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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, KR, 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.
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- Published:
— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: STORAGE UNIT WITH A DOOR AND A FASTENING MECHANISM FOR FASTENING THE DOOR, AND REFRI-GERATION APPLIANCE HAVING THE STORAGE UNIT

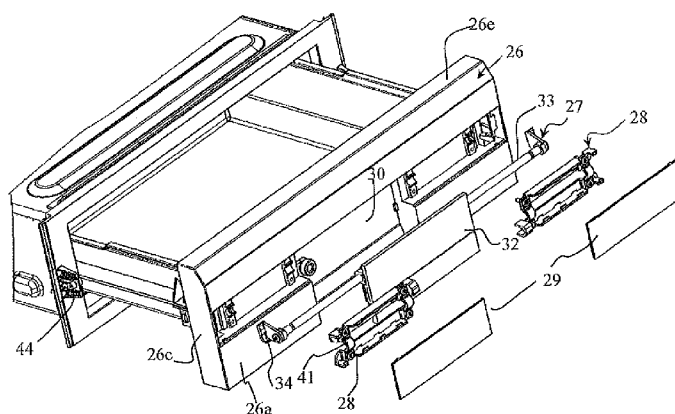


Fig. 6

(57) Abstract: A storage unit (7), comprising: a main body (8), wherein the main body (8) defines a storage chamber (15) having an opening portion (15a) for putting in or taking out articles; a door (10), for selectively opening or closing the opening portion (15a); a fastening mechanism (34, 44), for fastening the door (10) and the main body (8) when the door (10) is at a closed position, wherein the fastening mechanism (34, 44) comprises a first matching portion (34) on the door (10) and a second matching portion (44) on the main body (8); and a handle (32), mounted in association with the first matching portion (34), characterized by further comprising: a rod (33) connected between the handle (32) and the first matching portion (34), wherein the rod (33) is driven by the handle (32) to rotate in a manner that a central axis (X) thereof does not move relative to the door (10), and the first matching portion (34) is driven by the rod (33) to move.





— *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))*

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19 July 2012

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2011/062107

A. CLASSIFICATION OF SUBJECT MATTER

INV. F25D23/02

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 E05B E05C

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/090575 A1 (UTHUPPAN JOSE [US]) 15 April 2010 (2010-04-15) the whole document -----	1,2, 5-11, 14-23, 27-29, 37-40
X	US 4 373 450 A (MILLER NORMAN ET AL) 15 February 1983 (1983-02-15) the whole document -----	1-6, 12-15, 18,20, 21,27,29
X	US 2008/041090 A1 (LEE JONG DAL [KR] ET AL) 21 February 2008 (2008-02-21) the whole document ----- -/-	1-10,14, 18,19, 23,27, 29,39,40



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

9 May 2012

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23/05/2012

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2009/054681 A2 (LG ELECTRONICS INC [KR]; LIM SEOK-MIN [KR]; SHIN JONG-MIN [KR]; CHOI B) 30 April 2009 (2009-04-30) the whole document -----	1-23,27, 28
X	JP 2009 036501 A (HITACHI APPLIANCES INC) 19 February 2009 (2009-02-19) figures 4-6,18-28, 39 -----	1-41

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2011/062107

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.:

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. claims: 1-23, 27-29, 39-41

Storage unit with a door having a fastening mechanism comprising a rod driven by the handle mounted in association with a first matching portion of the fastening mechanism

2. claims: 24-26

Storage unit with a door having a fastening mechanism comprising a rod driven by the handle mounted in association with a first matching portion of the fastening mechanism, said storage unit further comprising an annular sealing element disposed around of opening portion of the unit whereby the first matching portion is located in a ring-shaped area between the sealing element and the peripheral end surfaces of the door

3. claims: 30, 31, 36

Storage unit with a door having a fastening mechanism comprising a rod driven by the handle mounted in association with a first matching portion of the fastening mechanism, said storage unit further comprising in its door a holding mechanism disposed in a manner that, when the door is opened, the first matching portion is held at a safe position where the first matching portion and the second matching portion do not collide in a closing process of the door

4. claims: 32-35

Storage unit with a door having a fastening mechanism comprising a rod driven by the handle mounted in association with a first matching portion of the fastening mechanism, said storage unit further comprising in its door a limiting structure for limiting the handle to continue rotating after reaching a first position or a second position

5. claims: 37, 38

Storage unit with a door having a fastening mechanism comprising a rod driven by the handle mounted in association with a first matching portion of the fastening mechanism, said storage unit further comprising a positioning mechanism for the door

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2011/062107

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010090575 A1	15-04-2010	US 2010090575 A1	15-04-2010
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