

Title (en)

NATURAL GAS LIQUEFACTION SYSTEM INCLUDING AN INTEGRALLY-GEARED TURBO-COMPRESSOR

Title (de)

ERDGASVERFLÜSSIGUNGSSYSTEM MIT EINEM GETRIEBETURBOVERDICHTER

Title (fr)

SYSTÈME DE LIQUÉFACTION DE GAZ NATUREL COMPRENANT UN TURBOCOMPRESSEUR À ENGRENAGE INTÉGRÉ

Publication

EP 3532786 B1 20210127 (EN)

Application

EP 17793914 A 20171025

Priority

- IT 201600109378 A 20161028
- EP 2017077281 W 20171025

Abstract (en)

[origin: WO2018077935A1] According to one aspect of the present disclosure, a natural gas liquefaction system (100) is provided. The system comprises an integrally-geared turbo-compressor (150) with a plurality of compressor stages; a prime mover (160) for driving the compressor; a pre-cooling loop (110), through which a first refrigerant is adapted to circulate, wherein one or more first compressor stages (151) of the plurality of compressor stages are adapted to pressurize the first refrigerant; a cooling loop (130), through which a second refrigerant is adapted to circulate, wherein one or more second compressor stages (155) of the plurality of compressor stages are adapted to pressurize the second refrigerant; a first heat exchanger device (170) for transferring heat from a natural gas and/or from the second refrigerant to the first refrigerant; and a second heat exchanger device (180) for transferring heat from the natural gas to the second refrigerant. A further aspect relates to a compressor arrangement for a natural gas liquefaction system. A yet further aspect relates to a method of liquefying natural gas.

IPC 8 full level

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CPC (source: EP KR US)

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