

Title (en)
FUEL-INJECTION VALVE

Title (de)
KRAFTSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1727977 B1 20080319 (DE)

Application
EP 05701507 A 20050113

Priority
• EP 2005050122 W 20050113
• DE 102004011095 A 20040306

Abstract (en)
[origin: WO2005085624A1] The invention relates to a fuel-injection valve comprising a nozzle module (12). An outer nozzle needle (24), which co-operates with a first injection orifice (32) and is surrounded by a high-pressure chamber (20) that is connected to a fuel-supply channel (62) and an inner nozzle needle (26), which co-operates with at least one second injection orifice (34) and is guided in a channel that axially penetrates the outer nozzle needle (24), are configured in said module to be axially displaced. The fuel-injection valve also comprises a valve-type valve control module (12), which controls the fluid pressure prevailing in a valve control chamber (36) that is equipped with an input throttle (64) and an output throttle (68). The level of the fluid pressure defines the position of the outer nozzle needle (24) and the inner nozzle needle (26). The outer nozzle needle (24) has at least one transverse channel (46), via which fuel can be conducted from the high-pressure chamber (20) to the periphery and the inner pressure stage (50) of the inner nozzle needle (26).

IPC 8 full level
F02M 45/08 (2006.01); **F02M 47/02** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 45/086 (2013.01); **F02M 47/027** (2013.01); **F02M 63/0026** (2013.01); **F02M 2200/46** (2013.01)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005085624 A1 20050915; AT E389796 T1 20080415; DE 102004011095 A1 20050922; DE 502005003321 D1 20080430;
EP 1727977 A1 20061206; EP 1727977 B1 20080319

DOCDB simple family (application)
EP 2005050122 W 20050113; AT 05701507 T 20050113; DE 102004011095 A 20040306; DE 502005003321 T 20050113;
EP 05701507 A 20050113