

Title (en)

ELECTRIC PROPULSION AND STEERING SYSTEM FOR A WATERCRAFT

Title (de)

ELEKTRISCHES ANTRIEBS- UND LENKSYSTEM FÜR EIN WASSERFAHRZEUG

Title (fr)

SYSTÈME DE DIRECTION ET DE PROPULSION ÉLECTRIQUE POUR UN BATEAU

Publication

**EP 4309996 A1 20240124 (EN)**

Application

**EP 22186465 A 20220722**

Priority

EP 22186465 A 20220722

Abstract (en)

A propulsion and steering system for a watercraft comprises at least three propulsion units and an electronic controller device. Each of the at least three propulsion units comprises an electric motor and a propeller with a respective axis orientation, a respective forward direction of rotation, and a respective reverse direction of rotation. The propeller is rotationally coupled to the electric motor. The electronic controller device is adapted to be electronically coupled to the at least three propulsion units to individually adjust the rotation speeds of their respective electric motors to adjust the rotational speeds of their respective propellers. The at least three propulsion units are adapted to be arranged such that the axis orientations of the propellers are fixed and essentially parallel to each other according to a top view. The electronic controller device is adapted to adjust the rotation speed of a first propeller of the propellers according to its forward direction of rotation to generate a forward thrust, to adjust the rotation speeds of a second propeller and a third propeller of the propellers according to their respective reverse directions of rotation to generate an aft thrust; such that the propellers generate a transverse thrust exceeding a total longitudinal thrust comprising the forward thrust and the aft thrust.

IPC 8 full level

**B63H 21/17** (2006.01); **B63H 5/08** (2006.01); **B63H 25/42** (2006.01)

CPC (source: EP)

**B63H 5/08** (2013.01); **B63H 21/17** (2013.01); **B63H 25/42** (2013.01); **B63H 2020/003** (2013.01); **B63H 2025/066** (2013.01)

Citation (search report)

- [XI] US 2020285239 A1 20200910 - MATTILA MIKKO [FI], et al
- [I] DE 19856305 A1 20000608 - BUECHLER DIRK [DE]

Designated contracting state (EPC)

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BA ME

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