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ABSTRACT
TRIMARAN TYPE WING EFFECT SHIP WITH SMALL WATERPLANE
AREA

A trimaran type WIG (Wing-In-Ground) effect ship with a minimum waterplane area is disclosed. This WIG ship consists of a main hull and two half-submerged sub-hulls each having a minimum waterplane area capable of minimizing the wave resistance and appendage resistance of the ship, thus reducing speed loss on rough water. The WIG ship also has main and sub-wings and an effective propelling mechanism, designed such that they produce a strong lift force allowing a take-off of the ship sailing on water even at a low speed. The WIG ship is thus excellent in its seakeeping and maneuverability on the rough water. In the WIG ship, the main hull is intermediately positioned between the main wings and comprises a slender and half-submerged body, and bears 60% of the total displacement of the ship. The sub-hulls are respectively provided under the outer ends of the main wings, and each bear 20% of the total displacement, and act as an end plate. This WIG ship also has two sailing propellers each supplying 25% of maximum required power of the ship, and a flight propeller supplying 50% of the maximum required power.

FIGURE 1



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