

(51) International Patent Classification:

F24F 11/02 (2006.01) H04Q 9/04 (2006.01)

(21) International Application Number:

PCT/KR2011/009536

(22) International Filing Date:

12 December 2011 (12.12.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10-2011-0006536 21 January 2011 (21.01.2011) KR

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(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

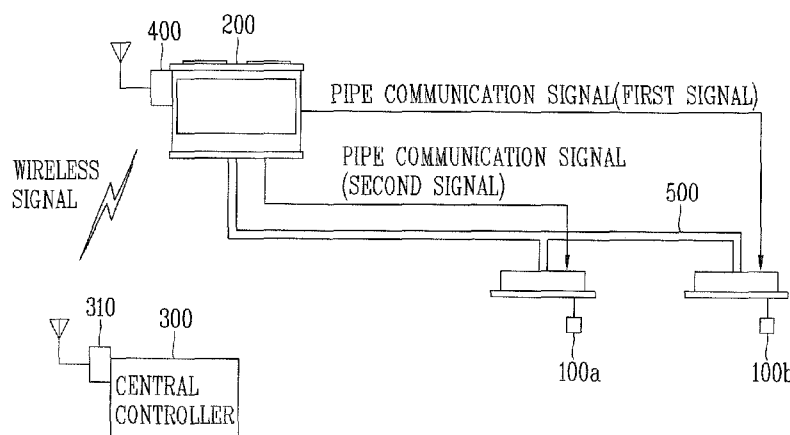
- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

13 September 2012

(54) Title: AIR CONDITIONER AND COMMUNICATION APPARATUS AND METHOD THEREOF

[Fig. 2]



(57) Abstract: The air conditioner includes indoor units, at least one outdoor unit connected to the indoor units via a refrigerant pipe to drive the indoor unit using a first signal, a central controller to control operations of the outdoor unit and the indoor units using a second signal, the second signal having a frequency band spaced from that of the first signal, and a communication apparatus installed in the outdoor unit or one of the indoor units connected to the outdoor unit to communicate with the central controller using the second signal, whereby signals with different frequency bands can be used upon communication between the outdoor unit and the indoor unit and communication between the outdoor unit or indoor unit and the central controller, so as to reduce signal interference and enhance efficiency of a system operation, resulting in improving safety of the system.

A. CLASSIFICATION OF SUBJECT MATTER***F24F 11/02(2006.01)i, H04Q 9/04(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F24F 11/02; F24F 7/007; F24F 3/00; F24F 5/00; E03D 9/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: signal, wireless, communication

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2009-0044776 A (LG ELECTRONICS CO.) 07 May 2009 See para. 47, claims 6, 9	1-4, 8-12, 16-20
Y	See para. 47, claims 6, 9	5-7, 13-15
X	JP 09-210433 A (HITACHI LTD) 12 August 1997 See para. 002, claims 9, 10	1-4, 8-12, 16-20
Y	See para. 002, claims 9, 10	5-7, 13-15
Y	JP 2005-164219 A (MITSUBISHI ELECTRIC CORP) 23 June 2005 See claims 1, 13	5-7, 13-15
A	US 2010-0301123 A1 (DORENDORF BRUCE) 02 December 2010 See para. 7, claim 1	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

24 JULY 2012 (24.07.2012)

Date of mailing of the international search report

25 JULY 2012 (25.07.2012)

Name and mailing address of the ISA/KR

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City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JANG, GI JEONG

Telephone No. 82-42-481-5498



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2011/009536

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