

Title (en)

Centrifugal pump and method for compensating for the axial impulse in a centrifugal pump

Title (de)

Zentrifugalpumpe und Verfahren zum Ausgleichen des axialen Schubs in einer Zentrifugalpumpe

Title (fr)

Pompe centrifuge et procédé d'équilibrage de la poussée axiale dans une pompe centrifuge

Publication

**EP 2273124 B1 20150225 (DE)**

Application

**EP 10164973 A 20100604**

Priority

- EP 09164690 A 20090706
- EP 10164973 A 20100604

Abstract (en)

[origin: EP2273124A1] The centrifugal pump (1) has a rotor (3) comprising a pump wheel with vanes for generation of main flow from an inlet (21) to an outlet (22) of a pump housing (2). A relief bore of another pump wheel is provided in the rotor for generation of recirculation flow from a rear side (32) of the rotor through the relief bore. A partition element separates the recirculation flow partly from the main flow in a region of the latter pump wheel, where the partition element is provided between the pump wheels. An independent claim is also included for a method for compensation of axial thrust in a centrifugal pump.

IPC 8 full level

**F04D 13/06** (2006.01); **F04D 29/041** (2006.01); **F04D 29/048** (2006.01); **F04D 29/18** (2006.01); **F04D 29/22** (2006.01)

CPC (source: EP US)

**F04D 13/0633** (2013.01 - EP US); **F04D 13/064** (2013.01 - EP US); **F04D 29/0413** (2013.01 - EP US); **F04D 29/048** (2013.01 - EP US); **F04D 29/186** (2013.01 - EP US); **F04D 29/2266** (2013.01 - EP US)

Citation (examination)

US 3413925 A 19681203 - CAMPOLONG JOSEPH F

Cited by

DE102017128027A1; CN113365735A; WO2023186376A1; EP4084304A1; US11879466B2; DE102020121420A1; WO2022033952A1; DE102020121422A1; WO2022033953A1; DE102021123178A1; WO2020173545A1; WO2020173578A1; DE102020121419A1; WO2022033954A1; WO2024033325A1; WO2023036786A1; WO2019101624A1; US11596954B2

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)

**EP 2273124 A1 20110112**; **EP 2273124 B1 20150225**; US 2011002794 A1 20110106; US 9115725 B2 20150825

DOCDB simple family (application)

**EP 10164973 A 20100604**; US 82092510 A 20100622