

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PN774379WO	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2022/084917	International filing date (day/month/year) 08.12.2022	Priority date (day/month/year) 27.12.2021	
International Patent Classification (IPC) or national classification and IPC INV. B65D1/16			
Applicant Anheuser-Busch InBev S.A.			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of <u>7</u> sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. ☒ a total of <u>8</u> sheets, as follows: ☒ sheets of the description, claims and/or drawings which have been amended and/or sheets containing rectifications authorized by this Authority, unless those sheets were superseded or cancelled, and any accompanying letters (see Rules 46.5, 66.8, 70.16, 91.2, and Section 607 of the Administrative Instructions). ☐ sheets containing rectifications, where the decision was made by this Authority not to take them into account because they were not authorized by or notified to this Authority at the time when this Authority began to draw up this report, and any accompanying letters (Rules 66.4bis, 70.2(e), 70.16 and 91.2). ☐ superseded sheets and any accompanying letters, where this Authority either considers that the superseding sheets contain an amendment that goes beyond the disclosure in the international application as filed, or the superseding sheets were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in item 4 of Box No. I and the Supplemental Box (see Rule 70.16(b)). b. ☐ a separate electronic file containing a sequence listing (<i>sent to the International Bureau only</i>)			
4. This report contains indications relating to the following items: ☒ 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			
Date of submission of the demand 25.10.2023		Date of completion of this report 26.02.2024	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Fax: +49 89 2399 - 4465		Authorized officer Sacepe, Nicolas Telephone No. +31 70 340-2241 	

Box No. I Basis of the report

1. With regard to the **language**, this report is based on
- ☒ 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 (under Rules 12.3(a) and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4(a))
 - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a) and (b))
2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-17 as originally filed

Claims, Numbers

1-14 filed in electronic form on 25-10-2023

Drawings, Sheets

1/2, 2/2 as originally filed

- ☐ a sequence listing - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since either they are considered to go beyond the disclosure as filed, or they were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in the Supplemental Box (Rules 70.2(c) and (c-bis)):
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
5. ☐ This report has been established:
- ☐ taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rules 66.1(d-bis) and 70.2(e)).
 - ☐ without taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91(Rules 66.4bis and 70.2(e)).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2022/084917

6. ☒ With regard to top-up searches (Rules 66.1 *ter* and 70.2(f)):
- ☒ A top-up search was carried out by this Authority on 08.02.2024 (all discovered documents are listed in the Supplemental Box Relating to Top-up Search).
 - ☐ Additional relevant documents have been discovered during the top-up search.
 - ☐ No top-up search was carried out by this Authority because it would serve no useful purpose.
7. ☐ Supplementary international search report(s) from Authority(ies) has/have been received and taken into account in establishing this report (Rule 45bis.8(b) and (c)).

* If item 4 applies, some or all of those sheets may be marked "superseded".

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	<u>1-14</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-14</u>
Industrial applicability (IA)	Yes: Claims	<u>1-14</u>
	No: Claims	

2. Citations and explanations (Rule 70.7):

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 document:

D1 WO 2017/008961 A1 (BALL EUROPE GMBH [CH]) 19 January 2017
(2017-01-19)

2 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 is regarded as being the prior art closest to the subject-matter of **claim 1**, and discloses (fig. 2 and page 5, line 9 - line 17) a beverage can comprising:
a body having a body diameter D_b of 58 mm;

a base comprising a stand having a stand diameter D_s of between 44mm and 48mm (indeed, the diameter of the stand ring is smaller than 48mm); ~~and~~
~~a neck having an end diameter D_e of between 49.7mm and 50.3mm.~~

2.2 The subject-matter of **claim 1** therefore differs from this known beverage can in that a neck having an end diameter D_e of between 49.7mm and 50.3mm.

2.3 The problem to be solved by the present invention can therefore be considered as allowing the stacking of cans.

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:

The embodiment shown in fig. 2 comprises a stand diameter D_s potentially of 48 mm. To stack these cans, the neck diameter must necessarily be greater than 48 mm within a very narrow range. Considering this configuration, the skilled person could use a neck having an end diameter D_e of between 49.7mm and 50.3mm, without inventive step, in order to stack cans.

3 The present application does not meet the criteria of Article 33(3) PCT, because the subject-matter of **claim 7** does not involve an inventive step.

- 3.1 D1 may be regarded as being the prior art closest to the subject-matter of **claim 7**, and discloses (fig. 2 and page 5, line 9 - line 17) a method of manufacturing a beverage can comprising:
- forming a body with a body diameter D_b of between 58mm and 60mm;
- forming a base comprising a stand having a stand diameter D_s of between 44mm and 48mm; and
- ~~forming a neck having an end diameter D_e of between 49.7mm and 50.3mm.~~
- 3.2 The subject-matter of **claim 7** therefore differs from this known method in that the method comprises the step of forming a neck having an end diameter D_e of between 49.7mm and 50.3mm.
- 3.3 The problem to be solved by the present invention can therefore be considered as allowing the stacking of cans.
- 3.4 The solution proposed in **claim 7** of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons:
- The embodiment shown in fig. 2 comprises a stand diameter D_s potentially of 48 mm. To stack these cans, the neck diameter must necessarily be greater than 48 mm within a very narrow range. Considering this configuration, the skilled person could use a neck having an end diameter D_e of between 49.7mm and 50.3mm, without inventive step, in order to stack cans.
- 4 The present application does not meet the criteria of Article 33(3) PCT, because the subject-matter of **claim 14** does not involve an inventive step.
- 4.1 D1 may be regarded as being the prior art closest to the subject-matter of **claim 14**, and discloses (fig. 4 and TABLE 1) a method of manufacturing a beverage can, the method comprising forming a base comprising:
- a stand having a stand diameter D_s , and
- a dome having a first dome section defined by a first dome radius R_{1a} , a second dome section defined by a second dome radius R_2 and a third dome section defined by a third dome radius R_{1b} ;
- wherein the base is formed to have a ratio of the first dome radius to the stand diameter **R_{1a}/D_s is 1.02 so between 1 and 1.1,**

- a ratio of the second dome radius to the stand diameter **R2/Ds is 0.06** so closest to between 0.04 and 0.05, and a ratio of the third dome radius to the stand diameter **R3/Ds is 0.214** so closest between 0.35 and 0.4.
- 4.2 The subject-matter of **claim 14** therefore differs from this known method in that the ratio of the second dome radius to the stand diameter R2/Ds is between 0.04 and 0.05, and the ratio of the third dome radius to the stand diameter R3/Ds is between 0.35 and 0.4.
- 4.3 The problem to be solved by the present invention may therefore be regarded as to optimize the strength and the weight.
- 4.4 The feature *"the ratio of the second dome radius to the stand diameter R2/Ds is between 0.04 and 0.05, and the ratio of the third dome radius to the stand diameter R3/Ds is between 0.35 and 0.4"* is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to to optimize the strength and the weight.
- 5 Dependent **claims 2-6, 8-13** 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.

Re Item VII

Certain defects in the international application

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

Re Item VIII

Certain observations on the international application

- 7 Although **claims 7 and 14** 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.