

Title (en)
VORTEX PUMP

Title (de)
FREISTROMPUMPE

Title (fr)
POMPE NON COLMATABLE

Publication
EP 3559475 A1 20191030 (DE)

Application
EP 17804118 A 20171114

Priority
• DE 102016225891 A 20161221
• EP 2017079120 W 20171114

Abstract (en)
[origin: CA3045062A1] The invention relates to a vortex pump having an impeller which comprises blades for delivering solids-containing media. Starting from an original blade section (12), at least a part of the blades (7) branches off into further blade sections (14, 17).

IPC 8 full level
F04D 29/22 (2006.01); **F04D 7/04** (2006.01); **F04D 29/24** (2006.01)

CPC (source: EP US)
F04D 7/04 (2013.01 - EP US); **F04D 29/2244** (2013.01 - EP US); **F04D 29/24** (2013.01 - US); **F04D 29/242** (2013.01 - EP);
F05B 2260/604 (2013.01 - US)

Citation (search report)
See references of WO 2018114143A1

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)
DE 102016225891 A1 20180621; AU 2017380927 A1 20190613; AU 2017380927 B2 20220922; BR 112019010727 A2 20191001;
CA 3045062 A1 20180628; CN 110073112 A 20190730; CN 110073112 B 20210618; EP 3559475 A1 20191030; EP 3559475 B1 20210106;
HU E053792 T2 20210728; MX 2019006127 A 20190814; PL 3559475 T3 20210705; US 11187232 B2 20211130; US 2021131438 A1 20210506;
WO 2018114143 A1 20180628

DOCDB simple family (application)
DE 102016225891 A 20161221; AU 2017380927 A 20171114; BR 112019010727 A 20171114; CA 3045062 A 20171114;
CN 201780079088 A 20171114; EP 17804118 A 20171114; EP 2017079120 W 20171114; HU E17804118 A 20171114;
MX 2019006127 A 20171114; PL 17804118 T 20171114; US 201716471456 A 20171114