Title (en)

HYDRAULIC RADIAL PISTON MOTOR

Title (de

RADIALKOLBENHYDRAULIKMOTOR

Title (fr)

MOTEUR HYDRAULIQUE A PISTONS RADIAUX

Publication

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Application

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Priority

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Abstract (en

[origin: FR2834012A1] The invention concerns a hydraulic radial piston motor comprising a cam, a cylinder block and a distributor. The cylinders of the cylinder block are connected to communication orifices (32A) located in a communication surface of the cylinder block, while the distributor has a distribution surface wherein are provided communication orifices (21A, 23A) adapted to communicate with the communication orifices to drive the motor in rotation. The cam has several lobes (50, 50') each having two ramps (51, 52), each ramp corresponding to a distribution orifice (21A, 23A). The edges of some communication orifices (32A) have each at least a recess (54A, 54B) designed to provide a small communication cross-section with a distribution orifice. The invention is particularly applicable to hydraulic radial piston motors for which the ratio between the number of cylinders and the number of cam lobes is close to 1.

[origin: FR2834012A1] The hydraulic motor comprises a cam and a cylinder block that rotate relative to one another, the cylinder block having radial cylinders connected by ducts to communication ports (32A, 32'A, 32A) in its communication face. The cylinders contain sliding pistons that interact with the cam, which has a series of lobes with inclined surfaces (50, 50'). The motor also has a distributor with distribution ports (21A, 23A) that link in sequence with the communication ports as the cylinder block and distributor rotate relative to one another, and the edges of at least some of the communication ports have notches (54A, 54B) to establish a small communication with the distribution ports.

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