

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1481159 B1 20091028 (DE)

Application
EP 02795038 A 20021223

Priority
• DE 0204730 W 20021223
• DE 10208222 A 20020226

Abstract (en)
[origin: WO03072929A1] A fuel injection valve (10) for internal combustion engines comprises an actuator (11), which is actively connected to a valve needle (15) that is guided inside a nozzle body (26), and comprises a valve closing body (27), which is connected in a non-positive manner to the valve needle (15) and which forms a sealing seat with a valve seat face (28) that is provided on said nozzle body (26). The valve needle (15) and/or the valve closing body (27) have, preferably in the area of the guide inside the nozzle body (26), at least one planar ground section (29), which is located on the periphery of the valve needle (15) and/or of the valve closing body (27). A throttling gap (32) is provided between the at least one planar ground section (29) and a mating face (31) provided on the nozzle body (26). The cross-section of the throttling gap is smaller than the opening cross-section on the sealing seat when the fuel injection valve (10) is open.

IPC 8 full level
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F02M 61/12 (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR)
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F02M 61/10 (2013.01 - EP KR); **F02M 61/12** (2013.01 - EP KR); **F02M 61/18** (2013.01 - KR)

Citation (examination)
US 5829688 A 19981103 - REMBOLD HELMUT [DE], et al

Cited by
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Designated contracting state (EPC)
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WO 03072929 A1 20030904; DE 10208222 A1 20031030; DE 50213972 D1 20091210; EP 1481159 A1 20041201; EP 1481159 B1 20091028;
JP 2005518498 A 20050623; JP 4593927 B2 20101208; KR 100972523 B1 20100728; KR 20040083459 A 20041001

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