

Title (en)
HYDRAULIC PUMP WITH DOUBLE DIRECTION OF ROTATION

Title (de)
HYDRAULISCHE PUMPE MIT DOPPELTER DREHRICHTUNG

Title (fr)
POMPE HYDRAULIQUE A DOUBLE SENS DE ROTATION

Publication
EP 2981720 A1 20160210 (FR)

Application
EP 14719055 A 20140327

Priority
• FR 1353027 A 20130404
• FR 2014050729 W 20140327

Abstract (en)
[origin: WO2014162083A1] A hydraulic pump with double direction of rotation comprises axial pistons bearing against a swash plate, the pump comprising a cylinder head comprising two chambers intended to be connected respectively to a high-pressure circuit and to a low-pressure circuit. The port plate (3) produced in the form of a planar plate arranged between the rotating drum and the cylinder head has two identical openings (22, 23) passing through the thickness of the planar plate. The port plate pivots about an axis (21) in such a way as to be able to occupy two angular positions depending on the direction of rotation of the pump. The pump comprises a device (38, 39) for hydraulically controlling the angular position of the port plate, capable of automatically causing a change in the angular position of the port plate, when the direction of rotation of the pump is reversed, under the effect of the pressure differential between the two chambers of the cylinder head.

IPC 8 full level
F04B 1/20 (2006.01); **F03C 1/06** (2006.01); **F03C 1/34** (2006.01); **F03C 1/40** (2006.01); **F04B 1/30** (2006.01); **F04B 1/32** (2006.01)

CPC (source: EP US)
F03C 1/0636 (2013.01 - EP US); **F03C 1/0647** (2013.01 - EP US); **F03C 1/0655** (2013.01 - EP US); **F03C 1/0686** (2013.01 - EP US); **F04B 1/20** (2013.01 - EP US); **F04B 1/2021** (2013.01 - EP US); **F04B 1/2042** (2013.01 - EP US); **F04B 1/303** (2013.01 - EP US); **F04B 1/324** (2013.01 - EP US)

Citation (search report)
See references of WO 2014162083A1

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 2014162083 A1 20141009; EP 2981720 A1 20160210; FR 3004224 A1 20141010; US 2016025081 A1 20160128

DOCDB simple family (application)
FR 2014050729 W 20140327; EP 14719055 A 20140327; FR 1353027 A 20130404; US 201414782173 A 20140327