

Title (en)
INJECTION NOZZLE FOR A LEAKLESS FUEL INJECTOR

Title (de)
EINSPRITZDÜSE FÜR EINEN LECKLOSEN KRAFTSTOFFINJEKTOR

Title (fr)
BUSE D'INJECTION POUR UN INJECTEUR DE CARBURANT SANS FUITE

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Abstract (en)
[origin: WO2011054608A1] The invention relates to a fuel injector for an internal combustion engine, comprising a valve body (2), in which a valve needle (1) is arranged in a longitudinally movable manner, which with a valve needle tip (3) designed on the valve needle (1) cooperates with a valve seat of the valve body (2) that delimits a fuel-filled pressure chamber between the valve body (2) and valve needle (1), wherein a fuel flow to at least one injection opening is enabled or interrupted by means of the cooperation of the valve needle (1) with the valve seat (2), wherein the fuel is supplied continuously or discontinuously to the pressure chamber, and wherein a closing throttle is designed in the pressure chamber between the valve needle (1) and the valve body (2). According to the invention, a fuel injector is provided, wherein the closing process of the valve needle (1) is optimized by a closing throttle that is improved over the prior art. This is achieved by designing the closing throttle on a circumferentially sealing collar (8, 8a) using at least one segment-shaped recess (9, 9a), and the collar (8, 8a) is part of the valve needle guide region (11).

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