

Title (en)  
CENTRIFUGAL PUMP

Title (de)  
ZENTRIFUGALPUMPE

Title (fr)  
POMPE CENTRIFUGE

Publication  
**EP 3810314 A4 20220119 (EN)**

Application  
**EP 19803929 A 20190516**

Priority  
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Abstract (en)  
[origin: WO2019221610A1] A centrifugal pump in which a centrally placed impeller/shaft system is eliminated and replaced by one or more active propellers placed tangentially in the fluid-filled pump casing. The axial force from the propeller system sets the fluid into rotation, both directly in the propeller jet and by viscous forces in the rest of the pump casing, so that tangential and radial velocity arises through the pump and thereby pressure and capacity. A method for using the centrifugal pump and a unit to be connected to the centrifugal pump are described as well.

IPC 8 full level  
**B01F 27/91** (2022.01); **F04D 1/00** (2006.01); **F04D 7/04** (2006.01); **F04D 29/18** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP NO)  
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Citation (search report)  
• [XAI] DE 572787 C 19330323 - KOESTER FRIEDRICH  
• [XAI] US 6533622 B1 20030318 - ZWAAN HENDRIK JOHANNES [AU], et al  
• [XA] DE 202006005067 U1 20070809 - LIEBHERR MACHINES BULLE S A [CH]  
• See also references of WO 2019221610A1

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)  
**WO 2019221610 A1 20191121**; EP 3810314 A1 20210428; EP 3810314 A4 20220119; EP 3810314 B1 20240626; NO 20180691 A1 20191118; NO 344723 B1 20200323

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