Title (en)

Water jet propulsion

Title (de)

Wasserstrahlantrieb

Title (fr)

Dispositif de propulsion par jet d'eau

Publication

EP 0612657 B1 19970502 (DE)

Application

EP 94102485 A 19940218

Priority

DE 4305267 A 19930220

Abstract (en)

[origin: US5520557A] A hydrojet for ships, intended for use in shallow waters, has a semiaxially bladed impeller with a vertical axis of rotation rotatably arranged in a well-shaped housing. The drive for the impeller is introduced into the housing from the top through a cover plate, and the housing is closed at the bottom by a bottom plate which has a water inlet arranged in the center for axial admission to the impeller and at least one flatly sloped water outlet. A control device in which the water delivered by the impeller is fed to at least one outlet nozzle without conversion of kinetic energy into pressure energy, is arranged between the discharge end of the delivery channels of the impeller and at least one water outlet. The control device forms a ring channel without blading. The water inlet is designed asymmetrically. The bottom plate with the water inlet and the water outlet of which there is at least one, which water inlet and water outlet are integrated in it, is endlessly rotatable around the longitudinal axis of the housing in both circumferential directions, either as part of the housing, which is rotatable as a whole, or in relation to the housing, which may be part of the carrying ship design in the latter case.

IPC 1-7

B63H 11/04

IPC 8 full level

B63H 11/08 (2006.01); **B63H 11/04** (2006.01)

CPC (source: EP US)

B63H 11/102 (2013.01 - EP US)

Cited by

WO2010063254A2; DE102010048359A1; WO2012049163A1; US8550862B2; FR3125278A1

Designated contracting state (EPC)

AT BE DE DK ES FR GB GR IE IT NL PT SE

DOCDB simple family (publication)

US 5520557 A 19960528; AT E152408 T1 19970515; CN 1048947 C 20000202; CN 1093666 A 19941019; DE 4305267 A1 19940825; DE 59402570 D1 19970605; DK 0612657 T3 19970929; EP 0612657 A1 19940831; EP 0612657 B1 19970502; ES 2103508 T3 19970916; FI 109013 B 20020515; FI 940786 A0 19940218; FI 940786 A 19940821; GR 3024084 T3 19971031; JP 3673289 B2 20050720; JP H06286693 A 19941011; NO 306456 B1 19991108; NO 940575 D0 19940218; NO 940575 L 19940822

DOCDB simple family (application)

US 19906394 A 19940222; AT 94102485 T 19940218; CN 94101405 A 19940219; DE 4305267 A 19930220; DE 59402570 T 19940218; DK 94102485 T 19940218; EP 94102485 A 19940218; ES 94102485 T 19940218; FI 940786 A 19940218; GR 970401734 T 19970710; JP 2236894 A 19940221; NO 940575 A 19940218