

Title (en)

FUEL INJECTION VALVE

Title (de)

BRENNSTOFFEINSPRITZVENTIL

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT

Publication

**EP 1339970 A2 20030903 (DE)**

Application

**EP 01999741 A 20011130**

Priority

- DE 0104505 W 20011130
- DE 10060290 A 20001205

Abstract (en)

[origin: WO0246604A2] A fuel injection valve (1), especially for direct injection of fuel into a combustion chamber of a mixture-compression, spark ignition internal combustion engine, comprises an actuator (10) and a valve needle (3) which is actuated by said actuator (10) and which activates a valve closing body (4). Said valve-closing body forms a sealed seat, together with a valve seat surface (6) which is configured on a valve seat body (5). The inventive valve also comprises several injection openings (7) which are configured in the valve seat body (5), and a damping element (37) is located in a recess (36) of the valve-closing body (4) on the off-flow side.

IPC 1-7

**F02M 61/10; F02M 61/18; F02M 51/06; F02M 45/08**

IPC 8 full level

**F02M 61/10** (2006.01); **F02M 45/08** (2006.01); **F02M 51/06** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01);  
**F02M 61/20** (2006.01); **F02B 75/12** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)

**F02M 45/086** (2013.01 - EP US); **F02M 51/0671** (2013.01 - EP US); **F02M 51/0685** (2013.01 - EP US); **F02M 61/12** (2013.01 - EP US);  
**F02M 61/18** (2013.01 - EP KR US); **F02M 61/1813** (2013.01 - EP US); **F02M 61/182** (2013.01 - EP US); **F02M 61/188** (2013.01 - EP US);  
**F02M 61/20** (2013.01 - EP US); **F02B 2075/125** (2013.01 - EP US); **F02M 2200/306** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 0246604A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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