

【ABSTRACT】

Disclosed are a ship power management method and apparatus for stably connecting a shaft generator to a ship power system and stably inputting power thereof, and a ship using the same. The ship power management method comprises: connecting a shaft generator to a ship power system; controlling, with a zero-power reference, a generator-side converter of a power converter connected to the shaft generator; charging a DC link capacitor of the power converter; magnetizing the shaft generator by using current of the DC link capacitor so as to enable self-power generation; controlling a grid-side converter of the power converter with the zero-power reference; controlling the generator-side converter to charge the DC link capacitor with power of the shaft generator; and performing secondary voltage control in the power converter so that the shaft generator operates as a distributed power generator of the ship power system.

FIG. 1