

Title (en)  
FUEL INJECTION VALVE.

Title (de)  
KRAFTSTOFFEINSPRITZVENTIL.

Title (fr)  
SOUPAPE INJECTRICE DE CARBURANT.

Publication  
**EP 0476084 B1 19941109**

Application  
**EP 91905794 A 19910327**

Priority  
• DE 4011372 A 19900407  
• DE 4029056 A 19900913  
• DE 9100270 W 19910327

Abstract (en)  
[origin: WO9115673A1] Described is a fuel injection valve for fuel injection units in internal-combustion engines, the valve having a hollow nozzle body (10) with a fuel-filled chamber (11) and a nozzle jet (13) for the fuel to emerge. Inside the nozzle body (10) is a valve seat (14) which works in conjunction with a valve closure element (16). To ensure a high degree of atomization or electrostatic charging of the fuel emerging from the jet aperture (13), the valve is fitted with two electrodes (21, 22) under high tension, at least one of the electrodes being made of a material suitable for the field emission of charge carriers. One electrode (21 or 22) is mounted on the valve closure member (16) and the other electrode (22 or 21) on the nozzle body (10) in such a way that an electric field extending through the fuel stream is formed directly in front of or behind the valve seat (14).

IPC 1-7  
**F02M 27/04**; **F02M 51/06**

IPC 8 full level  
**B05B 5/053** (2006.01); **F02M 27/04** (2006.01); **F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 57/00** (2006.01); **F02M 61/08** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02M 69/00** (2006.01)

CPC (source: EP KR US)  
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Cited by  
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Designated contracting state (EPC)  
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**WO 9115673 A1 19911017**; AU 625928 B2 19920716; AU 7462791 A 19911030; BR 9105681 A 19920804; DE 4029056 A1 19911017; DE 59103483 D1 19941215; EP 0476084 A1 19920325; EP 0476084 B1 19941109; ES 2065015 T3 19950201; JP 2962827 B2 19991012; JP H04507127 A 19921210; KR 100221905 B1 19990915; KR 920701652 A 19920812; RU 2060402 C1 19960520; US 5234170 A 19930810

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