

Title (en)
SINGLE VANE PUMP

Title (de)
EINFLÜGELPUMPE

Title (fr)
POMPE À UNE SEULE PALETTE

Publication
EP 2430290 A2 20120321 (EN)

Application
EP 10732421 A 20100512

Priority
• IB 2010001097 W 20100512
• IT MI20090821 A 20090513

Abstract (en)
[origin: WO2010131103A2] The invention relates to a single-vane pump comprising a stator (11), a first rotor (13) mounted in the chamber (20) of the stator and capable of rotating around an axis (M-M) and a vane (12) slidably mounted in a diametric groove (30) of the rotor (13) and having a rectilinear portion (26) having a predetermined length (L) and opposite free ends (22, 24) in contact with a perimetric surface (lib) of the chamber (20). A second rotor (14) is mounted in the chamber (20) and is capable of rotating around an axis (O-O) which is parallel to the axis (M-M). The vane (12) is pivoted to the rotor (14), at a longitudinal middle area thereof, on an axis (P-P) parallel to the axis (M-M). The distance between the axis (M-M) and the axis (O-O) and between the axis (P-P) and the axis (O-O) is equal to a fourth of the length (L) of the rectilinear portion (26) of the vane (12). The perimetric surface (lib) of the chamber (20) has, in a plane perpendicular to the axis (M-M), a cardioid shape that coincides with the cardioid defined by the ends (22, 24) of the vane (12) during the rotation of the rotors (13, 14).

IPC 8 full level
F01C 21/08 (2006.01); **F04C 2/344** (2006.01)

CPC (source: EP)
F01C 21/0836 (2013.01); **F04C 2/3441** (2013.01)

Citation (search report)
See references of WO 2010131103A2

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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2010131103 A2 20101118; WO 2010131103 A3 20110317; EP 2430290 A2 20120321; EP 2430290 B1 20190626; IT 1399349 B1 20130416; IT MI20090821 A1 20101114

DOCDB simple family (application)
IB 2010001097 W 20100512; EP 10732421 A 20100512; IT MI20090821 A 20090513