A1 20101006; EP 2235354 B1 20150708; JP 2011510221 A 20110331; JP 5264934 B2 20130814; RU 2010134798 A 20120227; RU 2505701 C2 20140127; RU 2505701 C9 20140527; US 2010294241 A1 20101125; US 8671912 B2 20140318; WO 2009092507 A1 20090730

DOCDB simple family (application)

DE 102008005532 A 20080122; CN 200880125353 A 20081230; EP 08871236 A 20081230; EP 2008068341 W 20081230; JP 2010543409 A 20081230; RU 2010134798 A 20081230; US 86411408 A 20081230