

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

10 JUN 2020

Applicant's or agent's file reference
76889-PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/CL2020/050018

International filing date (day/month/year)

13 March 2020

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC

IPC(8) - B65D 71/42; B65B 17/02; B65D 71/40; B65D 71/50 (2020.01)

CPC - B65D 71/42; B65B 17/025; B65D 71/504; B65D 2571/00; B65D 2571/00259; B65D 2571/00265;
B65D 2571/00277; B65D 2571/0066 (2020.05)

Applicant HERRERA MUNOZ, JORGE FUNDADOR

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 43bis.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 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 66.1bis(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/US
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Date of completion of this opinion

17 May 2020

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Box No. I Basis of this 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:
 - ☐ 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 13*ter*.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 13*ter*.1(a)).
 - ☐ on paper or in the form of an image file (Rule 13*ter*.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:

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 12

because:

☐ the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international search (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 12 are so unclear that no meaningful opinion could be formed (*specify*):

Claim 12 is improper multiple dependent claim not drafted in accordance with the second and third sentences of Rule 6.4(a).

☐ the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed (*specify*):

☒ no international search report has been established for said claims Nos. 12

☐ a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

☐ furnish a sequence listing in the form of an Annex C/ST.25 text file, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

☐ furnish a sequence listing on paper or in the form of an image file complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

☐ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13^{ter}.1(a) or (b).

☐ See Supplemental Box for further details.

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-11, 13-36	YES
	Claims	None	NO
Inventive step (IS)	Claims	2-11, 14, 20-36	YES
	Claims	1, 13, 15-19	NO
Industrial applicability (IA)	Claims	1-11, 13-36	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 13, and 15-19 lack an inventive step under PCT Article 33(3) as being obvious over De Paula (hereinafter Paula) in view of Tanzer and British Polythene Limited (hereinafter British).

Regarding Claim 1, Paula discloses a carrier device (Abstract; Figs. 5-7) for grouping and transporting a set of cans (C; Figs. 4, 6) of beverages into a package (Fig. 6), where the cans are of a type having a conical upper trunk portion (N; Fig. 4) with a raised upper ring (F; Fig. 4) defining an upper plane (horizontal plane top F; Fig. 4), such device being manufactured from a single laminar body (113; "blank 113"; paragraph [0026]; "The blanks can also be laminated or coated with one or more sheet-like materials at selected panels or panel sections"; paragraph [0036]; Fig. 5), having for each can a receiving opening (137; "receptacles 137"; paragraph [0027]; Fig. 5) whose contour (139; Fig. 5) has a series of retaining fins (144; "The edges of the foldable flaps 144 are defined by the cuts 139 and are for engaging the underside of the flanges F of the containers C"; paragraph [0027]; Figs. 5-7) that fit underneath the can's raised ring when the device is mounted on the plurality of cans to form a package (Figs. 6, 7), where the device allows for a strong grip with little material (Figs. 5-7), allows for grouping the cans without laterally protruding material portions (Figs. 5-7), and provides a continuous top surface (117; Figs. 5, 6) that protects the cans and increases a top area available for advertising printing (117 is capable of including advertising printing; Figs. 5, 6), characterized because the carrier device comprises an upper central area (center 117; Figs. 5, 6) arranged on a level above the top plane of the cans (Fig. 6); can receiving openings (137; Fig. 5) associated with perimeter clamping flanges (19, 23, 27, 31; Figs. 5, 6); where the receiving openings comprise a perimeter contour (139; Fig. 5) with radial cuts (142; Figs. 5-7) forming retainer fins (144; "The oblique cuts 142 form foldable flaps 144 in the top panel 117 that are adjacent the openings 107. The edges of the foldable flaps 144 are defined by the cuts 139 and are for engaging the underside of the flanges F of the containers C"; paragraph [0027]; Figs. 5-7), and formed by an incomplete cut line (139, 142; Fig. 5) that generates a covering flap (141; Figs. 5-7) that remains attached and co-planar to the central area of the device (Fig. 5).

Paula fails to explicitly disclose a carrier device, characterized because the carrier device comprises elliptical shaped can receiving openings associated with perimeter clamping flanges having proximal beveled ends through which the perimeter clamping flanges join transition portions provided between the flanges and extending in a downwards inclined radial way from the upper central area; where the receiving openings comprise an elliptical perimeter contour.

