

Title (en)
FREEZING DEVICE

Title (de)
TIEFKÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE CONGÉLATION

Publication
EP 2910872 A1 20150826 (EN)

Application
EP 12886969 A 20121022

Priority
JP 2012077197 W 20121022

Abstract (en)
There are provided a high-temperature side circulation circuit A including a high-temperature side compressor 1, a high-temperature side condenser 2, a high-temperature side expansion valve 3, and a high-temperature side evaporator 4 sequentially connected by piping to circulate a refrigerant therethrough, a low-temperature side circulation circuit B including a low-temperature side compressor 5, a low-temperature side condenser 7, a low-temperature side flow control valve 10, and a low-temperature side evaporator 12 sequentially connected by piping to circulate a refrigerant therethrough, a cascade capacitor 8 formed of the high-temperature side evaporator 4 and the low-temperature side condenser 7 to exchange heat between the refrigerant flowing through the high-temperature side evaporator 4 and the refrigerant flowing through the low-temperature side condenser 7, and a plurality of expansion tanks 18 connected to a pipe between the low-temperature side condenser 7 and the low-temperature side compressor 5 via a low-temperature side second solenoid valve 17. The high-temperature side compressor 1, the high-temperature side condenser 2, the high-temperature side expansion valve 3, the high-temperature side evaporator 4, the low-temperature side compressor 5, and the low-temperature side condenser 7 are mounted in an outdoor unit 14, and the plurality of expansion tanks 18 are mounted in an expansion tank unit housing 31.

IPC 8 full level
F25B 1/00 (2006.01); **F25B 1/10** (2006.01); **F25B 7/00** (2006.01); **F25B 43/00** (2006.01); **F25B 45/00** (2006.01)

CPC (source: EP)
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Cited by
CN113932504A; CN113950602A; EP3978831A4

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Designated extension state (EPC)
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