

Title (en)
INJECTION VALVE

Title (de)
EINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION

Publication
EP 1511932 B1 20061129 (DE)

Application
EP 03745746 A 20030401

Priority
• DE 0301062 W 20030401
• DE 10214931 A 20020404

Abstract (en)
[origin: WO03085253A1] The invention relates to an injection valve for injecting fuel, comprising a valve housing (1) inside of which a drive unit (15) controls the movement of a valve needle (5) that is pretensioned by a spring (11). The injection valve also comprises a main chamber (27), which is provided inside the valve housing, is filled with fuel and accommodates the valve needle (5), and comprises a hydraulic bearing for the drive unit (15). The aim of the invention is to provide a simple hydraulic bearing. To this end, the hydraulic bearing has a hydraulic chamber (29) that is connected to the main chamber (27), whereby fuel serves as the operating substance of the hydraulic bearing.

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/08** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP US)
F02M 51/0603 (2013.01 - EP US); **F02M 61/08** (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US)

Cited by
CN103764995A; US9574532B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 03085253 A1 20031016; DE 50305852 D1 20070111; EP 1511932 A1 20050309; EP 1511932 B1 20061129; JP 2005528546 A 20050922;
JP 4273003 B2 20090603; US 2005017096 A1 20050127; US 7886993 B2 20110215

DOCDB simple family (application)
DE 0301062 W 20030401; DE 50305852 T 20030401; EP 03745746 A 20030401; JP 2003582410 A 20030401; US 92400704 A 20040823