

Title (en)

FUEL INJECTOR WITH PISTON RESTORING OF A PRESSURE INTENSIFIER PISTON

Title (de)

KRAFTSTOFFINJEKTOR MIT KOLBENRÜCKHOLUNG EINES DRUCKÜBERSETZERKOLBENS

Title (fr)

INJECTEUR DE CARBURANT COMPRENANT UN RAPPEL DE PISTON D'UN PISTON MULTIPLICATEUR DE PRESSION

Publication

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Application

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Priority

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Abstract (en)

[origin: US2011168812A1] The invention relates to a fuel injector for injecting fuel into a combustion chamber of an internal combustion engine, which fuel injector comprises an injection valve element, for opening and closing at least one injection opening and a pressure booster, by way of which fuel which is at system pressure is compressed to injection pressure. The pressure booster is actuated via a first control valve and the injection valve element is actuated via a second control valve. The pressure booster comprises a pressure booster piston which is assigned a spring element which is supported by way of one side on the injector housing and by way of the other side on the pressure booster piston. The pressure booster piston delimits a compression chamber, a differential pressure chamber and a control chamber. The control chamber is arranged at that end of the pressure booster piston which lies opposite the compression chamber, the spring element is received in the control chamber, and the spring element is supported on one side on the injector housing and on the other side on the pressure booster piston.

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