

Title (en)
FUEL INJECTION NOZZLE

Title (de)
KRAFTSTOFFEINSPRITZDÜSE

Title (fr)
INJECTEUR DE CARBURANT

Publication
EP 1838960 B1 20100113 (DE)

Application
EP 05823534 A 20051121

Priority

- EP 2005056091 W 20051121
- DE 102004060550 A 20041216

Abstract (en)
[origin: WO2006063918A1] A fuel injection nozzle (1) for internal combustion engines comprises a nozzle base (2) having at least two injection orifices (11, 15), an outer injector needle (4) and an inner injector needle (5). The outer injector needle (4) is configured as a hollow needle and can be axially displaced in a bore (3) of the nozzle base (2) and controls injection of pressurized fuel through at least one first injection orifice (11). The inner injector needle (5) is coaxially guided in the outer injector needle (4) and controls injection of pressurized fuel through at least one second injection orifice (15). The inventive fuel injection nozzle is characterized by at least one axially displaceable piston (16) having a projection (22) that entrains the outer injector needle (4) in the opening direction thereof. The two injector needles (4, 5) can be displaced in relation to the piston (16) in the opening direction against the effect of a closing spring (8, 12). An actuator (18) comprises an actuating element (17) that can be axially displaced in relation to the piston (16).

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