

Title (en)

Self-cleaning centrifugal screw pump with auxiliary flushing flow behind the impeller

Title (de)

Selbstreinigende Schraubenzentrifugalradpumpe mit spülender Nebenströmung hinter dem Laufrad

Title (fr)

Pompe auto-nettoyante à rouet centrifuge hélicoïdal avec écoulement auxiliaire de rinçage derrière le rouet

Publication

EP 2643596 A1 20131002 (DE)

Application

EP 11799082 A 20111124

Priority

- EP 10192467 A 20101124
- EP 2011070996 W 20111124
- EP 11799082 A 20111124

Abstract (en)

[origin: EP2458225A1] The cover plate (2) has front face (2h) and rear face (2i), in which partial surface (2k) of front face is comprised of centrifugal wheel (25). A central opening (2g) is formed at the center of the partial surface, along the direction of an axis (A). An opening (2a) is formed in the partial surface, and is spaced apart from the central opening. A fluid-conduction connection between front and rear faces is obtained through the opening. Independent claims are included for the following: (1) screw centrifuge wheel pump; and (2) method for cleaning screw centrifuge wheel pump.

IPC 8 full level

F04D 29/42 (2006.01); **F04D 7/04** (2006.01); **F04D 29/44** (2006.01); **F04D 29/70** (2006.01)

CPC (source: EP US)

F04C 2/16 (2013.01 - US); **F04D 7/04** (2013.01 - EP US); **F04D 29/40** (2013.01 - US); **F04D 29/445** (2013.01 - EP US);
F04D 29/708 (2013.01 - EP US); **F05D 2250/15** (2013.01 - EP US)

Citation (search report)

See references of WO 2012069619A1

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 2458225 A1 20120530; CN 103299085 A 20130911; CN 103299085 B 20161116; CN 103339386 A 20131002; CN 103339386 B 20170329;
DK 2643595 T3 20170918; DK 2643596 T3 20171030; DK 3179112 T3 20201012; EP 2643595 A1 20131002; EP 2643595 B1 20170524;
EP 2643596 A1 20131002; EP 2643596 B1 20170712; EP 3179112 A1 20170614; EP 3179112 B1 20200805; JP 2014500930 A 20140116;
JP 2014502328 A 20140130; JP 5988106 B2 20160907; JP 6028162 B2 20161116; RU 2013128532 A 20141227; RU 2013128547 A 20141227;
RU 2559958 C2 20150820; RU 2566865 C2 20151027; US 2013243568 A1 20130919; US 2013243634 A1 20130919; US 9709071 B2 20170718;
US 9879695 B2 20180130; WO 2012069618 A1 20120531; WO 2012069619 A1 20120531

DOCDB simple family (application)

EP 10192467 A 20101124; CN 201180056678 A 20111124; CN 201180056681 A 20111124; DK 11796936 T 20111124;
DK 11799082 T 20111124; DK 17152843 T 20111124; EP 11796936 A 20111124; EP 11799082 A 20111124; EP 17152843 A 20111124;
EP 2011070995 W 20111124; EP 2011070996 W 20111124; JP 2013540375 A 20111124; JP 2013540376 A 20111124;
RU 2013128532 A 20111124; RU 2013128547 A 20111124; US 201113989083 A 20111124; US 201113989086 A 20111124