

Title (en)
HYDRAULIC RADIAL PISTON MOTOR

Title (de)
RADIALKOLBENHYDRAULIKMOTOR

Title (fr)
MOTEUR HYDRAULIQUE A PISTONS RADIAUX

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Application
EP 02799840 A 20021220

Priority
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Abstract (en)
[origin: FR2834011A1] The invention concerns a hydraulic radial piston motor comprising a cam, a distributor and a cylinder block whereof the cylinders are connected to communication orifices located in a communicating surface of the cylinder block. The directional valve has a distribution surface wherein emerge distribution orifices adapted to communicate with the communication orifices during the relative rotation of the cylinder block and of the distributor. The cam has several lobes each including two ramps (50) having each a convex portion (51) and a concave portion (52). The edge of each distribution orifice has a leading portion (B1) through which the communication of said orifice with the communication orifices is opened, and a separating portion (B2) through which said communication is closed. The leading portion and the separating portion (B1, B2) of the edge of at least some distribution orifices (21A, 23A) have each an edge fitting (53A; 53B) comprising at least a recess (54A; 54B), said edge fittings being different depending on whether they are in angular correspondence with the convex zone (51) or the concave zone (52) of the cam ramp.
[origin: FR2834011A1] The hydraulic motor consists of a cam and a cylinder block turning relative to one another about an axis of rotation, radial cylinders connected by ducts to communication ports, and pistons sliding in the cylinders and interacting with the cam, which has a series of lobes with convex (51) and concave (52) sections. The motor also has a fluid distributor with a surface pressing against the communication face of the cylinder block and equipped with ports (21A, 23A) that link with the communication ports in sequence as the cylinder block and distributor rotate relative to one another. Each of the distribution ports has a leading portion (B1) and a separating portion (B2) with notches (54A, 54B) in at least certain of the portions to allow for the passage of a volume of compensating fluid between the communication and distribution ports.

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