

Title (en)
Hydraulic machine, in particular hydraulic pressure exchanger

Title (de)
Hydraulikmaschine, insbesondere Hydraulikdruckaustauscher

Title (fr)
Machine hydraulique, en particulier échangeur de pression hydraulique

Publication
EP 2837825 A1 20150218 (EN)

Application
EP 13180511 A 20130815

Priority
EP 13180511 A 20130815

Abstract (en)
A hydraulic machine, in particular hydraulic pressure exchanger, is provided comprising a drum rotatable about a rotational axis, a first front plate arrangement at a first front face of said drum, a second front plate arrangement at a second front face of said drum, said drum comprising a plurality of cylinders, said first front plate arrangement comprising a first front plate and a pressure shoe (8), said first front plate comprising at least a high pressure supply port. Such a pressure exchanger should have a simple construction. To this end the pressure shoe (8) comprises at least a pressure cylinder (14), said pressure cylinder (14) opening to said first front plate, a piston (17) being arranged in said pressure cylinder (14), said pressure cylinder (14) being in fluid contact with said high pressure supply port.

IPC 8 full level
F04B 9/117 (2006.01); **F04F 13/00** (2009.01)

CPC (source: EP US)
F01B 3/0041 (2013.01 - EP US); **F04B 1/20** (2013.01 - US); **F04B 1/24** (2013.01 - US); **F04B 7/0023** (2013.01 - US); **F04B 9/109** (2013.01 - US); **F04B 9/117** (2013.01 - US); **F04B 9/1176** (2013.01 - EP US); **F04F 13/00** (2013.01 - EP US)

Citation (applicant)
EP 1508361 A1 20050223 - DANFOSS AS [DK]

Citation (search report)
• [AD] EP 1508361 A1 20050223 - DANFOSS AS [DK]
• [A] US 7799221 B1 20100921 - MACHARG JOHN P [US]
• [A] EP 2078867 A1 20090715 - GRUNDFOS MANAGEMENT AS [DK]
• [A] DE 1528525 A1 19700924 - ROLLS ROYCE
• [A] US 3431747 A 19690311 - HASHEMI HADI T, et al
• [A] EP 1108461 A2 20010620 - CALDER LTD [GB]

Cited by
EP4036421A1; 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)
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DOCDB simple family (publication)
EP 2837825 A1 20150218; EP 2837825 B1 20160210; CN 104373313 A 20150225; CN 104373313 B 20160824; US 2015050163 A1 20150219

DOCDB simple family (application)
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