

Title (en)

FUEL INJECTION VALVE AND METHOD OF PRODUCING THE SAME

Title (de)

BRENNSTOFFEINSPRITZVENTIL UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT ET SON PROCEDE DE FABRICATION

Publication

**EP 0865574 B1 20020220 (DE)**

Application

**EP 97923728 A 19970408**

Priority

- DE 9700710 W 19970408
- DE 19631280 A 19960802

Abstract (en)

[origin: DE19631280A1] The invention concerns a fuel injection valve for fuel injection systems of internal combustion engines. The fuel injection valve is composed of two main components: an inner valve part (70) comprises all the individual components lying directly in the fuel flow path, whilst an outer plastics part (60) is formed predominantly by a magnet coil subassembly and a plastics casing (50). The valve part (70) comprises inter alia a thin-walled non-magnetic sleeve (18) which is highly sensitive to mechanical and thermal influences. The valve part (70) is therefore produced and adjusted separately from the plastics part (60). The complete valve part (70) is subsequently inserted into a through-hole (54) in the plastics part (60), a fixed connection between the plastics part (60) and valve part (70) being brought about by engagement, locking or clipping in place. The fuel injection valve is particularly suitable for use in fuel injection systems of mixture-compressing spark-ignition internal combustion engines.

IPC 1-7

**F02M 61/16; F02M 51/06**

IPC 8 full level

**F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 51/00** (2006.01)

CPC (source: EP KR US)

**F02M 51/06** (2013.01 - KR); **F02M 51/0614** (2013.01 - EP US); **F02M 51/0682** (2013.01 - EP US); **F02M 61/16** (2013.01 - KR);  
**F02M 61/168** (2013.01 - EP US); **F02M 51/005** (2013.01 - EP US)

Citation (examination)

- DE 4442350 A1 19950622 - BOSCH GMBH ROBERT [DE]
- DE 4421881 A1 19960104 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

**DE 19631280 A1 19980205**; CN 1078668 C 20020130; CN 1198199 A 19981104; DE 59706434 D1 20020328; EP 0865574 A1 19980923;  
EP 0865574 B1 20020220; ES 2172788 T3 20021001; JP 3737130 B2 20060118; JP H11513101 A 19991109; KR 100482905 B1 20050725;  
KR 19990063902 A 19990726; RU 2177074 C2 20011220; US 6012655 A 20000111; WO 9805861 A1 19980212

DOCDB simple family (application)

**DE 19631280 A 19960802**; CN 97191008 A 19970408; DE 59706434 T 19970408; DE 9700710 W 19970408; EP 97923728 A 19970408;  
ES 97923728 T 19970408; JP 50743498 A 19970408; KR 19980702375 A 19980331; RU 98108441 A 19970408; US 2981898 A 19980318