

Title (en)
FUEL INJECTION PUMP FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
KRAFTSTOFFEINSPRITZPUMPE FÜR BRENNKRAFTMASCHINEN

Title (fr)
POMPE D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication
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Application
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Priority
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Abstract (en)
[origin: DE19713868A1] The present invention relates to a fuel injection pump having a distributor pump piston (6) placed in a bore provided in the housing. The surface of the pump casing presents a distribution groove (12), a filling groove (18) connected with a pressure relieving chamber and a pressure equalizing surface. Said pressure equalizing surface forms in the direction of the distribution groove (12) a first release path (39) and, in the direction of the ring groove (20), a second release path (42), so that the pressure equalizing surface, which otherwise is always closed by the inner wall (5) of the bore, ensures high pressure fuel feeding on the first release path (20) in the direction of the pressure equalizing surface (36), which in turn is unloaded on the second release path (42) in the direction of the ring groove (20). Since the pressure equalizing surface (36) is located at the end opposite the distributor groove, the forces acting upon the distributor pump piston are very efficiently balanced during the high pressure discharge phase, while the pressure feed on the aforementioned release paths enables such equalizing forces to be adjusted both to the corresponding pressure level and the strain of the distributor pump piston.

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