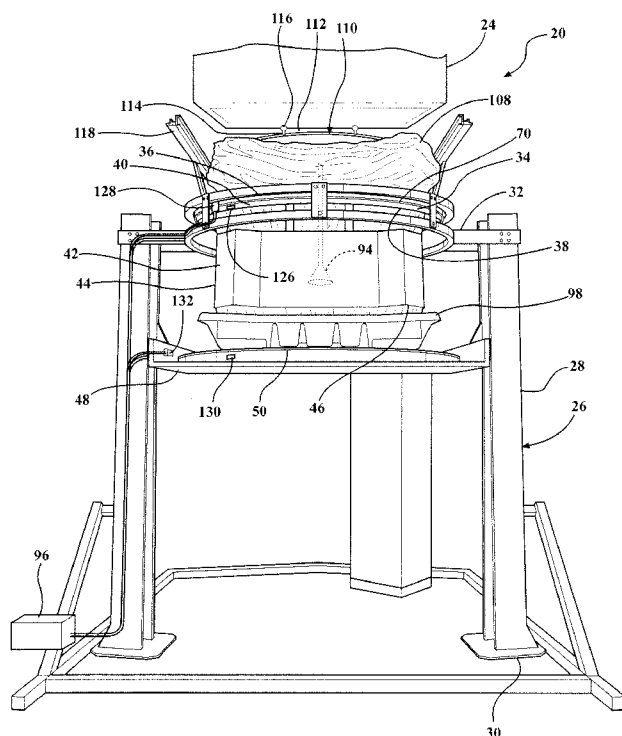




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- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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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[Continued on next page]

(54) Title: DRIVE SYSTEM AND METHOD FOR FORMING A TRANSPORTABLE CONTAINER OF BULK GOODS



(57) Abstract: A packaging system (20) for forming and filling a transportable container (22) of plurality of bulk goods includes a frame (26) having a bottom support (48) and an upper support (32). An upper turntable (34) is rotatably supported within the upper support (32) and a lower turntable (50) is rotatably supported on the bottom support (48). A drive system (58) includes at least one pulley system (62, 64, 66) interconnected to the upper and lower turntables (34, 50) for simultaneously driving and synchronizing rotation of the upper and lower turntables (34, 50) with the at least one pulley system (62, 64, 66). A slip frame former (42) extends downwardly from the upper turntable (34) and a roll of stretch wrap (92) is disposed in overlapping relationship with the slip frame former (42) and the bottom support (48) during simultaneous and synchronized rotation of the turntables (34, 50) with the at least one pulley system (62, 64, 66).



MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
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— *before the expiration of the time limit for amending the
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International application No
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A. CLASSIFICATION OF SUBJECT MATTER
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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)
B65B

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.
Y	US 2004/026292 A1 (OURS DAVID C [US] ET AL) 12 February 2004 (2004-02-12)	1,2,10
A	paragraphs [0023] - [0033], [0043] - [0045]; figures 1-3,10-14	3-9, 11-20
Y	GB 2 056 401 A (REED INTERNATIONAL LTD) 18 March 1981 (1981-03-18)	1-4,10
A	page 1, line 100 - page 2, line 16 page 2, lines 51-83; figures 1-3,6	5-9
Y	WO 2009/149316 A1 (KELLOG CO [US]; OURS DAVE [US]; JUNTUNEN SHARON [US]) 10 December 2009 (2009-12-10)	1-4,10
A	paragraphs [0028] - [0036], [0045] - [0050]; figures 4,6-11	5-9, 11-20
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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

Date of the actual completion of the international search

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Date of mailing of the international search report

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European Patent Office, P.B. 5818 Patentlaan 2
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/059491

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 430 902 A1 (DERIFAN SPA [IT]) 5 June 1991 (1991-06-05) column 2, line 27 - column 3, line 52; figures 1,5,8 -----	1-10
A	US 2009/308486 A1 (OURS DAVE [US] ET AL) 17 December 2009 (2009-12-17) paragraphs [0023] - [0028]; figures 1,2 -----	1-20
A	US 2010/051618 A1 (OURS DAVE [US] ET AL) 4 March 2010 (2010-03-04) paragraphs [0026] - [0038]; figures 1,2 -----	1-20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/059491

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: 1-10

A packaging system for forming and filling a transportable container with a plurality of bulk goods, the system including an upper turntable and a lower turntable, a drive system with a drive interconnected to the upper and lower turntables and a plurality of pulley systems to simultaneously drive and synchronize a rotational speed of the upper and lower turntables.

2. claims: 11-16

A packaging system for forming and filling a transportable container with a plurality of bulk goods, the system including an upper turntable and a lower turntable in interlocking relationship with the upper turntable, a drive system with a drive interconnected to one of said upper and lower turntables and one pulley system interconnected with one of said upper and lower turntables to simultaneously drive and synchronize a rotational speed of said interlocked upper and lower turntables.

3. claims: 17-20

A method of forming and filling a transportable container where an upper turntable including a slip frame former and a lower turntable are simultaneously rotated by means of a drive, a stretch wrap is applied to form a container, one of the upper turntable and a bottom support supporting the lower turntable are moved relative to one another, rotation of the upper turntable with the drive is disengaged during the relative movement of the upper turntable and the support and rotation of the upper turntable is continued using only the overlapped layers of stretch wrap extending between the support and the slip frame former.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/059491

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