

Title (en)  
COMMON RAIL INJECTOR

Title (de)  
COMMON-RAIL-INJEKTOR

Title (fr)  
INJECTEUR A RAMPE COMMUNE D'INJECTION

Publication  
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Application  
**EP 00963908 A 20000819**

Priority  
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Abstract (en)  
[origin: DE19945314A1] The invention relates to a common rail injector with a nozzle body (1) which is fixed to a support body (6) by means of a tension nut (5). The support body (6) is provided with a fuel inlet (9) that is connected to a central high-pressure fuel tank outside the injector and to a pressure chamber inside the injector. Fuel that is impinged upon with high-pressure is injected out of the pressure chamber according to the position of a control valve (16, 18). A nozzle needle (7) can be axially moved back and forth in a longitudinal bore of the injector, against the prestressing force of a nozzle spring (11) which is received in a nozzle spring chamber (10). Said control valves ensures that the nozzle needle is lifted up from a seat when the pressure in the pressure chamber is greater than the pressure in a control chamber (15) which is connected to the fuel inlet (9) by a fuel intake throttle (20). The aim of the invention is to allow higher nozzle needle speeds. To this end, the control chamber (15) is integrated into the nozzle body (1). Moreover, a control pin (14) is embodied at the end of the nozzle needle (7), whereby said end is situated furthest from the combustion chamber. The control pin is guided in the control chamber (15). Furthermore, the nozzle spring chamber (10) is arranged outside the control chamber (15).

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