

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**
(PCT Rule 43*bis*.1)

To:

see form PCT/ISA/220

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/US2018/039706

International filing date (day/month/year)
27.06.2018

Priority date (day/month/year)
30.06.2017

International Patent Classification (IPC) or both national classification and IPC
INV. B65D71/16 B65D71/36

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

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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. 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>1-21</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	<u>1-21</u>
	No: Claims	
Industrial applicability (IA)	Yes: Claims	<u>1-21</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 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 documents:
 - D1 WO 2016/032601 A1 (WESTROCK PACKAGING SYSTEMS LLC [US]) 3 March 2016 (2016-03-03)
 - D2 EP 0 072 089 A1 (MEAD CORP [US]) 16 February 1983 (1983-02-16)
- 2 D1 is regarded as being the prior art closest to the subject-matter of claim 1, and discloses (the reference numbers relating to this document) a carton for packaging articles comprising a plurality of primary panels for forming a tubular structure and an end closure structure for at least partially closing an end of the tubular structure, the primary panels include a top panel (14), the end closure structure comprising a top end closure flap (26A) having a handle opening and a first side end closure flap (28A).
 - 2.1 The subject-matter of claim 1 therefore differs from this known carton in that it has a web panel coupling the top end closure flap to the first side end closure flap, wherein the web panel is hingedly connected to the first side end closure flap along a first fold line, and wherein the web panel comprises a handle-reinforcing edge which extends along at least part of an engaging edge of the handle opening when the web panel is folded into position between the top and first side end closure flaps and wherein the first fold line is disposed at an acute angle with respect to a second fold line between the top end closure flap and the top panel when the carton is erected.
 - 2.2 This subject-matter is therefore new (Article 33(2) PCT).
 - 2.3 The problem to be solved by the present invention may be regarded as improving the reinforcement of the handle.
 - 2.4 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:
 - 2.5 The technical effect provided by the invention is that, since the web panel is connected to the top end closure flap, it doesn't reinforce only the upper edge of the handle, but the whole end closure structure when the carton is being carried. Web panels (gusset panels) connecting two adjacent end panels are

generally known (see for instance D2). However, they are located away from the handle. There is therefore no incentive for the skilled person to use them for reinforcing the handle.

- 3 For similar reasons, the subject-matter of corresponding claim 8 meets the requirements of the PCT with regard to novelty and inventive step.
- 4 D1 is regarded as being the prior art closest to the subject-matter of claim 9, and discloses a carton for packaging articles comprising a plurality of primary panels for forming a tubular structure and an end closure structure for at least partially closing an end of the tubular structure, the end closure structure comprising a top end closure flap (26A) having a handle opening and a first side end closure flap (28A).
 - 4.1 The subject-matter of claim 9 therefore differs from this known carton in that it has a web panel coupling the top end closure flap to the first side end closure flap, wherein the web panel is hingedly connected to the first side end closure flap along a first fold line, and wherein the web panel comprises a handle-reinforcing edge which extends along at least part of an engaging edge of the handle opening when the web panel is folded into position between the top and first side end closure flaps and wherein the handle-reinforcing edge extends from the lower end of the first fold line.
 - 4.2 This subject-matter is therefore new (Article 33(2) PCT).
 - 4.3 For the same reasons as explained in connection with claim 1, it also involves an inventive step (Article 33(3) PCT).
- 5 For similar reasons, the subject-matter of corresponding claim 21 meets the requirements of the PCT with regard to novelty and inventive step.
- 6 Claims 2-7 are dependent on claim 1, and claims 10-20 on claim 9. As such, they also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

Certain defects in the international application

- 7 The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art D1 being placed in the preamble (Rule 6.3(b)(i) PCT) and the remaining features (see 2.1 and 4.1 above) being included in the characterising part (Rule 6.3(b)(ii) PCT).
- 8 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- 9 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.
- 10 The references W (pages 5, 6, 7, 18, 19 and 20), 2 (page 16), and G (page 23) don't appear in the figures.
- 11 On page 4, second line, "figure 7" should read "figure 6". On page 23, "figure 7" should read "figure 3".
- 12 On page 25, lines 21-25 are superfluous, as they repeat lines 15-19.

Re Item VIII

Certain observations on the international application

- 13 Although claims 1 and 9, resp. 8 and 21, have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and/or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
- 14 The relative terms "lower end" and "distal end" used in claims 2, 3, 4, 10 and 11 have no clear meaning and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT.
- 15 The statement in the description on page 3, lines 16-20, implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.