

Title (en)  
VANE PUMP WITH MULTIPLE CONTROL CHAMBERS

Title (de)  
FLÜGELZELLENPUMPE MIT MEHREREN KONTROLLKAMMERN

Title (fr)  
POMPE À PALETTES AYANT DE MULTIPLES CHAMBRES DE COMMANDE

Publication  
**EP 2971779 A1 20160120 (EN)**

Application  
**EP 14763782 A 20140306**

Priority  
• US 201313800227 A 20130313  
• IB 2014059506 W 20140306

Abstract (en)  
[origin: WO2014141013A1] A variable capacity vane pump includes a first control chamber between a pump casing and a first portion of a pump control ring. The first portion of the control ring circumferentially extends on either side of a pivot pin. A second control chamber is provided between the pump casing and a second portion of the pump control ring. The first and second control chambers are operable to receive pressurized fluid to create a force to move the pump control ring to reduce the volumetric capacity of the pump. A return spring biases the pump ring toward a position of maximum volumetric capacity.

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

CPC (source: EP)  
**F04C 2/344** (2013.01); **F04C 14/226** (2013.01); **F04C 15/0034** (2013.01)

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)  
**WO 2014141013 A1 20140918**; CA 2902472 A1 20140918; CA 2902472 C 20181002; CA 3014939 A1 20140918; CA 3014939 C 20200714; CN 105074217 A 20151118; CN 105074217 B 20170315; EP 2971779 A1 20160120; EP 2971779 A4 20161207; EP 2971779 B1 20200805; JP 2016510102 A 20160404; JP 6130525 B2 20170517; KR 101789899 B1 20171025; KR 20150128866 A 20151118; MX 2015012591 A 20160120; MX 365215 B 20190527

DOCDB simple family (application)  
**IB 2014059506 W 20140306**; CA 2902472 A 20140306; CA 3014939 A 20140306; CN 201480013705 A 20140306; EP 14763782 A 20140306; JP 2015562455 A 20140306; KR 20157027875 A 20140306; MX 2015012591 A 20140306