

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1114250 B1 20050126 (DE)

Application
EP 00951263 A 20000713

Priority
• DE 0002278 W 20000713
• DE 19932761 A 19990714

Abstract (en)
[origin: DE19932761A1] The invention relates to a fuel injection valve with a fuel inlet and with an excitable actuator device (1, 2, 26, 35) that actuates a valve closing member (21). The valve further comprises a fixed valve seat (32) that is configured on a valve seat element (29) and with which the valve closing element (21) interacts to open and close the valve. A fuel outlet (33) is located downstream of the valve seat (32). A cylinder-shaped connecting part (16) receives the valve seat element (29) and is provided with an interior longitudinal opening (18). The thin-walled connecting part (16) is provided with at least one radially extending recess (43) in which a dampening element (45) is mounted so that the axial vibrations of the connecting part (16) are dampened, thereby effectively preventing the valve closing member (21) from being rebounded on the valve seat (32). The inventive valve is especially useful for fuel injection systems of mixture-compressing, spark-ignited internal combustion engines.

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

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 51/0614 (2013.01); **F02M 51/0625** (2013.01); **F02M 51/0671** (2013.01); **F02M 61/12** (2013.01); **F02M 61/162** (2013.01); **F02M 61/168** (2013.01); **F02M 61/20** (2013.01); **F02M 2200/306** (2013.01)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19932761 A1 20010118; CZ 2001904 A3 20011212; CZ 295158 B6 20050615; DE 50009352 D1 20050303; EP 1114250 A1 20010711; EP 1114250 B1 20050126; JP 2003504559 A 20030204; WO 0106114 A1 20010125

DOCDB simple family (application)
DE 19932761 A 19990714; CZ 2001904 A 20000713; DE 0002278 W 20000713; DE 50009352 T 20000713; EP 00951263 A 20000713; JP 2001510721 A 20000713