

Title (en)

A VORTEX DEVICE AND A METHOD FOR HYDROACOUSTIC TREATMENT OF A FLUID

Title (de)

WIRBELVORRICHTUNG UND VERFAHREN ZUR HYDROAKUSTISCHEN BEHANDLUNG EINER FLÜSSIGKEIT

Title (fr)

DISPOSITIF À TOURBILLON ET PROCÉDÉ DE TRAITEMENT HYDROACOUSTIQUE D'UN FLUIDE

Publication

**EP 3767069 A1 20210120 (EN)**

Application

**EP 19461558 A 20190715**

Priority

EP 19461558 A 20190715

Abstract (en)

A vortex device for a hydroacoustic treatment of a fluid that flows through the vortex device, the device comprising: a cylindrical inlet section of a first diameter; a cylindrical outlet section of a second diameter that is smaller than the first diameter, wherein the inlet section is connected to the outlet section via a conical reducer. The inlet section comprises tangential inlets to generate a concurrent flow of the fluid upon entry. The vortex device further comprises a conical cover comprising a base that covers the inlet section and an apex such that the conical cover directs the fluid from the outside of the vortex device to the tangential inlets.

IPC 8 full level

**E21B 28/00** (2006.01); **E21B 41/00** (2006.01); **E21B 43/20** (2006.01)

CPC (source: EP)

**E21B 28/00** (2013.01); **E21B 41/0078** (2013.01); **E21B 43/20** (2013.01)

Citation (applicant)

- US 2011042092 A1 20110224 - FRIPP MICHAEL L [US], et al
- US 8555975 B2 20131015 - DYKSTRA JASON D [US], et al

Citation (search report)

[A] US 5311955 A 19940517 - GANIJEW RIFNER W [SU], et al

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 3767069 A1 20210120**; EP 3999713 A1 20220525; WO 2021008831 A1 20210121

DOCDB simple family (application)

**EP 19461558 A 20190715**; EP 2020067583 W 20200624; EP 20739574 A 20200624