

Title (en)
Air conditioner

Title (de)
Klimaanlage

Title (fr)
Climatiseur

Publication
EP 2728279 A1 20140507 (EN)

Application
EP 13191783 A 20131106

Priority
JP 2012244492 A 20121106

Abstract (en)
The separation between a liquid refrigerant and a lubricant inside an accumulator is prevented, and the amount of the lubricant supplied to a compressor is ensured. As a refrigerant, a refrigerant made of only R32 or a mixed refrigerant containing predetermined mass percent or more of the R32 is used. The refrigerant mixed with a predetermined level or more of the lubricant to prevent the occurrence of the two-layer separation between the liquid refrigerant and the lubricant is supplied to a compressor (104) of an outdoor unit (100). The lubricant separated by an oil separator (106) is returned to the accumulator (105) by an oil return capillary (107) to prevent the occurrence of a two-layer separation area in the accumulator. By the supply of a gas refrigerant containing an appropriate amount of the liquid refrigerant from the accumulator (105) to the compressor (104), the lubricant can be supplied to the compressor (104).

IPC 8 full level
F25B 9/00 (2006.01); **F25B 31/00** (2006.01); **F25B 43/00** (2006.01)

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F25B 9/002 (2013.01 - EP); **F25B 9/006** (2013.01 - EP); **F25B 31/004** (2013.01 - CN EP); **F25B 43/006** (2013.01 - EP);
F25B 43/02 (2013.01 - CN); **F25B 2400/12** (2013.01 - EP); **F25B 2500/06** (2013.01 - CN); **F25B 2500/16** (2013.01 - EP)

Citation (applicant)
• JP H11325620 A 19991126 - HITACHI LTD
• JP 3956589 B2 20070808

Citation (search report)
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• [XY] EP 1174665 A1 20020123 - DAIKIN IND LTD [JP]
• [XY] EP 1275912 A1 20030115 - DAIKIN IND LTD [JP]
• [Y] GB 2159260 A 19851127 - MITSUBISHI ELECTRIC CORP

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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CN 106382768 B 20190730; ES 2661868 T3 20180404; JP 2014092339 A 20140519; JP 5927633 B2 20160601

DOCDB simple family (application)
EP 13191783 A 20131106; CN 201310544957 A 20131106; CN 201610757973 A 20131106; ES 13191783 T 20131106;
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