Title (en)

FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de

KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT POUR DES MOTEURS A COMBUSTION INTERNE

Publication

EP 1802863 B1 20170712 (DE)

Application

EP 05740328 A 20050512

Priority

- EP 2005052162 W 20050512
- DE 102004033283 A 20040709

Abstract (en)

[origin: WO2006005642A1] Disclosed is a fuel injection valve for internal combustion engines, comprising a pressure chamber (11) which is embodied in a housing (1) and in which high-pressure fuel is at least temporarily provided. A valve needle (10) which cooperates with a valve seat (36) to control a fuel flow from the pressure chamber (11) to at least two injection bores (40) is disposed in the pressure chamber (11). The injection bores (40) are provided with an inlet port (41) that is arranged in the wall of the pressure chamber (11) and an outlet port (41). The inlet ports (41) are positioned such that fuel flows from the pressure chamber (11) into the injection bores (40) when the valve needle (10) is lifted from the valve seat (36). The inlet ports (41) of at least two of the injection bores (40) located in the wall of the pressure chamber (11) are placed so as to be in contact with each other or overlap.

IPC 8 full level

F02M 61/18 (2006.01)

CPC (source: EP)

F02M 61/042 (2013.01); F02M 61/168 (2013.01); F02M 61/1806 (2013.01); F02M 61/10 (2013.01); F02M 2200/8069 (2013.01)

Citation (examination)

- JP H0299758 A 19900411 HITACHI LTD
- JP S61159667 U 19861003

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102004033283 A1 20060202; CN 1981130 A 20070613; CN 1981130 B 20120704; EP 1802863 A1 20070704; EP 1802863 B1 20170712; JP 2008506059 A 20080228; WO 2006005642 A1 20060119

DOCDB simple family (application)

DE 102004033283 A 20040709; CN 200580022897 A 20050512; EP 05740328 A 20050512; EP 2005052162 W 20050512; JP 2007519748 A 20050512