

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT

Publication  
**EP 0789810 B1 20030903 (DE)**

Application  
**EP 96917360 A 19960619**

Priority  
• DE 9601078 W 19960619  
• DE 19532865 A 19950906

Abstract (en)  
[origin: DE19532865A1] Prior art fuel injection valves make use of valve needles consisting of a tubular armature, a sleeve-like needle section acting as a connector and a valve closure. The individual components are assembled by material seaming processes, e.g. welding or soldering. The novel fuel injection valve is characterised in that use is made of a valve needle (18), the individual components of which, e.g. the valve needle section (19) and the valve closure (24) are secured together by a non-material seaming process. Ideally there are only pressed joints on the valve needle. The fuel injection valve is especially suitable for use in fuel injection systems of mixture-compressing spark-ignition internal combustion engines.

IPC 1-7  
**F02M 51/06**; **F02M 61/16**

IPC 8 full level  
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CPC (source: EP US)  
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