

Title (en)
AIR CONDITIONER WITH A COOLING MODULE

Title (de)
KLIMAANLAGE MIT EINEM KÜHLMODUL

Title (fr)
CLIMATISEUR COMPORTANT UN MODULE DE REFROIDISSEMENT

Publication
EP 2766667 A4 20150708 (EN)

Application
EP 11867333 A 20111229

Priority
• KR 20110054678 A 20110607
• KR 2011010310 W 20111229

Abstract (en)
[origin: US2012312046A1] An air conditioner includes a compressor, a condenser, an expansion device, and an evaporator. The air conditioner further includes an electric unit including electric components to operate the air conditioner. A cooling module is disposed at least on a side of the electric unit to dissipate heat generated from the electric unit, and at least a portion of the refrigerant tube supply refrigerant discharged from the evaporator to the cooling module. The refrigerant supplied to the cooling module exchanges heat with the electric unit and then flows to the compressor.

IPC 8 full level
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CPC (source: EP KR US)
F24F 1/22 (2013.01 - EP US); **F24F 1/24** (2013.01 - EP KR US); **F24F 11/89** (2017.12 - KR); **F24F 13/078** (2013.01 - KR); **F24F 2013/207** (2013.01 - KR)

Citation (search report)
• [X] EP 1862743 A1 20071205 - DAIKIN IND LTD [JP]
• [X] JP 2006214634 A 20060817 - DAIKIN IND LTD
• [X] JP H0634208 A 19940208 - MITSUBISHI ELECTRIC CORP
• [X] JP S6269066 A 19870330 - TOSHIBA CORP
• See references of WO 2012169713A1

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)
US 2012312046 A1 20121213; CN 103597289 A 20140219; CN 103597289 B 20170503; EP 2766667 A1 20140820; EP 2766667 A4 20150708; EP 2766667 B1 20200408; KR 20120135771 A 20121217; WO 2012169713 A1 20121213

DOCDB simple family (application)
US 201213364742 A 20120202; CN 201180071519 A 20111229; EP 11867333 A 20111229; KR 20110054678 A 20110607; KR 2011010310 W 20111229