

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

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Application
EP 03752691 A 20030325

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Abstract (en)
[origin: WO03098028A1] The invention relates to a fuel injection valve for internal combustion engines, comprising a housing (1) provided with a borehole (16) containing a longitudinally displaceable outer valve needle (20) and an inner valve needle (22) which can be longitudinally displaced in the outer valve needle, said valve needles each controlling at least one injection opening (30) with the combustion chamber end thereof. The pressure in a control chamber (50) exerts a closing force at least indirectly on the outer valve needle (20), and the pressure in a control pressure chamber (52) exerts a closing force at least indirectly on the inner valve needle (22). The housing (1) contains a control valve (58) comprising a valve chamber (68) which has a valve member (60), said valve chamber (68) being provided with a connection (59) to the leakage chamber (78), a continuously open connection to the control chamber (50), and a connection to the control pressure chamber (52). The valve member (60) in the valve chamber (68) can be displaced between two end positions. In the first end position, said valve member (60) closes the connection (59) to the leakage chamber (78) and opens the connection (74) to the control pressure chamber (52), and in the second end position, closes the connection (74) to the control pressure chamber (78) and opens the connection to the leakage chamber (78).

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