

MARINE PROPULSION DEVICE

Abstract

In a hybrid type marine propulsion device including a main engine and a motor, low fuel consumption is realized by a compact configuration and highly efficient drive control.

A marine propulsion device includes a clutch 7 provided on an input shaft 6 of a main engine, a horizontal input/output shaft 8 connected to the clutch, a vertical shaft 11 connected to the input/output shaft through an upper bevel gear 9, a horizontal propeller shaft 13 connected to a lower end of the vertical shaft through a lower bevel gear 12, and a propeller 14 at the other end side of the propeller shaft, in which the propeller is revolved around the vertical shaft to set a propulsion direction, wherein a motor generator 20 is mounted on a floor 3, and connected directly to the other end side of the input/output shaft. In a low rotation region, motor propulsion is performed, and in a high rotation region, hybrid propulsion in which the main engine is assisted by the motor is performed.