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(54) Title: IMPROVEMENTS TO PACKAGING MACHINES

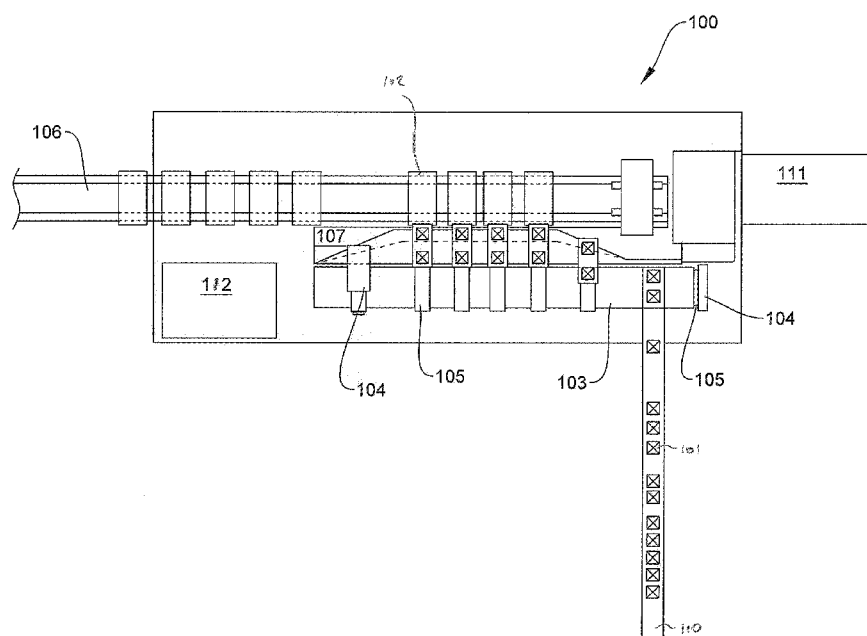


Figure 1

(57) Abstract: A packaging machine comprises a first conveyor (103); a plurality of pockets (104) moveable along a length of said first conveyor; means for urging said pockets to move along said first conveyor; a second conveyor (106) for carrying a plurality of containers; and means (107) for moving said pockets in a direction towards or away from said second conveyor; wherein said means for urging said pockets along said first conveyor is controllable to move each individual said pocket separately at a speed corresponding to said individual pocket.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER INV. B65G54/02 B65B35/44 B65B43/52 B65G47/22 B65B5/06 B65B35/20 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 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.
X	EP 2 743 192 A1 (TETRA LAVAL HOLDINGS & FINANCE [CH]) 18 June 2014 (2014-06-18)	1,2,4-7, 26
Y	paragraphs [0075], [0092]; claims 1-18; figure 14	3,8-18
X	DE 10 2014 116232 A1 (WEBER MASCHB GMBH [DE]) 12 May 2016 (2016-05-12) paragraph [0112] - paragraph [0167]	1,2,4-7, 26
X	WO 2016/200753 A1 (PROCTER & GAMBLE [US]) 15 December 2016 (2016-12-15) claims 1-15; figures 17,7B	1,26
Y	EP 3 034 414 A1 (UHLMANN PAC SYSTEME GMBH & CO [DE]) 22 June 2016 (2016-06-22) paragraph [0032] - paragraph [0068]; figures 4a,4b,4c	3,8-18
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<input checked="" 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 3 August 2018		Date of mailing of the international search report 19/10/2018
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Yazici, Baris

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International application No

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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.
Y	WO 03/047977 A2 (JONES & CO INC R A [US]) 12 June 2003 (2003-06-12) page 18, lines 12-22 page 17, line 1 - page 18, line 22 -----	3,8-18

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2018/059546

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.:

1-18, 26

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: 1-18, 26

means for moving individual pockets along and across a length axis of a conveyor during same time period.

2. claims: 19-25, 27-47

a secondary conveyor for transporting a plurality of containers.

3. claims: 48-52

carton engagement means to engage one end of a carton and a plurality of carriers movable along a length of a conveyor wherein a pair of carriers carrying an individual container therebetween.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2018/059546

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