

BOIL-OFF GAS TREATMENT SYSTEM AND METHOD FOR VESSEL

ABSTRACT OF THE DISCLOSURE

5 Provided are a BOG treatment system and method for a vessel, in which boil-off gas (BOG) discharged from a storage tank is compressed, most of the BOG is used as the fuel of vessel engines, and a part of the other BOG is liquefied by cold energy of BOG newly discharged from the storage tank and is returned to the storage tank, thereby efficiently utilizing the BOG. The BOG treatment system for a vessel includes: a
10 compressor configured to compress the BOG discharged from the storage tank; a medium pressure gas engine configured to receive at least a part of the BOG, which is compressed by the compressor, as fuel; a heat exchanger configured to exchange heat between the other BOG, which is not supplied to the medium pressure gas engine as fuel, and the BOG, which is discharged from the storage tank and is not compressed; and an
15 expander configured to decompress the other BOG that is cooled by the heat exchanger.

(Fig. 6)