

Title (en)

REFRIGERATION CYCLE DEVICE

Title (de)

KÄLTEKREISLAUFGERÄT

Title (fr)

DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication

**EP 3492835 B1 20200722 (EN)**

Application

**EP 16910469 A 20160726**

Priority

JP 2016071816 W 20160726

Abstract (en)

[origin: EP3492835A1] A refrigeration cycle apparatus (101) includes a drain pan (50) configured to receive drain water obtained by condensing moisture in the air by an evaporator (5), a temperature detector (51) configured to detect a temperature related to a temperature of the drain water, an oil separator (2) provided between the compressor (1) and the condenser (3) and configured to separate refrigerating machine oil and the refrigerant from each other, an oil return passage (71) configured to return the refrigerating machine oil separated by the oil separator (2) to a suction port of the compressor (1) and configured to dissipate heat of the refrigerating machine oil passing therethrough to the drain water in the drain pan (50), and a valve (8) for adjusting a flow rate of the refrigerating machine oil of the oil return passage (71). The valve (8) is configured to have a degree of opening varying in accordance with an output of the temperature detector (51). This configuration can prevent freezing of the drain water in the drain pan (50) while suppressing performance degradation in normal operation.

IPC 8 full level

**F25B 1/00** (2006.01); **F25B 31/00** (2006.01)

CPC (source: EP)

**F25B 1/00** (2013.01); **F25B 31/004** (2013.01); **F25B 31/006** (2013.01); **F25B 2500/16** (2013.01); **F25B 2600/2515** (2013.01)

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

DOCDB simple family (publication)

**EP 3492835 A1 20190605; EP 3492835 A4 20190807; EP 3492835 B1 20200722;** JP 6615351 B2 20191204; JP WO2018020566 A1 20190411; WO 2018020566 A1 20180201; WO 2018020566 A9 20181213

DOCDB simple family (application)

**EP 16910469 A 20160726;** JP 2016071816 W 20160726; JP 2018530226 A 20160726