

Title (en)
Hydraulic pump with axial pistons which can operate in both directions

Title (de)
Hydraulische Pumpe mit Axialkolben, die in beide Richtungen funktionieren

Title (fr)
Pompe hydraulique à pistons axiaux pouvant fonctionner dans les deux sens

Publication
EP 2674622 A3 20140115 (FR)

Application
EP 13170973 A 20130607

Priority
FR 1255552 A 20120614

Abstract (en)
[origin: EP2674622A2] The pump has two swashplates (101, 102) borne by a common drive shaft (100). Respective hollow pistons (103) press against each swashplate via an intermediary of a slipper shoe (105), and slide in respective cylinders connected to a casing. Supply crescents of the swashplates pass over the pistons during a suction phase of the pistons. The cylinders are fitted with a check valve (108) on a discharge side such that the first swashplate provides an output when the shaft rotates along a first direction and the second swashplate provides an output when the shaft rotates along a second direction. The cylinders are hydraulic slave cylinders or double-acting hydraulic cylinders. The swashplates are inclined swashplates.

IPC 8 full level
F04B 1/14 (2006.01); **F04B 1/16** (2006.01); **F04B 7/00** (2006.01)

CPC (source: EP US)
F04B 1/141 (2013.01 - EP US); **F04B 1/16** (2013.01 - EP US); **F04B 7/0057** (2013.01 - EP US); **F04B 9/04** (2013.01 - US)

Citation (search report)

- [A] FR 1162272 A 19580910
- [A] US 2545929 A 19510320 - ORSHANSKY JR ELIAS
- [A] GB 851701 A 19601019 - NEW PATENTS LTD, et al

Cited by
FR3129137A1; WO2023083813A1; CN103967731A

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 2674622 A2 20131218; EP 2674622 A3 20140115; EP 2674622 B1 20150930; FR 2992034 A1 20131220; FR 2992034 B1 20140718; US 2013336815 A1 20131219

DOCDB simple family (application)
EP 13170973 A 20130607; FR 1255552 A 20120614; US 201313905962 A 20130530