

Title (en)
AIR CONDITIONER DEVICE

Title (de)
KLIMAANLAGE

Title (fr)
DISPOSITIF DE CONDITIONNEMENT D'AIR

Publication
EP 2669607 A4 20170426 (EN)

Application
EP 11856852 A 20110126

Priority
JP 2011000411 W 20110126

Abstract (en)
[origin: US2013233006A1] An air-conditioning apparatus that includes a refrigeration cycle in which a compressor, a heat-source side heat exchanger, an expansion unit, and a load-side heat exchanger are included and are connected with refrigerant pipes, includes cutoff units capable of flowing or cut off a refrigerant circulating in the refrigeration cycle; a detection unit detecting leaking of the refrigerant on the basis of a resistance that changes with densities of plural kinds of leaked refrigerants; a concentration calculation unit calculating a concentration of a refrigerant that has leaked, on the basis of the resistance of the detection unit; a concentration detection unit outputting a calculation result of the concentration calculation unit in order that the calculation result is used for controlling the cutoff units; and a cutoff control unit controlling the cutoff units on the basis of an output of the concentration detection unit.

IPC 8 full level
F25B 13/00 (2006.01); **F25B 25/00** (2006.01); **F25B 49/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP US)
F25B 9/008 (2013.01 - US); **F25B 49/005** (2013.01 - EP US); **F25B 13/00** (2013.01 - EP US); **F25B 25/005** (2013.01 - EP US); **F25B 2313/0231** (2013.01 - EP US); **F25B 2313/0272** (2013.01 - EP US); **F25B 2313/02732** (2013.01 - EP US); **F25B 2500/222** (2013.01 - EP US); **F25B 2600/2519** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)
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DOCDB simple family (publication)
US 2013233006 A1 20130912; EP 2669607 A1 20131204; EP 2669607 A4 20170426; EP 2669607 B1 20200415; JP 5642202 B2 20141217; JP WO2012101673 A1 20140630; WO 2012101673 A1 20120802

DOCDB simple family (application)
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