

Title (en)

RADIAL PISTON PUMP FOR FUEL HIGH-PRESSURE SUPPLY

Title (de)

RADIALKOLBENPUMPE ZUR KRAFTSTOFFHOCHDRUCKVERSORGUNG

Title (fr)

POMPE A PISTON RADIAL POUR ALIMENTATION HAUTE PRESSION EN CARBURANT

Publication

EP 0925446 A1 19990630 (DE)

Application

EP 98941252 A 19980630

Priority

- DE 9801789 W 19980630
- DE 19729791 A 19970711

Abstract (en)

[origin: DE19729791A1] A radial piston pump for fuel high-pressure supply in fuel injection systems of internal combustion engines, in particular a common-rail injection system, has a driving shaft (4) which is mounted in a pump housing (2) and is eccentrically designed or has several cam-like projections around its circumference, and preferably several pistons (12, 132) radially arranged with respect to the driving shaft (4), each in its own cylinder chamber (18, 131), and movable back and forth in the cylinder chamber when the driving shaft (4) rotates. The radial piston pump also has an intake side and a high-pressure side check valve (34, 42, 124) and a component part (16, 134) with a passage (20) which forms the cylinder chamber (18, 131), a closure element (26, 110) being inserted into the outer end of the passage (20) in the radial direction. The check valve (34, 42, 124) on the intake side is integrated in the closure element (26, 110). In order to obtain a more compact radial piston pump, the closure element (26, 110) is closed in a pressure-tight manner with respect to the outside in the longitudinal direction of the passage (20) that forms the cylinder chamber and fuel is supplied to the check valve (34, 42, 124) on the intake side through a fuel supply inlet (50, 138) which extends substantially radially to the longitudinal direction in the component part (16, 134).

IPC 1-7

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Citation (search report)

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Cited by

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