

Title (en)
SOLENOID VALVE COMPRISING A PLUG-IN/ROTATIVE CONNECTION

Title (de)
MAGNETVENTIL MIT STECK-DREHVERBINDUNG

Title (fr)
ELECTROVANNE A RACCORD TOURNANT A DOUILLE

Publication
EP 1407132 B1 20050914 (DE)

Application
EP 02750796 A 20020619

Priority
• DE 0202234 W 20020619
• DE 10133450 A 20010710

Abstract (en)
[origin: WO03006817A2] The invention relates to a solenoid valve for a fuel injector for injecting fuel into the combustion chamber of an internal combustion engine, said valve comprising an injector (1), which contains an electromagnet (19). The latter is used to actuate an armature assembly of the solenoid valve (18) for relieving the pressure in a control chamber (3), thus causing a nozzle needle or tappet assembly (2) in the injector (1) to carry out an opening or closing movement. The armature assembly contains a first and a second armature part. The first armature part (30, 45.2) and the second armature part (36, 45.1) are joined together by a plug-in/rotative connection (31, 38; 47), whereby one of the armature parts (30, 45.2; 36, 45.1) is encompassed by an armature guide (41), which contains rotational locking elements (42, 43, 52).

IPC 1-7
F02M 59/46; **F02M 47/02**

IPC 8 full level
F02M 47/00 (2006.01); **F02M 47/02** (2006.01); **F02M 51/06** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP KR US)
F02M 47/027 (2013.01 - EP US); **F02M 61/04** (2013.01 - KR); **F02M 63/0015** (2013.01 - EP US); **F02M 2200/306** (2013.01 - EP US); **F02M 2547/003** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 03006817 A2 20030123; **WO 03006817 A3 20030410**; DE 10133450 A1 20030130; DE 50204274 D1 20051020; EP 1407132 A2 20040414; EP 1407132 B1 20050914; JP 2004521269 A 20040715; KR 100880481 B1 20090128; KR 20030036767 A 20030509; US 2004026645 A1 20040212; US 6874706 B2 20050405

DOCDB simple family (application)
DE 0202234 W 20020619; DE 10133450 A 20010710; DE 50204274 T 20020619; EP 02750796 A 20020619; JP 2003512550 A 20020619; KR 20037003454 A 20030308; US 38003303 A 20030909