

Title (en)
FUEL-INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

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Application
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Abstract (en)
[origin: WO2004027255A1] The invention relates to a fuel-injection valve for internal combustion engines. Said valve comprises a valve body (1), in which a plunger-type valve needle (5) is positioned in a bore (3) so that it can be displaced longitudinally. The valve needle (5) has a valve sealing surface (7) comprising at least one conical surface (30; 32). The valve seat surface (7) of said valve needle (5) co-operates with a conical valve seat (9) that is configured in the valve body (1), in such a way that when the valve needle (5) is lifted from the valve seat (9), fuel streams from a pressure chamber (19) between the conical surface (7) and the valve seat (9) through at least one injection orifice (11). Several depressions (40), whose respective depths are different in at least two places, are configured around the periphery of the conical surface (7) and/or the valve seat (9).

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