

Title (en)
MARINE DRIVE UNIT AND MARINE VESSEL

Title (de)
MARINE ANTRIEBSEINHEIT UND SEESCHIFF

Title (fr)
UNITÉ D'ENTRAÎNEMENT MARINE ET VAISSEAU MARIN

Publication
EP 4035991 A1 20220803 (EN)

Application
EP 21153776 A 20210127

Priority
EP 21153776 A 20210127

Abstract (en)
The invention relates to a hybrid marine drive unit (103; 203) mounted to a transom (102; 202), which drive unit (103; 203) comprises a drive housing (104; 204) rigidly mounted on the transom (102; 202), a propelling unit (105; 205) rotatable about a vertical axis (X) and mounted to a lower surface (106; 206) of the drive housing (104; 204), and a transmission with at least a vertical drive shaft (210) located in the drive housing (104; 204) and extending into the propelling unit (105; 205), which vertical drive shaft is arranged transmit drive torque from at least one of multiple sources of drive torque (211, 221). The vertical drive shaft (210) is operably connected to at least one first source of drive torque (111; 211) arranged within the drive housing (104; 204), and the vertical drive shaft (210) is operably connected to a horizontal output shaft (220) extending into the drive housing (104; 204) through the transom (102; 202), wherein the horizontal output shaft (220) is connectable to a second source of drive torque (121; 221). The invention further relates to a marine vessel comprising such a drive unit.

IPC 8 full level
B63H 23/30 (2006.01); **B63H 5/125** (2006.01); **B63H 21/20** (2006.01)

CPC (source: EP US)
B63H 5/1252 (2013.01 - EP); **B63H 20/02** (2013.01 - US); **B63H 20/12** (2013.01 - US); **B63H 20/16** (2013.01 - US);
B63H 21/20 (2013.01 - EP US); **B63H 23/04** (2013.01 - US); **B63H 23/06** (2013.01 - US); **B63H 23/30** (2013.01 - EP);
B63H 2005/1254 (2013.01 - EP); **B63H 2020/003** (2013.01 - US); **B63H 2020/006** (2013.01 - US); **B63H 2021/205** (2013.01 - EP US)

Citation (applicant)
US 2011195618 A1 20110811 - ARBUCKLE JASON S [US], et al

Citation (search report)
• [Y] US 2009209146 A1 20090820 - JEGEL FRANZ PETER [AT]
• [Y] US 2018086426 A1 20180329 - HÖFER VOLKER [DE], et al
• [A] WO 2006095042 A1 20060914 - WAERTSILAE FINLAND OY [FI], et al
• [A] US 2010203777 A1 20100812 - BRATEL DEAN J [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

DOCDB simple family (publication)
EP 4035991 A1 20220803; **EP 4035991 B1 20231206**; **EP 4035991 C0 20231206**; US 2022234708 A1 20220728; US 2022234712 A1 20220728

DOCDB simple family (application)
EP 21153776 A 20210127; US 202217648203 A 20220118; US 202217648882 A 20220125