

Title (en)  
HEAT MEDIUM CIRCULATION DEVICE

Title (de)  
HITZEMEDIUM-ZIRKULATIONSVORRICHTUNG

Title (fr)  
DISPOSITIF DE CIRCULATION DE MILIEU THERMIQUE

Publication  
**EP 4083524 A1 20221102 (EN)**

Application  
**EP 22169798 A 20220425**

Priority  
JP 2021074719 A 20210427

Abstract (en)  
A heat medium circulation device 100 of the present disclosure including: a refrigerant circuit 110 which is formed by annularly connecting a compressor 111, a use-side heat exchanger 112, an expanding device 113 and a heat source-side heat exchanger 114 to one another; and a mechanical chamber 130 in which a portion of at least the refrigerant circuit 110 and a control device 120 are accommodated, in which flammable refrigerant is used as working fluid, wherein the heat medium circulation device 100 further includes an open/close mechanism 140 which opens such that an interior of the mechanical chamber 130 is vented into the outdoor atmosphere when the flammable refrigerant leaks into the mechanical chamber 130. Therefore, it is possible to lower the ignition risk when the flammable refrigerant leaks while securing energy saving performance and noise barrier performance.

IPC 8 full level  
**F24F 1/46** (2011.01); **F24F 1/48** (2011.01); **F24F 11/00** (2018.01); **F24F 11/36** (2018.01); **F24F 11/89** (2018.01); **F24F 13/20** (2006.01); **F24F 140/00** (2018.01)

CPC (source: EP)  
**F24F 1/46** (2013.01); **F24F 1/48** (2013.01); **F24F 11/0001** (2013.01); **F24F 11/36** (2017.12); **F24F 11/89** (2017.12); **F24F 13/20** (2013.01); **F24F 2140/00** (2017.12)

Citation (applicant)  
EP 2896897 A1 20150722 - MITSUBISHI ELECTRIC CORP [JP]

Citation (search report)  
• [X] JP 2002115939 A 20020419 - HITACHI IND CO LTD  
• [I] JP H08200904 A 19960809 - SANYO ELECTRIC CO  
• [I] JP 5208100 B2 20130612  
• [Y] WO 2015058450 A1 20150430 - GD MIDEA AIR CONDITIONING EQUIPMENT CO LTD [CN], et al  
• [Y] CN 109357325 A 20190219 - HISENSE SHANDONG AIRCO CO LTD  
• [YD] EP 2896897 A1 20150722 - MITSUBISHI ELECTRIC CORP [JP]

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

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KH MA MD TN

DOCDB simple family (publication)  
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