

Title (en)

Fuel injection valve for a combustion engine

Title (de)

Kraftstoffeinspritzventil für Brennkraftmaschinen

Title (fr)

Soupe d'injection de carburant pour un moteur a combustion interne

Publication

EP 1382840 B1 20050727 (DE)

Application

EP 03009122 A 20030422

Priority

DE 10232049 A 20020716

Abstract (en)

[origin: EP1382840A1] Fuel injection valve comprises a valve body (1) containing a bore (3) having a longitudinal axis (4) and defined at its combustion chamber end by a valve seat (5) having the inlet opening (107) of at least one injection channel (7) which opens into the combustion chamber of the engine, and a valve needle (10) movably arranged in the bore. The valve needle interacts with the valve seat via its valve-sealing surface (12) so that when the valve needle is lifted from the valve seat an annular gap is produced through which the fuel flows to the injection channel. In the case of at least one injection channel the distance between the inlet opening and the valve-sealing surface at at least two different points of the inlet opening is different.

IPC 1-7

F02M 61/18

IPC 8 full level

F02M 61/16 (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR)

F02M 61/162 (2013.01 - EP); **F02M 61/18** (2013.01 - KR); **F02M 61/1806** (2013.01 - EP); **F02M 61/1893** (2013.01 - EP)

Cited by

EP3073107A1; DE102015205423A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1382840 A1 20040121; **EP 1382840 B1 20050727**; DE 10232049 A1 20040205; DE 50300845 D1 20050901; JP 2004052766 A 20040219; KR 20040010178 A 20040131

DOCDB simple family (application)

EP 03009122 A 20030422; DE 10232049 A 20020716; DE 50300845 T 20030422; JP 2003196575 A 20030714; KR 20030048140 A 20030715