

Title (en)
Axial piston pump

Title (de)
Axialkolbenpumpe

Title (fr)
Pompe à pistons axiaux du type à axe brisé

Publication
EP 1167756 A1 20020102 (FR)

Application
EP 01401515 A 20010612

Priority
FR 0008482 A 20000630

Abstract (en)
The cranked axis axial piston pump has a split rotor concentrically aligned containing an outer drive element (8) and an inner barrel (3). This barrel (3) contains the axially aligned pistons (6) reciprocating in chambers whose face (4) is pressed against the port plate (2) by the effect of a compression spring (11). This configuration reduces friction and allows compensation between the mating faces of the port plate and the barrel. The cranked hydraulic pump with axial pistons (6) consists of a rotating barrel (3) with a central axis (X) co-operating with a distribution port plate (2) associated with a support surface (4) set at right angles to this axis (X). The barrel (3) has a series of axial drillings (5) in which are mounted in a sliding fashion the corresponding pistons (6). A drive (8) distinct from the barrel (3) is provided to rotate about the axis (X) which ensures on one part the centring and driving of the barrel (3) about the axis of rotation (X) and on the other part the reaction for a spring (11) pushing the support surface (4) of the barrel (3) against the port plate (2).

Abstract (fr)
L'invention concerne une pompe hydraulique à pistons (6) axiaux du type à axe brisé comportant un barillet rotatif (3) à axe central (X) coopérant avec une glace de distribution (2) associée selon une surface d'appui (4) sensiblement perpendiculaire à cet axe (X), ledit barillet (3) présentant une pluralité de perçages axiaux (5) dans lesquels sont montés coulissants les pistons (6) correspondants. Selon l'invention, un entraîneur (8) distinct du barillet (3) est prévu pour tourner selon un axe de rotation essentiellement confondu avec l'axe central (X), ledit entraîneur (8) assurant d'une part le centrage et l'entraînement en rotation du barillet (3) selon ledit axe de rotation (X), et d'autre part l'appui d'un moyen élastique (11) pressant la surface d'appui (4) du barillet (3) contre la glace de distribution. <IMAGE>

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• FR 1456563 A 19660708
• NL 248888 A

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