

Thruster with Duct and Ship Including the Same

ABSTRACT

The present invention provides a thruster with a duct capable of securing stable towing force during a low-speed operation and improving propulsive efficiency by preventing separation vortices on an outer surface of the duct during a high-speed traveling, since the duct is configured such that: in a cross-sectional shape of a duct (5) provided around a propeller (4) and having an airfoil cross section, a bulge portion (6) bulging outward from a standard airfoil and having a circular-arc cross section is formed on an outer periphery of a front end portion of the duct to suppress pressure change on an outer surface of the front end portion of the duct during high-speed traveling; and the duct (5) spreads at a spread angle (α) in a leading edge direction so as to generate predetermined towing force during a low-speed operation.

Figure 1