

Title (en)
FUEL INJECTION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZVORRICHTUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
SYSTEME D'INJECTION DE CARBURANT POUR UN MOTEUR A COMBUSTION INTERNE

Publication
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Application
EP 01940207 A 20010503

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Abstract (en)
[origin: WO0188367A1] The invention relates to a fuel injection system comprising a pump assembly (39) which feeds high pressure fuel to a high pressure conduit (10) connected to an injection valve (1), as well as a control valve (11) within which a valve member (14) exhibiting the shape of a piston and having a sealing segment (114) is guided in the bore (26), said sealing segment (114) being surrounded by a high pressure chamber (16) connected to the pump working space (48). An end of the valve member (14) protrudes in a low pressure chamber (18) connected to a fuel supply system (58). The bore (26) has a valve seat (22) which co-operates with a valve sealing face (24) formed on the valve member (14) for controlling the connection of the high pressure chamber (16) and the low pressure chamber (18). Concerning the flow direction of the fuel from the high pressure chamber (16) to the low pressure chamber (18), a throttle section (21) which is situated in the bore (26) upstream from the valve seat (22) forms with the sealing segment (114) of the valve member (14) a throttle slit (23) and therefore limits the fuel flow during the opening stroke in a stroke area of the valve member (14) so that no extra hydraulic force affects the valve member (14) during the opening stroke of said valve member (14).

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