

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT

Publication  
**EP 0853724 B1 20011121 (DE)**

Application  
**EP 97917265 A 19970315**

Priority  

- DE 9700533 W 19970315
- DE 19631066 A 19960801

Abstract (en)  
[origin: DE19631066A1] Fuel injection valves for internal combustion engines wherein the valve seat body is produced by a series of complex operating methods are already known. With the novel valve, a valve seat body which is of simple design and can be produced economically is used. The valve seat body (16) is made by stamping and deep-drawing sheet metal, and is pot-shaped with a seat body base (19) and a seat body annular edge (20). Formed in the seat body base (19) is a valve seat (24). A perforated injection plate (34) is welded to the valve seat body (16). The fuel injection valve is particularly suitable for fuel injection systems of mixture-compressing, spark-ignition engines.

IPC 1-7  
**F02M 51/06; F02M 61/18**

IPC 8 full level  
**F02M 61/12** (2006.01); **F02M 51/06** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR US)  
**F02M 51/06** (2013.01 - KR); **F02M 51/0653** (2013.01 - EP US); **F02M 51/0671** (2013.01 - EP US); **F02M 61/18** (2013.01 - KR);  
**F02M 61/1853** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**DE 19631066 A1 19980205**; BR 9706548 A 19990720; DE 59705475 D1 20020103; EP 0853724 A1 19980722; EP 0853724 B1 20011121;  
JP 3737129 B2 20060118; JP H11513100 A 19991109; KR 19990063867 A 19990726; RU 2173789 C2 20010920; US 6039271 A 20000321;  
WO 9805859 A1 19980212

DOCDB simple family (application)  
**DE 19631066 A 19960801**; BR 9706548 A 19970315; DE 59705475 T 19970315; DE 9700533 W 19970315; EP 97917265 A 19970315;  
JP 50743398 A 19970315; KR 19980702339 A 19980330; RU 98108456 A 19970315; US 5112398 A 19980401