Tanzer teaches a carrier device (10; col. 2, lines 47-51; Figs. 1, 3), characterized because the carrier device comprises elliptical shaped can (12; Fig. 3) receiving openings (11; col. 2, lines 33-38; Fig. 1); where the receiving openings comprise an elliptical perimeter contour (inner 11; Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of Tanzer for the purpose of reducing stress at the ends of the major axis of the can receiving openings.

British teaches a carrier device (Abstract; Figs. 5a, 5b), characterized because the carrier device comprises perimeter clamping flanges (1a-1c; Examiner Figure 1) having proximal beveled ends (1d; Examiner Figure 1) through which the perimeter clamping flanges join transition portions (1e, 1f; Examiner Figure 1) provided between the flanges and extending in a downwards inclined radial way (1g; Examiner Figure 1) from an upper central area (1h; Examiner Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of British for the purpose of increasing the clamping force on the cans by providing perimeter flanges that directly clamp onto the conical upper trunk portion of the cans.

Regarding Claim 13, modified Paula discloses the carrier device, according to claim 1, characterized because such upper central area is substantially horizontal (Fig. 5).

Paula fails to explicitly disclose the carrier device, characterized because such upper central area comprises a central hole suitable to serve as a handle where a user introduces a finger and lifts the package of cans assembled by the device.

British teaches the carrier device, characterized because such upper central area (1h; Examiner Figure 1) comprises a central hole (1m; Examiner Figure 1) suitable to serve as a handle where a user introduces a finger and lifts a package (Fig. 5a) of cans (1j; Examiner Figure 1) assembled by the device (hole 1m is capable of being used as a handle for a user's finger; Examiner Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of British for the purpose of increasing the ergonomics of the carrier device for holding and transporting the cans.

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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:

Claims 1-36 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because Claims 1-36 are indefinite for the following reasons:

With regards to Claim 1, Claim 1 begins with "Carrier device" which is improper. For the purposes of the written opinion, "Carrier device" of Claim 1 is being treated as "A carrier device".

Furthermore, Claim 1 lacks an antecedent basis because Claim 1 refers to "the cans are of the type" (line 2) wherein a type of cans is not referred to prior in Claim 1. For the purposes of the written opinion, "the cans are of the type" of Claim 1 is being treated as "the cans are of a type".

Furthermore, Claim 1 lacks an antecedent basis because Claim 1 refers to "the top area" (line 8) wherein a top area is not referred to prior in Claim 1. For the purposes of the written opinion, "the top area" of Claim 1 is being treated as "a top area".

Furthermore, Claim 1 lacks an antecedent basis because Claim 1 refers to "characterized because it" (line 9) wherein "it" is not referred to prior in Claim 1. For the purposes of the written opinion, "characterized because it" of Claim 1 is being treated as "characterized because the carrier device".

Furthermore, Claim 1 lacks an antecedent basis because Claim 1 refers to "through which they join" (line 12) wherein "they" is not referred to prior in Claim 1. For the purposes of the written opinion, "through which they join" of Claim 1 is being treated as "through which the perimeter clamping flanges join".

Furthermore, Claim 1 refers to "extending in downwards inclined radial way from the top central area" (line 13) which is improper. For the purposes of the written opinion, "extending in downwards inclined radial way from the top central area" of Claim 1 is being treated as "extending in a downwards inclined radial way from the upper central area".

With regards to Claim 2, Claim 2 refers to "the clamping flanges are adapted to and surround the conical trunk portion of the can" (lines 1, 2) which is improper. For the purposes of the written opinion, "the clamping flanges are adapted to and surround the conical trunk portion of the can" of Claim 2 is being treated as "the clamping flanges are adapted to surround the conical trunk portion of the can".

With regards to Claims 2-13 and Claims 15-19, Claims 2-13 and Claims 15-19 begin with "Carrier device" which is improper. For the purposes of the written opinion, "Carrier device" of Claims 2-13 and Claims 15-19 is being treated as "The carrier device".

With regards to Claim 3, Claim 3 refers to "the incomplete cut-line is of polygonal-elliptical shape" (lines 1, 2) which is improper. For the purposes of the written opinion, "the incomplete cut-line is of polygonal-elliptical shape" of Claim 3 is being treated as "the incomplete cut-line is of a polygonal-elliptical shape".

