

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1379778 B1 20100519 (DE)

Application
EP 02737742 A 20020316

Priority
• DE 0200966 W 20020316
• DE 10118164 A 20010411

Abstract (en)
[origin: WO02084113A1] The invention relates to a fuel injection valve (1) for fuel injection systems of internal combustion engines, comprising a solenoid (10), a valve needle (3), which interacts with the solenoid (10) and is impinged by a return spring (23) in a closing direction, for actuating a valve closing body (4), the latter forming a tight seat with a valve seat surface (6) configured on a valve seat body (5) and an injection orifice plate (36) located downstream of the valve body (5). The injection orifice plate (36) is curved in a spherical manner in the flow direction of the fuel.

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

CPC (source: EP KR US)
F02M 61/18 (2013.01 - KR); **F02M 61/1806** (2013.01 - EP US); **F02M 61/1853** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 02084113 A1 20021024; CN 1461382 A 20031210; DE 10118164 A1 20021024; DE 10118164 B4 20070208; DE 50214442 D1 20100701; EP 1379778 A1 20040114; EP 1379778 B1 20100519; JP 2004518910 A 20040624; KR 20030007944 A 20030123; US 2004011894 A1 20040122

DOCDB simple family (application)
DE 0200966 W 20020316; CN 02801161 A 20020316; DE 10118164 A 20010411; DE 50214442 T 20020316; EP 02737742 A 20020316; JP 2002581832 A 20020316; KR 20027016838 A 20021210; US 29785203 A 20030530