

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.
PCT/US2020/017605

International filing date (day/month/year)
11.02.2020

Priority date (day/month/year)
15.02.2019

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 notified 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:



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Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

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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 43bis.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 13ter.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 13ter.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13ter.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. 13-27, 29, 30

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. 13-27, 29, 30

☐ 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 13ter.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. 1-12, 28

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

1. Statement

Novelty (N)	Yes: Claims	<u>6, 9-11</u>
	No: Claims	<u>1-5, 7, 8, 12, 28</u>
Inventive step (IS)	Yes: Claims	<u>6, 9-11</u>
	No: Claims	<u>1-5, 7, 8, 12, 28</u>
Industrial applicability (IA)	Yes: Claims	<u>1-12, 28</u>
	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 III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

- 1 An opinion with regard to novelty, inventive step and industrial applicability has not been established for claims 13-27, 29 and 30 due to the non-establishment of a Search Report for said claims.

Re Item IV

Lack of unity of invention

- 2 Reference is made to the following document:
D1 EP 1 365 970 B1
- 3 This Authority considers that the application does not meet the requirements of unity of invention and that there are three inventions:
- I. claims **1-12, 28** directed to a carrier, respectively a blank, wherein a first hinged connection is greater in fold resistance than a second and fourth hinged connection;
 - II. claims **13-24, 29** directed to a carrier, respectively a blank, wherein a first hinged connection is less in fold resistance than a second hinged connection and equal in fold strength to a fourth hinged connection;
 - III. claims **25-27, 30** directed to a carrier, respectively a blank, wherein a second primary panel comprises a first corner panel and a main panel.
- 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:
- 3.1 The common matter linking together the independent claims 1, 13, 25 and 28-30 is the following:
- A carrier, or blank for forming such a carrier, comprising a collapsible tubular structure which comprises a first primary panel, a second primary panel, a third primary panel and a fourth primary panel wherein wherein the first and second primary panels are hingedly connected by a first hinged connection, the second

and third primary panels are hingedly connected by a second hinged connection, the third and fourth primary panels are hingedly connected by a third hinged connection, the fourth and first primary panels are hingedly connected by a fourth hinged connection.

This common matter does not comprise a single general inventive concept, based on same or corresponding special technical features within the meaning of Rule 13.2 PCT, because said common matter is known in its entirety from D1 which discloses:

A carrier (fig. 9), or blank (fig. 1) for forming such a carrier, comprising a collapsible tubular structure (*at stages of the production process prior to the connection of the bottom panels*) which comprises a first primary panel (50, 52), a second primary panel (12), a third primary panel (82, 84) and a fourth primary panel (20) wherein wherein the first and second primary panels are hingedly connected by a first hinged connection (foldline 54), the second and third primary panels are hingedly connected by a second hinged connection (foldline 98), the third and fourth primary panels are hingedly connected by a third hinged connection (foldline 86), the fourth and first primary panels are hingedly connected by a fourth hinged connection (foldline 72).

- 3.2 Independent claims 1 and 28 do not comprise any special technical features, representing a contribution over the prior art. The reason being that D1 also discloses the first hinged connection (foldline 54) being greater (*implicitly in view of the greater length of foldline 54 compared to foldlines 98 and 72*) in fold resistance than the second (foldline 98) and fourth (foldline 72) hinged connections.

Consequently, no objective technical problem is solved by the subject-matter of independent claims 1 and 28.

- 3.3 Independent claims 13 and 29 do not comprise any special technical features, representing a contribution over the prior art. The reason being that D1 also discloses the first hinged connection being less in fold resistance than the second hinged connection and equal in fold strength to the fourth hinged connection.

NOTE: in this case the first hinged connection is taken as foldline 58, the second hinged connection is taken as foldline 94 and the fourth hinged connection is taken as foldline 72. Considering that foldlines 58 and 72 are of

equal length, they have equal fold resistance. Said foldlines 58 and 72 being of smaller length than the second foldline 94, thus implicitly having less fold resistance than said second foldline 94.

Consequently, no objective technical problem is solved by the subject-matter of independent claims 13 and 29.

