

Title (en)
VANE PUMP

Title (de)
FLÜGELZELLENPUMPE

Title (fr)
POMPE À PALETTES

Publication
EP 3358187 A1 20180808 (EN)

Application
EP 16851026 A 20160902

Priority
• JP 2015191667 A 20150929
• JP 2016075860 W 20160902

Abstract (en)
A vane pump 100 includes: the rotor 2 that is linked to the driving shaft 1; the plurality of slits 7 that are formed in the rotor 2 in a radiating pattern and have opening in the outer circumference of the rotor 2; the plurality of vanes 3 that are respectively inserted into the plurality of slits 7 in a slideable manner; the cam ring 4 that has the cam face 4a on which the tip-ends of the vanes 3 slide by the rotation of the rotor 2; and the pump chambers 6 that are defined by the rotor 2, the cam ring 4, and a pair of adjacent vanes 3. The plurality of vanes 3 have the plurality of first vanes 3a that are formed by applying the DLC coating on the base material and the second vanes 3b that are formed such that the base material is exposed, and the first vanes 3a are respectively inserted into at least two adjacent slits 7 of the plurality of slits 7.

IPC 8 full level
F04C 2/344 (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)
F01C 21/0809 (2013.01 - EP); **F01C 21/0863** (2013.01 - EP); **F01C 21/0881** (2013.01 - US); **F04C 2/344** (2013.01 - US);
F04C 2/3446 (2013.01 - EP); **F04C 15/00** (2013.01 - US); **F04C 15/0023** (2013.01 - US); **F04C 2230/91** (2013.01 - EP);
F04C 2270/701 (2013.01 - EP); **F05C 2203/0808** (2013.01 - EP)

Citation (search report)
See references of WO 2017056850A1

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 3358187 A1 20180808; CN 108026921 A 20180511; JP 2017066937 A 20170406; JP 6480841 B2 20190313; MX 2018003766 A 20180706;
US 2018306182 A1 20181025; WO 2017056850 A1 20170406

DOCDB simple family (application)
EP 16851026 A 20160902; CN 201680054620 A 20160902; JP 2015191667 A 20150929; JP 2016075860 W 20160902;
MX 2018003766 A 20160902; US 201615763833 A 20160902