

Title (en)
ROTARY FLUID PUMP

Title (de)
ROTATIONSFLÜSSIGKEITSPUMPE

Title (fr)
POMPE À FLUIDE ROTATIVE

Publication
EP 3158196 B1 20190807 (EN)

Application
EP 15741341 A 20150623

Priority
• IT TO20140500 A 20140623
• IT TO20150223 A 20150422
• IB 2015054705 W 20150623

Abstract (en)
[origin: WO2015198224A1] Fluid pump (10) comprising a hollow body (100) in which a stator (101) and an external rotor (106) of an electric motor are mounted. The external rotor (106) is rotatably mounted about a main axis (X-X) and has an internal cavity (25) connected to an inlet port (114) and an outlet port (115) arranged to allow the inflow of a fluid into said internal cavity (25) and the outflow of said fluid from said internal cavity (25), respectively, an internal rotor (111) rotatably mounted in the internal cavity (25) so as to be free to rotate about a secondary axis (Y-Y), a vane (109) slidably guided in a slot (110) which is formed in the internal rotor (111) so as to pass through said rotor in a through manner and has a first end and a second end, wherein the first end is provided at a pivot (108). The internal rotor (111) and the vane (109) cooperate in such a way as to divide in a cyclic and fluid-tight manner said internal cavity (25) at least into a first chamber with variable volume and a second chamber with variable volume, said chambers communicating with said inlet port (114) and said outlet port (115), respectively. The pivot (108) is oscillatably mounted in the external rotor (106) so that the external rotor (106), by rotating about its main axis (X-X), entrains in its movement said pivot (108) of the vane (109) and the internal rotor (111), which is brought into rotation by the vane (109) and rotates idly about its secondary axis (Y-Y).

IPC 8 full level
F04C 2/344 (2006.01); **F04C 18/32** (2006.01); **F04C 18/344** (2006.01)

CPC (source: EP)
F04C 2/3442 (2013.01); **F04C 18/322** (2013.01); **F04C 18/3441** (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

DOCDB simple family (publication)
WO 2015198224 A1 20151230; EP 3158196 A1 20170426; EP 3158196 B1 20190807

DOCDB simple family (application)
IB 2015054705 W 20150623; EP 15741341 A 20150623