

Title (en)
REFRIGERANT LEAKAGE SPOT SPECIFYING METHOD

Title (de)
VERFAHREN ZUM SPEZIFIZIEREN EINER KÄLTEMITTELLECKAGEGESTELLE

Title (fr)
PROCÉDÉ DE SPÉCIFICATION DE POINT DE FUITE DE RÉFRIGÉRANT

Publication
EP 3358277 A4 20180808 (EN)

Application
EP 16851548 A 20160927

Priority
• JP 2015195327 A 20150930
• JP 2016078489 W 20160927

Abstract (en)
[origin: EP3358277A1] Provided is a refrigerant leakage spot identifying method that is capable of identifying a refrigerant leakage spot when a refrigerant leakage has occurred while restraining an increase in cost. The refrigerant leakage spot identifying method applied to a refrigeration apparatus (100) is a method for identifying a refrigerant leakage spot when a leakage of refrigerant has occurred in a refrigerant circuit (RC) including a compressor (11) and a liquid-side closing valve (17), a gas-side closing valve (18), and a utilization-side expansion valve (32), the valves being capable of being in a closed state to block the flow of the refrigerant. The method includes a step for dividing the refrigerant circuit (RC) into a plurality of refrigerant flow paths by setting each of the valves to the closed state in the state of the compressor (11) being stopped; and a step for determining whether or not there is a leakage of the refrigerant in each of the refrigerant flow paths by detecting a change in the state of the refrigerant in each of the refrigerant flow paths after the first step.

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CPC (source: EP)
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Citation (search report)
• [XAI] JP 2005241050 A 20050908 - MITSUBISHI ELEC BUILDING TECHN
• [IAY] US 2011302941 A1 20111215 - TAKATA SHIGEO [JP]
• [Y] JP 2014095514 A 20140522 - PANASONIC CORP
• [A] JP H04369370 A 19921222 - HITACHI LTD
• [A] EP 1876403 A1 20080109 - DAIKIN IND LTD [JP]
• See references of WO 2017057377A1

Cited by
CN114364925A; WO2022089687A1; EP3951288A4; EP3932705A3; US11441820B2; US11674726B2; WO2020051314A1

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