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— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: SYSTEM WITH A CONFINED SPACE AND MEANS TO DISTRIBUTE WATER VAPOR TO SAID CONFINED SPACE, AS WELL AS METHOD OF CONTROLLING THE WATER VAPOR LEVEL PRESENT IN A CONFINED SPACE

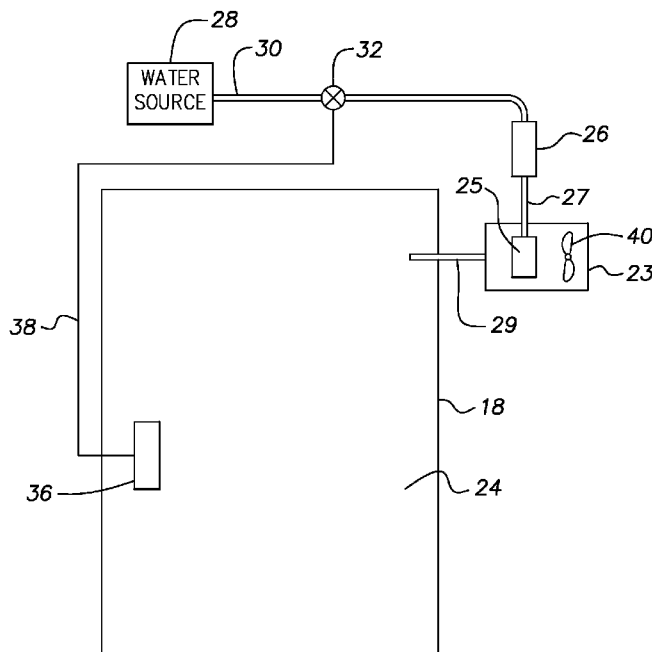


FIG. 2

(57) Abstract: An enclosure defines a confined space configured to store goods that can be advantageously maintained by controlling the water vapor levels to which the goods are exposed. A water vapor conversion element, at which liquid water is converted to water vapor, can be operably associated with the confined space to distribute that water vapor to the confined space. A water delivery unit is operatively associated with the water vapor conversion element and is configured to deliver water in liquid form to the water vapor conversion element. The water delivery unit can comprise a drip chamber configured to deliver the water essentially one drop at a time. The enclosure can comprise a drawer in a refrigeration appliance such as a household refrigerator. A sensor configured to determine the water vapor level present in the confined space can be operable to selectively control the distribution of water vapor to the confined space.



— *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:
19 December 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/047827

A. CLASSIFICATION OF SUBJECT MATTER
INV. F25D17/04
ADD.

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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/004950 A1 (HUSSMANN CORP [US]; ZANGARI JONY MARCELO [BR]; NICOLAI EDUARDO [BR]; R) 16 January 2003 (2003-01-16) abstract; figures 2,3 page 5, line 31 - page 6, line 25 -----	1
X	JP 2006 112737 A (TOSHIBA CORP; TOSHIBA CONSUMER MARKETING; TOSHIBA KADEN SEIZO KK) 27 April 2006 (2006-04-27) paragraphs [0007] - [0013]; figures 1,2 -----	1
X	GB 2 017 285 A (LINDE AG) 3 October 1979 (1979-10-03) abstract page 2, lines 30-64 -----	1



Further documents are listed in the continuation of Box C.



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

19 August 2013

Date of mailing of the international search report

05/11/2013

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/047827

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claim: 1

System with an enclosure, a water vapor conversion element and a water delivery unit

2. claim: 2

System with an enclosure, a water vapor conversion element and a water delivery unit, the water vapor conversion element comprising a glass microfiber element

3. claims: 3, 4, 10-15

System with an enclosure, a water vapor conversion element and a water delivery unit comprising a drip chamber

4. claim: 5

System with an enclosure, a water vapor conversion element and a water delivery unit, the water vapor conversion element being located within the confined space defined by the enclosure

5. claims: 6, 7

System with an enclosure, a water vapor conversion element, a water delivery unit and a device configured to displace the water vapor

6. claims: 8, 9

System with an enclosure, a water vapor conversion element and a water delivery unit, the enclosure comprising a drawer

7. claims: 16-27

Method for controlling the water vapor level present in a confined space including controlling the amount of water vapor introduced into the confined space

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/047827

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03004950	A1	16-01-2003	US 2003033822 A1
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			GB 2017285 A
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			NL 7900875 A
			SE 7900858 A