

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1327066 B1 20060628 (DE)

Application
EP 01986742 A 20011010

Priority
• DE 0103846 W 20011010
• DE 10050055 A 20001010

Abstract (en)
[origin: DE10050055A1] The valve (1) includes a valve closing body (4) linked to a valve needle (3) and acting with the valve seat surface (6) of a valve seat body (5). The spiral-creating element is downstream of the sealing seat with its central axis enclosing an angle other than zero with the central axis (39) of the valve. A threaded rod (36) is pressed into the valve seat body to serve as a spiral forming element.

IPC 8 full level
F02M 51/00 (2006.01); **F02M 51/06** (2006.01); **F02M 51/08** (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); **F02M 61/168** (2013.01 - EP US);
F02M 61/1846 (2013.01 - EP US); **F02M 61/1853** (2013.01 - EP US)

Citation (examination)
• US 4186883 A 19800205 - ROBLING MARC E [US]
• US 4487369 A 19841211 - DU ROCHER DANIEL J [US]
• PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01 31 January 2000 (2000-01-31)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 10050055 A1 20020418; DE 50110357 D1 20060810; EP 1327066 A2 20030716; EP 1327066 B1 20060628; JP 2004511699 A 20040415;
RU 2002117416 A 20040410; US 2003111562 A1 20030619; US 6851629 B2 20050208; WO 0231343 A2 20020418; WO 0231343 A3 20020718

DOCDB simple family (application)
DE 10050055 A 20001010; DE 0103846 W 20011010; DE 50110357 T 20011010; EP 01986742 A 20011010; JP 2002534690 A 20011010;
RU 2002117416 A 20011010; US 14930402 A 20021111