

Title (en)

HYDRAULIC DEVICE WITH RADIAL PISTONS COMPRISING AT LEAST ONE BALL BEARING

Title (de)

HYDRAULISCHE VORRICHTUNG MIT RADIALKOLBEN MIT MINDESTENS EINEM KUGELLAGER

Title (fr)

APPAREIL HYDRAULIQUE A PISTONS RADIAUX COMPRENANT AU MOINS UN ROULEMENT A BILLES

Publication

**EP 3234359 A1 20171025 (FR)**

Application

**EP 15820105 A 20151217**

Priority

- FR 1462670 A 20141217
- EP 2015080353 W 20151217

Abstract (en)

[origin: WO2016097216A1] The present invention relates to a hydraulic device (10) with radial pistons, comprising: - a shaft (12) arranged along an axis (11); - a cover (13) forming a casing element, the cover and the shaft being free to rotate with respect to one another; - a distribution assembly comprising: - a multi-lobe cam (14); - a cylinder block (15); - a distributor (16) configured to exert a thrust force (P) against the cylinder block (15) along the axis (11) of the shaft; - an assembly (22) of mechanical bearings comprising at least one mechanical bearing (22a) mounted in radial contact between the cover (13) and shaft (12), said assembly being configured to take up the thrust force (P) exerted by the distributor (16); and - a straight contact ball bearing mounted in radial contact between the cover (13) and the shaft (12).

IPC 8 full level

**F04B 1/04** (2006.01); **F03C 1/04** (2006.01); **F03C 1/047** (2006.01); **F03C 1/34** (2006.01); **F04B 1/047** (2006.01); **F04B 1/107** (2006.01)

CPC (source: CN EP US)

**F03C 1/002** (2013.01 - US); **F03C 1/0403** (2013.01 - CN EP US); **F03C 1/0435** (2013.01 - CN EP US); **F03C 1/0472** (2013.01 - CN EP US); **F04B 1/0404** (2013.01 - CN EP US); **F04B 1/047** (2013.01 - CN EP US); **F04B 1/107** (2013.01 - CN EP US); **F04B 53/162** (2013.01 - US)

Citation (search report)

See references of WO 2016097216A1

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)

**WO 2016097216 A1 20160623**; CN 107429674 A 20171201; CN 107429674 B 20200428; EP 3234359 A1 20171025; EP 3234359 B1 20190710; FR 3030645 A1 20160624; FR 3030645 B1 20191011; US 10578084 B2 20200303; US 2017335831 A1 20171123

DOCDB simple family (application)

**EP 2015080353 W 20151217**; CN 201580076198 A 20151217; EP 15820105 A 20151217; FR 1462670 A 20141217; US 201515536108 A 20151217