

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1155231 A1 20011121 (DE)

Application
EP 00993232 A 20001214

Priority
• DE 0004450 W 20001214
• DE 19960605 A 19991216

Abstract (en)
[origin: WO0144652A1] The invention relates to a fuel injection valve (1) for fuel injection systems in internal combustion engines. The inventive valve consists of a magnet coil (8), an armature (21) that is impinged upon in the closing direction and by a readjusting spring, and a valve closing body that is connected to the armature (21) in a positive fit. Said body forms a sealing seat together with a valve seat surface. The armature (21) stops at a magnetic pole surface (44) of the magnet body (43) with an armature stop face (42) thereof which is provided with a ring-shaped first edge zone (31a) that is adjacent to an inner edge (47), is situated inside and is inclined towards the inside in relation to a plane and vertically in relation to the longitudinal axis (30) of the armature (21). The stop face is also provided with a ring-shaped second edge zone (31b) that is adjacent to an outer edge (46), is situated outside and is inclined towards the outside in relation to a plane and vertically in relation to the longitudinal axis (30) of the armature (21).

IPC 1-7
F02M 51/06

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

CPC (source: EP US)
F02M 51/0664 (2013.01 - EP US); **F02M 51/0682** (2013.01 - EP US); **F02M 61/16** (2013.01 - EP US); **F02M 2200/07** (2013.01 - EP US)

Citation (search report)
See references of WO 0144652A1

Designated contracting state (EPC)
DE ES FR GB

DOCDB simple family (publication)
WO 0144652 A1 20010621; BR 0008230 A 20011030; CN 1186526 C 20050126; CN 1340133 A 20020313; CZ 295771 B6 20051116; DE 19960605 A1 20010719; DE 50011450 D1 20051201; EP 1155231 A1 20011121; EP 1155231 B1 20051026; ES 2249327 T3 20060401; JP 2003517141 A 20030520; US 2002125343 A1 20020912; US 6758419 B2 20040706

DOCDB simple family (application)
DE 0004450 W 20001214; BR 0008230 A 20001214; CN 00803864 A 20001214; CZ 20012970 A 20001214; DE 19960605 A 19991216; DE 50011450 T 20001214; EP 00993232 A 20001214; ES 00993232 T 20001214; JP 2001545716 A 20001214; US 91365701 A 20011109