

Title (en)

FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

Publication

**EP 1144860 A1 20011017 (DE)**

Application

**EP 00975807 A 20000927**

Priority

- DE 0003394 W 20000927
- DE 19949818 A 19991015

Abstract (en)

[origin: DE19949818A1] The fuel injection valve is such that at the wall of the spring chamber (16,17), several slots (32) are arranged, running longitudinally in the spring chamber (16,17). Which respectively end in a base surface (34). So that the base surfaces (34) are arranged at least approximately in a common plane, radial to the axis of the spring chamber (16,17), and a supporting disc (25) engaging in the slots (32), which arrive at the base surfaces (34) of the slots (32) to make contact and support itself the closing springs (20,21) at their second ends.

IPC 1-7

**F02M 61/16; F02M 61/20; F02M 45/08**

IPC 8 full level

**F02M 45/08** (2006.01); **F02M 61/04** (2006.01); **F02M 61/08** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP KR)

**F02M 45/083** (2013.01 - EP); **F02M 59/46** (2013.01 - KR); **F02M 61/045** (2013.01 - EP); **F02M 61/08** (2013.01 - EP); **F02M 61/16** (2013.01 - EP); **F02M 61/20** (2013.01 - EP)

Citation (search report)

See references of WO 0131194A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**DE 19949818 A1 20010426**; BR 0007212 A 20010904; CN 1327513 A 20011219; CZ 20012116 A3 20020612; EP 1144860 A1 20011017; JP 2003513198 A 20030408; KR 20010093157 A 20011027; WO 0131194 A1 20010503

DOCDB simple family (application)

**DE 19949818 A 19991015**; BR 0007212 A 20000927; CN 00802278 A 20000927; CZ 20012116 A 20000927; DE 0003394 W 20000927; EP 00975807 A 20000927; JP 2001533312 A 20000927; KR 20017007315 A 20010612