

Title (en)

FUEL INJECTOR FOR COMBUSTION ENGINE

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

INJECTEUR DE CARBURANT POUR MOTEUR À COMBUSTION

Publication

EP 2798192 B1 20151216 (DE)

Application

EP 12809283 A 20121227

Priority

- DE 102011090060 A 20111228
- EP 2012076926 W 20121227

Abstract (en)

[origin: WO2013098307A1] The invention relates to a fuel injection valve with a nozzle needle (10) to which the pressure in a control chamber (22) is at least indirectly applied in a closing direction. The control chamber (22) can be filled with highly pressurized fuel. The fuel injection valve is equipped with a control valve (3) which opens or closes a connection to a low-pressure chamber (25) in the fuel injection valve, said control valve (22) comprising a movable control valve element (4). A connection of the control chamber (22) to the low-pressure chamber (25) is formed by a valve chamber (20) in the fuel injection valve. The valve chamber (20) is hydraulically connected to the control chamber (22) via a throttle connection (23), and the valve chamber (20) can be connected to the low-pressure chamber (25) via the control valve (3). Furthermore, a pressure pin (30) is provided which protrudes through the valve chamber (20) into the control chamber (22). A hydraulic pressure is applied to the pressure pin (30) by the pressure in the control chamber (22), and an opening force is thereby exerted on the control valve element (4).

IPC 8 full level

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

CPC (source: EP)

F02M 47/027 (2013.01); **F02M 63/0071** (2013.01); **F02M 63/0073** (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)

WO 2013098307 A1 20130704; CN 104081037 A 20141001; CN 104081037 B 20170329; DE 102011090060 A1 20130704;
EP 2798192 A1 20141105; EP 2798192 B1 20151216

DOCDB simple family (application)

EP 2012076926 W 20121227; CN 201280065373 A 20121227; DE 102011090060 A 20111228; EP 12809283 A 20121227