With regards to Claim 7, Claim 7 lacks an antecedent basis because Claim 7 refers to "the set of retaining fins" (lines 1, 2) wherein a set of retaining fins is not referred to prior in Claim 7, nor in Claim 1 in which Claim 7 depends from. For the purposes of the written opinion, "the set of retaining fins" of Claim 7 is being treated as "the series of retaining fins".

Furthermore, Claim 7 lacks an antecedent basis because Claim 7 refers to "the perimeter outline of the opening" (line 5) wherein a perimeter outline of the opening is not referred to prior in Claim 7, nor in Claim 1 in which Claim 7 depends from. For the purposes of the written opinion, "the perimeter outline of the opening" of Claim 7 is being treated as "a perimeter outline of the opening".

With regards to Claim 8, Claim 8 lacks an antecedent basis because Claim 8 refers to "the two radial cuts" (line 1) wherein two radial cuts are not referred to prior in Claim 8, nor in any claims in which Claim 8 depends from. For the purposes of the written opinion, "the two radial cuts" of Claim 8 is being treated as "two radial cuts".

With regards to Claim 9, Claim 9 lacks an antecedent basis because Claim 9 refers to "the radial height of the radial cuts is preferably equivalent to half the width of the flange" (lines 3, 4) wherein a radial height of the radial cuts and a width of the flange is not referred to prior in Claim 9, nor in any claims in which Claim 9 depends from. For the purposes of the written opinion, "the radial height of the radial cuts is preferably equivalent to half the width of the flange" of Claim 9 is being treated as "a radial height of the radial cuts is preferably equivalent to half a width of the flange".

With regards to Claim 10, Claim 10 lacks an antecedent basis because Claim 10 refers to "the set of retaining fins" (lines 1, 2) wherein a set of retaining fins is not referred to prior in Claim 10, nor in any claims in which Claim 10 depends from. For the purposes of the written opinion, "the set of retaining fins" of Claim 10 is being treated as "the series of retaining fins".

Furthermore, Claim 10 lacks an antecedent basis because Claim 10 refers to "each located at each of the proximal ends of the flange" (line 2) wherein each proximal ends of the flange are not referred to prior in Claim 10, nor in any claims in which Claim 10 depends from. For the purposes of the written opinion, "each located at each of the proximal ends of the flange" of Claim 10 is being treated as "each located at each of a proximal end of the flange".

Furthermore, Claim 10 lacks an antecedent basis because Claim 10 refers to "the last radial cut" (line 3) wherein a last radial cut is not referred to prior in Claim 10, nor in any claims in which Claim 10 depends from. For the purposes of the written opinion, "the last radial cut" of Claim 10 is being treated as "a last radial cut".

Furthermore, Claim 10 lacks an antecedent basis because Claim 10 refers to "the bottom of the flange" (line 4) wherein a bottom of the flange is not referred to prior in Claim 10, nor in any claims in which Claim 10 depends from. For the purposes of the written opinion, "the bottom of the flange" of Claim 10 is being treated as "a bottom of the flange".

With regards to Claim 11, Claim 11 lacks an antecedent basis because Claim 11 refers to "characterized because it" (line 1) wherein "it" is not referred to prior in Claim 11, nor in Claim 1 in which Claim 11 depends from. For the purposes of the written opinion, "characterized because it" of Claim 11 is being treated as "characterized because the carrier device".

With regards to Claim 13, Claim 13 lacks an antecedent basis because Claim 13 refers to "the user" (line 3) wherein a user is not referred to prior in Claim 13, nor in Claim 1 in which Claim 13 depends from. For the purposes of the written opinion, "the user" of Claim 13 is being treated as "a user".

With regards to Claim 14, Claim 14 begins with "Device carrier" which is improper. For the purposes of the written opinion, "Device

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

carrier" of Claim 14 is being treated as "The carrier device".

With regards to Claims 15-17, Claims 15-17 lack an antecedent basis because Claims 15-17 refer to "the assembly" (line 1) wherein an assembly is not referred to prior in Claims 15-17, nor in Claim 1 in which Claims 15-17 depend from. For the purposes of the written opinion, "the assembly" of Claims 15-17 is being treated as "an assembly".

