

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT

Publication  
**EP 1402175 B1 20080305 (DE)**

Application  
**EP 02729859 A 20020409**

Priority  
• DE 0201288 W 20020409  
• DE 10118276 A 20010412

Abstract (en)  
[origin: DE10118276A1] The fuel injection valve has a disk-shaped helical element (26) with at least one inlet (27), outlet (20) and helical channel (28) upstream of the outlet aperture. The helical element is fitted in a disk-shaped receiving part (25). A supply channel (33) runs precisely to each inlet end (34) of a helical channel (28).

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)  
**F02M 51/0671** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/1806** (2013.01 - EP US); **F02M 61/186** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**DE 10118276 A1 20021017**; CN 1461383 A 20031210; CZ 20023956 A3 20040714; DE 50211838 D1 20080417; EP 1402175 A1 20040331; EP 1402175 B1 20080305; JP 2004518908 A 20040624; US 2004011895 A1 20040122; WO 02084111 A1 20021024

DOCDB simple family (application)  
**DE 10118276 A 20010412**; CN 02801176 A 20020409; CZ 20023956 A 20020409; DE 0201288 W 20020409; DE 50211838 T 20020409; EP 02729859 A 20020409; JP 2002581830 A 20020409; US 29798202 A 20021211