PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2019/062932	25.11.2019	30.11.2018

International Patent Classification (IPC) or both national classification and IPC
INV. B65D71/58

Applicant
WESTROCK PACKAGING SYSTEMS, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:	Date of completion of this opinion	Authorized Officer
European Patent Office P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Fax: +31 70 340 - 3016	see form PCT/ISA/210	Fournier, Jacques Telephone No. +31 70 340-0

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2019/062932

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:

   a. ☐ forming part of the international application as filed:

      ☐ in the form of an Annex C/ST.25 text file.

      ☐ on paper or in the form of an image file.

   b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.

   c. ☐ furnished subsequent to the international filing date for the purposes of international search only:

      ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).

      ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of

☐ the entire international application

☒ claims Nos. 12, 14

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international search *(specify)*:

☐ the description, claims or drawings *(indicate particular elements below)* or said claims Nos. are so unclear that no meaningful opinion could be formed *(specify)*:

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed *(specify)*:

☒ no international search report has been established for the whole application or for said claims Nos. 12, 14

☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

- ☐ furnish a sequence listing in the form of an Annex C/ST.25 text file, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.
- ☐ furnish a sequence listing on paper or in the form of an image file complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.
- ☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13*ter*.1(a) or (b).

☐ See Supplemental Box for further details

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has, within the applicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

   see separate sheet

4. Consequently, this report has been established in respect of the following parts of the international application:

   ☐ all parts.

   ☒ the parts relating to claims Nos. 1-11, 13

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-11, 13
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-11, 13
Industrial applicability (IA)	Yes:	Claims	1-11, 13
	No:	Claims	

2. Citations and explanations

   see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item IV

Lack of unity of invention

This Authority considers that the application does not meet the requirements of unity of invention and that there are 2 inventions.

Invention I (claims 1-11, 13): Independent claim 1 relates to an article carrier comprising a plurality of primary panels, the panels including a first and a second panel and a partition structure for dividing the interior into two or more cells, the partition structure being formed from the first panel. Claim 13 deals with a blank for forming such a carrier.

Invention II (claims 12, 14): Claim 12 relates to an article carrier comprising a plurality of primary panels, the panels including a first and and a second side panel, a medial partition wall interposed parallel between the first and the second side panel and a pair of end closure flaps comprising at least one press-activated locking feature for interconnecting the end closure flaps. Claim 14 deals with a blank for forming such a carrier.

The reasons, for which the inventions are not so linked as to form a single general inventive concept, as required by Rule 13.1 PCT, are as follows.

The prior art has been identified as D1: US 2016/0152389A1.
The common matter linking together the independent claims 1 and 12 is the following:
An article carrier comprising a plurality of primary panels for forming a tubular structure and defining interior of the article carrier, the plurality of primary panels including:
a first panel; and
a second panel opposing the first panel;

wherein the carrier further comprises a partition structure (wording of claim 1) or a medial partition wall (wording of claim 12) for dividing the interior into two or more article-receiving cells.

This common matter is anticipated by the disclosure of document D1.
D1 discloses figures 4 and 5 an article carrier (5) comprising a plurality of primary panels for forming a tubular structure and defining interior of the article carrier, the plurality of primary panels including:
a first panel (15a); and
a second panel (15b) opposing the first panel;

wherein the carrier further comprises a partition structure (wording of claim 1) or a medial partition wall (wording of claim 12) (the partition structure, or the medial partition wall, is identified as the central wall 140 depicted figures 4 and 5) for dividing the interior into two or more article-receiving cells.

Since the common matter is anticipated by D1, the common matter cannot provide a single general inventive concept.

