

Title (en)
AXIAL-PISTON HYDRAULIC PUMP WITH INCLINED THRUST PLATE

Publication
EP 0220175 B1 19880713 (DE)

Application
EP 85902965 A 19850619

Priority
DE 3423467 A 19840626

Abstract (en)
[origin: WO8600377A1] The pump comprises a cylinder drum (20 converted to a shaft (1) and equipped with pistons (4) fitted in cylinders (3). The piston heads press against the oscillating plate (7) in such a way that the forces of the pistons do not produce only a useful torque on the cylinder drum (2), but also a radial transverse force (PK Res), the application point of which (10) is located in the axis of the shaft (1). The plane (13) of a bearing (12) supporting the drum (2) on the housing (8) intersects the axis (9) of the drum (1) at a certain distance from application point (10) of the transverse drum force (PKRes) on the side of the drum (2). The straight line (14) resulting from all the bearing forces acting perpendicularly on the guide path (15) of the bearing (12) forms a sharp angle (26) with the drum axis (9) and intersects the latter practically at the point of application (10) of the transverse force (PK Res), so that the bearing pressure of the drum takes effect in the region of this application point (10) and unwanted overturning torques acting on the drum are avoided.

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F04B 1/20

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