

Title (en)

VALVE ASSEMBLY FOR AN INJECTION VALVE AND FUEL INJECTION VALVE

Title (de)

VENTILANORDNUNG FÜR EIN EINSPRITZVENTIL UND KRAFTSTOFFEINSPRITZVENTIL

Title (fr)

ENSEMABLE DE SOUPAPE POUR SOUPAPE D'INJECTION ET SOUPAPE D'INJECTION DE CARBURANT

Publication

**EP 3636911 A1 20200415 (EN)**

Application

**EP 18199089 A 20181008**

Priority

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Abstract (en)

A valve assembly (3) comprising a valve body (4) with a cavity (9) having a fluid inlet portion (5) and a fluid outlet portion (7), a valve needle (11) and an armature (23) is disclosed. The armature (23) has a plurality of flow holes (36) extending in an axial direction from an upper side (33) of the armature (23) to a lower side (35), the flow holes (36) permitting fuel to pass through the armature (23). Inlets (37) of the flow holes (36) are at a distance  $R_{<sub>1</sub>}$  from the central longitudinal axis L, wherein  $R_{<sub>1</sub>}$  is larger than the radius  $r_{<sub>P</sub>}$  of a central opening (28) in an element of the valve assembly (3) adjacent to the upper side (33) of the armature (23). Outlets (39) of the flow holes (36) are at a distance  $R_{<sub>2</sub>}$  from the central longitudinal axis L, wherein  $R_{<sub>2</sub>}$  is smaller than the radius  $r_{<sub>H</sub>}$  of a disc-shaped element (40) arranged in an axial region of the valve needle (11) adjacent to the lower side of the armature (23). A fuel injection valve (1) comprising the valve assembly is also disclosed.

IPC 8 full level

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CPC (source: CN EP)

**F02M 51/0653** (2013.01 - CN EP); **F02M 51/0685** (2013.01 - EP); **F02M 55/008** (2013.01 - EP); **F02M 61/10** (2013.01 - CN);  
**F02M 2200/304** (2013.01 - EP)

Citation (applicant)

EP 2985445 A1 20160217 - CONTINENTAL AUTOMOTIVE GMBH [DE]

Citation (search report)

- [X] EP 3009663 A1 20160420 - CONTINENTAL AUTOMOTIVE GMBH [DE]
- [X] EP 2851551 A1 20150325 - CONTINENTAL AUTOMOTIVE GMBH [DE]
- [A] DE 102017207273 A1 20180104 - BOSCH GMBH ROBERT [DE]

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Designated contracting state (EPC)

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