CLAIMS

1. A modularized electric propulsion apparatus for ships, the apparatus comprising:

a casing;

a space partition plate provided inside the casing and dividing an inner space of the casing into a plurality of different spaces;

a switch board fixed to the space partition plate in a first space and receiving and distributing external power, and separately outputting the power as power to be supplied to an inverter and power to be supplied to loads of a hull;

the inverter fixed to the space partition plate in a second space among the spaces such that the inverter is spaced apart from the switch board, the inverter being configured to convert and output the power supplied from the switch board; and

a motor which is fixed in a third space among the spaces such that the motor is spaced apart from the switch board and the inverter, the motor being configured to generate driving force by receiving the power from the inverter,

wherein no engine is provided inside the casing,

only the motor is provided as a single power source, and

a rotation shaft of the motor protrudes directly from a front surface which is a surface facing a rear of the hull

among surfaces of the casing, and the rotation shaft of the motor protrudes from the front surface of the casing, but is eccentric from a center of the front surface of the casing.

2. The apparatus of claim 1, wherein

the inverter and the switch board are spaced apart from the casing, and

the inverter and the switch board are insulated from the space partition plate.

3. The apparatus of claim 2, wherein

the third space is provided with a motor support plate for fixing the motor while spacing the motor apart from the casing, and

the motor and the motor support plate are insulated from each other.

4. The apparatus of claim 1, wherein

the switch board and the inverter are connected by a busbar, and

the inverter and the motor are connected by a busbar.

5. The apparatus of claim 1, wherein

the casing is provided with a power supply connector for supplying the power by being connected to a cable gland of the

switch board and a communication connector for communicating with the switch board, the inverter, or the motor; and

the power supply connector and the communication connector have standards or shapes different from each other.

6. The apparatus of claim 1, wherein the casing is provided with a cooling water supply nozzle receiving external cooling water to branch and supply the cooling water to the inverter and the motor, and a cooling water discharge nozzle combining the cooling water returned from the inverter and from the motor to discharge the combined cooling water to the outside.

7. The apparatus of claim 1, wherein the rotation shaft of the motor is positioned at a lateral side of a lower part by being eccentric from the center of the front surface of the casing.

8. A ship comprising:

the modularized electric propulsion apparatus for ships of claim 1 which is mounted on the ship, the ship using no internal combustion engine.