

Title (en)

CYCLOIDAL DYNAMIC PROPULSION OR POSITIONING SYSTEM FOR A SHIP

Title (de)

ZYKLOIDISCHES DYNAMISCHES ANTRIEBS- ODER POSITIONIERUNGSSYSTEM FÜR EIN SCHIFF

Title (fr)

SYSTEME DE PROPULSION OU DE POSITIONNEMENT DYNAMIQUE CYCLOIDAL POUR UN NAVIRE

Publication

**EP 3898406 B1 20240103 (FR)**

Application

**EP 19817344 A 20191213**

Priority

- FR 1873269 A 20181219
- EP 2019085163 W 20191213

Abstract (en)

[origin: WO2020126933A1] The invention relates to a cycloidal dynamic propulsion or positioning system (100) for a ship sitting in water exhibiting a direction of flow and comprising a chassis, a rotor (102) mounted with the ability to rotate on the chassis about a main axis (104) perpendicular to the direction of flow, and comprising a plurality of arms (108) extending radially from the main axis (104), a main motor (106) equipped with a rotary encoder and driving said rotor (102) in rotation, for each arm (108), a blade (110) mounted with the ability to rotate on the arm (108) about a secondary axis (112) parallel to the main axis (104), for each blade (110), a secondary motor (114) equipped with a rotary encoder and driving said blade (110) in rotation, for at least one blade (110), a load sensor (202) designed to be able to evaluate the loads applied to the blade (110), and a control unit (150) connected to each rotary encoder, to the stress sensor (202) and to each motor (106, 114) and commanding the rotation of each motor (106, 114) both in terms of angle and in terms of speed.

IPC 8 full level

**B63H 1/10** (2006.01)

CPC (source: EP KR US)

**B63H 1/10** (2013.01 - EP KR US); **B63H 2001/105** (2013.01 - EP KR US)

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 2020126933 A1 20200625**; CN 113613995 A 20211105; CN 113613995 B 20240430; EP 3898406 A1 20211027; EP 3898406 B1 20240103; FI 3898406 T3 20240328; FR 3090571 A1 20200626; FR 3090571 B1 20210108; JP 2022516242 A 20220225; JP 7482346 B2 20240514; KR 20210127921 A 20211025; US 11613335 B2 20230328; US 2022063783 A1 20220303

DOCDB simple family (application)

**EP 2019085163 W 20191213**; CN 201980087639 A 20191213; EP 19817344 A 20191213; FI 19817344 T 20191213; FR 1873269 A 20181219; JP 2021535289 A 20191213; KR 20217022688 A 20191213; US 201917414894 A 20191213