

Title (en)
POSITIVE DISPLACEMENT PUMP

Title (de)
VERDRÄNGERPUMPE

Title (fr)
POMPE VOLUMÉTRIQUE

Publication
EP 2499371 A2 20120919 (DE)

Application
EP 10771702 A 20101019

Priority
• DE 102009046516 A 20091109
• EP 2010065678 W 20101019

Abstract (en)
[origin: WO2011054660A2] The invention relates to a positive displacement pump having a variable delivery volume, in particular a vane pump, comprising a housing, a cover plate and a annular circumferential flange extending in the longitudinal axial direction of the pump, an outer ring being introduced in the interior space of said flange which supports a rotor set, substantially consisting of a rotor, rotor elements and a cam ring. The rotor is enclosed by the cam ring. Delimited working chambers are formed between the rotor and the cam ring by means of the rotor elements, the volume of said chambers being adjustable by varying the eccentricity between the rotor and the cam ring. Pressure chambers are formed between an outer circumferential surface of the cam ring and the outer ring, which can be pressurized to displace the cam ring. A control piston is provided for pressurization, which is connected to the pressure chambers by means of associated control bores. The control bores run at least approximately axially in the cover plate radially within the circumferential flange of the housing and extend through a face plate, which is arranged axially in front of the rotor set in the interior, into the pressure chambers.

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

CPC (source: EP US)
F04C 2/3442 (2013.01 - EP US); **F04C 14/226** (2013.01 - EP US); **F04C 2240/30** (2013.01 - EP US)

Citation (search report)
See references of WO 2011054660A2

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)
DE 102009046516 A1 20110512; CN 102667160 A 20120912; EP 2499371 A2 20120919; US 2012257962 A1 20121011;
WO 2011054660 A2 20110512; WO 2011054660 A3 20111110

DOCDB simple family (application)
DE 102009046516 A 20091109; CN 201080057372 A 20101019; EP 10771702 A 20101019; EP 2010065678 W 20101019;
US 201213467321 A 20120509