

Title (en)
PUMP

Title (de)
PUMPE

Title (fr)
POMPE

Publication
EP 2677178 B1 20201007 (DE)

Application
EP 13171905 A 20130613

Priority
DE 102012210554 A 20120622

Abstract (en)
[origin: EP2677178A2] The radial pump (11) has pump chamber (14) that is provided with central suction and pump chamber outlet (16). Radially outside of impeller (18), circular ring shaped and circumferential pump chamber ring section (28) is provided. Pump chamber ring section has length along axial direction of pump from impeller against suction direction. Pump chamber ring section has varying width and is configured to be narrower in compression region in circulation direction. Pump chamber is configured without guide ring for fluid and does not have guide elements of type of guide ring.

IPC 8 full level
F04D 29/44 (2006.01); **A47L 15/42** (2006.01); **D06F 39/08** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP KR US)
A47L 15/42 (2013.01 - KR); **A47L 15/4225** (2013.01 - EP US); **D06F 39/08** (2013.01 - KR); **D06F 39/085** (2013.01 - EP US);
F04D 29/22 (2013.01 - KR); **F04D 29/426** (2013.01 - KR); **F04D 29/445** (2013.01 - EP US); **F04D 29/586** (2013.01 - KR);
F04D 29/588 (2013.01 - US); **F05D 2210/11** (2013.01 - KR)

Cited by
CN109154308A; EP2754900A1; US9771950B2; WO2017194300A1

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 2677178 A2 20131225; EP 2677178 A3 20150422; EP 2677178 B1 20201007; CN 103511349 A 20140115; DE 102012210554 A1 20131224;
ES 2835185 T3 20210622; KR 20140000154 A 20140102; PL 2677178 T3 20210419; US 2013343882 A1 20131226; US 9470242 B2 20161018

DOCDB simple family (application)
EP 13171905 A 20130613; CN 201310321239 A 20130621; DE 102012210554 A 20120622; ES 13171905 T 20130613;
KR 20130068842 A 20130617; PL 13171905 T 20130613; US 201313924212 A 20130621