

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 B1 20150930 (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)

Cited by

FR3129137A1; WO2023083813A1; CN103967731A

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