

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 December 2006 (21.12.2006)

PCT

(10) International Publication Number
WO 2006/135171 A3

- (51) International Patent Classification:
F24F 3/14 (2006.01) F24F 5/00 (2006.01)
- (21) International Application Number:
PCT/KR2006/002231
- (22) International Filing Date: 12 June 2006 (12.06.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10-2005-0051320 15 June 2005 (15.06.2005) KR
10-2005-0051318 15 June 2005 (15.06.2005) KR
10-2005-0052921 20 June 2005 (20.06.2005) KR

(74) Agents: BAHNG, Hae Cheol et al.; KBK & Associates, 15th Floor, Yo Sam Building, 648-23 Yeoksam-dong, Kangnam-gu, Seoul 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

(72) Inventors; and

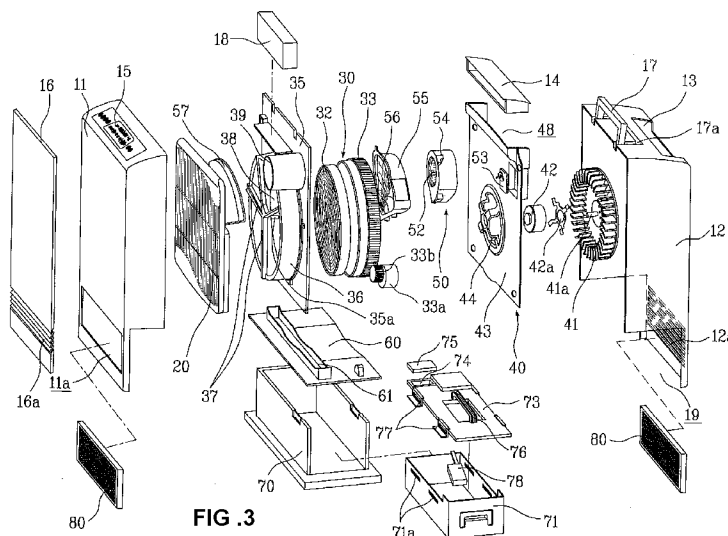
(75) Inventors/Applicants (for US only): AHN, Byung Yong [KR/KR]; 301-1501 Wonpung Byoksan Apt., Paryong-dong, Changwon-si, Gyeongsangnam-do 641-906 (KR). YOON, Sang Youn [KR/KR]; 13/5, 329-53 Bugok 1-dong, Geumjeong-gu, Busan 609-320 (KR).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: DEHUMIDIFIER



(57) Abstract: The present invention relates to a dehumidifier having high dehumidifying efficiency, low noise and vibration. The dehumidifier includes a case (10), inlets passed through the case (10) for introduction of air from an outside of the case (10) to an inside of the case (10), an outlet (13) formed to pass through a top of the case (10) for discharging air dehumidified in the case (10) to the outside of the case (10), a desiccant assembly (30) for absorbing moisture from air drawn into the case (10), a blower assembly (40) for drawing air through the inlets and blowing the air to the outlet (13), a regenerator assembly (50) for blowing hot air to the desiccant assembly (30) for drying the desiccant assembly (30), a heat exchanger for condensing high temperature, humid air blown by the regenerator assembly (50).

WO 2006/135171 A3



(88) Date of publication of the international search report:
7 May 2009

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2006/002231

A. CLASSIFICATION OF SUBJECT MATTER IPC⁸: F24F 3/14 (2006.01); F24F 5/00 (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) IPC⁸: F24F 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, PAJ; NPL; esp@cenet; Internet (Google)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2005-265256 A (TIGER VACUUM BOTTLE CO LTD) 29 September 2005 (29.09.2005) (abstract) [online] [retrieved 08.12.2008]; Retrieved from: EPOQUE EPODOC Database <i>Paragraphs [0015] - [0022]; paragraphs [0082] - [0086] and figures 3, 4, 18</i>	1-35
A	JP 2004-316952 A (TIGER VACUUM BOTTLE CO LTD) 7 October 2004 (07.10.2004) (abstract) [online] [retrieved 12.12.2008]; Retrieved from: EPOQUE EPODOC Database <i>description and figures</i>	1-35
<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 "E" earlier application or patent but published on or after the international filing date "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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "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 "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 "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 "&" document member of the same patent family		
Date of the actual completion of the international search 12 December 2008 (12.12.2008)		Date of mailing of the international search report 13 March 2009 (13.03.2009)
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 SZILVITZKY Gyöngyi Telephone No. +36 /1/ 474-5882

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/KR 2006/002231

Patent document cited in search report			Patent family member(s)			
Publication date			Publication date			
JP	A	2005265256	JP	A	2005265256	2005-09-29
JP	A	2004316952	JP	A	2004316952	2004-11-11