

Title (en)
AIR CONDITIONER DEVICE

Title (de)
KLIMAANLAGE

Title (fr)
DISPOSITIF DE CONDITIONNEMENT D'AIR

Publication
EP 2669607 A1 20131204 (EN)

Application
EP 11856852 A 20110126

Priority
JP 2011000411 W 20110126

Abstract (en)

An air-conditioning apparatus 100 that includes a refrigeration cycle in which a compressor 10, a heat-source side heat exchanger 12, an expansion unit 16, and a load-side heat exchanger 15 are included and are connected with refrigerant pipes, includes cutoff units 37 and 38 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 41 calculating a concentration of a refrigerant that has leaked, on the basis of the resistance of the detection unit; a concentration detection unit 39 outputting a calculation result of the concentration calculation unit 41 in order that the calculation result is used for controlling the cutoff units 37 and 38; and a cutoff control unit 40 controlling the cutoff units 37 and 38 on the basis of an output of the concentration detection unit 39.

IPC 8 full level
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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)

Cited by
CN106440584A; CN109952479A; EP3546855A4; US11181303B2

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DOCDB simple family (publication)

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