Title (en)

CEILING-TYPE INDOOR UNIT OF AIR CONDITIONER

Title (de)

DECKENINNENRAUMEINHEIT EINER KLIMAANLAGE

Title (fr)

UNITÉ INTÉRIEURE DU TYPE POUR PLAFOND DE CLIMATISEUR

Publication

EP 3693676 A1 20200812 (EN)

Application

EP 18854263 A 20180906

Priority

- KR 20170114121 A 20170906
- KR 20170121408 A 20170920
- KR 2018010446 W 20180906

Abstract (en)

Disclosed is a ceiling type indoor unit of an air conditioner, the ceiling type indoor unit including a case installed at the ceiling of a room so as to be suspended therefrom, the case having a suction port and a discharge port formed at the lower surface thereof, and a vane module disposed at the case, the vane module being configured to guide the flow direction of air discharged from the discharge port, wherein the vane module includes a module body installed at the case, at least a portion of the module body being exposed to the discharge port, a vane motor assembled to the module body, the vane motor being configured to provide driving force, a driving link assembled to the module body so as to be rotatable relative thereto, the driving link being coupled to the vane motor, the driving link being configured to be rotated by the driving force of the vane motor, the driving link including a first driving link body and a second driving link body having a predetermined angle therebetween, a first vane link located further forwards than the driving link, the first vane link being assembled to the module body so as to be rotatable relative thereto, a second vane link assembled to the second driving link body so as to be rotatable relative thereto, a first vane disposed at the discharge port, the first vane being disposed forwards in the discharge direction of air discharged from the discharge port, the first vane being assembled to each of the first driving link body and the first vane link so as to be rotatable relative thereto, and a second vane disposed at the discharge port, the second vane being assembled to the module body so as to be rotatable relative thereto by the second vane shaft, the second vane being assembled to the second vane link so as to be rotatable relative thereto, the vane module adjusts inclinations of the first vane and the second vane to provide a plurality of discharge steps, and when the vane module provides discharge step P1, which is one of the plurality of discharge steps, the first vane is located at the lower side of the discharge port, and the front end of the second vane is located higher than the rear end of the first vane.

IPC 8 full level

F24F 13/14 (2006.01); **F24F 1/00** (2019.01)

CPC (source: CN EP KR)

F24F 1/0011 (2013.01 - CN EP KR); **F24F 1/0014** (2013.01 - EP); **F24F 1/0047** (2019.01 - CN EP); **F24F 13/14** (2013.01 - EP); **F24F 13/142** (2013.01 - CN); **F24F 13/1426** (2013.01 - CN EP KR); **F24F 13/1486** (2013.01 - EP); **F24F 13/15** (2013.01 - CN); F24F 1/0047 (2019.01 - KR); F24F 2013/1433 (2013.01 - CN KR); F24F 2013/1446 (2013.01 - CN); F24F 2013/1473 (2013.01 - EP)

Cited by

US2023010148A1; EP4269884A4

Designated contracting state (EPC)

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Designated extension state (EPC)

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EP 3680571 A1 20200715; **EP 3680571 A4 20210609**; AU 2018327937 A1 20200423; AU 2018327937 B2 20220224; AU 2018330127 A1 20200423; AU 2018330127 B2 20220310; AU 2018330128 A1 20200423; AU 2018330128 B2 20220609; AU 2018330129 A1 20200423; AU 2018330129 B2 20211223; AU 2018330131 A1 20200423; AU 2018330131 B2 20220303; AU 2022202992 A1 20220526; AU 2022202992 B2 20240516; AU 2022202993 A1 20220526; AU 2022202993 B2 20240328; AU 2022228087 A1 20220929; CN 111295553 A 20200616; CN 111295553 B 20210820; CN 111295554 A 20200616; CN 111295554 B 20211029; CN 111316045 A 20200619; CN 111316045 B 20210924; CN 111566413 A 20200821; CN 111566413 B 20211228; CN 112204315 A 20210108; CN 112204315 B 20220517; CN 113739400 A 20211203; CN 113739400 B 20230331; CN 113864870 A 20211231; CN 113864870 B 20230414; CN 114165912 A 20220311; CN 114165912 B 20230818; CN 114738986 A 20220712; CN 114738986 B 20231017; EP 3680570 A1 20200715; EP 3680570 A4 20210714; EP 3680572 A1 20200715; EP 3680572 A4 20210728; EP 3680572 B1 20240110; EP 3680573 A1 20200715; EP 3680573 A4 20210721; EP 3693676 A1 20200812; EP 3693676 A4 20210922; EP 4332446 A2 20240306; EP 4332446 A3 20240515; ES 2974022 T3 20240625; KR 102078277 B1 20200407; KR 102080512 B1 20200423; KR 102165467 B1 20201014; KR 102165468 B1 20201014; KR 102201562 B1 20210112; KR 20190027335 A 20190314; KR 20190027336 A 20190314; KR 20190027338 A 20190314; KR 20190027345 A 20190314; KR 20190027348 A 20190314

DOCDB simple family (application)

EP 18854348 A 20180906; AU 2018327937 A 20180906; AU 2018330127 A 20180906; AU 2018330128 A 20180906; AU 2018330129 A 20180906; AU 2018330131 A 20180906; AU 2022202992 A 20220504; AU 2022202993 A 20220504; AU 2022228087 A 20220905; CN 201880071848 A 20180906; CN 201880071874 A 20180906; CN 201880071875 A 20180906; CN 201880071876 A 20180906; CN 201880071881 A 20180906; CN 202111045041 A 20180906; CN 202111182942 A 20180906; CN 202111519577 A 20180906; CN 202210475228 A 20180906; EP 18853201 A 20180906; EP 18854263 A 20180906; EP 18854349 A 20180906; EP 18854669 A 20180906; EP 23216196 A 20180906; ES 18854349 T 20180906; KR 20180106319 A 20180906; KR 20180106320 A 20180906; KR 20180106394 A 20180906; KR 20180106647 A 20180906; KR 20180106756 A 20180906