

(19) World Intellectual Property Organization
International Bureau



(10) International Publication Number
WO 2010/134701 A3

(43) International Publication Date
25 November 2010 (25.11.2010)

(51) International Patent Classification:
F25D 23/12 (2006.01)

(21) International Application Number:
PCT/KR2010/002365

(22) International Filing Date:
15 April 2010 (15.04.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2009-0043125 18 May 2009 (18.05.2009) KR

(71) Applicant (for all designated States except US): LG ELECTRONICS INC. [KR/KR]; 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): LEE, Dong Hoon [KR/KR]; LG ELECTRONICS INC. Gasan R&D Campus, 327-23 Gasan-dong Geumcheon-gu, Seoul 153-802 (KR). LEE, Tae-Hee [KR/KR]; LG ELECTRONICS INC. Gasan R&D Campus, 327-23 Gasan-dong Geumcheon-gu, Seoul 153-802 (KR). LEE, Donghoon [KR/KR]; LG ELECTRONICS INC. Gasan R&D Campus, 327-23 Gasan-dong Geumcheon-gu, Seoul 153-802 (KR).

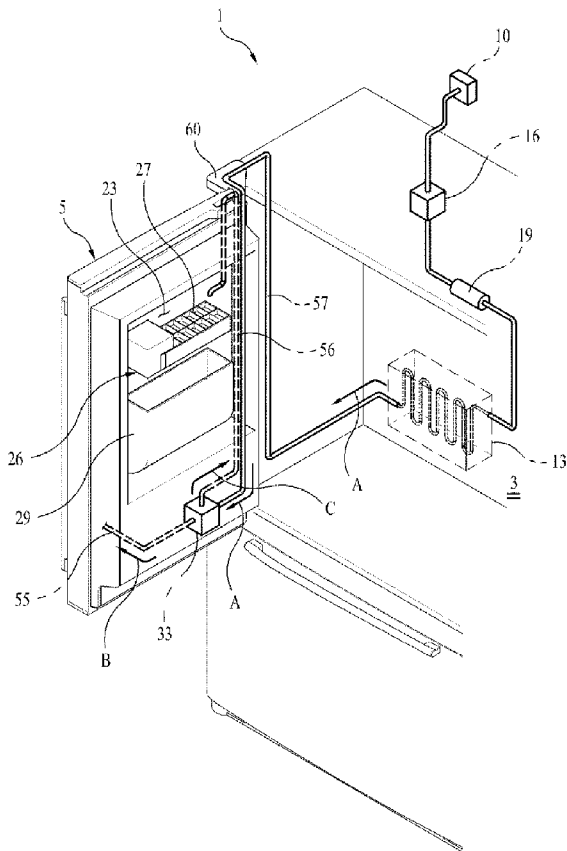
(74) Agents: KIM, Yong In et al.; KBK & Associates, 7th Floor Hyundai Building 175-9, Jamsil-dong Songpa-ku, Seoul 138-861 (KR).

(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,

[Continued on next page]

(54) Title: REFRIGERATOR AND CONTROL METHOD THEREOF

[Fig. 1]



(57) Abstract: A refrigerator and a control method thereof are disclosed. A refrigerator is able to supply water preserved in a cool state to an ice maker (26). The refrigerator includes an ice-making chamber (23), an icemaker (26) provided in the ice-making chamber (23), a dispenser for dispensing water, and a water tank (13) connected to the dispenser and the icemaker (26). The water tank (13) stores water in a cool state.

WO 2010/134701 A3



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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, 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:

1 September 2011

INTERNATIONAL SEARCH REPORT

International application No.

PCT / KR 2010/002365

A. CLASSIFICATION OF SUBJECT MATTER IPC: F25D 23/12 (2006.01) 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) F25D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPODOC, WPI		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	EP 1939560 A2 (WHIRLPOOL) 02 July 2008 (02.07.2008) fig. 6; description column 9, lines 15-20	1,2,5,8 4,7 11
X Y	US 5737932 A (LEE) 14 April 1998 (14.04.1998) fig. 2; description column 2, lines 25-30	16-18, 20 4,7
X A	KR 20050117830 A (LG ELECTRONICS) 15 December 2005 (15.12.2005) figs. 1,3	1,8 2,3,11
A	KR 100756884 B1 (DAEWOO) 07 September 2007 (07.09.2007) fig. 5	1,2
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 27 May 2011 (27.05.2011)	Date of mailing of the international search report 20 June 2011 (20.06.2011)	
Name and mailing address of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. +43 / 1 / 534 24-535	Authorized officer KUTZENBERGER T. Telephone No. +43 / 1 / 534 24-577	

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT / KR 2010/002365

Patent document cited in search report			Patent family member(s)			Publication date
EP	A2	1939560	EP	A2	1939560	2008-07-02
			MX	A	2007016407	2009-02-16
			US	A1	2008156015	2008-07-03
US	A	5737932	CN	A	1151505	1997-06-11
			DE	A1	19645018	1997-05-07
			DE	C2	19645018	1999-08-05
			JP	A	9222275	1997-08-26
			JP		2798133B2	1998-09-17
			JP	B2	2798133	1998-09-17
			US	A	5737932	1998-04-14
KR	A	20050117830	KR	A	20050117830	2005-12-15
KR	B1	100756884	KR		100756884B	2007-09-07
			KR	B1	100756884	2007-09-07