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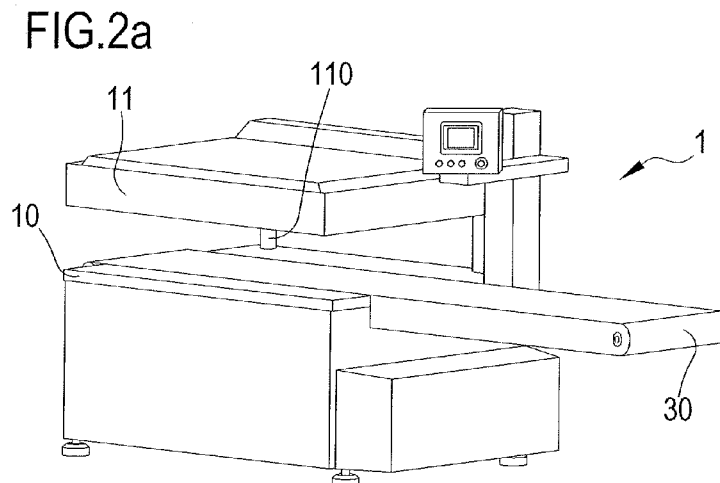
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- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: PACKAGING APPARATUS COMPRISING ACTUATOR AND METHOD OF OPERATING PACKAGING APPARATUS



(57) Abstract: A packaging apparatus and a method of operating the apparatus are provided. The apparatus comprises a support frame, a packaging station having a first tool, a second tool, and one or more actuators, operably coupled to at least one of the first tool and the second tool, to modify a position of the second tool with respect to the first tool; and a control unit operably coupled to the one or more actuators, wherein the one or more actuators have a first configuration, in which the first tool and the second tool are spaced from one another by a first distance, a second configuration, in which the first tool and the second tool are spaced from one another by a second distance, and a third configuration, in which the first tool and the second tool are spaced from one another by a third distance, and wherein the control unit is configured to operate in a first modality, wherein the control unit is configured to move the one or more actuators from the first configuration into the second configuration, to maintain the one or more actuators in the second configuration for a first time interval, and to move the one or more actuators from the second configuration into the first configuration.



**(88) Date of publication of the international search report:**  
25 June 2015

**INTERNATIONAL SEARCH REPORT**

International application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. B65B31/02 F15B11/12 F15B15/14  
 ADD. B65B57/00 B65B59/00

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 F15B

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	GB 1 603 066 A (INAUEN MASCH AG) 18 November 1981 (1981-11-18) the whole document -----	1,3-9, 27-30
Y	US 2011/247303 A1 (HAERING RAINER [DE] ET AL) 13 October 2011 (2011-10-13) the whole document -----	1-9, 27-30
Y	WO 97/45322 A1 (RIVERWOOD INT CORP [US]) 4 December 1997 (1997-12-04) the whole document -----	1-9, 27-30
Y	WO 2009/145885 A1 (CRYOVAC INC [US]; IOCCO JEFFREY R [US]; MCDONALD GREG E [US]; PAINTER) 3 December 2009 (2009-12-03) page 6 ----- -/--	1-9, 27-30

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

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"&" document member of the same patent family

Date of the actual completion of the international search  27 April 2015	Date of mailing of the international search report  06/05/2015
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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  Dick, Birgit
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/EP2014/065845

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 343 537 B1 (IIDA KENJI [JP] ET AL) 5 February 2002 (2002-02-05) the whole document	10-26
Y	----- DE 10 2009 037959 A1 (SPORER KLAUS [DE]) 24 February 2011 (2011-02-24) the whole document	10-26
A	----- US 2004/144063 A1 (COUNTZ JOHN W [US]) 29 July 2004 (2004-07-29) the whole document	1-9, 27-30
A	----- WO 2012/161469 A2 (INTROPACK CO LTD) 29 November 2012 (2012-11-29) the whole document	10-26
A,P	& EP 2 716 556 A2 (ROLLPACK CO LTD [KR]; INTROPACK CO LTD [KR]; LEE KYUL JOO [KR] ROLLPAC) 9 April 2014 (2014-04-09) -----	10-26

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2014/065845

## 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: 1-9, 27-30

Packaging apparatus  
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2. claims: 10-26

Packaging apparatus with fluid distribution system  
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2014/065845

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