

Title (en)
UNDERWATER CLEANER

Title (de)
UNTERWASSERREINIGER

Title (fr)
DISPOSITIF DE NETTOYAGE SUBMERSIBLE

Publication
EP 3141675 B1 20181219 (DE)

Application
EP 16185089 A 20160822

Priority
AT 507782015 A 20150910

Abstract (en)
[origin: US2017073989A1] In order to obtain the simplest possible underwater cleaner (1) with the lowest production costs, which offers high suction power with low flow losses even in the case of impellers (3) of relatively large diameters, the first channel section (13) converges continuously into the second channel section (14).

IPC 8 full level
E04H 4/16 (2006.01); **B63B 59/08** (2006.01)

CPC (source: AT CN EP US)
B63B 59/08 (2013.01 - US); **E04H 4/1618** (2013.01 - EP US); **E04H 4/1636** (2013.01 - CN EP US); **E04H 4/1654** (2013.01 - AT US);
B63B 2059/082 (2013.01 - US)

Citation (examination)
DE 1920172 A1 19701022 - MYERS ROBERT ROY

Cited by
DE102023108163A1

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 3141675 A1 20170315; **EP 3141675 B1 20181219**; AT 517469 A4 20170215; AT 517469 B1 20170215; CN 106639391 A 20170510;
CN 106639391 B 20190628; US 10184259 B2 20190122; US 2017073989 A1 20170316

DOCDB simple family (application)
EP 16185089 A 20160822; AT 507782015 A 20150910; CN 201610816517 A 20160909; US 201615257344 A 20160906