

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference DOW-38589-A	FOR FURTHER ACTION	See item 4 below
International application No. PCT/US2015/040568	International filing date (<i>day/month/year</i>) 15 July 2015 (15.07.2015)	Priority date (<i>day/month/year</i>) 16 July 2014 (16.07.2014)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant DOW GLOBAL TECHNOLOGIES LLC		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 8 sheets, including this cover sheet.																								
In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																									
3.	This report contains indications relating to the following items: <table style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;">☒</td> <td style="width: 25%;">Box No. I</td> <td style="width: 70%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;">☐</td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;">☐</td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;">☐</td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;">☒</td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;">☐</td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;">☒</td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;">☒</td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	☒	Box No. I	Basis of the report	☐	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 Article 35(2) with regard to novelty, inventive step or 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
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☒	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 17 January 2017 (17.01.2017)
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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/US2015/040568

International filing date (day/month/year)
15.07.2015

Priority date (day/month/year)
16.07.2014

International Patent Classification (IPC) or both national classification and IPC
INV. B65D75/58 B65B3/04 B65B3/02 B65B61/18 B65B61/00 ADD. B65B43/08 B65D75/56

Applicant
DOW GLOBAL TECHNOLOGIES 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>1-11, 14, 15</u>
	No: Claims	<u>12, 13</u>
Inventive step (IS)	Yes: Claims	<u>7-10</u>
	No: Claims	<u>1-6, 11-15</u>
Industrial applicability (IA)	Yes: Claims	<u>1-15</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 US 2003/202719 A1 (WILKES KENNETH R [US]) 30 October 2003 (2003-10-30)
 - D2 DE 103 23 600 A1 (HERRMANN ULTRASCHALLTECHNIK [DE]) 23 December 2004 (2004-12-23)
 - D3 EP 0 893 358 A1 (HOSOKAWA YOKO KK [JP]; MITSUBISHI SHOJI PACKAGING KAB [JP]) 27 January 1999 (1999-01-27)
 - D4 US 2007/110344 A1 (MURRAY R C [US]) 17 May 2007 (2007-05-17)
- 2 Notwithstanding the below raised clarity issue (see Item VIII), 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 (references in parenthesis applying to this document):

"A process comprising:
(A) providing a flexible container (figure 3) with four panels (11-14), the four panels (11-14) forming
(i) a body portion (figure 3),
(ii) a neck portion (27),"

"(iii) a tapered transition portion (26) between the body portion and the neck portion (27),
(iv) the neck portion (27) having a reduced width," ";and
(B) inserting a fitment (28) into the" *neck* "portion from the" *open* "end."
 - 2.2 The subject-matter of claim 1 therefore differs from this known process in that the container further comprises:

a flare portion that extends from the neck portion,

the flare portion having an expanded end, and the width of the flare portion gradually increases from the neck portion to the flare expanded end; and

the fitment is inserted into the flare portion from the expanded end.

- 2.3 The objective technical problem to be solved by the present invention may therefore be regarded as how to improve the sealing quality between the fitment and the container flexible elements.
- 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:

D2 (see paragraphs 4-28; figures 3-4), for example, teaches how a better quality seal may be achieved by means of inserting the fitment on a flare-shaped portion from its expanded end.

The skilled person, in face of the above stated objective technical problem, would in an obvious manner consider the mentioned teaching of D2 and arrive at the subject-matter of claim 1 without exercising inventive skills.

- 3 Furthermore, the present application does not meet the criteria of Article 33(2) PCT, because the subject-matter of **claim 12** is not new.

D3 discloses (references in parenthesis applying to this document):

"A process comprising:

(A) providing a flexible container (1) with four panels (5-7), the four panels (5-7) forming

(i) a body portion (figure 1),

(ii) a neck portion (8),

(iii) a tapered transition portion between the body portion and the neck portion (figure 1),

(iv) the neck portion having a reduced width (figure 1), (columns 2-3, lines 54-17)

(B) adding, through the neck portion, a flowable substance into the container interior; (figure 3; column 5, lines 34-42) and

(C) sealing the neck portion. (figure 3; column 5, lines 34-42)"

D3 thus discloses all the features of claim 12.

- 4 Claim 15
- Notwithstanding the below raised clarity issue (see Item VIII), flexible containers comprising a seal of the re-sealable type is seen as common knowledge in the art of packaging of fluids (see e.g. D4 - paragraph 60), thus rendering such container or associated use at least not inventive.
- 5 Dependent claims 2-6, 11, 13, 14 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 novelty and/or inventive step, see e.g.:
- 5.1 additional feature of claim 3: D1 (paragraph 10), D2 (figures 1-4);
- 5.2 additional feature of claim 13: D3 (column 5, lines 40-42).
- 6 The combination of the features of dependent claims 7-10 seem neither known from, nor rendered obvious by, the available prior art. In fact no disclosure seems to be present that teaches the use of a flare portion that may result in an excess of material after the sealing of the fitment element.

Re Item VII

Certain defects in the international application

- 7 The features in 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 It is clear from the description paragraph 123 and figures 9-11 that the step order by which the fitment is inserted into the neck is essential to the definition of the invention.

Since independent **claim 1** does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3 (b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

- 9 In **claim 14** seems to be an error in the claimed dependency. In the present analysis said claim was interpreted as being dependent of any of claims 12-13.
- 10 In **claim 15** it is not clear the nature of the claimed subject-matter, thus not fulfilling the requirements of Article 6 PCT. The disclosed features seem to address process features even though no process is claimed. Furthermore it seems to be a dependency error and in the present analysis said claim was interpreted as being dependent of any of claims 12-14.