

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

Publication
EP 1718862 B1 20101103 (DE)

Application
EP 05706519 A 20050221

Priority
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Abstract (en)
[origin: WO2005080785A1] The movement of an injection valve member (9), which can be longitudinally displaced and guided in a housing (2) and which is used to close and release injection openings, is controlled by means of a hydraulic control device (10) which comprises a control body (32) which is maintained in a central bore (6) on the periphery thereof and which is provided with a control duct (41) which is connected to a control area (26) on a lower front-surface side (32a) of the control body (32) and which is sealed on another upper front-surface side (32b) of the control body (32) and which can be connected to a low pressure area (57) by means of a pilot valve (45). The control body (32) is maintained on the periphery thereof in a non-tight manner in a central bore (6) of the housing (2) and the upper front-surface side (32b) thereof is provided with a sealing surface (40) which surrounds the control duct (41) and which is sealingly adjacent to a first sealing surface (39) of a retaining body which is firmly maintained inside the housing (2) as a result of the effect of the high fuel pressure in a high pressure area (7). A second sealing surface (37) is formed on said retaining body (33), enabling the retaining body (33) to lie sealingly adjacent to a seat surface (38) which is formed inside the housing (2) and which surrounds the central bore (6) in the housing (2).

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