

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
BRENNSTOFFEINSPRITZVENTIL FÜR VERBRENNUNGSKRAFTMASCHINEN

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

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Application
EP 03700111 A 20030117

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Abstract (en)
[origin: WO03071122A1] A control body (22) with a control passage (25) is fixed in a hollow cylindrical housing (2). A control piston (18), co-operating with an injection valve body and a slide valve body (21) are arranged in a sleeve (19) such as to be displaced. The control piston (18) defines the base of a control chamber (20), which is defined at the top thereof by the control body (22) and laterally by the sleeve (19). Two parallel-axis throttle passages (26, 28), comprising a throttle restriction (26a, 28a) are embodied in the slide valve body (21), the one throttle passage (26) of which is flow connected to the control passage (25) in the control body (22) and to the control chamber (20), by means of the throttle restriction (26a). In said throttle passage (26), on the control chamber side thereof relative to the throttle restriction (26a), a throttle inlet (33) opens, embodied in the slide valve body (21), which is connected to a high pressure chamber (9) through a chamber (30) embodied in the sleeve (19), a slot (31) in the sleeve (19) and a flow gap (32) embodied between the sleeve (19) and the housing (2). Said chamber is pressurised with high pressure fuel. The control chamber (20) is thus directly connected to the high pressure chamber (9) by means of the throttle inlet (33). The pressure in the control chamber (20) is always higher than the pressure in the control passage (25).

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