

Title (en)

AXIAL PISTON ENGINE WITH INCLINED AXES HAVING SLIDING SHOES IN THE DRIVE FLANGE

Title (de)

AXIALKOLBENMASCHINE IN SCHRÄGACHSENBAUWEISE MIT GLEITSCHUHEN IM TRIEBFLANSCH

Title (fr)

MACHINE À PISTON AXIAL DANS UNE CONSTRUCTION À AXE OBLIQUE AVEC PATINS DE GUIDAGE DANS LE PLATEAU D'ENTRAÎNEMENT

Publication

EP 2930360 A3 20151104 (DE)

Application

EP 15160552 A 20150324

Priority

DE 102014104952 A 20140408

Abstract (en)

[origin: US2015285076A1] A hydrostatic axial piston machine (1) utilizing a bent-axis construction has a driveshaft (4) with a drive flange (3) rotatable around an axis of rotation (Rt) inside a housing (2). A cylinder barrel (7) has pistons (10) fastened in an articulated manner to the drive flange (3). The drive flange (3) is supported on a housing-side slide face (101) by an axial bearing (100) in the form of a hydrostatically relieved sliding bearing (102) having a plurality of slippers (105). Each of the slippers (105) is mounted in an articulated manner in the drive flange (3) so that when the drive flange (3) rotates, a compensating force (FFR) acts on the slipper (105) which is in the opposite direction to the centrifugal force (FF) acting on the slipper (105). The point of application (AP) of the compensating force (FFR) on the slipper (105) is selected so that there is no tipping moment on the slipper (105) or to compensate for some or all of any tipping moment that does occur.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [Y] EP 2050957 A1 20090422 - LINDE MATERIAL HOLDING GMBH [DE]
- [A] DE 3725979 A1 19880331 - KARL MARX STADT IND WERKE [DD]
- [A] US 5381724 A 19950117 - KAWAHARA EIICHIRO [JP], et al

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CH716310A1; WO2020249682A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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