

Title (en)

BINARY REFRIGERATION CYCLE DEVICE

Title (de)

BINÄRE KÄLTEKREISLAUFPORRICHTUNG

Title (fr)

DISPOSITIF À CYCLE DE RÉFRIGÉRATION BINAIRE

Publication

**EP 2672204 A1 20131211 (EN)**

Application

**EP 12754509 A 20120308**

Priority

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- JP 2012055951 W 20120308

Abstract (en)

A binary refrigeration cycle system includes: a low temperature-side refrigeration cycle including a heat source-side heat exchanger that absorbs heat from an external heat source, and a low temperature-side compressor; a high temperature-side refrigeration cycle including a utilization-side heat exchanger that supplies heat to a utilization side, and a high temperature-side compressor; an intermediate heat exchanger that exchanges heat between a refrigerant in the low temperature-side refrigeration cycle and a refrigerant in the high temperature-side refrigeration cycle; a casing to which at least the utilization-side heat exchanger is mounted; a utilization-side pipe that is provided for the casing and connected to the utilization-side heat exchanger so as to exchange heat between a circulated utilization-side fluid and the refrigerant in the high temperature-side refrigeration cycle and supply the heat to the utilization side; a bypass passage that is connected to the utilization-side pipe in parallel with the utilization-side heat exchanger so as to feed the utilization-side fluid in the utilization-side pipe from a utilization-side heat exchanger outlet side to a utilization-side heat exchanger inlet side; and a fluid control unit that controls a flow of the utilization-side fluid circulated in the bypass passage.

IPC 8 full level

**F25B 7/00** (2006.01); **F24D 19/10** (2006.01); **F24H 4/02** (2006.01); **F25B 1/00** (2006.01)

CPC (source: EP KR US)

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**F25B 7/00** (2013.01 - EP KR); **F25B 49/027** (2013.01 - EP); **F24D 2200/123** (2013.01 - EP); **F24H 15/38** (2022.01 - EP KR US);  
**F24H 15/414** (2022.01 - EP KR US); **F25B 2339/047** (2013.01 - EP); **F25B 2600/2501** (2013.01 - EP)

Cited by

EP4257894A4; EP3581853A1; FR3082606A1

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