Title (en)

AIR CONDITIONER INDOOR UNIT

Title (de)

KLIMAANLAGENINNENRAUMEINHEIT

Title (fr)

UNITÉ INTÉRIEURE DE CLIMATISEUR

Publication

EP 3438559 A4 20200108 (EN)

Application

EP 17895510 A 20171003

Priority

- JP 2017089969 A 20170428
- JP 2017036039 W 20171003

Abstract (en)

[origin: EP3438559A1] An indoor unit 2 for an air conditioner includes a heat exchanger 16 for exchanging heat between air and refrigerant; a drain pan 17 for receiving drain water which drops from the heat exchanger; and a controller for controlling a freezing operation of making frost or ice adhere to a surface of the heat exchanger. A volume of the drain pan is equal to or greater than a total adhesion amount of frost or ice to adhere to the heat exchanger during the freezing operation. Preferably, in consideration that the drain water is discharged out side of the indoor unit 2 through the drain pipe, a volume of the drain pan is equal to or greater than (the total adhesion amount of frost or ice - an amount of drainage through the drain pipe per unit time × a smaller one of an amount of time required for all the frost or ice to melt and an amount of time required for all the frost or ice to drop into the drain pan).

IPC 8 full level

F24F 1/00 (2019.01); **F24F 1/0063** (2019.01); **F24F 13/22** (2006.01)

CPC (source: EP)

F24F 1/0063 (2019.01); **F24F 13/222** (2013.01); F24F 2013/227 (2013.01); F24F 2221/22 (2013.01)

Citation (search report)

- [IA] US 6062032 A 20000516 - YOON YEON-SEOB [KR]
- [I] WO 2006098436 A1 20060921 - TOSHIBA CARRIER CORP [JP], et al
- [A] WO 2017049089 A1 20170323 - WHIRLPOOL CO [US]
- See references of WO 2018198400A1

Cited by

EP4033165A1; FR3119011A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3438559 A1 20190206; **EP 3438559 A4 20200108**; **EP 3438559 B1 20231129**; CN 109154445 A 20190104; CN 109154445 B 20200204; JP 2018189271 A 20181129; JP 6340111 B1 20180606; MY 173637 A 20200212; TW 201839330 A 20181101; TW I644063 B 20181211; WO 2018198400 A1 20181101

DOCDB simple family (application)

EP 17895510 A 20171003; CN 201780011595 A 20171003; JP 2017036039 W 20171003; JP 2017089969 A 20170428; MY PI2018702856 A 20171003; TW 106139435 A 20171115