

Title (en)
DIVIDED DOUBLE SEAT INJECTION VALVE MEMBER

Title (de)
GETEILTES EINSPRITZVENTILGLIED MIT DOPPELSITZ

Title (fr)
OBTURATEUR EN PLUSIEURS PARTIES POURVU D'UN SIEGE DOUBLE

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Application
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Abstract (en)
[origin: WO2007017335A1] The invention relates to a fuel injector (10) having a complex injection valve member (14) for injecting fuel into a combustion chamber (54) of an internal combustion engine. The complex injection valve member (14) comprises an outer part (18), impinged upon with pressure by a first pressure compartment (20), and at least one inner part (16; 16.1, 16.2), impinged upon with pressure by a second pressure compartment (34). The at least one inner part (16; 16.1, 16.2) comprises at least one pressure stage (36, 38) and a seat (40) having an outer part (18). A seat (42) of the outer part (18) is configured inside the nozzle body (12). Once the seat (40) of the at least one inner part (16; 16.1 and 16.2) in the outer part is opened, the opening force of the outer part (18) is reduced depending on the product of a pressure difference Δp between the system pressure $p_{\text{SUB} > D < / \text{SUB} >}$ and a pressure $p_{\text{SUB} > S < / \text{SUB} >}$ in front of the injection openings (46) having a difference in area between the seat surface of the seat (42) of the outer part (18) minus a bore surface of a bore (52) for the seat (40) of the at least one inner part (16; 16.1, 16.2).

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