

Title (en)

WATERJET PROPULSION FOR WATERCRAFT

Title (de)

WASSERSTRÄHLENANTRIEB FÜR EIN WASSERFAHRZEUG

Title (fr)

DISPOSITIF DE PROPULSION PAR HYDROJET POUR BATEAU

Publication

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Application

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Priority

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- EP 9802156 W 19980414

Abstract (en)

[origin: DE19717175A1] The invention relates to a waterjet propulsion device for watercraft, comprising a housing (1) to which an inlet pipe is connected upstream and an outlet nozzle (3) downstream. Two impellers (4.1 and 4.2) are arranged coaxially to each other inside the housing. Each impeller is surrounded by a sprocket wheel (4.1.1 and 4.2.1) which is connected in a non-rotational manner to its corresponding pump rotor. A toothed wheel (5.3 and 5.4) is assigned to each sprocket wheel. The two toothed wheels drive the two sprocket wheels rotating in opposite directions. The number of teeth on the toothed wheels and sprocket wheels is chosen in such a way that the one impeller turns more slowly than the other impeller. The invention also provides for an external mechanical drive mechanism (5) comprising a single shaft (5.1) on which two pinions (5.2, 5.4) are mounted in a non-rotational manner. The one pinion (5.2) engages an intermediate wheel (5.3) which in turn engages the sprocket wheel (4.1.1) of the first impeller (4.1), while the second pinion (5.4) directly engages the sprocket wheel (4.2.1) of the second impeller (4.2).

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