

Title (en)

Apparatus and method for reliquefying boil-off gas capable of operating with variable refrigeration load

Title (de)

Vorrichtung und Verfahren zur Rückverflüssigung von Boil-off-Gas geeignet zum Betrieb mit variabler Kühlleistung

Title (fr)

Appareil et procédé pour reliquéfier un vaporisat capable de fonctionner à une charge de réfrigération variable

Publication

EP 1959217 A3 20120801 (EN)

Application

EP 07121837 A 20071129

Priority

KR 20070014682 A 20070213

Abstract (en)

[origin: EP1959217A2] The invention relates to an apparatus and a method for reliquefying boil-off gas in which the refrigeration load of a refrigeration system (20) can be changed when the reliquefaction load of the apparatus for reliquefying boil-off gas is changed. The boil-off gas reliquefaction apparatus according to the present invention, which supercools and reliquefies the boil-off gas generated in an LNG storage tank (1) by allowing the boil-off gas to pass through a cryogenic heat exchanger (11) via a boil-off gas discharge line (L1), and then to pass through a gas-liquid separator (13) installed at a rear end of the cryogenic heat exchanger (11), so as to return the boil-off gas to the LNG storage tank (1), is characterized in that the cryogenic heat exchanger (11) is connected to a refrigeration system (20) for compressing and expanding a refrigerant, in that the refrigerant system (20) comprises a multi-stage compressor (21a, 21b, 21c, 22a, 22b, 22c), an expander, (23) and a motor (M), and in that the motor is connected to an inverter (60).

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

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