

Title (en)  
Built-in type air conditioner

Title (de)  
Eingebaute Klimaanlage

Title (fr)  
Climatiseur d'air de type intégré

Publication  
**EP 2402669 A3 20150812 (EN)**

Application  
**EP 11171880 A 20110629**

Priority  
JP 2010149401 A 20100630

Abstract (en)  
[origin: EP2402669A2] A built-in type air conditioner (30,40) having a unit body (35, 135) in which a heat exchanger (60) and an air blowing fan (55) are mounted, characterized in that the heat exchanger (60) comprises a planar upper heat exchanger (71) and a planar lower heat exchanger (72) that are joined to each other to have a V-shape in side view, and the air blowing fan (55) has an air blow-out port (68) that is disposed so as to confront the apex of the V-shape of the V-shaped heat exchanger.

IPC 8 full level  
**F24F 1/0067** (2019.01); **F24F 13/22** (2006.01); **F24F 13/30** (2006.01)

CPC (source: EP KR US)  
**F24F 1/00** (2013.01 - KR); **F24F 1/0047** (2019.01 - EP); **F24F 1/0063** (2019.01 - EP); **F24F 1/0067** (2019.01 - EP US); **F24F 13/222** (2013.01 - EP); **F24F 13/30** (2013.01 - KR); **F24F 1/0022** (2013.01 - EP); **F28D 2001/0266** (2013.01 - EP)

Citation (search report)

- [XY] US 4000779 A 19770104 - IRWIN JOHN W
- [X] US 5284027 A 19940208 - MARTIN SR LENDELL [US]
- [Y] EP 2199701 A1 20100623 - TOSHIBA CARRIER CORP [JP]
- [AD] JP 2000274724 A 20001006 - SANYO ELECTRIC CO

Cited by  
EP3078917A4; CN106871246A; EP3637002A4; EP3315869A4; US11808464B2; US11365892B2; WO2021082328A1; WO2020130796A1; EP3081867A1; EP3081877A1

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 2402669 A2 20120104**; **EP 2402669 A3 20150812**; **EP 2402669 B1 20190626**; CN 102313318 A 20120111; ES 2738556 T3 20200123; JP 2012013295 A 20120119; JP 5587060 B2 20140910; KR 101319770 B1 20131017; KR 20120002407 A 20120105

DOCDB simple family (application)  
**EP 11171880 A 20110629**; CN 201110097272 A 20110419; ES 11171880 T 20110629; JP 2010149401 A 20100630; KR 20110029019 A 20110330