

Title (en)

METHOD AND HEAT EXCHANGER FOR RECOVERING COLD DURING THE RE-GASIFICATION OF CRYOGENIC LIQUIDS

Title (de)

VERFAHREN UND WÄRMEAUSTAUSCHER ZUR RÜCKGEWINNUNG VON KÄLTE BEI DER REGASIFIZIERUNG TIEFKALTER FLÜSSIGKEITEN

Title (fr)

PROCÉDÉ ET ÉCHANGEUR DE CHALEUR POUR LA RÉCUPÉRATION DE FROID LORS DE LA REGAZÉIFICATION DE LIQUIDES CRYOGÉNIQUES

Publication

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Application

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Abstract (en)

[origin: WO2017114518A1] The invention relates to the recovery of cold during the re-gasification of cryogenic liquids, in particular, liquefied natural gas, liquefied nitrogen and liquefied oxygen. The cold is initially transferred from the cryogenic liquid to an intermediate medium and then from same to a liquid coolant, which remains without a phase change down to a temperature level of -60 °C and can be safely pumped in this way. The heat transfer occurs by evaporating and condensing the intermediate medium without use of pumps in natural circulation. The temperature of the intermediate medium can be set in the range of -20 °C to -100 °C by defining the equipment or construction features of the heat exchanger. The heat exchanger is characterised by relatively simple construction features and easy operability, which enable a suitably low capital expenditure for the cooling capacity.

IPC 8 full level

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