

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1328725 A1 20030723 (DE)

Application
EP 01987848 A 20011017

Priority
• DE 0103967 W 20011017
• DE 10051900 A 20001019

Abstract (en)
[origin: WO0233249A1] A fuel injection valve (1), in particular for the direct injection of fuel into the combustion chamber of an internal combustion engine with charge compression and external ignition, comprises a spinning disc (35) with helical channels (36), a central recess (38) and a guide compensator (41), arranged in the recess (38), the mid-axis of which may be inclined relative to the mid-axis of the fuel injection valve (8) and which has a sealing fit against the valve needle (3). A sealing seat is formed from a sealing seat surface (39), arranged in the spinning disc (35) and a radial extension (40) of the guide compensator (41), which is tolerant of a displacement relative to the mid-axis and which prevents the occurrence of a non-spinning leakage, just as the sealing fit between valve needle (3) and guide compensator (41).

IPC 1-7
F02M 61/16; **F02M 61/18**; **F02M 61/12**; **F02M 51/06**

IPC 8 full level
F02M 51/06 (2006.01); **F02M 51/08** (2006.01); **F02M 61/10** (2006.01); **F02M 61/12** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)
F02M 51/0671 (2013.01 - EP US); **F02M 61/12** (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US)

Citation (search report)
See references of WO 0233249A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0233249 A1 20020425; CN 1394257 A 20030129; DE 10051900 A1 20020529; DE 50103252 D1 20040916; EP 1328725 A1 20030723; EP 1328725 B1 20040811; JP 2004511721 A 20040415; US 2003071148 A1 20030417; US 6719220 B2 20040413

DOCDB simple family (application)
DE 0103967 W 20011017; CN 01803220 A 20011017; DE 10051900 A 20001019; DE 50103252 T 20011017; EP 01987848 A 20011017; JP 2002536206 A 20011017; US 16826402 A 20021011