

Title (en)  
REFRIGERANT LEAKAGE DETERMINATION DEVICE, FREEZING DEVICE INCLUDING THIS REFRIGERANT LEAKAGE DETERMINATION DEVICE, AND REFRIGERANT LEAKAGE DETERMINATION METHOD

Title (de)  
KÄLTEMITTELLECKBESTIMMUNGSVORRICHTUNG, GEFRIERVORRICHTUNG MIT DIESER KÄLTEMITTELLECKBESTIMMUNGSVORRICHTUNG UND KÄLTEMITTELLECKBESTIMMUNGSVERFAHREN

Title (fr)  
DISPOSITIF DE DÉTERMINATION DE FUITE DE FLUIDE FRIGORIGÈNE, DISPOSITIF DE CONGÉLATION COMPRENANT CE DISPOSITIF DE DÉTERMINATION DE FUITE DE FLUIDE FRIGORIGÈNE ET PROCÉDÉ DE DÉTERMINATION DE FUITE DE FLUIDE FRIGORIGÈNE

Publication  
**EP 3859249 B1 20230830 (EN)**

Application  
**EP 19865774 A 20190926**

Priority  
• JP 2018185173 A 20180928  
• JP 2019037874 W 20190926

Abstract (en)  
[origin: EP3859249A1] A refrigerant leakage determination device (60) includes a calculator (66) and a determination unit (67). The calculator (66) calculates a deviation degree of a refrigerant circuit (20) from a normal state based on data related to operation of a refrigeration apparatus (1). The determination unit (67) determines refrigerant leakage or estimates refrigerant leakage occurrence time based on a calculation result of the calculator (66). The calculator (66) calculates first and second index values respectively from data related to operation of the refrigeration apparatus (1) in a first period and a second period that differs in length from the first period and calculates the deviation degree of the refrigerant circuit (20) from the normal state based on the first and second index values. The determination unit (67) determines refrigerant leakage or estimates refrigerant leakage occurrence time based on the deviation degree of the refrigerant circuit (20) from the normal state.

IPC 8 full level  
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CPC (source: EP US)  
**F25B 40/00** (2013.01 - EP); **F25B 41/20** (2021.01 - EP); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - US); **F25B 2400/13** (2013.01 - EP); **F25B 2500/19** (2013.01 - EP); **F25B 2500/222** (2013.01 - EP US); **F25B 2700/21152** (2013.01 - EP US)

Cited by  
EP4400782A1; US11971183B2; US11994326B2

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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