

Title (en)
INJECTOR USED TO INJECT FUEL INTO INTERNAL COMBUSTION CHAMBERS IN INTERNAL COMBUSTION ENGINES, PARTICULARLY, A PIEZO-ACTUATOR CONTROLLED COMMON-RAIL-INJECTOR

Title (de)
INJEKTOR ZUR EINSPRITZUNG VON KRAFTSTOFF IN BRENNRÄUME VON BRENNKRAFTMASCHINEN, INSBESONDERE PIEZOAKTORGESTEUERTER COMMON-RAIL-INJEKTOR

Title (fr)
INJECTEUR DESTINE A L'INJECTION DE CARBURANT DANS LES CHAMBRES DE COMBUSTION DE MOTEURS A COMBUSTION INTERNE, NOTAMMENT INJECTEUR A PRESSION MODULEE (COMMON-RAIL) COMMANDE PAR UN ACTIONNEUR PIEZO-ELECTRIQUE

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Application
EP 04786749 A 20040909

Priority
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• DE 10353169 A 20031114

Abstract (en)
[origin: US2007170286A1] A common rail injector for an internal combustion engines has control means including a piezoelectric actuator deposited in an injector body and via at least one booster piston actuates a control valve received in a valve plate. Also provided are a nozzle body having a nozzle outlet on its free end toward the combustion chamber; a nozzle needle located axially movably and actuatably in a longitudinal recess of the nozzle body; a throttle disk, closing off the rear end (remote from the nozzle outlet) of the longitudinal recess and located between the nozzle body and the control valve, which throttle disk forms an opening stop for the nozzle needle and cooperates with the rear end face of the nozzle needle and thus limits the opening stroke of the nozzle needle; and a control chamber between the rear nozzle needle end face and the throttle disk, which chamber is in hydraulic communication with a pressure connection serving to deliver fuel. A substantial special feature is that a cylindrical retaining body is disposed in the injector body and receives the booster piston or pistons and the valve plate that contains the control valve.

IPC 8 full level
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CPC (source: EP KR US)
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