

Title (en)

A FIN PROPULSION APPARATUS

Title (de)

FLOSSENANTRIEBSVORRICHTUNG

Title (fr)

APPAREIL DE PROPULSION A AILERONS

Publication

EP 2222550 A1 20100901 (EN)

Application

EP 08860078 A 20081209

Priority

- EP 2008067127 W 20081209
- DK PA200701756 A 20071210
- US 1316907 P 20071212

Abstract (en)

[origin: WO2009074580A1] A propulsion apparatus is provided for propulsion in a fluid, comprising at least one propulsion fin being fixed to a fin axle, and means for driving the propulsion fin comprising a crankshaft, a pitching mechanism for rotating the propulsion fin around the axis of the fin axle, and a heave mechanism for translating the propulsion fin in a substantially transverse direction with respect to the axis of the fin axle, and where the crankshaft is driving the pitching mechanism and the heave mechanism. A simple, reliable and efficient construction is obtained by having both the heave and the pitch mechanism mounted on a single crank on the crankshaft, or to separate cranks having substantially the same radius and angular position with respect to the axis of rotation of the crankshaft.

IPC 8 full level

B63H 1/36 (2006.01)

CPC (source: EP US)

B63H 1/36 (2013.01 - EP US)

Citation (search report)

See references of WO 2009074580A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009074580 A1 20090618; AT E546351 T1 20120315; BR PI0820940 A2 20150630; CN 101909984 A 20101208; CY 1112779 T1 20160210; DK 2222550 T3 20120604; EP 2222550 A1 20100901; EP 2222550 B1 20120222; ES 2387654 T3 20120927; HR P20120428 T1 20120831; JP 2011506173 A 20110303; KR 20100098684 A 20100908; PL 2222550 T3 20121031; PT 2222550 E 20120529; RU 2010128532 A 20120120; RU 2482012 C2 20130520; UA 98185 C2 20120425; US 2010291814 A1 20101118

DOCDB simple family (application)

EP 2008067127 W 20081209; AT 08860078 T 20081209; BR PI0820940 A 20081209; CN 200880124370 A 20081209; CY 121100464 T 20120521; DK 08860078 T 20081209; EP 08860078 A 20081209; ES 08860078 T 20081209; HR P20120428 T 20120521; JP 2010537422 A 20081209; KR 20107015231 A 20081209; PL 08860078 T 20081209; PT 08860078 T 20081209; RU 2010128532 A 20081209; UA A201008566 A 20081209; US 74698808 A 20081209