

Title (en)

VALVE ASSEMBLY ARRANGEMENT FOR AN INJECTION VALVE AND INJECTION VALVE

Title (de)

VENTILMONTAGEANORDNUNG FÜR EIN EINSPRITZVENTIL UND EINSPRITZVENTIL

Title (fr)

AGENCEMENT D'ENSEMBLE DE SOUPAPE POUR SOUPAPE D'INJECTION ET LADITE SOUPAPE

Publication

EP 3153697 A1 20170412 (EN)

Application

EP 15189051 A 20151009

Priority

EP 15189051 A 20151009

Abstract (en)

The invention regards a valve assembly arrangement (2) for an injection valve (1), comprising a first valve assembly (3) and a second valve assembly (4), wherein the latter is axially arranged adjacent to and coupled to the first valve assembly (3), wherein the second valve assembly comprises a valve housing section (14) having an orifice (15) at an axial end area (16) of the valve housing (5), the second valve assembly comprises a cavity (17) in its valve housing section and the second valve assembly comprises a valve needle (18) being axially movable in said cavity between a closing position and other positions. The invention suggests that the second valve assembly (4) comprises a first magnetic member (20) being fixed to the valve needle (18) of the second valve assembly (4), that the second valve assembly (4) comprises a second magnetic member (21) being fixed to the valve housing section (14) of the second valve assembly (4), that at least one of the first magnetic member (20) and the second magnetic member (21) includes permanent-magnetic material or consists of permanent-magnetic material, and that the second valve assembly (4) is of the outward opening type and the first magnetic member (20) is disposed at a side (27) of the second magnetic member (21) wherein said side (27) is facing the axial end area (16).

IPC 8 full level

F02M 47/02 (2006.01); **F02M 47/06** (2006.01); **F02M 51/06** (2006.01); **F02M 61/08** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

F02M 51/0603 (2013.01); **F02M 51/0682** (2013.01); **F02M 51/0685** (2013.01); **F02M 61/08** (2013.01); **F02M 61/20** (2013.01);
F02M 63/0007 (2013.01); **F02M 2200/20** (2013.01)

Citation (applicant)

- WO 2013083626 A1 20130613 - CONTINENTAL AUTOMOTIVE GMBH [DE]
- EP 2378106 A1 20111019 - CONTINENTAL AUTOMOTIVE GMBH [DE]

Citation (search report)

- [X] JP 2004316503 A 20041111 - MIKUNI KOGYO KK
- [Y] US 5947091 A 19990907 - KROHN KLAUS-HENNING [DE], et al
- [XY] US 5353991 A 19941011 - DE NAGEL STEPHEN F [US], et al
- [Y] DE 3139949 A1 19830428 - BOSCH GMBH ROBERT [DE]
- [Y] US 4653720 A 19870331 - KNAPP HEINRICH [DE], et al
- [A] JP H0199967 U 19890705
- [A] DE 4023688 A1 19920130 - BOSCH GMBH ROBERT [DE]

Cited by

EP3470657A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3153697 A1 20170412

DOCDB simple family (application)

EP 15189051 A 20151009