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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))

(54) Title: APPARATUS FOR STORING ARTICLES

(57) Abstract: Apparatus for storing articles (11) that comprises a conveyor member (12), a guide (13) at least partly defining a closed-ring movement path (P), and a drive unit (14) associated with the conveyor member (12) and configured to move the latter along the movement path (P). The apparatus for storing articles (11) comprises a plurality of containing devices (20) and a structure (16).



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INTERNATIONAL SEARCH REPORT

International application No
PCT/IT2019/050155

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65G1/133 A47B49/00 G07F17/12
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)

B65G F16B A47B G07F

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	FR 3 052 963 A1 (NESTORE GREEN TECH [FR]) 29 December 2017 (2017-12-29)	1,2, 10-13, 15,16 3,4,17
Y	page 4, line 19 - page 13, line 30; figures 1-9	
X	JP 2008 056485 A (KANEDA MITSURU) 13 March 2008 (2008-03-13) abstract; figures 1-2	1-4,6, 10,17
X	GB 1 531 028 A (REDOUTE) 1 November 1978 (1978-11-01)	1,2,6,9, 10,12-16 3,4,17
Y	page 3, line 45 - page 6, line 95; figures 1-4	
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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

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"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

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8 October 2019

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IT2019/050155

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 840 103 A (WILLIS I) 8 October 1974 (1974-10-08)	1,2,10, 16
Y	column 3, line 40 - column 8, line 13; figures 1-3	3,4,17
X	US 2010/185754 A1 (OWEN GARY M [US]) 22 July 2010 (2010-07-22) paragraph [0031] - paragraph [0062]; figures 1-10	1,3,4, 10,16,17
X	EP 1 495 995 A1 (EMMERLING JENS [DE]) 12 January 2005 (2005-01-12)	1,2,6, 10-13,16
Y	paragraph [0040] - paragraph [0054]; figures 1-5	3,4,17
Y	GB 2 061 860 A (GISPEN & STAALMEUBEL BV) 20 May 1981 (1981-05-20) page 1; figures 1-3	1-7,9-17
Y	EP 2 796 390 A1 (COBEL S A SOCIÉTÉ ANONYME [LU]; METALPROGETTI S P A [IT]) 29 October 2014 (2014-10-29) paragraph [0017] - paragraph [0043]; figures 1-8	1-7,9-17
Y	JP 2001 097506 A (TSUBAKIMOTO CHAIN CO; SHIZUOKA BANK LTD) 10 April 2001 (2001-04-10) abstract; figures 1-3	1-7, 10-17
Y	JP 2018 034923 A (TSUBAKIMOTO CHAIN CO) 8 March 2018 (2018-03-08) paragraph [0010] - paragraph [0011]; figures 1-3	3,4,17
Y	US 5 711 431 A (REICHERT CORY A [US]) 27 January 1998 (1998-01-27) column 3, line 50 - column 3, line 55; figure 3	3,4,17

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IT2019/050155

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.:
1-7, 9-17

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: 1-7, 9-17

Apparatus and method for storing articles with a containing device having a tapered shape toward a rear wall facing toward the inside of said movement path;
and

Apparatus for storing articles having connection elements comprised by the containing device disposed on its upper wall suitable to cooperate with attachment elements on the conveyor member or a centering and guiding element attached on the lower side of a bottom wall of the containing device.

1.1. claims: 1-4, 9-17

Apparatus and method for storing articles with a containing device having a tapered shape toward a rear wall facing toward the inside of said movement path

1.2. claims: 5-7

Apparatus for storing articles having connection elements comprised by the containing device disposed on its upper wall suitable to cooperate with attachment elements on the conveyor member or a centering and guiding element attached on the lower side of a bottom wall of the containing device.

2. claims: 8, 18, 19

Apparatus and method for storing articles with a reticular base structure and a panel having a first flat conformation for transport and a second assembled condition in which they are folded to assume a three-dimensional shape defining the bulk of said containing device.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IT2019/050155

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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