

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

Publication
EP 2867517 A1 20150506 (DE)

Application
EP 13723131 A 20130515

Priority

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- DE 102012220025 A 20121102
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Abstract (en)
[origin: WO2014000957A1] The invention relates to a fuel injection valve comprising a housing (1) in which pressure is applied to a nozzle needle (8), in a control chamber (28), at least indirectly with a closing force in the direction of a valve seat (10). The pressure in the control chamber (28) can be adjusted using a control valve (40) as said control chamber (28) is able to be connected to a low pressure chamber (46) via an outlet restrictor (31) and be filled with fuel at high pressure via an inlet restrictor (30). A longitudinally-displaceable control piston (29) is arranged in the control chamber (28) and divides said chamber (28) into a first control sub-chamber (128) and a second control sub-chamber (228), the first control sub-chamber (128) being able to be connected to the low pressure chamber (46) by means of said outlet restrictor (31). A sealing surface (38) is formed on the control piston (29) and interacts with a sealing seat (39) in the control chamber (28) such that the inlet restrictor (30) is hydraulically disconnected from the second control sub-chamber (228) when the sealing surface (38) comes to rest against the sealing seat (39). Said first control sub-chamber (128) and second control sub-chamber (228) are constantly hydraulically interconnected by means of a restrictor connection (34).

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Citation (search report)
See references of WO 2014000957A1

Cited by
EP3800344A1; WO2018162747A1; EP3800344B1

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