With regards to Claim 18, Claim 18 lacks an antecedent basis because Claim 18 refers to "characterized because it" (line 1) wherein "it" is not referred to prior in Claim 18, nor in Claim 1 in which Claim 18 depends from. For the purposes of the written opinion, "characterized because it" of Claim 18 is being treated as "characterized because the carrier device".

With regards to Claim 20, Claim 20 begins with "Template" which is improper. For the purposes of the written opinion, "Template" of Claim 20 is being treated as "A template".

Furthermore, Claim 20 lacks an antecedent basis because Claim 20 refers to "characterized because it" (line 3) wherein "it" is not referred to prior in Claim 20, nor in Claim 1 in which Claim 20 depends from. For the purposes of the written opinion, "characterized because it" of Claim 20 is being treated as "characterized because the template".

Furthermore, Claim 20 lacks an antecedent basis because Claim 20 refers to "centered on that side" (line 4) wherein "that side" is not referred to prior in Claim 20, nor in Claim 1 in which Claim 20 depends from. For the purposes of the written opinion, "centered on that side" of Claim 20 is being treated as "centered on a side".

Furthermore, Claim 20 lacks an antecedent basis because Claim 20 refers to "the bases" (lines 5, 6) wherein bases are not referred to prior in Claim 20, nor in Claim 1 in which Claim 20 depends from. For the purposes of the written opinion, "the bases" of Claim 20 is being treated as "bases of the arched portions".

Furthermore, Claim 20 lacks an antecedent basis because Claim 20 refers to "the contour of the openings" (lines 8, 9) wherein a contour of the openings is not referred to prior in Claim 20, nor in Claim 1 in which Claim 20 depends from. For the purposes of the written opinion, "the contour of the openings" of Claim 20 is being treated as "a contour of the openings".

With regards to Claims 21-36, Claims 21-36 begin with "Template" which is improper. For the purposes of the written opinion, "Template" of Claims 21-36 is being treated as "The template".

With regards to Claim 23, Claim 23 refers to "the radial cuts forming the retaining fins" (line 2) which is improper. For the purposes of the written opinion, "the radial cuts forming the retaining fins" of Claim 23 is being treated as "the radial cuts forming the retainer fins".

Furthermore, Claim 23 lacks an antecedent basis because Claim 23 refers to "the perimeter contour of the opening" (lines 3, 4) wherein a perimeter contour of the opening is not referred to prior in Claim 23, nor in any claims in which Claim 23 depends from. For the purposes of the written opinion, "the perimeter contour of the opening" of Claim 23 is being treated as "a perimeter contour of the opening".

Furthermore, Claim 23 refers to "an curved opposite end" (line 4) which is improper. For the purposes of the written opinion, "an curved opposite end" of Claim 23 is being treated as "a curved opposite end".

With regards to Claim 24, Claim 24 lacks an antecedent basis because Claim 24 refers to "the two radial cuts" (line 2) wherein two radial cuts are not referred to prior in Claim 24, nor in Claim 20 in which Claim 24 depends from. For the purposes of the written opinion, "the two radial cuts" of Claim 24 is being treated as "two radial cuts".

Furthermore, Claim 24 lacks an antecedent basis because Claim 24 refers to "the distance between the two cuts of each pair forms an auxiliary clamping flange" (lines 4, 5) wherein a distance between the two cuts of each pair is not referred to prior in Claim 24, nor in Claim 20 in which Claim 24 depends from. For the purposes of the written opinion, "the distance between the two cuts of each pair forms an auxiliary clamping flange" of Claim 24 is being treated as "a distance between the two cuts of each pair forms an auxiliary clamping flange".

With regards to Claims 25, 26, 28 and 35, Claims 25, 26, 28 and 35 begin with "Template for forming a carrier device" which is improper. For the purposes of the written opinion, "Template for forming a carrier device" of Claims 25, 26, 28 and 35 is being treated as "template to form a carrier device".

With regards to Claim 25, Claim 25 lacks an antecedent basis because Claim 25 refers to "the distance between the auxiliary flanges form trapezoidal wings intercalated with the said auxiliary flanges" (lines 2, 3) wherein a distance between auxiliary flanges and auxiliary flanges are not referred to prior in Claim 25, nor in any claims in which Claim 25 depends from. For the purposes of the written opinion, "the distance between the auxiliary flanges form trapezoidal wings intercalated with the said auxiliary flanges" of Claim 25 is being treated as "a distance between auxiliary flanges form trapezoidal wings intercalated with the auxiliary flanges".

