

Title (en)

Refrigeration cycle system, natural gas liquefaction plant, heat pump system, and method for retrofitting refrigeration cycle system

Title (de)

Kältekreislaufsystem, Erdgasverflüssigungsanlage, Wärmepumpensystem und Verfahren zum Nachrüsten des Kältekreislaufsystems

Title (fr)

Système de cycle de réfrigération, installation de liquéfaction de gaz naturel, système de pompe à chaleur, et procédé pour modifier le système de cycle de réfrigération

Publication

**EP 2068099 A3 20120215 (EN)**

Application

**EP 08020972 A 20081203**

Priority

JP 2007314484 A 20071205

Abstract (en)

[origin: EP2068099A2] A refrigeration cycle system is provided, comprising a plurality of compressors (3,4,5) for compressing a refrigerant that is used to cool a medium (10), one of the compressors being a low pressure compressor (3), another one of the compressors being a high pressure compressor (5); a condenser (6) for cooling and condensing the refrigerant compressed by the plurality of compressors (3,4,5); a reservoir (7) for receiving the refrigerant condensed by the condenser (6); an expansion mechanism (9) for expanding and cooling the refrigerant supplied from the reservoir (7); an evaporator (9) for evaporating the refrigerant cooled by the expansion mechanism (8) by means of the medium (10) to generate a refrigerant to be supplied to the plurality of compressors (3,4,5); and an intercooler (15,15A,61) that is provided between the low pressure compressor (3) and the high pressure compressor (5) and adapted to cool the refrigerant supplied from the low pressure compressor (3) by means of the refrigerant supplied from the expansion mechanism (8) so as to generate a refrigerant to be supplied to the high pressure compressor (5).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [I] EP 1347251 A2 20030924 - CARRIER CORP [US]
- [A] WO 03019085 A1 20030306 - MAERSK CONTAINER IND AS [DK], et al
- [A] HEINRICH ET AL: "KAELTEERZEUGUNG", LEHRBUCH DER KALTETECHNIK, MULLER VERLAG, HEIDELBERG, DE, 1 January 1997 (1997-01-01), pages 131 - 135,575, XP002143605

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Designated extension state (EPC)

AL BA MK RS

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