

Title (en)

Valve assembly for an injection valve and injection valve

Title (de)

Ventilanordnung für ein Einspritzventil und Einspritzventil

Title (fr)

Ensemble de vanne pour soupape d'injection, et soupape d'injection

Publication

EP 2003331 A1 20081217 (EN)

Application

EP 07011514 A 20070612

Priority

EP 07011514 A 20070612

Abstract (en)

Injection valve (10) and valve assembly (14) for an injection valve (10), comprising a valve body (20) including a central longitudinal axis (L), the valve body (20) comprising a cavity (24) forming an inner wall (42), the cavity (24) comprising a fluid outlet portion (28) with a seat area (44) being part of the inner wall (42), a valve needle (22) axially movable in the cavity (24), the valve needle (22) preventing a fluid flow through the fluid outlet portion (28) in a closing position and releasing the fluid flow in a fluid flow direction (F) through the fluid outlet portion (28) in further positions, the valve needle (22) comprising a needle seat (46), the needle seat (46) and the seat area (44) forming an injection nozzle (29), and a collar (40) being coupled to an outer surface (48) of the valve body (20) and extending in axial direction of the valve body (20) relative to the central longitudinal axis (L), wherein the collar (40) is arranged circumferentially relative to the central longitudinal axis (L) to encircle the injection nozzle (29).

IPC 8 full level

F02M 61/18 (2006.01)

CPC (source: EP)

F02M 61/08 (2013.01); **F02M 61/1866** (2013.01); **F02M 61/1886** (2013.01)

Citation (search report)

- [X] EP 1655482 A1 20060510 - SIEMENS AG [DE]
- [X] GB 1015429 A 19651231 - OLIVIER BRETING
- [X] JP S60190663 A 19850928 - TOYOTA MOTOR CO LTD
- [X] WO 03038272 A1 20030508 - BOSCH GMBH ROBERT [DE], et al
- [X] JP S62248867 A 19871029 - NIPPON DENSO CO
- [X] EP 1467087 A1 20041013 - SIEMENS VDO AUTOMOTIVE SPA [IT]

Cited by

EP2218905A1; CN105275696A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

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