Furthermore, Claim 25 lacks an antecedent basis because Claim 25 refers to "the radial height of the radial cuts is preferably equivalent to half the width of the arched portions" (lines 3-5) wherein a radial height of the radial cuts and a width of the arched portions is not referred to prior in Claim 25, nor in any claims in which Claim 25 depends from. For the purposes of the written opinion, "the radial height of the radial cuts is preferably equivalent to half the width of the arched portions" of Claim 25 is being treated as "a radial height of the radial cuts is preferably equivalent to half a width of the arched portions".

With regards to Claim 26, Claim 26 lacks an antecedent basis because Claim 26 refers to "the perimeter of such polygonal-elliptical openings" (lines 3, 4) wherein a perimeter of the polygonal-elliptical openings is not referred to prior in Claim 26, nor in Claim 20 in which Claim 26 depends from. For the purposes of the written opinion, "the perimeter of such polygonal-elliptical openings" of Claim 26 is being treated as "a perimeter of such polygonal-elliptical openings".

With regards to Claims 29 and 30, Claims 29 and 30 lack an antecedent basis because Claims 29 and 30 refer to "the assembly" (line 2) wherein an assembly is not referred to prior in Claims 29 and 30, nor in Claim 20 in which Claims 29 and 30 depend from. For the purposes of the written opinion, "the assembly" of Claims 29 and 30 is being treated as "an assembly".

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With regards to Claim 31, Claim 31 lacks an antecedent basis because Claim 31 refers to "characterized because it" (lines 1, 2) wherein "it" is not referred to prior in Claim 31, nor in Claim 20 in which Claim 31 depends from. For the purposes of the written opinion, "characterized because it" of Claim 31 is being treated as "characterized because the template".

With regards to Claim 33, Claim 33 lacks an antecedent basis because Claim 33 refers to "they are arranged in a linear arrangement" (line 2) wherein "they" are not referred to prior in Claim 33, nor in Claim 20 in which Claim 33 depends from. For the purposes of the written opinion, "they are arranged in a linear arrangement" of Claim 33 is being treated as "a plurality of templates are arranged in a linear arrangement".

Furthermore, Claim 33 refers to "joined together by their opposite sides of the template" (line 3) which is improper. For the purposes of the written opinion, "joined together by their opposite sides of the template" of Claim 33 is being treated as "joined together at opposite sides of the plurality of template".

With regards to Claim 34, Claim 34 lacks an antecedent basis because Claim 34 refers to "characterized because it" (lines 1, 2) wherein "it" is not referred to prior in Claim 34, nor in Claim 20 in which Claim 34 depends from. For the purposes of the written opinion, "characterized because it" of Claim 34 is being treated as "characterized because the template".

Furthermore, Claim 34 lacks an antecedent basis because Claim 34 refers to "the attached row" (lines 4, 5) wherein an attached row is not referred to prior in Claim 34, nor in Claim 20 in which Claim 34 depends from. For the purposes of the written opinion, "the attached row" of Claim 34 is being treated as "an attached row".

With regards to Claim 35, Claim 35 lacks an antecedent basis because Claim 35 refers to "they are arranged in a linear arrangement" (line 2) wherein "they" are not referred to prior in Claim 35, nor in Claim 20 in which Claim 35 depends from. For the purposes of the written opinion, "they are arranged in a linear arrangement" of Claim 35 is being treated as "a plurality of templates are arranged in a linear arrangement".

Furthermore, Claim 35 refers to "joined to each other by their opposite sides of the template" (line 3) which is improper. For the purposes of the written opinion, "joined to each other by their opposite sides of the template" of Claim 35 is being treated as "joined to each other at opposite sides of the plurality of templates".

With regards to Claim 36, Claim 36 lacks an antecedent basis because Claim 36 refers to "characterized because it" (lines 1, 2) wherein "it" is not referred to prior in Claim 36, nor in Claim 20 in which Claim 36 depends from. For the purposes of the written opinion, "characterized because it" of Claim 36 is being treated as "characterized because the template".

Furthermore, Claim 36 lacks an antecedent basis because Claim 36 refers to "the attached row" (line 4) wherein an attached row is not referred to prior in Claim 36, nor in Claim 20 in which Claim 36 depends from. For the purposes of the written opinion, "the attached row" of Claim 36 is being treated as "an attached row".

