

VERTICAL WATER-JET PROPULSION DEVICE
ABSTRACT OF THE DISCLOSURE

The conventional vertical water-jet propulsion device has a casing and a diffuser which are integral with each other. Due to the integral structure, a turning force resulting from the reactive force of a turning flow applied to the diffuser acts on the casing and the capacity of a steering motor disadvantageously increases.

In a vertical water-jet propulsion device WJ according to the present invention including a casing 10 which can be turned, pushing upward the running water taken from the bottom of the casing 10 by rotating an impeller 6, passing the water through a diffuser 8 to fill the pressure chamber of the casing 10 with a water flow and discharging the water flow from discharge openings provided at the bottom of the casing 10, a inner ring 5 supported by a hull 1 side and having an impeller shaft 7 inserted thereinto is provided at the upper portion of the casing 10 to support the casing 10 through swivel bearing 14, and the diffuser 8 is integral with or integrally fixed to the inner ring 5.

Fig. 1