

Title (en)

COMBINATION MANUALLY DRIVEN AND MOTOR DRIVEN WATERCRAFT

Title (de)

WASSERFAHRZEUG MIT KOMBINATION AUS HAND- UND MOTORANTRIEB

Title (fr)

EMBARCATION COMBINÉE À PROPULSION MANUELLE ET À PROPULSION PAR MOTEUR

Publication

EP 2477889 A4 20140409 (EN)

Application

EP 10816539 A 20100917

Priority

- US 24367109 P 20090918
- CA 2010001490 W 20100917

Abstract (en)

[origin: WO2011032293A1] In one aspect, the invention is directed to a watercraft that is drivable by a manual force input member and by a motor. The watercraft is configured to prevent the motor from back-driving the manual force input member. In a particular embodiment, the watercraft includes a hull, a propelling member configured to propel the hull through water, a manual force input member that is movable manually, an output shaft that is operatively connected to the propelling member and that is drivable by the manual force input member, a motor that is operatively connectable to the output shaft, and a one-way clutch connected between the manual force input member and the output shaft. The one-way clutch is configured to permit the manual force input member to drive the output shaft in a first rotational direction, and to prevent the output shaft from driving the manual force input member in the first rotational direction.

IPC 8 full level

B63B 35/73 (2006.01); **B63H 5/125** (2006.01); **B63H 16/08** (2006.01); **B63H 16/20** (2006.01); **B63H 21/17** (2006.01); **B63H 21/20** (2006.01);
B63H 23/12 (2006.01); **B63H 23/30** (2006.01); **G01L 3/02** (2006.01); **G01L 5/00** (2006.01); **G01L 5/22** (2006.01)

CPC (source: EP US)

B63H 16/14 (2013.01 - EP US); **B63H 16/20** (2013.01 - EP US); **B63H 21/20** (2013.01 - EP US); **B63H 21/22** (2013.01 - EP US);
B63H 23/12 (2013.01 - EP US); **B63H 23/30** (2013.01 - EP US); **G01L 3/104** (2013.01 - EP US); **G01L 5/133** (2013.01 - EP US);
B63H 2016/202 (2013.01 - EP US); **Y02T 70/5236** (2013.01 - EP US)

Citation (search report)

- [XI] US 4170188 A 19791009 - JAMISON JOSEPH L JR [US]
- [A] US 5242028 A 19930907 - MURPHY LISA J [US], et al
- [A] FR 2474995 A2 19810807 - BEAULATON JEAN [FR]
- See references of WO 2011032293A1

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011032293 A1 20110324; CA 2774406 A1 20110324; EP 2477889 A1 20120725; EP 2477889 A4 20140409; US 2012238159 A1 20120920

DOCDB simple family (application)

CA 2010001490 W 20100917; CA 2774406 A 20100917; EP 10816539 A 20100917; US 201013496950 A 20100917