



**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**01.04.2015 Bulletin 2015/14**

(51) Int Cl.:  
**F24F 3/06** (2006.01) **F25B 13/00** (2006.01)  
**F25B 41/00** (2006.01) **F24F 1/26** (2011.01)  
**F24F 1/32** (2011.01) **F24F 1/56** (2011.01)

(43) Date of publication A2:  
**14.09.2011 Bulletin 2011/37**

(21) Application number: **11157489.3**

(22) Date of filing: **09.03.2011**

(84) Designated Contracting States:  
**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 States:  
**BA ME**

(72) Inventors:  
• **Park, Hee**  
**641-711, Gyeongnam (KR)**  
• **Kim, Jong Il**  
**641-711, Gyeongnam (KR)**

(30) Priority: **11.03.2010 KR 20100021705**

(74) Representative: **Vossius & Partner**  
**Siebertstrasse 3**  
**81675 München (DE)**

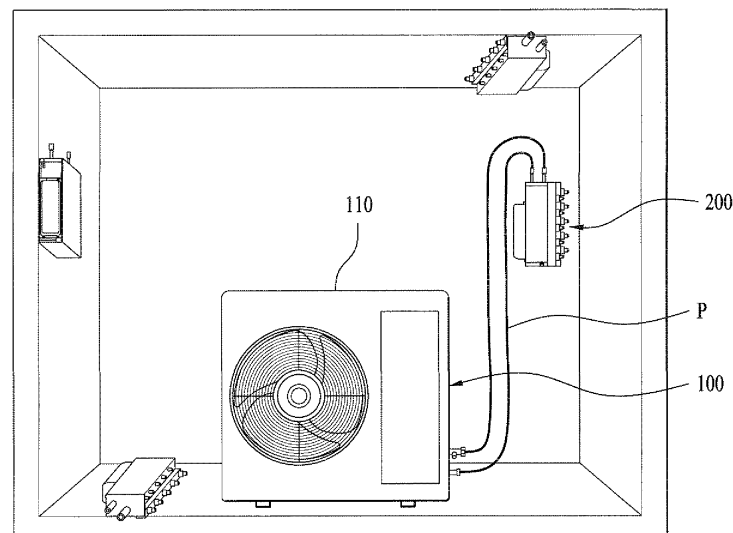
(71) Applicant: **LG Electronics, Inc.**  
**Seoul 150-721 (KR)**

(54) **Air conditioning device**

(57) An air conditioning device is provided. The air conditioning device includes a distribution device that distributes refrigerant from an outdoor unit to a plurality of indoor units, and that receives refrigerant from the plurality of indoor units and supplies the received refrigerant

to the outdoor unit. The distribution device may reduce the length of pipes used to connect the plurality of indoor units and the outdoor unit and facilitate installation of the outdoor unit.

**FIG. 1**





## PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.  
This report shall be considered, for the purposes of  
subsequent proceedings, as the European search report

EP 11 15 7489

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 862 023 A2 (SANYO ELECTRIC CO [JP]) 2 September 1998 (1998-09-02) * column 2, line 8 - column 14, line 56; claims 1-12; figures 1-11 *	1-10,16	INV. F24F3/06 F25B13/00 F25B41/00 F24F1/26 F24F1/32 F24F1/56
X	JP 2007 278559 A (SANYO ELECTRIC CO) 25 October 2007 (2007-10-25) * and corresponding description; figures 1-5 *	1-10,16	
X	EP 1 953 463 A1 (DAIKIN IND LTD [JP]) 6 August 2008 (2008-08-06) * the whole document *	1-10,16	
X	EP 1 278 022 A1 (DAIKIN IND LTD [JP]) 22 January 2003 (2003-01-22) * paragraph [0024] - paragraph [0061]; figures 1-6 *	1-10,16	
			TECHNICAL FIELDS SEARCHED (IPC)
			F25B F24F
<b>INCOMPLETE SEARCH</b>			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search: see sheet C</p>			
Place of search		Date of completion of the search	Examiner
Munich		23 February 2015	Gaspar, Ralf
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (PC/E07)

**INCOMPLETE SEARCH  
SHEET C**

Application Number

EP 11 15 7489

Claim(s) completely searchable:  
1-10, 16

Claim(s) not searched:  
11-15

Reason for the limitation of the search:

The search has been restricted to the subject-matter indicated by the applicant in his letter of 13. January 2015 filed in reply to the invitation pursuant to Rule 62a(1) and/or Rule 63(1) EPC, namely to independent apparatus claim 1 and its dependent claims 2 to 10, and to independent method claim 16. Therefore, the present opinion is restricted to the claims being searched.

The applicant's attention is drawn to the fact that the application will be further prosecuted on the basis of subject-matter for which a search has been carried out and that the claims should be limited to that subject-matter at a later stage of the proceedings (Rule 62a(2) EPC).

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 15 7489

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-02-2015

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0862023	A2	02-09-1998	CA	2230416 A1		28-08-1998
			CN	1190722 A		19-08-1998
			DE	69831281 D1		29-09-2005
			DE	69831281 T2		22-06-2006
			EP	0862023 A2		02-09-1998
			SG	64478 A1		27-04-1999
			US	5927093 A		27-07-1999
-----						
JP 2007278559	A	25-10-2007	JP	4721943 B2		13-07-2011
			JP	2007278559 A		25-10-2007
-----						
EP 1953463	A1	06-08-2008	AU	2006309867 A1		10-05-2007
			CN	101292120 A		22-10-2008
			EP	1953463 A1		06-08-2008
			JP	4063296 B2		19-03-2008
			JP	2007120900 A		17-05-2007
			KR	20080045294 A		22-05-2008
			US	2009044554 A1		19-02-2009
			WO	2007052539 A1		10-05-2007
-----						
EP 1278022	A1	22-01-2003	AU	771853 B2		01-04-2004
			AU	4878701 A		07-11-2001
			CN	1426521 A		25-06-2003
			EP	1278022 A1		22-01-2003
			JP	2002013763 A		18-01-2002
			WO	0181834 A1		01-11-2001
-----						

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82