Title (en)

REFRIGERANT LEAKAGE DETECTING DEVICE AND REFRIGERATOR USING THE SAME

Title (de)

VORRICHTUNG ZUR ERFASSUNG VON KÄLTEMITTELLECKAGE UND DIESE VERWENDENDE KÜHLVORRICHTUNG

Title (fr)

DISPOSITIF DE DETECTION DE FUITE DE REFRIGERANT ET REFRIGERATEUR UTILISANT UN TEL DISPOSITIF

Publication

EP 1691150 B1 20161123 (EN)

Application

EP 04720265 A 20040312

Priority

- JP 2004003451 W 20040312
- JP 2003329149 A 20030919

Abstract (en)

[origin: EP1691150A1] In a refrigerator using a flammable coolant, a coolant leakage detecting device is provided with which it is possible to improve the detection accuracy of coolant leakages certainly in correspondence with input fluctuations of a compressor. When a coolant leak occurs on the low-pressure side of a refrigerating cycle, because the internal pressure of the cycle in operation is negative, air is sucked in and the power increases. When the value of this increase in an instantaneous power for determination Wi(t) rises above a reference increase value G1, it is determined that there is a low-pressure side leak. On the other hand, when a coolant leak occurs on the high-pressure side of the refrigerating cycle, the internal pressure of the cycle in operation decreases and along with this the power decreases. When the value of this decrease in the instantaneous power for detection Wi(t) exceeds a reference decrease value G2, it is determined that there is a coolant leak on the high-pressure side.

IPC 8 full level

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CPC (source: EP KR)

F25B 49/00 (2013.01 - KR); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - KR); F25B 2400/12 (2013.01 - EP); F25B 2500/222 (2013.01 - EP); F25D 2400/04 (2013.01 - EP)

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