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Continuation of:

Regarding Claim 15, modified Paula discloses the carrier device, according to claim 1, characterized because an assembly formed by the receiving opening and its corresponding covering flap are at least two per device (Figs. 5-7).

Paula fails to explicitly disclose the carrier device, characterized because an assembly formed by the clamping flange with the receiving opening is at least two per device.

British teaches the carrier device, characterized because an assembly formed by the clamping flange with a receiving opening (1n; Examiner Figure 1) is at least two per device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of British for the purpose of increasing the clamping force on the cans by providing perimeter flanges that directly clamp onto the conical upper trunk portion of the cans.

Regarding Claim 16, modified Paula discloses the carrier device, according to claim 1, characterized because an assembly formed by the receiving opening and its corresponding covering flap are four for each device (Figs. 5-7).

Paula fails to explicitly disclose the carrier device, characterized because an assembly formed by the clamping flange with the receiving opening is four for each device.

British teaches the carrier device, characterized because an assembly formed by the clamping flange with a receiving opening (1n; Examiner Figure 1) is four for each device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of British for the purpose of increasing the clamping force on the cans by providing perimeter flanges that directly clamp onto the conical upper trunk portion of the cans.

Regarding Claim 17, modified Paula discloses the carrier device, according to claim 1, characterized because an assembly formed by the receiving opening and its corresponding covering flap are six for each device (Figs. 5-7).

Paula fails to explicitly disclose the carrier device, characterized because an assembly formed by the clamping flange with the receiving opening is six for each device.

British teaches the carrier device, characterized because an assembly formed by the clamping flange with a receiving opening (1n; Examiner Figure 1) is six for each device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula with the teaching of British for the purpose of increasing the clamping force on the cans by providing perimeter flanges that directly clamp onto the conical upper trunk portion of the cans.

Regarding Claim 18, modified Paula discloses the carrier device, according to claim 1, characterized because the carrier device is made of a single laminar piece (113; "blank 113"; paragraph [0026]; Fig. 5) of biodegradable and recyclable cellulose material ("The blanks can also be constructed of other materials, such as cardboard, hard paper, or any other material"; paragraph [0036]; Fig. 5).

Regarding Claim 19, modified Paula discloses the carrier device, according to claim 18.

Paula fails to explicitly disclose the carrier device, characterized because the cellulosic material is a sheet weighing between 250 and 600 grams per square millimeter.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Paula for the purpose of increasing the strength of the carrier device and since where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Claims 2-11, 14, and 20-36 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest:

Regarding claim 2, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device according to claim 1, characterized because the clamping flanges are adapted to surround the conical trunk portion of the can, have a larger lower base and a smaller upper base in a polygonal-elliptical shape which gives rise to the perimeter contour of each of the receiving openings which are formed by the incomplete cut line.

The following prior art is made of record to support and further define the reasons that claim 2 meets the criteria set out in PCT Article 33 (2)-(3):

British teaches the carrier device characterized because the clamping flanges are adapted to surround a conical trunk portion (1i; Examiner Figure 1) of a can (1j; Examiner Figure 1), have a larger lower base (1k; Examiner Figure 1) and a smaller upper base (1l; Examiner Figure 1).

However British fails to teach the elements of a larger lower base and a smaller upper base in a polygonal-elliptical shape which gives rise to the perimeter contour of each of the receiving openings which are formed by the incomplete cut line.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of a larger lower base and a smaller upper base in a polygonal-elliptical shape which gives rise to the perimeter contour of each of the receiving openings which are formed by the incomplete cut line, and none of the cited references cure the deficiencies of British discussed in this written opinion.

Regarding claim 3, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the incomplete cut-line is of a polygonal-elliptical shape with an interrupted section located adjacent to the upper central area of the device, through which the covering flaps are attached to the device.

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Regarding claim 4, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the elliptical receiving openings have a larger diameter arranged along their length and at least a smaller diameter arranged along their width, where these openings are oriented in the device diagonally with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees to a longitudinal central axis and a transverse central axis.

The following prior art is made of record to support and further define the reasons that claim 4 meets the criteria set out in PCT Article 33 (2)-(3):

Tanzer teaches the carrier device, characterized because the elliptical receiving openings have a larger diameter arranged along their length and at least a smaller diameter arranged along their width (Fig. 1).

