

Title (en)

APPARATUS TO INJECT FUEL IN THE COMBUSTION CHAMBER OF A COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUM EINSPRITZEN VON BRENNSTOFF IN DEN BRENNRAUM EINER VEBRENNUNGSKRAFTMASCHINE

Title (fr)

DISPOSITIF POUR L'INJECTION DE CARBURANT DANS UNE CHAMBRE DE COMBUSTION D'UN MOTEUR À COMBUSTION

Publication

**EP 2961977 B1 20170621 (DE)**

Application

**EP 14708195 A 20140219**

Priority

- CH 5342013 A 20130301
- EP 2014000447 W 20140219

Abstract (en)

[origin: WO2014131497A1] The housing (18) of the fuel injection valve (10) of the device for intermittently injecting fuel into the combustion chamber of an internal combustion engine comprises a high-pressure inlet (34) with a conical sealing face (44). The high-pressure chamber (36) is disposed in the housing (18) from the high-pressure inlet (34). A cartridge-like, independent component (56) is inserted into the high-pressure chamber (36). Said component comprises the valve carrier (46), the non-return valve (48), the holding element (50), and preferably the filter body (52'). The valve carrier (46) is provided with a conical outer sealing face (69), by which the valve carrier rests against the conical sealing face (44). A fixing element (74) presses the supply line (16) against the valve carrier (46).

IPC 8 full level

**F02M 55/00** (2006.01); **F02M 47/02** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)

**F02M 47/027** (2013.01 - EP US); **F02M 55/005** (2013.01 - EP US); **F02M 55/008** (2013.01 - EP US); **F02M 61/04** (2013.01 - US); **F02M 61/165** (2013.01 - EP US); **F02M 67/10** (2013.01 - US); **F02M 2200/28** (2013.01 - EP US); **F02M 2200/40** (2013.01 - EP US)

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)

**WO 2014131497 A1 20140904**; EP 2961977 A1 20160106; EP 2961977 B1 20170621; JP 2016508576 A 20160322; JP 6441824 B2 20181219; KR 102098354 B1 20200409; KR 20150121116 A 20151028; US 2016010609 A1 20160114; US 9803603 B2 20171031

DOCDB simple family (application)

**EP 2014000447 W 20140219**; EP 14708195 A 20140219; JP 2015559439 A 20140219; KR 20157025857 A 20140219; US 201414767653 A 20140219