

Title (en)

ROTARY PISTON PUMP COMPRISING A PUMP HOUSING AND TWO DOUBLE-BLADED ROTARY PISTONS

Title (de)

DREHKOLBENPUMPE MIT EINEM PUMPENGEHÄUSE UND ZWEI ZWEIFLÜGELIGEN DREHKOLBEN

Title (fr)

POMPE À PISTONS ROTATIFS COMPORTANT UN CARTER ET DEUX PISTONS ROTATIFS À DEUX PALES

Publication

EP 1797327 B1 20081231 (DE)

Application

EP 05783062 A 20050802

Priority

- EP 2005008348 W 20050802
- DE 102004037995 A 20040805
- DE 102005017575 A 20050416

Abstract (en)

[origin: WO2006015766A1] The invention relates to a rotary piston pump (1) comprising a medium inlet (11), a medium outlet (11"), and two rotary pistons (2). Each rotary piston (2) has an outer contour with a constant radius R around the axis (20) thereof, in two opposing peripheral regions (21), respectively over a peripheral angular region α , and, in the other peripheral regions (22), respectively a continuous contour with radii which are measured from the axis (20) and are shorter than the radius R. The rotary pistons (2) are helicoidal, respectively one front side of each rotary piston (2) being rotated in relation to the other front side by a rotary angle β . The medium inlet (11) and the medium outlet (11") have a rectangular cross-section with two axially parallel edges (11.1, 11.2, 11.1", 11.2") and two edges (11.3, 11.3') extending at right angles to said parallel edges. The angles α and β are measured and adapted to each other in such a way that an imaginary sealing line (21') extending parallel to the respective axis (20) extends over the entire axial length of each rotary piston (2) inside the peripheral region (21) thereof with the outer contour and constant radius R.

IPC 8 full level

F04C 2/12 (2006.01); **F04C 2/08** (2006.01)

CPC (source: EP US)

F04C 2/084 (2013.01 - EP US); **F04C 2/126** (2013.01 - EP US); **F04C 18/16** (2013.01 - EP US)

Cited by

DE102022120550A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006015766 A1 20060216; AT E419464 T1 20090115; DE 102005017575 A1 20060316; DE 502005006392 D1 20090212; EP 1797327 A1 20070620; EP 1797327 B1 20081231; US 2009123319 A1 20090514

DOCDB simple family (application)

EP 2005008348 W 20050802; AT 05783062 T 20050802; DE 102005017575 A 20050416; DE 502005006392 T 20050802; EP 05783062 A 20050802; US 65912805 A 20050802