

Title (en)  
FUEL INJECTION SYSTEM OF AN INTERNAL COMBUSTION ENGINE

Title (de)  
KRAFTSTOFFEINSPRITZSYSTEM EINER BRENNKRAFTMASCHINE

Title (fr)  
SYSTÈME D'INJECTION DU CARBURANT D'UN MOTEUR À COMBUSTION INTERNE

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Application  
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Abstract (en)  
[origin: WO2011110389A1] The invention relates to a fuel injection system of an internal combustion engine, comprising a presupply pump (1) and a downstream high-pressure pump (7), which is connected to a high-pressure accumulator (9) and wherein the high pressure accumulator (9) is operatively connected to at least one fuel injector (10). According to the invention, a fuel injection system is provided and a method for operating such a fuel system is described which avoids the disadvantage of a slow pressure build-up in the high-pressure accumulator (9) and rather allows a rapid start of the internal combustion engine. This is achieved in that the presupply pump (1) is designed to generate a delivery pressure by which a fuel injection by means of the fuel injector (10) is effected, at least in a defined operating state of the internal combustion engine. At the delivery pressure generated by the presupply pump (1), the fuel injector is prompted to open by a control device. A corresponding method for operating the fuel injection system provides for the presupply pump (1) to be operated in a starting operating mode until the internal combustion engine has been started, and after the internal combustion engine has been started to be operated in a presupply operating mode.

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