

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 23481-WOORD1	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2020/017605	International filing date (<i>day/month/year</i>) 11 February 2020 (11-02-2020)	(Earliest) Priority Date (<i>day/month/year</i>) 15 February 2019 (15-02-2019)
Applicant WESTROCK PACKAGING SYSTEMS, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out 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))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☒ **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant
☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1
☒ as suggested by the applicant
☐ as selected by this Authority, because the applicant failed to suggest a figure
☐ as selected by this Authority, because this figure better characterizes the invention
 b. ☐ none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2020/017605

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.:

1-12, 28

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.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2020/017605

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D71/58
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)
B65D

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 1 365 970 B1 (MEADWESTVACO PACKAGING SYSTEMS [US]) 30 August 2006 (2006-08-30) figures 1,9	1-5,7,8, 12,28
A	----- US 2016/101923 A1 (COSTANZO JR DONN J [US]) 14 April 2016 (2016-04-14) abstract; figure 1	1,28
A	----- US 4 735 315 A (OLIFF JAMES R [US] ET AL) 5 April 1988 (1988-04-05) abstract; figure 2 column 1, lines 58-64	1,28
A	----- WO 2018/080962 A1 (WESTROCK PACKAGING SYSTEMS LLC [US]) 3 May 2018 (2018-05-03) abstract; figures 1,5,6	1,28



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

"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

18 May 2020

Date of mailing of the international search report

17/07/2020

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2020/017605

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1365970	B1	30-08-2006	AT 337981 T 15-09-2006
		AU 2002242309 B2	01-06-2006
		CA 2439576 A1	06-09-2002
		DE 60214344 T2	12-04-2007
		DK 1365970 T3	08-01-2007
		EP 1365970 A2	03-12-2003
		ES 2272676 T3	01-05-2007
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		WO 02068280 A2	06-09-2002

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		BR 8804712 A	18-04-1989
		CA 1318893 C	08-06-1993
		CN 1031977 A	29-03-1989
		DE 3874062 D1	01-10-1992
		DE 3874062 T2	11-02-1993
		EP 0308158 A1	22-03-1989
		ES 2034253 T3	01-04-1993
		KR 890004955 A	10-05-1989
		MX 164264 B	28-07-1992
		NZ 226058 A	26-02-1990
		PH 25211 A	27-03-1991
		US 4735315 A	05-04-1988

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		BR 112019008508 A2	09-07-2019
		CA 3042376 A1	03-05-2018
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		EP 3532403 A1	04-09-2019
		KR 20190075961 A	01-07-2019
		US 2019248557 A1	15-08-2019
		WO 2018080962 A1	03-05-2018

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 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.

2. 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.

3. 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.
