

Title (en)  
CARTRIDGE-TYPE VANE PUMP

Title (de)  
FLÜGELZELLENPUMPE VOM KARTUSCHENTYP

Title (fr)  
POMPE À PALETTES DU TYPE CARTOUCHE

Publication  
**EP 3351799 A1 20180725 (EN)**

Application  
**EP 16846357 A 20160908**

Priority  
• JP 2015185588 A 20150918  
• JP 2016076380 W 20160908

Abstract (en)  
The cartridge vane pump (100) includes a first connection channel (41a) that connects a first discharge port (7a) and a first discharge channel (93a) and a second connection channel (41b) that connects a second discharge port (7b) and a second discharge channel (93b). An O-ring (82) is provided on an outer circumference of a circular tube portion (40c), the O-ring (82) blocks communication between the first connection channel (41a) and the second connection channel (41b).

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

CPC (source: EP US)  
**F04C 2/344** (2013.01 - US); **F04C 2/3446** (2013.01 - EP US); **F04C 15/00** (2013.01 - US); **F04C 15/0073** (2013.01 - EP); **F04C 15/06** (2013.01 - EP); **F04C 2240/10** (2013.01 - US); **F04C 2240/20** (2013.01 - US); **F04C 2240/30** (2013.01 - US)

Citation (search report)  
See references of WO 2017047486A1

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 3351799 A1 20180725**; CN 107923392 A 20180417; JP 2017057834 A 20170323; JP 6574363 B2 20190911; MX 2018003378 A 20180530; US 2018283373 A1 20181004; WO 2017047486 A1 20170323

DOCDB simple family (application)  
**EP 16846357 A 20160908**; CN 201680050952 A 20160908; JP 2015185588 A 20150918; JP 2016076380 W 20160908; MX 2018003378 A 20160908; US 201615758230 A 20160908