

Title (en)

Hydraulic machine, in particular a hydraulic pressure exchanger

Title (de)

Hydraulikmaschine, insbesondere Hydraulikdruckaustauscher

Title (fr)

Machine hydraulique, en particulier un échangeur de pression hydraulique

Publication

**EP 3020968 A1 20160518 (EN)**

Application

**EP 14193210 A 20141114**

Priority

EP 14193210 A 20141114

Abstract (en)

A hydraulic machine, in particular hydraulic pressure exchanger, is provided comprising a drum having a first end face and a second end face and being rotatable about an axis, said drum comprising at least a cylinder (4), a piston (15) being arranged in said cylinder (4), said piston (15) being moveable in a first moving direction and in a second moving direction opposite to said first moving direction, said piston dividing said cylinder in a first section opening in said first end face and a second section opening in said second end face. Such hydraulic pressure exchanger should be operated with a low noise. To this end braking means are provided for at least of said moving directions, said braking means braking said piston (15) before reaching an end stop.

IPC 8 full level

**F04B 1/20** (2006.01); **F04B 9/117** (2006.01); **F04F 13/00** (2009.01)

CPC (source: CN EP)

**F04B 1/20** (2013.01 - EP); **F04B 9/1172** (2013.01 - EP); **F04F 13/00** (2013.01 - EP); **F15B 15/1404** (2013.01 - CN); **F15B 15/1409** (2013.01 - CN); **F15B 15/1414** (2013.01 - CN); **F15B 15/1423** (2013.01 - CN); **F15B 15/22** (2013.01 - CN); **F15B 21/008** (2013.01 - CN)

Citation (applicant)

EP 1508361 A1 20050223 - DANFOSS AS [DK]

Citation (search report)

- [X] WO 9119094 A1 19911212 - ABB MINERAL SLURRY TRANSPORT [AU]
- [AD] EP 1508361 A1 20050223 - DANFOSS AS [DK]
- [A] DE 102011117081 A1 20130502 - BOSCH GMBH ROBERT [DE]

Cited by

US2023020630A1; EP4130492A1; EP4036421A1; CN114810684A; US11920573B2

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)

**EP 3020968 A1 20160518; EP 3020968 B1 20160824; CN 105605024 A 20160525**

DOCDB simple family (application)

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