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/US2022/050985	24.11.2022	24.11.2021

International Patent Classification (IPC) or both national classification and IPC
INV. B65D41/16 B65D51/16

Applicant
OWENS-BROCKWAY GLASS CONTAINER INC.

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:

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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 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.

   b. ☐ furnished subsequent to the international filing date for the purposes of international search (Rule 13*ter*.1(a)),

      ☐ accompanied by a statement to the effect that the sequence listing does not go beyond the disclosure in the international application as filed.

4. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established to the extent that a meaningful opinion could be formed without a WIPO Standard ST.26 compliant sequence listing.

5. Additional comments:

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	2, 6, 7, 9-20
	No:	Claims	1, 3-5, 8
Inventive step (IS)	Yes:	Claims	2, 6, 7, 9-20
	No:	Claims	1, 3-5, 8
Industrial applicability (IA)	Yes:	Claims	1-20
	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

Re Item V

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

1 Cited documents

Reference is made to the following documents:

D1 US 2012/018430 A1 (BORK KEVIN W [US]) 26 January 2012 (2012-01-26)

D2 CN 101 289 060 A (SHANGHAI ZHAOHUI TECHNOLOGY CO [CN]) 22 October 2008 (2008-10-22)

D3 DE 10 2012 016902 B3 (NEBEL MIKE [DE]) 30 January 2014 (2014-01-30)

D4 US 2020/024041 A1 (NIVER MICHAEL ANDREW [US]) 23 January 2020 (2020-01-23)

D5 DE 20 2011 003207 U1 (REISE UWE [DE]) 5 May 2011 (2011-05-05)

2 Inventive step

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of the following claims does not involve an inventive step in the sense of Article 33(3) PCT.

2.2 Claim 1

2.2.1 D1 is regarded as being the prior art closest to the subject-matter of the present claim, and discloses (reference signs in parenthesis refer to this document)

A ~~threadless~~ pressure retention closure for a container, comprising:
a pressure closure assembly including a pressure relief valve ***(44+40)****, and an inner shell* ***(16)*** *having an inner shell base wall* ***(see horizontal part of 16 as it is the case in the present application)*** *configured to retain the pressure relief valve* ***(see [0016])****, a pressure relief slot for exposing a portion of the pressure relief valve* ***(see hole in inner shell 16 letting the***

upper part 40b of the valve go through), *and an outer skirt* ***(see part of 16 comprising 20)*** *extending away from the inner shell base wall and including a first circumferential portion and a second circumferential portion* ***(the skirt of D1 is in indeed circular and contains two circular portions as these two portions are not more precisely defined in present claim 1. Consequently the two portions of D1 could be arbitrarily designated as a first half of the skirt and the other half of the skirt)***; *and*
an outer release shell ***(28)*** *configured to be coupled to the pressure closure assembly, and including a first portion having a first portion base wall configured to overlap a first corresponding portion of the inner shell base wall when assembled, and a pressure relief tab* ***(actuator 78 in D1)*** *corresponding to the pressure relief slot of the inner shell* ***(see paragrahphs [0018] to [0027] as well as fig.2)***, *the first portion further having an outer skirt extending away from the first portion base wall and configured to wrap around the first circumferential portion of the outer skirt of the inner shell of the pressure closure assembly when assembled, and a second portion having a second portion base wall configured to overlap a second corresponding portion of the inner shell base wall when assembled, and an outer skirt extending away from the second portion base wall.* ***(given that the outer shell 28 wraps aroud the inner shell 16, the same reasoning provided for the portions of the inner shell also applies)***

2.2.2 The subject-matter the present claim therefore differs from this known D1 in that the pressure retention device is threadless whereas the device of D1 discloses threads 20 in order to allow the fixation to the container.

2.2.3 However switching the a threadless alternative is considered as obvious for the skilled person only using the general knowledge, as it only depends on classic parameters for example on the nature of the container, the magnitude of the pressure within said container etc... Should this be contested see also as example D2 which discloses a threadless connection of the closure member to a container. In addition modifying the closure member of D1 in order to arrive at the subject-matter of claim 1 would not require any modification to the valve of other components that the thread itself. The subject-matter of claim 1 is thus regarded as not inventive.

2.3 Claims 3 and 4

See seal ring 24 of D1 which abuts the inner skirt of 16 in fig.2. See especially [0014]. This paragraph also describes the interaction with the container 12 as in present claim 4.

2.4 Claim 5

In D1 the release shell 28 is also circumferentially oriented with respect to the inner shell 16 so that the outer skirt of the first portion of the release shell grips the corresponding circumferential first portion of the outer skirt of the inner shell via the racheting pawl 32. See [0015].

2.5 Claim 8

Because a first a second portion can be freely selected everywhere along the circumference of the skirt, the subject-matter of claim 8 is also considered as disclosed by D1.

3 Proposal

3.1 The combination of the features of dependent claim 2 or dependent claim 9 (and consequently 10-18) is neither known from, nor rendered obvious by, the available prior art.

3.2 Indeed in addition to the features of claim 1, these claims refer to the respectively interrupted and continuous nature of the first and second portions of outer skirt of the inner shell. The interrupted portions aims at improving the clamping or snaping onto the finish of the container. This cannot be derived from the prior art because in D1 what was considered as the outer skirt is screwed onto the container. In addition replacing the screwing connection of D1 by a clamping mechanism does not appear possible in D1 because of the presence of the seal 36 in D1 which would not allow the skirt to deform in this particular section, therefore rendering impossible to arrive at the subject-matter of these claims with D1 as closest prior art.

3.3 Furthermore, the subject-matter of claim 6 (and consequently 7) is also neither known from, nor rendered obvious by, the available prior art.

3.4 Indeed the relief tab of D1 (as well as D3 and D4) is directly dropped by vertical pressure on the cap and not induced via a rotation of the release shell. Releasing the pressure via a rotation mechanism is known from D5 but without using a relief tab. The skilled person would thus have to way when trying to find an alternative in order to open the valve, to conceive a system as described in these claims.

3.5 The same reasoning applies mutatis mutandis for the subject-matter of independent claim 19 (and consequently 20) which in addition to the subject-matter of claim introduces at least the concept of a semi-circular pressure relief slot extending partially around the central valve whereas D1 discloses a disc shape relief slot centered abode the valve. Again semi circular release slots imply a rotation of the release shell, for example as in D5, but without release tab. The skilled person would thus have to way when trying to find an alternative in order to open the valve, to conceive a system as described in these claims.

3.6 It is noted that this suggestion is only for assisting the applicant in his decision on how to proceed. It in no way precludes consideration of alternative solutions submitted by the applicant. The responsibility for determining the text of the application and in particular for defining the subject-matter for which protection is sought remains with the applicant.

Re Item VII

Certain defects in the application

4 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 and D5 is not mentioned in the description, nor are these documents identified therein.

5 In the present case it would be appropriate to draft independent claims in the two-part form (Rule 6.3(b) PCT) with the features known in combination from the closest prior art identified in Item V being placed in the preamble (Rule 6.3(b)(i) PCT) and the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

Final remark:

If the applicant intends to enter the European phase, the current set of claims does not comply with the requirements of Rule 43(2) and 43(4) EPC, as it contains multiple independent claims from the same category and as the content of these claims (for example claim 9 with respect to claim 1) could be easily presented as one single independent claim and further dependent claims.