

Title (en)

MARINE PROPULSIVE DEVICE COMPRISING CONCENTRIC AND CONTRA-ROTATING PROPELLERS AND SHIPS EQUIPPED WITH SUCH DEVICE.

Title (de)

SCHIFFSANTRIEBSVORRICHTUNG MIT KONZENTRISCHEN UND GEGENLAUFIGEN SCHRAUBEN UND SCHIFFE AUSGERUSTET MIT DIESER VORRICHTUNG.

Title (fr)

DISPOSITIF DE PROPULSION DE NAVIRES COMPORTANT DES HELICES CONCENTRIQUES ET CONTRA-ROTATIVES ET NAVIRES EQUIPES D'UN TEL DISPOSITIF.

Publication

EP 0547214 B1 19950628 (FR)

Application

EP 92915660 A 19920708

Priority

- FR 9200654 W 19920708
- FR 9109003 A 19910709

Abstract (en)

[origin: FR2678891A1] Marine propulsive device (1) comprising two concentric and contra-rotating propellers (5, 6), rotating at the same speed but in opposite directions, with reversed pitches, said propellers (5, 6) being driven by two primary shafts (3, 4) from either two thermal engines (21, 22) rotating in opposite directions and, each driving a primary shaft, or from a cam engine (2) comprising two concentric primary shafts (3, 4) rotating at the same speed but in opposite directions, such drive means preventing any reaction torque of the ship (1) about the propeller axis (5, 6), the torques of the propellers (5, 6) and of the or both engines. The device is characterized in that the concentric and contra-rotating propellers (5, 6) are placed within a cylindrical shroud, thereby avoiding cavitation and the formation of vortexes generated by each propeller, the shroud (7) being arranged such that its water outlet walls (7) constitute a thrust reverser by closing the water outlet and opening either in two parts or in corolla shape in order to reverse the direction of water flow and provide reverse thrust.

IPC 1-7

B63H 5/10; B63H 5/14; B63G 8/08

IPC 8 full level

B63G 8/08 (2006.01); **B63H 5/10** (2006.01); **B63H 5/14** (2006.01)

CPC (source: EP)

B63G 8/08 (2013.01); **B63H 5/10** (2013.01); **B63H 5/14** (2013.01)

Cited by

CN104085519A; CN114933002A

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

FR 2678891 A1 19930115; FR 2678891 B1 19960126; DE 69203221 D1 19950803; EP 0547214 A1 19930623; EP 0547214 B1 19950628; WO 9301085 A2 19930121; WO 9301085 A3 19930318

DOCDB simple family (application)

FR 9109003 A 19910709; DE 69203221 T 19920708; EP 92915660 A 19920708; FR 9200654 W 19920708