

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1327068 A2 20030716 (DE)

Application
EP 01986331 A 20011006

Priority
• DE 0103838 W 20011006
• DE 10049518 A 20001006

Abstract (en)
[origin: WO0229242A2] The invention relates to a fuel injection valve (1), in particular, for directly injecting fuel into a combustion chamber of an internal combustion engine. Said fuel injection valve comprises an actuator (10) for actuating a valve needle (3), whereby the valve needle (3), at a spraying end, has a valve closing body (4) that, together with a valve seating (6), which is provided on a valve seat body (5), forms a tight seat. Fuel channels (35) that lead into a turbulence chamber (43) are arranged inside a valve needle guide (31), which is connected to the valve seat body (5) or provided therewith as one piece. The number of fuel channels (35) is calculated as to render a turbulent flow, which is generated in the turbulence chamber (43), homogeneous in a peripheral direction.

IPC 1-7
F02M 61/12; **F02M 51/06**; **F02M 61/16**; **F02M 61/18**

IPC 8 full level
F02M 51/06 (2006.01); **F02M 51/08** (2006.01); **F02M 61/10** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02B 75/12** (2006.01)

CPC (source: EP US)
F02M 51/0671 (2013.01 - EP US); **F02M 61/12** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/18** (2013.01 - EP US); **F02M 61/1806** (2013.01 - EP US); **F02M 61/188** (2013.01 - EP US); **F02B 2075/125** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)
See references of WO 0229242A2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 0229242 A2 20020411; **WO 0229242 A3 20020627**; DE 10049518 A1 20020418; DE 10049518 B4 20051124; EP 1327068 A2 20030716; JP 2004510913 A 20040408; US 2003106946 A1 20030612; US 6739525 B2 20040525

DOCDB simple family (application)
DE 0103838 W 20011006; DE 10049518 A 20001006; EP 01986331 A 20011006; JP 2002532791 A 20011006; US 14894202 A 20020930