Title (en)

MARINE PROPULSION APPARATUS

Publication

EP 0406451 A4 19910612 (EN)

Application

EP 90901906 A 19900119

Priority

- JP 1253489 A 19890120
- JP 19787589 A 19890729

Abstract (en)

[origin: WO9008061A1] This invention relates to a marine propulsion apparatus. To improve propeller efficiency by utilizing the flow in the backward direction of a propeller shaft and the flow turning in the rotating direction of the propeller, the present invention provides a marine propulsion apparatus which has propeller vanes (2) and turbine vanes (3) fitted to the propeller shaft (1). The propeller vanes (2) are fitted on the front side and the turbine vanes (3), on the rear side, and an axial length (l) obtained by dividing the distance between the center lines of both vanes (2) and (3) by the diameter of the propeller is at least 6 % and the number of turbine vanes (3) is integral multiples of the number of propeller vanes (2). Furthermore, the diameter of the turbine vanes (3) is 33 to 60 % of the diameter of the propeller vanes (2) and the pitch angle ($g(U)p?) of the propeller vanes (2) and the pitch angle ($g(U)T?) of the turbine vanes (3) satisfy the relation $g(U)T? $g(U)p? + 20 at the position satisfying the relation 0.3 r/R 0.6.

IPC 1-7

B63H 1/28

IPC 8 full level

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CPC (source: EP KR)

B63H 1/28 (2013.01 - EP KR); **B63H 5/10** (2013.01 - EP); B63H 2005/103 (2013.01 - EP)

Citation (search report)

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DOCDB simple family (publication)

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