

Title (en)  
ROTARY PUMP

Title (de)  
ROTATIONSPUMPE

Title (fr)  
POMPE ROTATIVE

Publication  
**EP 3550148 A1 20191009 (EN)**

Application  
**EP 18382236 A 20180406**

Priority  
EP 18382236 A 20180406

Abstract (en)  
The rotary pump (1) comprises a driving element (4) housed in a rotor housing (31). The driving element (4) comprises a contact portion (41) comprising an spherical zone and at least one lateral driving protrusion (42) extending from spherical zone along a direction (X, Y) orthogonal to Z axis for transmitting a rotary movement to the rotor (3) around a rotational axis Z. The rotor housing (31) comprises a central recess (32) having a diameter for accommodating the contact portion (41) and at least one lateral cavity (33) intended to house the at least one lateral driving protrusion (42), such that the contact portion (41) and the central recess (32) are slidably engageable to each other for compensating angular misalignments between the Z axis and an axis orthogonal to the rotor bottom base when the rotor bottom base is resting on the chamber base and such that the at least one lateral cavity (33) is configured to allow a relative angular movement, around any direction orthogonal to Z axis, between the at least one lateral driving protrusion (42) and the at least one lateral cavity (33) required by the sliding between the central recess (32) and the contact portion (41), to keep the bottom base of the rotor (3) resting on the chamber base (21) but movable around Z axis by the pushing of the at least one lateral driving protrusion (42) against the lateral cavity (33).

IPC 8 full level  
**F04C 29/00** (2006.01); **F04C 15/00** (2006.01); **F04C 18/344** (2006.01)

CPC (source: CN EP)  
**F04C 2/3441** (2013.01 - CN); **F04C 11/00** (2013.01 - CN); **F04C 15/00** (2013.01 - CN); **F04C 15/0073** (2013.01 - EP);  
**F04C 18/3441** (2013.01 - EP); **F04C 29/0071** (2013.01 - EP); **F04C 29/0078** (2013.01 - EP); **F04C 29/0085** (2013.01 - EP);  
**F04C 2240/20** (2013.01 - CN EP); **F04C 2240/60** (2013.01 - EP)

Citation (search report)  
• [XI] US 3113527 A 19631210 - LEO KRAMER  
• [X] US 1526356 A 19250217 - ARNULPH MALLOCK HENRY REGINALD  
• [X] US 1685815 A 19281002 - JENNINGS IRVING C  
• [XI] WO 2014086338 A1 20140612 - IXETIC BAD HOMBURG GMBH [DE]

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 3550148 A1 20191009**; CN 110345066 A 20191018; WO 2019193127 A1 20191010

DOCDB simple family (application)  
**EP 18382236 A 20180406**; CN 201810734858 A 20180706; EP 2019058571 W 20190404