Title (en)

Refrigeration cycle device

Title (de)

Kältekreislaufvorrichtung

Title (fr)

Dispositif de circuit de réfrigération

Publication

EP 1826510 A3 20110615 (EN)

Application

EP 07003911 A 20070226

Priority

JP 2006050549 A 20060227

Abstract (en)

[origin: EP1826510A2] In a refrigeration cycle device (2) in which heat generated by heat absorption of an evaporator (16) is used for heating in a condenser (11), a disadvantage that a cooling capacity of the evaporator (16) deteriorates owing to shortage or drop of an amount of the heat to be rejected from the condenser (11) is securely avoided and a cooling function is maintained. In the refrigeration cycle device which is provided with a refrigerant circuit including a compressor (10), a condenser (11), an expansion valve (14) and an evaporator (16) and which exhibits a heating function by the heat rejected from the condenser (11) and which exhibits the cooling function by the heat absorption of the evaporator (16), an operation to secure a predetermined amount of the heat to be rejected from the condenser (11) is executed in order to maintain the cooling function of the evaporator (16) based on an index capable of grasping the amount of the heat to be rejected from the condenser (11).

IPC 8 full level

F25B 29/00 (2006.01); F25B 6/02 (2006.01); F25B 6/04 (2006.01); F25B 9/00 (2006.01); F25B 49/02 (2006.01)

CPC (source: EP US)

F24D 17/02 (2013.01 - EP US); **F25B 29/003** (2013.01 - EP US); F25B 6/02 (2013.01 - EP US); F25B 6/04 (2013.01 - EP US); F25B 9/008 (2013.01 - EP US); F25B 49/027 (2013.01 - EP US); F25B 2309/061 (2013.01 - EP US); F25B 2339/047 (2013.01 - EP US); F25B 2700/2111 (2013.01 - EP US); F25B 2700/21152 (2013.01 - EP US); F25B 2700/21161 (2013.01 - EP US); F25B 2700/21163 (2013.01 - EP US)

Citation (search report)

- [X] US 4373345 A 19830215 - TYREE JR LEWIS [US], et al
- [X] US 4351159 A 19820928 - SCHUMACHER FRANK A
- [A] GB 2117884 A 19831019 - BIRMINGHAM HEAT PUMPS LIMITED

Cited by

DE102007019981B4; CN112702662A; EP2211125A1; CN102326040A; AU2009350584B2; GB2466559A; GB2457926A; GB2457926B; EP2829819A1; US8893520B2; US9807908B2; WO2009039057A1; WO2011012153A1; EP1853856A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1826510 A2 20070829; **EP 1826510 A3 20110615**; CN 100554826 C 20091028; CN 101029786 A 20070905; JP 2007232225 A 20070913; JP 4592616 B2 20101201; US 2007199337 A1 20070830

DOCDB simple family (application)

EP 07003911 A 20070226; CN 200710084711 A 20070226; JP 2006050549 A 20060227; US 71099007 A 20070227