

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
BRENNSTOFFEINSPRITZVENTIL FÜR VERBRENNUNGSKRAFTMASCHINEN

Title (fr)
INJECTEUR DE CARBURANT POUR MOTEURS À COMBUSTION INTERNE

Publication
EP 2394049 B1 20121121 (DE)

Application
EP 10701799 A 20100122

Priority
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• CH 1922009 A 20090209

Abstract (en)
[origin: WO2010088781A1] The control apparatus (88) of a fuel injection valve comprises a mushroom-shaped intermediate valve member (56), which is guided in an intermediate element (94) with a sliding fit (94"). Together with a guide sleeve (78) and the lower surface of the intermediate element (94), the injection valve member (28), which has a control plunger (28'), for opening and closing injection openings so as to implement intermittent injection processes defines a control space (54). An outlet element (114) is located between the intermediate element (94) and the housing body (116) and delimits a valve space (70), which is hydraulically connected to the face of the stem (58) of the mushroom-shaped intermediate valve member (56). The intermediate valve member comprises a stem (58), which is guided in the intermediate element (94) with a sliding fit, and a head (60), which rests with the sealing surface (61) thereof at least partially against a surface (57) of an intermediate valve seat (59) configured on the intermediate element (94) in the closed position of the intermediate valve member (56) in order to separate the high pressure inlet (96) from the control space (54), wherein the sealing surface (61) of the head (60) and the surface (57) of the intermediate valve seat (59) are designed such that they create a throttled fluid connection between the high pressure inlet (96) and the sliding fit in the closed position of the intermediate valve (56').

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