- 3.4 Independent claims 25 and 30 do not comprise any special technical features, representing a contribution over the prior art. The reason being that D1 also discloses the second primary panel (12) comprising a first corner panel portion (panel portion between foldlines 54 and 58) and a main panel portion (12), the first corner panel portion being hingedly connected to the first primary panel by the first hinged connection (foldline 54) and to the main panel portion by a first corner hinged connection (foldline 58) and wherein the first hinged connection is greater (*implicitly in view of the greater length of foldline 54 compared to foldline 58*) or lesser in fold resistance than the first corner hinged connection.

Consequently, no objective technical problem is solved by the subject-matter of independent claims 25 and 30.

- 3.5 Hence, inventions I, II and III comprise neither the same, nor corresponding special technical features, so the technical relationship between the subject matter of the claims required by Rule 13.2 PCT is lacking and the claims are not so linked as to form a single general inventive concept as required by Rule 13.1 PCT.

Consequently the application does not meet the requirement for unity of invention.

Re Item V

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

- 4 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-5, 7, 8, 12 and 28 is not new in the sense of Article 33(2) PCT.
- 4.1 D1 discloses the subject-matter of independent claims 1 and 28. Reference is made to points 3.1 and 3.2 above.

- 4.2 Dependent claims 2-5, 7, 8 and 12 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty, the reasons being that D1 further discloses:
- the third hinged connection (foldline 86) being greater (*implicitly in view of the greater length of foldline 86 compared to foldlines 98 and 72*) in fold resistance than each of the second (foldline 98) and fourth (foldline 72) hinged connections [cf. claim 2];
 - the first hinged connection (foldline 54) being equal (*implicitly in view of the equal length of foldlines 54 and 86*) in fold resistance to the third hinged connection (foldline 86) [cf. claim 3];
 - the second hinged connection (foldline 98) being equal (*implicitly in view of the equal length of foldlines 98 and 72*) in fold resistance to the fourth hinged connection (foldline 72) [cf. claim 4];
 - the second primary panel (12) comprising a first corner panel portion (panel portion between foldlines 54 and 58) and a main panel portion (12), the first corner panel portion being hingedly connected to the first primary panel by the first hinged connection (foldline 54) and to the main panel portion by a first corner hinged connection (foldline 58) and wherein the first hinged connection is greater (*implicitly in view of the greater length of foldline 54 compared to foldline 58*) in fold resistance than the first corner hinged connection [cf. claim 5];
 - the first corner hinged connection (foldline 58) being equal (*implicitly in view of the equal length of foldlines 58 and 98*) in fold resistance to the second hinged connection (foldline 98) [cf. claim 7];
 - the fourth primary panel (20) comprising an additional corner panel portion (panel portion between foldlines 86 and 90) and a second main panel portion (20), the additional corner panel portion being hingedly connected to the third primary panel (82, 84) by the third hinged connection (foldline 86) and to the second main panel portion (20) by an additional corner hinged connection (foldline 90) wherein the third hinged connection is greater (*implicitly in view of the greater length of foldline 86 compared to foldline 90*) in fold resistance than the additional corner hinged connection [cf. claim 8];
 - a partition structure (74) [cf. claim 12].

- 5 The combination of the features of claims 1 and 6, or claims 1 and 9, is neither known from, nor rendered obvious by, the available prior art. The reason being that D1 discloses a different hinged configuration. Based on the teaching of D1 the skilled person would not find any hints or suggestions to modify the disclosed hinged connection to reflect the combination of features of claims 1 and 6, or of claims 1 and 9.

Re Item VII

Certain defects in the international application

- 6 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.
- 7 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Re Item VIII

Certain observations on the international application

- 8 The application does not meet the requirements of Article 6 PCT, because claims 1, 10, 11 and 28 are not clear.
- 8.1 Independent claim 1 broadly defines a collapsible tubular structure comprising primary panels. However, the description (page 5, lines 28-31) and drawings (fig. 1 and 7) convey the impression that the collapsible tubular structure is formed by said primary panels. Hence, independent claim 1 is not supported by the description as required by Article 6 PCT.
- 8.2 Dependent claim 10 refers to "...the main panel portion..." which is not previously defined. Dependent claim 11, which is depending on claim 10 is likewise unclear.

- 8.3 Independent claim 28 defines a blank including a first, second, third and fourth primary panel. However, with reference to figure 1, in order for the fourth primary panel of the blank to be hingedly connected to the first primary panel, at least two first primary panels (12, 28) are required.

* * *