

Title (en)
PUMP BLADE FOR SUBMERGED PUMP AND SUBMERGED PUMP HAVING SAME

Title (de)
PUMPENKLINGE FÜR EINE UNTERWASSERPUMPE UND TAUCHPUMPE DAMIT

Title (fr)
AILETTE DE POMPE POUR POMPE IMMERGÉE ET POMPE IMMERGÉE COMPRENANT CELLE-CI

Publication
EP 2930367 A1 20151014 (EN)

Application
EP 14819908 A 20140415

Priority
• JP 2013141415 A 20130705
• JP 2014060657 W 20140415

Abstract (en)
A pump impeller for a submerged pump capable of removing or reducing the radial load is provided. A non-clogging submerged pump is provided, which includes a substantially cylindrical body, an intake port provided in a center of a lower end surface of the body, a discharge port that is open in a side surface of the body, and a flow channel passing from the intake port to the discharge port within the body. The flow channel includes a plurality of flow channels, and the flow channels have their size, shape, and position defined such that fluid unbalance is reduced with respect to an axis of rotation.

IPC 8 full level
F04D 7/04 (2006.01); **F04D 13/02** (2006.01); **F04D 29/22** (2006.01); **F04D 29/66** (2006.01)

CPC (source: CN EP US)
F04D 7/04 (2013.01 - CN EP US); **F04D 13/02** (2013.01 - US); **F04D 29/225** (2013.01 - CN EP US); **F04D 29/2255** (2013.01 - CN EP US); **F04D 29/426** (2013.01 - US); **F04D 29/669** (2013.01 - EP US)

Cited by
WO2021049925A1; EP2930367B1

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 2930367 A1 20151014; **EP 2930367 A4 20161102**; **EP 2930367 B1 20200527**; BR 112015009797 A2 20170711;
BR 112015009797 A8 20170801; BR 112015009797 B1 20220315; CN 104662302 A 20150527; CN 104662302 B 20171128;
DK 2930367 T3 20200629; JP 2015014251 A 20150122; JP 6351216 B2 20180704; US 2016108927 A1 20160421;
WO 2015001830 A1 20150108

DOCDB simple family (application)
EP 14819908 A 20140415; BR 112015009797 A 20140415; CN 201480002515 A 20140415; DK 14819908 T 20140415;
JP 2013141415 A 20130705; JP 2014060657 W 20140415; US 201414439879 A 20140415