

Title (en)
HYDRAULIC COUPLER AND FUEL INJECTION VALVE

Title (de)
HYDRAULISCHER KOPPLER UND KRAFTSTOFFEINSPRITZVENTIL

Title (fr)
COUPLEUR HYDRAULIQUE ET SOUPAPE D'INJECTION DE CARBURANT

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Application
EP 04738650 A 20040609

Priority

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Abstract (en)
[origin: WO2005010343A1] The invention concerns a hydraulic coupler for a fuel injection valve, comprising a multiplying piston (6) capable of being connected to an actuator (4), in particular to a piezoelectric actuator, and a multiplying piston (7) capable of being connected to an injector needle. A chamber located between the two multiplying pistons (6, 7) is filled with a hydraulic fluid, for the entire life span of the coupler, so as to provide hydraulic coupling between the two multiplying pistons. The invention aims at creating a coupler of simple design and capable of being produced economically. Therefor, one end of the multiplying piston (7) is guided into one end of the other multiplying piston (6). Moreover, a multiplying chamber (14), formed between the surface on one multiplying piston (7) and the other multiplying piston (6), communicates with another housing chamber (15) for the hydraulic fluid and sealed by a sealing element (17) with spring action.

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