Invention I (claims 1-11, 13)
Compared to independent claim 1, D1 discloses an article carrier comprising a plurality of primary panels for forming a tubular structure and defining interior of an article carrier, the plurality of primary panels including:
a first panel 41 (see figures 1 and 4); and
a second panel 15a (see figure 4) opposing the first panel; wherein the carrier further comprises a partition structure for dividing the interior into two or more article-receiving cells, the partition structure being formed from the first panel 41 and comprising:
a lateral partition panel 81 (see figures 1, 6-9) hingedly connected at a proximal end thereof to the first panel by a first fold line 83;
a joint panel (the joint panel is identified in figure 8 as the "right" portion of the hinge ear 143, the portion connected to the glue panel 145 by the fold line 147) hingedly connected to a distal end portion (the distal end portion is identified in figure 8 as the "left" portion of the hinge ear 143, the portion connected to the lateral partition panel 81 by the fold line 91) of the lateral partition panel 81 (Remark: The distinction between the two portions of the hinge ear 143 is also mentioned in paragraph 38 of D1 : "As shown in FIGS. 6-9, the glue tab 145 and a portion of the hinge ear 143 can extend from the lateral fold line 91 on one side of the divider flap 81, and another portion of the hinge ear 143 can extend on an opposing side of the divider flap 81 in the erected carrier 5"); and
a glue panel 145 hingedly connected to the joint panel by a third fold line 147; wherein the joint panel is angled with respect to the distal end portion (the angle can be seen figures 8).

It follows that the following technical feature of claim 1 makes a contribution over the prior art and can be considered as a special technical feature within the meaning of Rule 13.2 PCT:

The joint panel is hingedly connected to a distal end portion of the lateral partition panel by a second fold line and the length of the joint panel is greater than the length of the end portion.

The problem solved by this special technical feature can therefore be construed as facilitating the flexing of the joint panel and the outward movement of the second panel when containers are inserted.

Invention II (claims 12, 14)

Compared to independent claim 2, D1 discloses an article carrier comprising a plurality of primary panels defining an interior of the article carrier, the plurality of primary panels including: first 15a and second opposed side 15b panels for forming a tubular structure, a medial partition wall 140 interposed parallel between the first and second side panels to divide the interior into two or more article-receiving cells, and a pair of end closure flaps 12a 12b which at least partially close one of opposed ends of the tubular structure, wherein the medial partition wall comprises a backing edge (the edge of central bottom flap 45) extending alongside an inside surface of at least one of the end closure flaps.

It follows that the following technical feature of claim 2 makes a contribution over the prior art and can be considered as a special technical feature within the meaning of Rule 13.2 PCT:
the end closure flaps comprising at least one press-activated locking feature for interconnecting the end closure flaps, and wherein the backing edge of the medial partition wall has at least one recess defined therealong and arranged in registration with the at least one press-activated locking feature.

The problem solved by this special technical feature can therefore be construed as providing alternative means for interconnecting the end closure flaps.

The problems solved by the two inventions are different. The special technical features of the two inventions are neither the same nor linked. Consequently, neither the objective problem underlying the subjects of the claimed inventions, nor their solutions defined by the special technical features allow for a relationship to be established between the said inventions, which involves a single general inventive concept.

In conclusion, the groups of claims are not linked by common or corresponding special technical features and define two different inventions not linked by a single general inventive concept.

The application, hence does not meet the requirements of unity of invention as defined in Rules 13.1 and 13.2 PCT.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D1 US 2016/152389 A1.

2 The present application does not meet the criteria of Article 33(3) PCT, because the subject-matter of claim 1 does not involve an inventive step.

2.1 D1 may be regarded as being the prior art closest to the subject-matter of claim 1, and discloses an article carrier comprising a plurality of primary panels for forming a tubular structure and defining interior of an article carrier, the plurality of primary panels including:
a first panel 41 (see figures 1 and 4); and
a second panel 15a (see figure 4) opposing the first panel; wherein the carrier further comprises a partition structure for dividing the interior into two or more article-receiving cells, the partition structure being formed from the first panel 41 and comprising:
a lateral partition panel 81 (see figures 1, 6-9) hingedly connected at a proximal end thereof to the first panel by a first fold line 83;
a joint panel (the joint panel is identified in figure 8 as the "right" portion of the hinge ear 143, the portion connected to the glue panel 145 by the fold line 147) hingedly connected to a distal end portion (the distal end portion is identified in figure 8 as the "left" portion of the panel or hinge ear 143, the portion connected to the lateral partition panel 81 by the fold line 91) of the lateral partition panel 81 (Remark: The distinction between the two portions of the hinge ear 143 is also mentioned in paragraph 38 of D1 : "As shown in FIGS. 6-9, the glue tab 145 and a portion of the hinge ear 143 can extend from the lateral fold line 91 on one side of the divider flap 81, and another portion of the hinge ear 143 can extend on an opposing side of the divider flap 81 in the erected carrier 5"); and
a glue panel 145 hingedly connected to the joint panel by a third fold line 147; wherein the joint panel is angled with respect to the distal end portion (the angle can be seen figures 8).

