

Title (en)

FUEL SUPPLY SYSTEM FOR DIRECT-INJECTION INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFFVERSORGUNGSSYSTEM FÜR VERBRENNUNGSMOTOREN MIT DIREKTEINSPRITZUNG

Title (fr)

SYSTEME D'ALIMENTATION EN CARBURANT POUR MOTEURS A COMBUSTION A INJECTION DIRECTE

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Application

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Abstract (en)

[origin: WO2004059160A1] The invention relates to a fuel supply system (1) for direct-injection internal combustion engines, comprising a preliminary feed pump (4) and a high-pressure pump (6) which is mounted downstream therefrom and delivers the fuel from a fuel reservoir (2) to a parallel circuit that is mounted downstream of the high-pressure pump (6) and encompasses a plurality of injectors (13) or injection nozzles via a conduit system. A hydraulic transmission (9) which is connected in parallel to the high-pressure pump (6) and is designed so as to generate or maintain the high fuel pressure p2 required for the injection process during the starting phases or standstill phases of the internal combustion engine is disposed between the preliminary feed pump (4) and the plurality of injectors (13) or injection nozzles. The intake end of the preliminary feed pump (4) is connected to a fuel reservoir (2) via one conduit (3a) while the discharge end thereof is connected to the hydraulic transmission (9) via another conduit (3b) and to the high-pressure pump (6) via a branch conduit (5a).

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