Title (en)

INJECTOR FOR FUEL INJECTION SYSTEMS OF COMBUSTION ENGINES, PARTICULARLY DIRECT INJECTION DIESEL ENGINES

Title (de)

INJEKTOR FÜR KRAFTSTOFF-EINSPRITZSYSTEME VON BRENNKRAFTMASCHINEN, INSBESONDERE VON DIREKTEINSPRITZENDEN DIESELMOTOREN

Title (fr)

INJECTEUR POUR SYSTEMES D'INJECTION DE CARBURANT DE MOTEURS A COMBUSTION INTERNE, NOTAMMENT DE MOTEURS DIESEL A INJECTION DIRECTE

Publication

EP 1654453 A1 20060510 (DE)

Application

EP 04738750 A 20040622

Priority

- DE 2004001301 W 20040622
- DE 10336327 A 20030807

Abstract (en)

[origin: WO2005014995A1] An injector for fuel injection systems of combustion engines, particularly direct injection diesel engines, comprises a piezo actuator (16), which is placed inside an injector body (10) and which, via first spring means (35), is held in contact with the injector (10) and with a sleeve-like intensifier plunger (33). In addition, a nozzle body (20) is provided, which is connected to the injector body (10), has at least one nozzle discharge opening (26, 27), and inside of which a graduated (first) nozzle needle (21) is guided in an axially displaceable manner, and (second) spring means (54) are provided, which are placed inside the intensifier plunger (33) and which, together with the injection pressure acting on the rear side on the (first) nozzle needle (21), hold the (first) nozzle needle (21) in the closed position. In addition, the injector comprises an (outer) control space (47), which is formed at the nozzle needle-side end of the intensifier plunger (33), and which is connected, via at least one leakage gap, to a fuel supply (18) that is under injection pressure. The (first) nozzle needle (21) is displaced in the opening direction (36) by the fuel located inside the control space (47).

IPC 1-7

F02M 45/08; F02M 51/06; F02M 61/18

IPC 8 full level

F02M 45/08 (2006.01); **F02M 51/06** (2006.01); **F02M 61/18** (2006.01); F02M 63/00 (2006.01)

CPC (source: EP KR US)

F02M 45/086 (2013.01 - EP KR US); **F02M 51/0603** (2013.01 - EP KR US); **F02M 61/18** (2013.01 - EP KR US); F02M 2200/215 (2013.01 - EP KR US); F02M 2200/46 (2013.01 - EP KR US); F02M 2200/704 (2013.01 - EP KR US)

Citation (search report)

See references of WO 2005014995A1

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