

Title (en)
BUILT-IN TYPE AIR CONDITIONING DEVICE

Title (de)
EINGEBAUTE KLIMAANLAGENVORRICHTUNG

Title (fr)
DISPOSITIF DE CONDITIONNEMENT D'AIR ENCASTRABLE

Publication
EP 2722609 A1 20140423 (EN)

Application
EP 12803151 A 20120620

Priority
• JP 2011136240 A 20110620
• JP 2011136241 A 20110620
• JP 2011144141 A 20110629
• JP 2011144143 A 20110629
• JP 2012065747 W 20120620

Abstract (en)
A built-in type air conditioning device in which maintenance performance and efficiency of an indoor heat exchanger are enhanced is provided. A heat exchanger 60 contains an upper heat exchange portion and a lower heat exchange portion which are connected to each other substantially in V-shape in side view, and the lower end of the upper heat exchange portion is mounted to be stacked on the lower heat exchange portion at the apex of the V-shape. The heat exchange area of the lower heat exchange portion is set to be larger than the heat exchange area of the upper heat exchange portion. Inverted U-shaped grooves 66A, 66B are provided to be opened downwards so that an auxiliary refrigerant pipe 67 of the heat exchanger 60 can be inserted into the heat exchange chamber integrally with the heat exchanger 60. Both the end portions of the heat exchanger 60 are provided with fixing members 63A, 63B formed of resin which are fixed to the front plate 16 and the top plate 12 of the unit main body 10 to fix the heat exchanger 60 to the inside of the unit main body 10.

IPC 8 full level
F24F 13/30 (2006.01); **F24F 1/0063** (2019.01); **F24F 13/22** (2006.01); **F28D 1/02** (2006.01); **F28D 1/04** (2006.01)

CPC (source: EP US)
F24F 1/0047 (2019.01 - EP); **F24F 1/0063** (2019.01 - EP US); **F24F 13/22** (2013.01 - EP); **F24F 13/30** (2013.01 - EP); **F28D 1/0408** (2013.01 - EP); **F28D 2001/0266** (2013.01 - EP); **F28D 2021/0068** (2013.01 - EP)

Cited by
EP3196566A1; AU2017200364B2; EP3169942A4; EP3637002A4; EP3315869A4; US11365892B2; EP3726150A4; US11549721B2; US10571151B2; US11326806B2; US10830490B2

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 2722609 A1 20140423; **EP 2722609 A4 20150812**; **EP 2722609 B1 20190501**; CN 103608629 A 20140226; CN 103608629 B 20160525; ES 2734354 T3 20191205; JP 5995107 B2 20160921; JP WO2012176805 A1 20150223; WO 2012176805 A1 20121227

DOCDB simple family (application)
EP 12803151 A 20120620; CN 201280030248 A 20120620; ES 12803151 T 20120620; JP 2012065747 W 20120620; JP 2013521598 A 20120620