

Title (en)

ELECTRIC DRIVE SYSTEM FOR CRAFT, SUCH AS A SURFBOARD OR PADDLEBOARD, WITH COOLING MEANS

Title (de)

ELEKTRISCHES ANTRIEBSSYSTEM FÜR WASSERFAHRZEUG WIE EIN SURFBRETT ODER PADDELBRETT MIT KÜHLVORRICHTUNG

Title (fr)

SYSTÈME DE MOTORISATION ÉLECTRIQUE POUR EMBARCATION, TELLE QU'UNE PLANCHE DE SURF OU DE PADDLE, AVEC MOYENS DE REFOUILLISSEMENT

Publication

EP 4021793 A1 20220706 (FR)

Application

EP 20775187 A 20200828

Priority

- FR 1909454 A 20190828
- EP 2020074072 W 20200828

Abstract (en)

[origin: WO2021038037A1] The invention relates to a drive system for an electrically assisted craft which is intended to allow a user to be transported on water, the invention being used particularly in the field of surfboards, paddleboards or sailboards, and in the field of kayaks or canoes. The electric drive system is configured to be connected to an electrical energy source and comprises, on the one hand, a sealed enclosure (1) which is intended to be integrated in or on a craft, in which enclosure (1) a rotor (2) and a stator (3, 7) are arranged, and, on the other hand, an axle (4) which is connected at a first end to the rotor (2) and which protrudes in a fluid-tight manner outside the enclosure (1) at a second end opposite its first end. The axle (4) can be connected at its second end to propulsion means for a craft, such as a propeller, so that when the system is supplied with electrical energy, the rotor (2) is rotated and drives the axle (4) with this rotation. The system also comprises cooling means (5) which themselves comprise at least one first elongate assembly (5), which is at least partially made of metal and a first end of which is arranged inside the enclosure (1), the elongate assembly (5) protruding in a fluid-tight manner outside the enclosure (1) at a second end opposite its first end so as to allow the conduction of the heat from the inside to the outside of the enclosure (1) along the first elongate assembly (5).

IPC 8 full level

B63B 32/10 (2020.01); **H02K 9/22** (2006.01)

CPC (source: EP US)

B63B 32/10 (2020.02 - EP US); **B63B 34/10** (2020.02 - US); **B63B 79/40** (2020.01 - US); **B63H 21/17** (2013.01 - US); **B63H 21/38** (2013.01 - US); **B63H 23/34** (2013.01 - US); **H02K 1/2791** (2022.01 - EP US); **H02K 9/22** (2013.01 - EP US); **Y02T 70/5236** (2013.01 - EP)

Citation (search report)

See references of WO 2021038037A1

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)

WO 2021038037 A1 20210304; AU 2020339725 A 20220317; CN 114286781 A 20220405; EP 4021793 A1 20220706; FR 3100222 A1 20210305; JP 2022546377 A 20221104; TW 202114908 A 20210416; TW I780474 B 20221011; US 2022324538 A1 20221013

DOCDB simple family (application)

EP 2020074072 W 20200828; AU 2020339725 A 20200828; CN 202080060091 A 20200828; EP 20775187 A 20200828; FR 1909454 A 20190828; JP 2022512805 A 20200828; TW 109129451 A 20200828; US 202017639133 A 20200828