

Title (en)

HIGH PRESSURE INJECTION SYSTEM HAVING FUEL COOLING FROM LOW PRESSURE REGION

Title (de)

HOCHDRUCK-EINSPRITZSYSTEM MIT KRAFTSTOFFKÜHLUNG AUS NIEDERDRUCKBEREICH

Title (fr)

SYSTÈME D'INJECTION À HAUTE PRESSION AVEC REFROIDISSEMENT PAR LE CARBURANT PROVENANT DE LA PARTIE BASSE PRESSION

Publication

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Application

EP 10722121 A 20100608

Priority

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Abstract (en)

[origin: WO2011012363A1] The invention relates to a high pressure injection system having a fuel tank, a connection line between the fuel tank and a high pressure pump for sealing the fuel, wherein the high pressure pump is connected to at least one fuel injection valve via a corresponding connection line. According to the invention, at least a partial volume of the fuel sealed in the high pressure pump is fed back to the fuel tank from said fuel injection valve by leakage in the fuel injection valve via a return line connected to the fuel tank. An essential characteristic of the invention is that the high pressure injection system comprises a cooling line that connects the fuel tank or the low pressure region to the high pressure or a return of the high pressure pump via a mixing point with the return line. It is thereby possible to cool the fuel in the return lines between the fuel injection valve and the fuel tank.

IPC 8 full level

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