

Title (en)  
Ceiling-mounted air conditioner

Title (de)  
An der Decke montierte Klimaanlage

Title (fr)  
Climatiseur monté au plafond

Publication  
**EP 2520869 A1 20121107 (EN)**

Application  
**EP 12166175 A 20120430**

Priority  
JP 2011103501 A 20110506

Abstract (en)  
Provided is a ceiling-mounted air conditioner that facilitates an attachment and detachment operation of a blower unit relative to a unit body regardless of the number of blower units and realizes improvement of deformation and vibration characteristics of a top plate of the unit body. In the ceiling-mounted air conditioner, the blower subunits (11A, 11B) are integrated with the support member (20A, 20B) bent substantially at a right angle, one surfaces of which are configured to be partition plates (22A, 22B) for partitioning an inside of the unit body (2) into an inlet region and an outlet region, and the other surfaces of which are configured to be support plates (21A, 21B) for supporting fans (18A, 18B, 18C) and motors (19A, 19B) of the blower subunits (11A, 11B). The blower subunits (11A, 11B) are slidably inserted between a pair of the rail members installed in parallel on an inner surface of a top plate from one end to the other end of the top plate of the unit body (2) from the aperture (26) provided in one side surface of the unit body (2), so as to be mounted into the unit body (2) through the support members (20A, 20B).

IPC 8 full level  
**F24F 1/0047** (2019.01)

CPC (source: EP US)  
**F24F 1/0047** (2019.01 - EP US); **F24F 1/0022** (2013.01 - EP); **F24F 1/0033** (2013.01 - EP); **F24F 13/20** (2013.01 - EP)

Citation (applicant)  
• JP H0784930 B2 19950913  
• JP 2561906 Y2 19980204

Citation (search report)  
• [Y] EP 2108897 A1 20091014 - HITACHI APPLIANCES INC [JP]  
• [Y] WO 2009119524 A1 20091001 - TOSHIBA CARRIER CORP [JP], et al  
• [Y] JP H10332169 A 19981215 - HITACHI LTD  
• [A] EP 1103768 A2 20010530 - ROSENBERG VENTILATOREN GMBH [DE]

Cited by  
EP3252385A4; CN109154451A; US10890352B2; WO2017153801A1; US10571151B2; US11326806B2

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 2520869 A1 20121107**; **EP 2520869 B1 20180822**; AU 2012202533 B2 20170406; ES 2690311 T3 20181120; JP 2012233646 A 20121129; JP 5832135 B2 20151216

DOCDB simple family (application)  
**EP 12166175 A 20120430**; AU 2012202533 A 20120501; ES 12166175 T 20120430; JP 2011103501 A 20110506