

Title (en)

CEILING-TYPE INDOOR UNIT OF AIR CONDITIONER

Title (de)

DECKENINNENRAUMEINHEIT EINER KLIMAANLAGE

Title (fr)

UNITÉ INTÉRIEURE DE CLIMATISEUR DE TYPE AU PLAFOND

Publication

EP 3730847 A4 20211103 (EN)

Application

EP 18891513 A 20181221

Priority

- KR 20170177353 A 20171221
- KR 20180164267 A 20181218
- KR 2018016459 W 20181221

Abstract (en)

[origin: EP3730845A1] In the present disclosure, an intake grille is supported at four points through four wires, two wires disposed on one side are fixed to a first drum and two wires disposed on the other side are fixed to a second drum, whereby two pairs of wires may be simultaneously wound or unwound through two drum motors operating the first drum and the second drum, respectively.

IPC 8 full level

F24F 1/0047 (2019.01); **F24F 13/08** (2006.01); **F24F 13/10** (2006.01); **F24F 13/14** (2006.01); **F24F 13/20** (2006.01); **F24F 13/28** (2006.01)

CPC (source: EP KR)

F24F 1/0011 (2013.01 - KR); **F24F 1/0047** (2019.02 - EP); **F24F 13/084** (2013.01 - EP); **F24F 13/085** (2013.01 - EP);
F24F 13/10 (2013.01 - EP KR); **F24F 13/20** (2013.01 - EP); **F24F 13/28** (2013.01 - EP); **F24F 1/0047** (2019.02 - KR);
F24F 2013/1453 (2013.01 - EP); **F24F 2013/207** (2013.01 - EP)

Citation (search report)

- [XAY] KR 20060005847 A 20060118 - SAMSUNG ELECTRONICS CO LTD [KR]
- [XAY] KR 20080044496 A 20080521 - SAMSUNG ELECTRONICS CO LTD [KR]
- [YA] WO 2010013957 A2 20100204 - SHIN JEONG-HUN [KR]
- [YA] JP H10141695 A 19980529 - MITSUBISHI HEAVY IND LTD
- [YA] JP 2016153702 A 20160825 - JOHNSON CONTROLS HITACHI AIR CONDITIONING TECH (HONGKONG) LTD
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- See also references of WO 2019125046A1

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 3730845 A1 20201028; EP 3730845 A4 20211020; AU 2018388327 A1 20200806; AU 2018388327 B2 20220519;
AU 2018388381 A1 20200806; AU 2018388381 B2 20220616; AU 2018388754 A1 20200806; AU 2018388754 B2 20220616;
CN 111742178 A 20201002; CN 111742178 B 20220426; CN 111742179 A 20201002; CN 111742179 B 20220524; CN 111801529 A 20201020;
CN 111801529 B 20220422; EP 3730846 A1 20201028; EP 3730846 A4 20211027; EP 3730847 A1 20201028; EP 3730847 A4 20211103;
KR 102187748 B1 20201207; KR 102235273 B1 20210402; KR 102278184 B1 20210716; KR 102454127 B1 20221014;
KR 20190075818 A 20190701; KR 20190075819 A 20190701; KR 20190075820 A 20190701; KR 20200144534 A 20201229

DOCDB simple family (application)

EP 18890162 A 20181221; AU 2018388327 A 20181221; AU 2018388381 A 20181221; AU 2018388754 A 20181221;
CN 201880089977 A 20181221; CN 201880089986 A 20181221; CN 201880089987 A 20181221; EP 18891313 A 20181221;
EP 18891513 A 20181221; KR 20180164264 A 20181218; KR 20180164266 A 20181218; KR 20180164267 A 20181218;
KR 20200179957 A 20201221