Title (en)

HEAT PUMP TYPE CHILLER

Title (de)

WÄRMEPUMPENARTIGE KÄLTEANLAGE

Title (fr)

REFROIDISSEUR DE TYPE POMPE À CHALEUR

Publication

EP 3163218 B1 20200909 (EN)

Application

EP 15811007 A 20150518

Priority

- JP 2014129484 A 20140624
- JP 2015064166 W 20150518

Abstract (en)

[origin: EP3163218A1] A heat pump type chiller (100) includes a compressor (10), a refrigerant-air heat exchanger (20), an expansion valve (40), and a refrigerant-circulating liquid heat exchanger (50) and cools a circulating liquid by heat exchange between the circulating liquid and a refrigerant. Temperature sensors (TWR, TWL, TWS) are provided respectively at a circulating liquid inlet port, at a circulating liquid outlet port, and on a surface portion of the refrigerant-circulating liquid heat exchanger (50). A pressure sensor (PL) is provided in a refrigerant suction path of the compressor (10). If it is detected that any one of temperatures detected by the three temperature sensors (TWR, TWL, TWS) and a refrigerant evaporation temperature calculated by converting a pressure detected by the pressure sensor (PL) is less than or equal to a predetermined temperature, the compressor (10) is stopped, and a circulation pump (300) for circulating the circulating liquid is activated.

IPC 8 full level

F25B 1/00 (2006.01); **F25B 13/00** (2006.01); **F25B 25/00** (2006.01); **F25B 49/00** (2006.01)

CPC (source: EP KR)

F25B 1/00 (2013.01 - EP); **F25B 13/00** (2013.01 - EP); **F25B 25/005** (2013.01 - EP); **F25B 49/005** (2013.01 - EP); **F25B 49/022** (2013.01 - KR); **F25D 29/00** (2013.01 - KR); **F25D 31/002** (2013.01 - KR); F25B 2500/26 (2013.01 - EP); F25B 2700/1933 (2013.01 - EP KR); F25B 2700/21172 (2013.01 - KR); F25B 2700/21173 (2013.01 - KR); F25D 2700/16 (2013.01 - KR)

Designated contracting state (EPC)

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DOCDB simple family (publication)

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