

Title (en)

Fuel injector valve for combustion engines

Title (de)

Kraftstoffeinspritzventil für Brennkraftmaschinen

Title (fr)

Soupape d'injection de carburant pour moteurs à combustion interne

Publication

EP 2458194 A3 20130724 (DE)

Application

EP 11182517 A 20110923

Priority

DE 102010041629 A 20100929

Abstract (en)

[origin: EP2458194A2] The fuel injection valve has housing (1), where a piston-shaped valve needle (20) is arranged in longitudinally movable manner. A valve sealing surface is formed at the valve needle. The valve needle with a valve seat acts together for opening and closing an injection opening. The valve needle has two piston-shaped valve needle units (120,220), where former valve needle unit limits a control chamber (30) and latter valve needle portion has the valve sealing surface.

IPC 8 full level

F02M 47/02 (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)

F02M 45/08 (2013.01); **F02M 47/027** (2013.01); **F02M 61/10** (2013.01); **F02M 61/167** (2013.01); **F02M 2200/02** (2013.01); **F02M 2200/8084** (2013.01); **F02M 2547/001** (2013.01)

Citation (search report)

- [XY] DE 102007001363 A1 20080710 - BOSCH GMBH ROBERT [DE]
- [Y] DE 19954802 A1 20010517 - BOSCH GMBH ROBERT [DE]
- [A] WO 0206665 A1 20020124 - BOSCH GMBH ROBERT [DE], et al

Cited by

FR3042822A1; CN108138717A; WO2017067930A1; US10502170B2

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)

DE 102011083260 A1 20120329; EP 2458194 A2 20120530; EP 2458194 A3 20130724; EP 2458194 B1 20140820

DOCDB simple family (application)

DE 102011083260 A 20110923; EP 11182517 A 20110923