

Title (en)
VARIABLE CAPACITY VANE PUMP

Title (de)
FLÜGELZELLENPUMPE MIT VARIABLER KAPAZITÄT

Title (fr)
POMPE À PALETTES À CAPACITÉ VARIABLE

Publication
EP 3225847 A4 20180718 (EN)

Application
EP 15863924 A 20151124

Priority

- JP 2014239200 A 20141126
- JP 2015082937 W 20151124

Abstract (en)
[origin: EP3225847A1] A variable displacement vane pump 100 includes: a restrictor 37 configured to impart resistance to flow of working fluid discharged from the pump chambers 11; a control valve 27 configured to introduce the working fluid which is discharged from the pump chambers to the first fluid pressure chamber as a differential pressure between upstream and downstream of the restrictor is increased, the control valve being configured to discharge the working fluid in the first fluid pressure chamber as the differential pressure between upstream and downstream of the restrictor is reduced; a suction passage 22 configured to guide the working fluid to be sucked into the pump chambers 11, the suction passage 22 being configured to always communicate with the second fluid pressure chamber 17; and a guiding passage 36 configured to allow communication between the control valve 27 and the second fluid pressure chamber 17, the guiding passage 36 being configured to guide the working fluid, which is discharged from the first fluid pressure chamber 16 to the control valve 27, to the second fluid pressure chamber 17.

IPC 8 full level
F04C 14/22 (2006.01); **F04C 2/344** (2006.01)

CPC (source: EP US)
F04C 2/344 (2013.01 - US); **F04C 2/3442** (2013.01 - EP US); **F04C 14/223** (2013.01 - EP US); **F04C 14/24** (2013.01 - US);
F04C 2210/206 (2013.01 - EP US)

Citation (search report)

- [A] WO 2013141129 A1 20130926 - KAYABA INDUSTRY CO LTD [JP] & US 2015044083 A1 20150212 - AKATSUKA KOICHIRO [JP], et al
- See references of WO 2016084804A1

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

DOCDB simple family (publication)
EP 3225847 A1 20171004; EP 3225847 A4 20180718; CN 107002672 A 20170801; JP 2016098802 A 20160530; JP 6375212 B2 20180815;
US 2017321696 A1 20171109; WO 2016084804 A1 20160602

DOCDB simple family (application)
EP 15863924 A 20151124; CN 201580061546 A 20151124; JP 2014239200 A 20141126; JP 2015082937 W 20151124;
US 201515525385 A 20151124