

Title (en)
BOIL-OFF GAS RELIQUEFACTION DEVICE

Title (de)
VORRICHTUNG ZUR WIEDERVERFLÜSSIGUNG EINES BOIL-OFF-GASES

Title (fr)
DISPOSITIF DE RELIQUÉFACTION DE GAZ D'ÉVAPORATION

Publication
EP 2623414 A1 20130807 (EN)

Application
EP 11828834 A 20110916

Priority
• JP 2010222495 A 20100930
• JP 2011071216 W 20110916

Abstract (en)
Provided is a boil-off gas reliquefaction device that devises a disposition of equipment to be installable even in existing LNG carriers and that has a refrigeration cycle unit that reduces thermal load, is compact, and is highly efficient. The boil-off gas reliquefaction device (1) has: a liquefaction processing unit (5) having a BOG supply pipework (35), a fuel compressor (33), and a BOG transport pipework (39); and a refrigeration cycle unit (3) that further lowers the temperature of a coolant from a coolant compressor (6) by means of an expander (13) and that has a condenser (17) that cools BOG passing through the BOG transport pipework (39). The liquefaction processing unit (5) is provided with a BOG precooler (57) that performs heat exchange between BOG passing through the BOG transport pipework (39) on the upstream side of the condenser (17) and BOG passing through the BOG supply pipework (35). The refrigeration cycle unit (3) is provided with: a booster compressor (19) that is driven on the downstream side of the condenser (17) by the expander (13); and a second aftercooler (29) that cools the coolant from the booster compressor (19).

IPC 8 full level
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