

Title (en)  
PISTON PUMP FOR HIGH PRESSURE FUEL SUPPLY

Title (de)  
KOLBENPUMPE ZUR KRAFTSTOFFHOCHDRUCKVERSORGUNG

Title (fr)  
POMPE A PISTON POUR L'ALIMENTATION HAUTE PRESSION EN CARBURANT

Publication  
**EP 0925443 B1 20031015 (DE)**

Application  
**EP 98936263 A 19980630**

Priority  
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• DE 19729793 A 19970711

Abstract (en)  
[origin: DE19729793A1] The invention relates to a piston pump of the roller tappet type for high pressure fuel supply in fuel injection systems in internal combustion engines, particularly in a common rail injection system. The invention is characterized in that it has: a motor shaft (4), accommodated in a pump housing (2) and having several cam-like raised parts (8) around the periphery; at least one tappet (12) radially fitted, in relation to the motor shaft (4), in a cylinder chamber. The radially inner end (18) of the tappet (12) is fitted with a rotating roller (20), which rests against the motor shaft (4) in the region of its raised parts (8) in such a way that it can roll around the periphery. The invention seeks to reduce wear in the area of the roller accommodation. To this end, the pump is configured so that a lubricant supply opening (60, 82, 100), leading from the casing of the tappet (12, 70, 90), opens into the radially inner end (18) of the tappet accommodating the roller (20, 72, 92). At least during part of the stroke, this lubricant supply opening communicates with a lubricant supply duct (54, 56) in the housing (2), which duct opens into the cylinder chamber (16).

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Citation (examination)  
US 4325589 A 19820420 - HIRT MANFRED

Cited by  
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