

Title (en)

REFRIGERANT LEAKAGE DETERMINATION DEVICE, CONTROL DEVICE, REFRIGERANT LEAKAGE DETERMINATION PROGRAM, AND REFRIGERANT LEAKAGE DETERMINATION METHOD

Title (de)

KÄLTEMITTELLECKAGEBESTIMMUNGSVORRICHTUNG, STEUERUNGSVORRICHTUNG,
KÄLTEMITTELLECKAGEBESTIMMUNGSPROGRAMM UND KÄLTEMITTELLECKAGEBESTIMMUNGSVERFAHREN

Title (fr)

DISPOSITIF DE DÉTERMINATION DE FUITE DE FLUIDE FRIGORIFIQUE, DISPOSITIF DE COMMANDE, PROGRAMME DE DÉTERMINATION
DE FUITE DE FLUIDE FRIGORIFIQUE ET PROCÉDÉ DE DÉTERMINATION DE FUITE DE FLUIDE FRIGORIFIQUE

Publication

EP 4350257 A1 20240410 (EN)

Application

EP 21943036 A 20210527

Priority

JP 2021020162 W 20210527

Abstract (en)

A refrigerant leak determination apparatus (300) is provided with a refrigeration cycle device (100), connection devices (105A and 105B), and a control device (200). The refrigeration cycle device (100) is configured with an indoor unit (100A) and an outdoor unit (100B). The refrigeration cycle device (100) includes a refrigerant circuit (120), and performs a refrigeration cycle in which a refrigerant circulates through the refrigerant circuit (120). Each of the connection devices (105A and 105B) has a communication opening to an internal space of the refrigerant circuit (120), and is connected to a pressure sensor (104) that measures a refrigerant pressure in the internal space. The control device (200) causes the refrigeration cycle device (100) to perform oil recovery operation to collect oil inside the refrigerant circuit (120) in a compressor (109), and determines a leak of the refrigerant from the refrigerant circuit (120), by comparing a reference pressure with the refrigerant pressure measured by the pressure sensor (104) after the oil recovery operation.

IPC 8 full level

F25B 49/02 (2006.01); **F25B 1/00** (2006.01)

CPC (source: EP US)

F25B 13/00 (2013.01 - EP); **F25B 31/002** (2013.01 - US); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - US);
F25B 2313/0314 (2013.01 - EP); **F25B 2313/0315** (2013.01 - EP); **F25B 2400/19** (2013.01 - EP); **F25B 2500/16** (2013.01 - US);
F25B 2500/222 (2013.01 - EP US); **F25B 2600/2513** (2013.01 - US); **F25B 2700/1933** (2013.01 - EP); **F25B 2700/195** (2013.01 - EP US);
F25B 2700/21 (2013.01 - US); **F25B 2700/21151** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4350257 A1 20240410; EP 4350257 A4 20240717; CN 117321360 A 20231229; JP WO2022249387 A1 20221201;
US 2024191924 A1 20240613; WO 2022249387 A1 20221201

DOCDB simple family (application)

EP 21943036 A 20210527; CN 202180098354 A 20210527; JP 2021020162 W 20210527; JP 2023523855 A 20210527;
US 202118553347 A 20210527