

Title (en)
Refrigeration cycle apparatus

Title (de)
Kältekreislaufvorrichtung

Title (fr)
Appareil de circuit de réfrigération

Publication
EP 2679921 A2 20140101 (EN)

Application
EP 13160066 A 20130319

Priority
JP 2012143606 A 20120627

Abstract (en)
From recent study of combustion of an HFC refrigerant that has a low GWP but is flammable, it has been found that the combustion scale tends to increase as the absolute humidity increases. In a refrigeration cycle apparatus using such a refrigerant, it is necessary to increase safety against unexpected refrigerant leakage in consideration of this tendency. This refrigeration cycle apparatus includes a compressor having a compression mechanism section in an enclosed container and configured to compress and discharge a refrigerant so as to circulate the refrigerant in a refrigerant circuit, and an outdoor unit installed outdoors and having a housing divided by a partition plate into a fan chamber and a machine chamber including the compressor. The refrigerant is a flammable HFC refrigerant. The refrigeration cycle apparatus further includes a desiccant attached in thermal contact with a surface of the enclosed container of the compressor whose temperature is increased by a gas refrigerant compressed by the compression mechanism section during operation of the compressor so that the temperature becomes a high temperature near a temperature of the compressed gas refrigerant, and adsorbs water from air in the machine chamber during non-operation of the outdoor unit.

IPC 8 full level
F24F 1/06 (2011.01); **F24F 1/46** (2011.01); **F24F 3/14** (2006.01); **F24F 11/00** (2006.01); **F25B 9/00** (2006.01); **F25B 13/00** (2006.01); **F25B 49/00** (2006.01)

CPC (source: EP)
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Citation (applicant)
JP 2000105003 A 20000411 - SANYO ELECTRIC CO

Cited by
EP3112768A4; US11506431B2; EP3795927A4; EP3578894A4; US11067303B2

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