

Title (en)

FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES AND A METHOD FOR PRODUCING SAME

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN UND EIN VERFAHREN ZUR HERSTELLUNG DESSELBEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE ET PROCEDE PERMETTANT DE LA PRODUIRE

Publication

EP 1135605 B1 20050202 (DE)

Application

EP 00967601 A 20000920

Priority

- DE 0003268 W 20000920
- DE 19947195 A 19991001

Abstract (en)

[origin: DE19947195A1] The fuel injection valve has a valve body (2), containing a piston valve element (12), displaced axially against at least one closure spring (27,28), within a valve bore (21), for controlling at least one fuel injection channel (19), in response to the fuel pressure acting against a pressure shoulder (10) of the valve element. The closure spring is contained in a spring space (30) and acted on by a setting bolt (31,32), displaced axially for determining the opening pressure of the injection valve. An Independent claim for a manufacturing method for a fuel injection valve is also included.

IPC 1-7

F02M 61/20; F02M 61/16; F02M 45/08

IPC 8 full level

F02M 45/08 (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 65/00** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR)

F02M 45/083 (2013.01 - EP); **F02M 61/04** (2013.01 - KR); **F02M 61/168** (2013.01 - EP); **F02M 61/20** (2013.01 - EP);
F02M 2200/505 (2013.01 - EP)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19947195 A1 20010405; BR 0007194 A 20010904; BR 0007194 B1 20081118; CN 1171014 C 20041013; CN 1327515 A 20011219;
DE 50009418 D1 20050310; EP 1135605 A1 20010926; EP 1135605 B1 20050202; JP 2003511610 A 20030325; JP 4587259 B2 20101124;
KR 100791043 B1 20080103; KR 20010090853 A 20011019; RU 2267640 C2 20060110; SK 287015 B6 20090907; SK 7362001 A3 20020205;
WO 0125621 A1 20010412

DOCDB simple family (application)

DE 19947195 A 19991001; BR 0007194 A 20000920; CN 00802134 A 20000920; DE 0003268 W 20000920; DE 50009418 T 20000920;
EP 00967601 A 20000920; JP 2001528329 A 20000920; KR 20017006733 A 20010530; RU 2001118034 A 20000920; SK 7362001 A 20000920