Title (en)

FUEL INJECTION VALVE

Title (de)

BRENNSTOFFEINSPRITZVENTIL

Title (fr)

SOUPAPE D'INJECTION DE CARBURANT

Publication

EP 1799998 B1 20091125 (DE)

Application

EP 05804895 A 20050920

Prioritv

- EP 2005054699 W 20050920
- DE 102004049278 A 20041009

Abstract (en)

[origin: WO2006040247A1] Disclosed is a fuel injection valve which is characterized in that a perforated disk that is provided with at least one discharge port (24) is disposed downstream of a valve seat member (16) encompassing a fixed valve seat (29). An inlet port (19) comprising an annular hollow inflow space (26) is provided directly upstream of the discharge ports (24). The valve seat member (16) covers the hollow inflow space (26) in such a way that the discharge ports (24) of the perforated disk (23) which are located downstream are covered up. The penetration area (32) above each discharge port (24), which is located at the inlet end and amounts to the product of the circumference of the discharge port (24) in the zone of the inlet plane (31) thereof and the free height thereof in the hollow inflow space (26), is smaller than the area of the inlet plane (31) of the discharge port (24). The inventive fuel injection valve is particularly suitable for use in fuel injection systems of mixture-compressing spark-ignited internal combustion engines.

IPC 8 full level

F02M 61/18 (2006.01)

CPC (source: EP US) F02M 61/1853 (2013.01 - EP US)

Designated contracting state (EPC) DE FR IT

DOCDB simple family (publication)

DE 102004049278 A1 20060413; DE 502005008594 D1 20100107; EP 1799998 A1 20070627; EP 1799998 B1 20091125; JP 2008516137 A 20080515; JP 4537457 B2 20100901; US 2009057444 A1 20090305; WO 2006040247 A1 20060420

DOCDB simple family (application)

DE 102004049278 A 20041009; DE 502005008594 T 20050920; EP 05804895 A 20050920; EP 2005054699 W 20050920; JP 2007535136 A 20050920; US 66509505 A 20050920