

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 1040270 B1 20040804 (DE)**

Application

**EP 99929069 A 19990503**

Priority

- DE 9901284 W 19990503
- DE 19832940 A 19980722

Abstract (en)

[origin: DE19832940A1] The fuel filter (35) at its axial ends is guided into the fuel feed channel (23) and in its cover surface are machined two groups of axially one-sidedly closed longitudinal grooves. A first group of grooves (39) evolves from an upper face surface (41) turned away from the injection aperture and a second group of grooves (43) evolves from a lower face surface (45) of the fuel filter facing the injection aperture.

IPC 1-7

**F02M 61/16**

IPC 8 full level

**F02M 61/16** (2006.01)

CPC (source: EP US)

**F02M 61/165** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**DE 19832940 A1 20000127**; DE 59910131 D1 20040909; EP 1040270 A1 20001004; EP 1040270 B1 20040804; JP 2002521605 A 20020716; US 6186420 B1 20010213; WO 0005500 A1 20000203

DOCDB simple family (application)

**DE 19832940 A 19980722**; DE 59910131 T 19990503; DE 9901284 W 19990503; EP 99929069 A 19990503; JP 2000561431 A 19990503; US 50871600 A 20000515