

Title (en)

FUEL INJECTOR

Title (de)

KRAFTSTOFF-INJEKTOR

Title (fr)

INJECTEUR DE CARBURANT

Publication

**EP 2294309 A1 20110316 (DE)**

Application

**EP 09765667 A 20090422**

Priority

- EP 2009054814 W 20090422
- DE 102008002527 A 20080619

Abstract (en)

[origin: WO2009153087A1] The invention relates to a fuel injector, in particular common rail injector, for injecting fuel into a combustion chamber of an internal combustion engine, having a fuel return port (10) and having a single-part or multi-part injection valve element (13) which can be adjusted between an open position and a closed position and which is arranged at least in sections in a high-pressure chamber (8) which is provided in an injector body (19). According to the invention, an annular chamber (42) is arranged radially between the high-pressure chamber (8) and the injector body (19), in which annular chamber (42), during the operation of the fuel injector (1), the fuel pressure is at least intermittently lower than the fuel pressure in the high-pressure chamber (8) and higher than the fuel pressure in the fuel return port (10).

IPC 8 full level

**F02M 47/02** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

**F02M 47/027** (2013.01); **F02M 61/16** (2013.01); **F02M 63/0225** (2013.01); **F02M 63/008** (2013.01); **F02M 2200/31** (2013.01);  
**F02M 2200/315** (2013.01); **F02M 2547/003** (2013.01)

Citation (search report)

See references of WO 2009153087A1

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**DE 102008002527 A1 20091224**; BR PI0914857 A2 20200818; CN 102066741 A 20110518; CN 102066741 B 20140709;  
EP 2294309 A1 20110316; EP 2294309 B1 20140611; RU 2011101635 A 20120727; RU 2541484 C2 20150220; WO 2009153087 A1 20091223

DOCDB simple family (application)

**DE 102008002527 A 20080619**; BR PI0914857 A 20090422; CN 200980123041 A 20090422; EP 09765667 A 20090422;  
EP 2009054814 W 20090422; RU 2011101635 A 20090422