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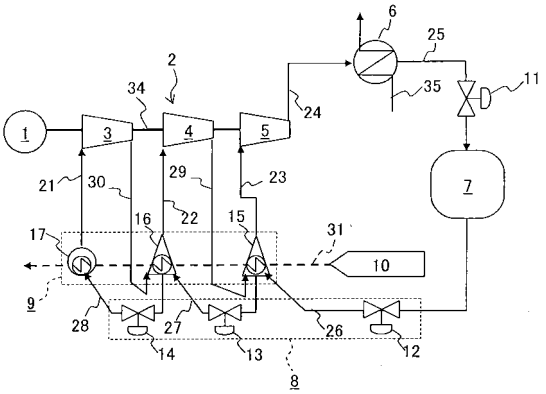
(54) Refrigeration cycle system, natural gas liquefaction plant, heat pump system, and method for retrofitting refrigeration cycle system

(57) 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).

FIG. 1



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EUROPEAN SEARCH REPORT

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TECHNICAL FIELDS SEARCHED (IPC)

F25B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	10 January 2012	Szilagyi, Barnabas

CATEGORY OF CITED DOCUMENTS

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