2.2 The subject-matter of claim 1 therefore differs from this known article carrier in that the joint panel is hingedly connected to a distal end portion of the lateral partition panel by a second fold line and the length of the joint panel is greater than the length of the end portion.

2.3 The problem to be solved by the present invention may therefore be regarded as facilitating the flexing of the joint panel and the outward movement of the second panel when containers are inserted.

2.4 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons. Adding a fold line to the connection between two portions of the hinge ear 143 is for the skilled person an obvious manner to facilitate flexing of the joint panel panels. Regarding the length relations, although the description of D1 is silent about the lengths of the joint panel and the (distal) end portion, figure 8 depicts without any doubts that the joint panel is greater than the distal end portion. In any case, the skilled person would adapt without inventive activity, the lengths of the joint panel and the distal end portion accordingly to ensure that flexing is facilitated and that outward movement of the second panel when containers are inserted is sufficient. Should the movement be limited, he would increase the length of the joint panel and arrive at the solution of claim 1 without inventive step.

3 The present application does not meet the criteria of Article 33(3) PCT, because the subject-matter of claim 13 does not involve an inventive step.

3.1 D1 may be regarded as being the prior art closest to the subject-matter of claim 13, and discloses figure 1 a blank for forming an article carrier, the blank comprising a plurality of primary panels for forming walls of a tubular structure defining an interior chamber, the plurality of primary panels including:
a first panel 41; and
a second panel 15a opposing the first panel;
wherein the blank further comprises a partition structure for dividing the interior into two or more article-receiving cells, the partition structure being formed from the first panel and comprising:
a lateral partition panel 41 hingedly connected at a proximal end thereof to the first panel by a first fold line 83;
a joint panel hingedly connected to a distal end portion of the lateral partition panel; and
a glue panel (145) hingedly connected to the joint panel by a third fold line (147) ;

wherein the joint panel is configured to be angled with respect to the distal end portion in a setup carrier and wherein the length of the joint panel is greater than the length of the end portion, see also the assessment of point 2.1 related to claim 1.

3.2 The subject-matter of claim 13 therefore differs from this known blank in that a joint panel is hingedly connected to a distal end portion of the lateral partition panel by a second fold line and in that the length of the joint panel is greater than the length of the end portion.

3.3 The problem to be solved by the present invention may therefore be regarded as facilitating the flexing of the joint panel and the outward movement of the second panel when containers are inserted.

3.4 The solution proposed in claim 13 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the same reasons as the ones mentioned for claim 1.

3.5 Dependent claims 2-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.
Regarding claims 2-3, D1 discloses the features listed in claims 2-3, see for example figures 1 and 6-9. The additional features of claims 4, 7, 8 relate to details of fold lines or relief cuts which are commonly used in the field of carriers made of blanks. Hence, the subject-matter of these claims does not involve an inventive step. Regarding claims 5-6, D1 also discloses an abutment between the second panel and the lateral partition panel, see figures 6-9. The additional features of claims 9-10 relate to the collapsibility and erectability of an article carrier. Such a functionality is well known and commonly used in the field of carrier made of blanks. D1 furthermore mentions that the carrier 5 is erected from the blank 3, see paragraph 32. In addition, the wording of claim 10 "automatically erected" is vague and no technical features are mentioned to achieve this automatic erection. Hence, the subject-matter of claims 9-10 does not involve an inventive step. Regarding claim 11, the tubular structure of D1 also discloses an end closed at least in part by one or more bottom panels (see bottom panels 12a, 12b).

Re Item VII

Certain defects in the international application

The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 is not mentioned in the description, nor is this document identified therein.

Re Item VIII

Certain observations on the international application

The description and the claims are unclear. Many technical features are named differently in the description. For example, on page 21 the first panels are associated with the reference signs 14 and 28 and the second panels with the reference signs 18 and 24. Page 22 mentions that the first and second panels are 18 and 24 while a medial partition wall is given the reference signs 14 and 28. The same inconsistency applies to the claims. The application as a whole, the description and the claims are thus totally unclear. The same reference signs and names should have been used for the same technical features.

Claim 10 is not clear because of the wording "automatically erected". This wording is vague and unclear. Claim 10 furthermore does not list any technical features which can achieve this automatic erection.