

Title (en)
Centrifugal pump with axially shiftable and closable impeller

Title (de)
Kreiselpumpe mit axial verschiebbarem, schliessbarem Laufrad

Title (fr)
Pompe centrifuge avec roue à aubes déplaçable axialement et obturable

Publication
EP 2818725 B1 20170913 (DE)

Application
EP 13174142 A 20130627

Priority
EP 13174142 A 20130627

Abstract (en)
[origin: WO2014207030A1] The invention relates to a rotary pump apparatus with an electric drive motor (2) and with at least one rotor (10; 10') which is movable in an axial direction (X) between at least two functional positions, wherein, in one functional position, a flow path through the rotor (10; 10') is substantially closed, and in another functional position, the flow path through the rotor (10; 10') is open, wherein the rotor (10; 10') is held in a first functional position by a magnetic force (FM) or a spring force and is held in a second functional position by a hydraulic force (FH) generated by a delivered fluid, and to a rotor for a rotary pump apparatus.

IPC 8 full level
F04D 29/042 (2006.01); **F04D 1/00** (2006.01); **F04D 13/06** (2006.01); **F04D 15/00** (2006.01); **F04D 29/041** (2006.01)

CPC (source: EP US)
F04D 1/00 (2013.01 - EP US); **F04D 13/064** (2013.01 - EP US); **F04D 15/0022** (2013.01 - US); **F04D 15/0038** (2013.01 - EP US); **F04D 29/0416** (2013.01 - EP US); **F04D 29/042** (2013.01 - EP US); **F04D 29/426** (2013.01 - US); **F05D 2270/62** (2013.01 - EP US); **F05D 2270/64** (2013.01 - EP US)

Cited by
CN109424578A; EP3076020A1; US10760577B2

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)
EP 2818725 A1 20141231; **EP 2818725 B1 20170913**; CN 105339672 A 20160217; CN 105339672 B 20180515; US 10539142 B2 20200121; US 2016273542 A1 20160922; WO 2014207030 A1 20141231

DOCDB simple family (application)
EP 13174142 A 20130627; CN 201480036938 A 20140625; EP 2014063370 W 20140625; US 201414392246 A 20140625