

Title (en)

ELECTRICAL FORWARD-MOVING ASSISTANT APPARATUS

Title (de)

ELEKTRISCHE, SICH VORWÄRTS BEWEGENDE HILFSVORRICHTUNG

Title (fr)

APPAREIL D'ASSISTANCE D'AVANCE ÉLECTRIQUE

Publication

**EP 3050598 A1 20160803 (EN)**

Application

**EP 16153249 A 20160128**

Priority

TW 104201469 U 20150130

Abstract (en)

An electrical forward-moving assistant apparatus (3) comprised of a housing (31), a motor (32), a battery unit (34), a propeller (33), a housing mounting fixture (35) and a battery mounting fixture. The housing forms a watertight chamber. The housing mounting fixture is installed onto the housing to position the housing on one end of a cylinder body (30). The motor is installed inside the watertight chamber and connected to the propeller by a shaft which extends through the housing to provide thrust. The battery unit mounted on the cylinder body by the battery mounting fixture is connected to the motor via an electrical wire (37).

IPC 8 full level

**A63B 35/12** (2006.01)

CPC (source: CN EP US)

**A63B 35/12** (2013.01 - EP US); **B63C 11/02** (2013.01 - CN); **B63C 11/18** (2013.01 - US); **B63C 11/46** (2013.01 - US);  
**A63B 2225/50** (2013.01 - EP US); **B63C 2011/028** (2013.01 - CN)

Citation (search report)

- [XYI] TW M433888 U 20120721 - KANG CHIEN-CHUNG [TW]
- [XY] US 4467742 A 19840828 - DUBOY GUSTAVO [US]
- [XY] GB 2415913 A 20060111 - REMBISZ DIMITRI [GB]
- [Y] US 5984739 A 19991116 - DONAHUE CHRISTOPHER [US]
- [Y] WO 02072382 A1 20020919 - MAZIN BENJAMIN A [US]
- [Y] US 3995578 A 19761207 - MCCULLOUGH KEITH R

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)

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DOCDB simple family (application)

**EP 16153249 A 20160128**; CN 201610047908 A 20160125; TW 104201469 U 20150130; US 201615004043 A 20160122