

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT

Publication  
**EP 1112446 A1 20010704 (DE)**

Application  
**EP 99953591 A 19990825**

Priority  

- DE 9902658 W 19990825
- DE 19838949 A 19980827
- DE 19907860 A 19990224

Abstract (en)  
[origin: US6938840B1] A fuel injector, in particular a high pressure injector for direct injection of fuel into a combustion chamber of an internal combustion engine having externally supplied ignition and mixture compression, is characterized in that a valve needle, which is movable axially along a longitudinal axis of the valve, has a specially designed valve closing section on its downstream end. To open and close the valve, the valve closing section works together with a fixed valve seat. Swirl-producing elements are arranged upstream from the valve seat while a flattened face running perpendicular to the longitudinal axis of the valve is provided on the downstream end of the valve closing section downstream from the valve seat.

IPC 1-7  
**F02M 61/16**; **F02M 61/18**

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)  
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