

Title (en)
Indoor unit of air-conditioning apparatus and air-conditioning apparatus

Title (de)
Inneneinheit einer Klimaanlagevorrichtung sowie Klimaanlagevorrichtung

Title (fr)
Unité intérieure d'appareil de climatisation d'air et appareil de climatisation d'air

Publication
EP 2416074 B1 20211222 (EN)

Application
EP 11176224 A 20110802

Priority
JP 2010175336 A 20100804

Abstract (en)
[origin: EP2416074A2] An indoor unit includes: a casing (1) formed with a suction port (2) and a blow-out port (3); a plurality of fans (20) provided in parallel in the casing (1); a heat exchanger (50) provided on the downstream side of the fans (20) and on the upstream side of the blow-out port (3); a horizontal wind direction control vane (80) provided at the blow-out port (3) to control the horizontal direction of an airflow blown out from the blow-out port (3); a vertical wind direction control vane (70) provided at the blow-out port (3) to control the vertical direction of the airflow blown out from the blow-out port (3); and an infrared ray human detection sensor (410) configured to detect the position of a person present in a room, and air volumes, the orientation of the horizontal wind direction control vane, and the orientation of the vertical wind direction control vane (70) of the fans (20) are each controlled according to results of detection by the infrared ray sensor (410) .

IPC 8 full level
F24F 1/00 (2019.01); **F24F 11/00** (2018.01); **F24F 13/14** (2006.01)

CPC (source: EP US)
F24F 1/0011 (2013.01 - EP US); **F24F 1/0029** (2013.01 - EP US); **F24F 1/0033** (2013.01 - EP US); **F24F 11/77** (2017.12 - EP US); **F24F 11/79** (2017.12 - EP US); **F24F 13/14** (2013.01 - EP US); **F24F 11/30** (2017.12 - EP US); **F24F 2120/10** (2017.12 - EP US)

Citation (examination)
• DE 20216099 U1 20040304 - REICHEL TIMMER INGBUERO GMBH [DE]
• EP 2045540 A1 20090408 - MITSUBISHI ELECTRIC CORP [JP]
• EP 0483977 A1 19920506 - MITSUBISHI ELECTRIC CORP [JP]

Cited by
AU2013366975B2; EP3358270A1; CN103528131A; EP2982912A1; CN105333498A; AU2013366976B2; EP3276273A4; US9964324B2; US10584894B2; EP2664861A1; CN103375882A; AU2013205422B2; US9726384B2; US9982902B2; US9551498B2; US9863661B2; US10895402B2; WO2021168985A1

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 2416074 A2 20120208; EP 2416074 A3 20170927; EP 2416074 B1 20211222; CN 102374589 A 20120314; CN 102374589 B 20141231; ES 2904324 T3 20220404; JP 2012037087 A 20120223; JP 5220068 B2 20130626; US 2012031983 A1 20120209

DOCDB simple family (application)
EP 11176224 A 20110802; CN 201110221732 A 20110804; ES 11176224 T 20110802; JP 2010175336 A 20100804; US 201113196991 A 20110803