

Title (en)

Water jet propulsion for ships used in low water depths.

Title (de)

Wasserstrahlantrieb für Schiffe, die zum Einsatz in flachen Gewässern bestimmt sind.

Title (fr)

Propulsion marine par jets d'eau pour bateaux navigant en eaux peu profondes.

Publication

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Application

EP 91110861 A 19910701

Priority

DE 4021340 A 19900704

Abstract (en)

[origin: EP0464739A1] An impeller with semiaxial blading and a vertical axis of rotation is rotatably arranged in a well-shaped thrust housing. The drive for the impeller is inserted into the thrust housing from above through a cover plate, and the thrust housing is closed at the bottom by a base plate which has a water inlet, arranged concentrically in the centre, for the axial flow of water against the impeller and at least one water outlet inclined at a slight angle. Arranged between the discharge end of the delivery passages of the impeller and the at least one water outlet is a baffle apparatus in which the flow energy of the water delivered by the impeller is converted to the greatest possible extent into thrust energy. The base plate (3) is structurally separate from the well-shaped thrust housing (1) and its cover plate (27), and the thrust housing is integrated in the supporting structure (42) of the ship as an integral component of it. The base plate together with the water inlet (4) integrated in it and the at least one water outlet (11) can be continuously rotated about the longitudinal axis of the thrust housing in both peripheral directions. <IMAGE>

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B63H 11/04

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