

Title (en)  
REFRIGERATION CYCLE APPARATUS

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
APPAREIL À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 3524915 B1 20211215 (EN)**

Application  
**EP 16918265 A 20161004**

Priority  
JP 2016079499 W 20161004

Abstract (en)  
[origin: EP3524915A1] A refrigeration cycle apparatus according to the present invention includes: a first heat exchanger which is a fin-less heat exchanger, and includes a plurality of heat transfer tubes extending in a gravity direction; a fan configured to send air to the first heat exchanger; and a vortex generating device provided upstream of the first heat exchanger, and configured to cause the air to be sent to the first heat exchanger by the fan to change into a vortex flow.

IPC 8 full level  
**F28F 13/12** (2006.01); **F25B 1/00** (2006.01); **F25B 39/02** (2006.01); **F28D 7/16** (2006.01)

CPC (source: EP)  
**F25B 1/00** (2013.01); **F25B 39/02** (2013.01); **F28D 1/024** (2013.01); **F28D 1/0435** (2013.01); **F28D 1/05366** (2013.01); **F28F 13/12** (2013.01); **F28D 2021/0068** (2013.01); **F28F 2265/02** (2013.01)

Cited by  
US2022053673A1; US11997839B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3524915 A1 20190814; EP 3524915 A4 20191016; EP 3524915 B1 20211215**; JP WO2018066066 A1 20190624;  
WO 2018066066 A1 20180412

DOCDB simple family (application)  
**EP 16918265 A 20161004**; JP 2016079499 W 20161004; JP 2018543512 A 20161004