

Title (en)  
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)  
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT POUR DES MOTEURS A COMBUSTION INTERNE

Publication  
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Application  
**EP 02767066 A 20020727**

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Abstract (en)  
[origin: WO03040543A1] The invention relates to a fuel injection valve comprising a valve body (1) inside of which an outer valve needle (5) and an inner needle (7), which is guided inside the outer valve needle (5), are situated inside a boring (3). The valve needles (5; 7) interact with a valve seat (10), which is provided at the combustion chamber-side end of the boring (3) and in which an outer row of injection orifices (14) and in inner row of injection orifices (12) are arranged. The inner valve needle (7) controls the opening of the inner row of injection orifices (12), and the outer valve needle (5) controls the opening of the outer row of injection orifices (14). The outer valve needle (5) comprises an inward projecting, encircling sealing lip (25) having an inner sealing edge (30), whereby the inner sealing edge (30) rests against the valve seat (10) when the outer valve needle (7) is in a closed position.

IPC 1-7  
**F02M 45/08**

IPC 8 full level  
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