

Title (en)
FUEL INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

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Application
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Abstract (en)
[origin: WO2005031153A1] Known fuel injection valves comprise a valve needle that has a maximum diameter on a flow-off edge, and a valve seat that comprises a sealed seat and co-operates with the valve needle. Said valve seat widens from the sealed seat to a spray-off edge, and the flow-off edge of the valve needle is displaced to the rear in the flow direction, in relation to the spray-off edge of the valve seat, when the fuel injection valve is closed. The fuel injection valve injects the fuel into a combustion chamber of an internal combustion engine at a pre-determined jet angle. Disadvantageously, when the displacement of the flow-off edge to the rear is too little or too much, an unacceptably high jet angle dispersion occurs. The inventive fuel injection valve enables the jet angle dispersion to be reduced in a simple manner. According to the invention, the flow-off edge (14) of the valve needle (4) is displaced to the rear in relation to the spray-off edge (16) of the valve seat (9), by between 2 micrometers and 20 micrometers, in the direction of a valve longitudinal axis (22).

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