

Title (en)
FUEL INJECTOR PROVIDED WITH A SERVO LEAKAGE FREE VALVE

Title (de)
KRAFTSTOFFINJEKTOR MIT LECKAGEFREIEM SERVOVENTIL

Title (fr)
INJECTEUR DE CARBURANT COMPORTANT UNE SOUPAPE ASSERVIE LIBRE DE FUITES

Publication
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Application
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Abstract (en)
[origin: WO2004088121A1] The invention relates to a fuel injector (18) for injecting a fuel into the combustion chamber of an internal combustion engine. The inventive injector comprises a pressure relay valve (3) whose pressure relay piston (4) separates the working chamber (5) continuously receiving the fuel supplied by a pressure source (1,2) from a differential decompression pressure chamber (6). A pressure fluctuation is produced in said differential pressure chamber (6) by means of a servo valve (22) whose control chamber (36) can be released from pressure by means of a switch valve (32) which closes or opens a hydraulic connection (21, 38, 30) between the differential pressure chamber (6) and a first return run (30) on a low-pressure side. Said fuel injector is characterised in that when the pressure relay valve (3) is deactivated, the high pressure area of the servo valve (22) which closes the control chamber (36), a first hydraulic chamber (37) and a second hydraulic chamber (38) are sealed with respect to the return run (30) by means of a sealing surface (24).

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