

Title (en)

Reverse apparatus for water-jet propulsor

Title (de)

Rückwärtsvorrichtung für einen Wasserstrahlantrieb

Title (fr)

Dispositif de marche arrière pour un propulseur à jet d'eau

Publication

EP 0800991 A1 19971015 (EN)

Application

EP 96105431 A 19960404

Priority

EP 96105431 A 19960404

Abstract (en)

ÄBJECTÜ To provide a reverse apparatus for a water-jet propulsor, that is designed with reduced size and weight while retaining the reliability of the apparatus. ÅCONSTITUTIONÜ A steering nozzle 5 swingable from side to side is mounted rearwardly of an outlet nozzle 2 of a water-jet propulsor, and a flap 11 is provided which is tilted downward to close a rear opening 5D of the steering nozzle 5, forming astern flow passages by working together with curved guide vanes arranged in a row in a steering nozzle bottom, and is lifted upward and held in a substantially horizontal position to open the steering nozzle rear opening 5D. A hydraulic cylinder 9 is disposed upwardly of a steering nozzle upper wall 5A, directly below which is mounted an driving shaft to which the flap 11 is attached. Further, an opening window 6 is formed in the steering nozzle upper wall 5A, and a lever 8 is made to protrude through the opening window 6, an upper end of the lever 8 being connected to the hydraulic cylinder 9 and a lower end thereof connected to the driving shaft 7. <IMAGE>

IPC 1-7

B63H 11/107

IPC 8 full level

B63H 11/11 (2006.01); **B63H 11/113** (2006.01)

CPC (source: EP)

B63H 11/11 (2013.01); **B63H 11/113** (2013.01)

Citation (search report)

- [DA] JP H05278683 A 19931026
- [A] US 3127741 A 19640407 - POTTHARST JR JOHN E
- [A] US 3788265 A 19740129 - MOORE C
- [A] EP 0085035 A2 19830803 - KAMEWA AB [SE]

Cited by

CN114906307A; DE10319909A1

Designated contracting state (EPC)

DE SE

DOCDB simple family (publication)

EP 0800991 A1 19971015; EP 0800991 B1 19990616; DE 69602917 D1 19990722; DE 69602917 T2 19991014

DOCDB simple family (application)

EP 96105431 A 19960404; DE 69602917 T 19960404