

Title (en)
BINARY REFRIGERATION CYCLE DEVICE

Title (de)
BINÄRE KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE DE RÉFRIGÉRATION BINAIRE

Publication
EP 2672204 A4 20150617 (EN)

Application
EP 12754509 A 20120308

Priority
• JP 2011051306 A 20110309
• JP 2012055951 W 20120308

Abstract (en)
[origin: EP2672204A1] 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)
F24D 19/1021 (2013.01 - EP KR US); **F24D 19/1054** (2013.01 - EP KR US); **F24H 4/02** (2013.01 - EP); **F24H 9/2007** (2013.01 - EP KR US); **F24H 15/232** (2022.01 - EP KR US); **F24H 15/258** (2022.01 - EP KR US); **F24H 15/385** (2022.01 - EP KR US); **F25B 1/00** (2013.01 - KR); **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)

Citation (search report)
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• [A] JP 2002235953 A 20020823 - TOSHIBA CARRIER KK
• [A] DE 4026699 A1 19910508 - OSAKA PREFECTURE [JP], et al
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• See references of WO 2012121326A1

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EP4257894A4; EP3581853A1; FR3082606A1

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