

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1434941 B1 20051221 (DE)

Application
EP 02800535 A 20020907

Priority
• DE 0203338 W 20020907
• DE 10148597 A 20011002

Abstract (en)
[origin: US2004129806A1] A fuel injector (1) for the direct injection of fuel into the combustion chamber of an internal combustion engines includes an actuator (10), a valve needle (3), which is able to be activated by the actuator (10) to actuate a valve-closure member (4), which forms a sealing seat together with a valve-seat surface (6) formed on a valve-seat member (5); and has a plurality of spray-discharge orifices (7) formed in the valve-seat member (5). A groove-type surface structure (34) is formed at an end face (35) of the valve-seat member (5) facing the combustion chamber.

IPC 1-7
F02M 61/18

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 51/0685 (2013.01 - EP US); **F02M 61/16** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/1806** (2013.01 - EP US); **F02M 2200/306** (2013.01 - EP US)

Citation (examination)
• DE 19911928 A1 19990930 - TOYOTA MOTOR CO LTD [JP]
• JP H07208294 A 19950808 - KEIHIN SEIKI MFG

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WO 03031806 A1 20030417; AT E313711 T1 20060115; DE 10148597 A1 20030821; DE 50205379 D1 20060126; EP 1434941 A1 20040707; EP 1434941 B1 20051221; JP 2005504923 A 20050217; US 2004129806 A1 20040708

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