

Title (en)
INTEGRATED PROPULSION AND STEERING SYSTEM

Title (de)
INTEGRIERTES ANTRIEBS- UND LENKSYSTEM

Title (fr)
SYSTÈME DE PROPULSION ET DE DIRECTION INTÉGRÉ

Publication
EP 4219292 A1 20230802 (EN)

Application
EP 22153993 A 20220128

Priority
EP 22153993 A 20220128

Abstract (en)
An electrically driven propulsion system for a watercraft comprises an electric motor adapted to provide a mechanical power of at least 50 kW, a pulse inverter, a thrust bearing, and a transmission. The pulse inverter is electrically coupled to the electric motor and adapted to provide an electrical supply power of at least 50 kW to the electric motor. The transmission comprises a rotary shaft. The electrically driven propulsion system further comprises a common waterproof housing. The electric motor, the pulse inverter and an enclosed section of the transmission are arranged inside the common waterproof housing. An external section of the transmission is arranged outside of the common waterproof housing. The transmission is adapted to rotationally couple the external section of the transmission to the electric motor. The thrust bearing is mechanically coupled to the rotary shaft of said transmission and to the common waterproof housing. The thrust bearing is adapted to transfer a force applied to the transmission along an axial direction of said rotary shaft of the transmission to the common waterproof housing.

IPC 8 full level
B63H 23/24 (2006.01); **B63H 23/32** (2006.01)

CPC (source: EP US)
B63H 21/17 (2013.01 - US); **B63H 21/30** (2013.01 - US); **B63H 23/24** (2013.01 - EP); **B63H 23/321** (2013.01 - US); **B63H 2023/325** (2013.01 - EP US); **B63H 2023/327** (2013.01 - EP)

Citation (search report)

- [IY] EP 2230172 A1 20100922 - IHI MARINE UNITED INC [JP]
- [Y] DE 102011007599 A1 20121018 - SIEMENS AG [DE]
- [I] CN 202295272 U 20120704 - XINIAN LI
- [X] US 6299493 B1 20011009 - GRIFFITH SR THOMAS E [US], et al
- [Y] US 2021119522 A1 20210422 - HOLLAND SEANAN R [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

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4219292 A1 20230802; US 2023242231 A1 20230803

DOCDB simple family (application)
EP 22153993 A 20220128; US 202318160766 A 20230127