

Title (en)

Fuel injection valve with increased small quantity capacity

Title (de)

Kraftstoffeinspritzventil mit erhöhter Kleinmengenfähigkeit

Title (fr)

Soupape d'injection de carburant dotée d'une capacité à petites quantités augmentée

Publication

EP 2280160 A3 20130116 (DE)

Application

EP 10164578 A 20100601

Priority

DE 102009028089 A 20090729

Abstract (en)

[origin: EP2280160A2] The valve has a valve body (1), and a valve needle (6) arranged in a hole (2) of the body in a longitudinally displaceable manner. The valve needle has a valve seat surface (8) at an end that is turned towards a valve seat (3). The valve needle works together with the valve seat for opening and closing injection channels (5), and a pressure chamber (7) is formed between the valve needle and a wall of the hole. A seat section (9) is arranged adjacent to the valve seat, and a throttle (10) is arranged between the valve seat and the seat section.

IPC 8 full level

F02M 45/08 (2006.01); **F02M 61/18** (2006.01); **F02M 61/20** (2006.01)

CPC (source: EP)

F02M 45/08 (2013.01); **F02M 61/1866** (2013.01); **F02M 61/1873** (2013.01); **F02M 61/1886** (2013.01); **F02M 61/205** (2013.01); **F02M 2200/28** (2013.01)

Citation (search report)

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- [X] DE 3303470 A1 19840802 - JAROSLAVSKIJ SAVOD DIESELNOJ AP [SU]
- [X] WO 2009072345 A1 20090611 - MITSUBISHI HEAVY IND LTD [JP], et al
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DE102013209251A1; WO2015043913A1

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 SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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