

Title (en)

RADIAL PISTON PUMP FOR FEEDING HIGH PRESSURE FUEL

Title (de)

RADIALKOLBENPUMPE ZUR KRAFTSTOFFHOCHDRUCKVERSORGUNG

Title (fr)

POMPE A PISTONS RADIAUX POUR ALIMENTATION EN CARBURANT SOUS HAUTE PRESSION

Publication

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Application

EP 98963344 A 19981112

Priority

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- DE 19753593 A 19971203

Abstract (en)

[origin: DE19753593A1] The invention relates to a radial piston pump for feeding high pressure fuel in fuel injection systems of internal combustion engines, more particularly in a common rail injection system, comprising a drive shaft (4) located in a pump housing (2) which has an eccentric configuration or has cam-like protuberances in the peripheral direction, and, preferably, several pistons (12) arranged radially in a corresponding cylinder chamber (18) in relation to the drive shaft (4), which can move back and forth in the radial direction in the corresponding cylinder chamber (18) by rotating the drive shaft (4). As part of the present invention, it was proven that the piston skirt in contact with the drive shaft (4) was damaged during operation. The invention has the aim of providing a radial piston pump, in which damages to the piston skirt are prevented. This is achieved by arranging a transverse force receiving device (9) between the piston (12) and the drive shaft (4). This provides the advantage that only forces in longitudinal direction are exerted on the pistons, which implies that practically no torque is exerted on the pistons.

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