However Tanzer fails to teach the elements of these openings are oriented in the device diagonally with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees to a longitudinal central axis and a transverse central axis.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of these openings are oriented in the device diagonally with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees to a longitudinal central axis and a transverse central axis, and none of the cited references cure the deficiencies of Tanzer discussed in this written opinion.

Regarding claim 5, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the elliptical receiving openings have a larger diameter arranged along their length and at least a smaller diameter arranged along their width (Fig. 1).

However Tanzer fails to teach the elements of at least some of these openings are oriented in the device diagonally-with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees with respect to a longitudinal central axis and a transverse central axis.

The following prior art is made of record to support and further define the reasons that claim 5 meets the criteria set out in PCT Article 33 (2)-(3):

Tanzer teaches the carrier device, characterized because the elliptical receiving openings have a larger diameter arranged along their length and at least a smaller diameter arranged along their length (Fig. 1).

However Tanzer fails to teach the elements of at least some of these openings are oriented in the device diagonally-with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees with respect to a longitudinal central axis and a transverse central axis.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of at least some of these openings are oriented in the device diagonally-with their larger diameter coinciding with an imaginary diagonal axis rotated by 45 degrees with respect to a longitudinal central axis and a transverse central axis, and none of the cited references cure the deficiencies of Tanzer discussed in this written opinion.

Regarding claim 6, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the transition portions have concave curved side edges, an upper end area which is continuous with the upper central area and an opposite lower end with a concave curved edge.

The following prior art is made of record to support and further define the reasons that claim 6 meets the criteria set out in PCT Article 33 (2)-(3):

British teaches the carrier device, characterized because the transition portions have curved side edges (1e, 1f; Examiner Figure 1).

However British fails to teach the elements of the transition portions have concave curved side edges, an upper end area which is continuous with the upper central area and an opposite lower end with a concave curved edge.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of the transition portions have concave curved side edges, an upper end area which is continuous with the upper central area and an opposite lower end with a concave curved edge, and none of the cited references cure the deficiencies of British discussed in this written opinion.

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Regarding claim 7, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the series of retaining fins is formed by larger fins intercalated with auxiliary flanges, and where the fins are formed by a plurality of radial cuts arranged in pairs, symmetrical and equidistant from each other; each of the cuts comprising a distal straight portion with one end coinciding with a perimeter outline of the opening, and a curved opposite end, where the curved ends of both cuts of each pair of cuts are opposite each other.

The following prior art is made of record to support and further define the reasons that claim 7 meets the criteria set out in PCT Article 33(2)-(3):

Paula teaches the carrier device, characterized because the series of retaining fins is formed by larger fins (middle 144; "The edges of the foldable flaps 144 are defined by the cuts 139 and are for engaging the underside of the flanges F of the containers C"; paragraph [0027]; Figs. 5-7), and where the fins are formed by a plurality of radial cuts (142; Figs. 5-7) arranged in pairs, symmetrical and equidistant from each other; each of the cuts comprising a distal straight portion (142; Figs. 5-7) with one end (inner 142; Fig. 5) coinciding with a perimeter outline (139; Fig. 5) of the opening.

However Paula fails to teach the elements of the series of retaining fins is formed by larger fins intercalated with auxiliary flanges; each of the cuts comprising a curved opposite end, where the curved ends of both cuts of each pair of cuts are opposite each other.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of the series of retaining fins is formed by larger fins intercalated with auxiliary flanges; each of the cuts comprising a curved opposite end, where the curved ends of both cuts of each pair of cuts are opposite each other, and none of the cited references cure the deficiencies of Paula discussed in this written opinion.

Claims 8-10 depend from claim 7, and therefore meet the criteria set out in PCT Article 33(2)-(3) for at least the same reasons as claim 7.

Regarding claim 11, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 1, characterized because the carrier device comprises an outer contour preferably formed by four sides parallel in pairs, an upper face, a lower face and beveled corners where the four sides of the contour are provided with at least one recess arranged between the flanges.

The following prior art is made of record to support and further define the reasons that claim 11 meets the criteria set out in PCT Article 33(2)-(3):

Paula teaches the carrier device, characterized because the carrier device comprises an outer contour (perimeter of 117; Fig. 6) preferably formed by four sides parallel in pairs (Fig. 6), an upper face (top 117; Fig. 6), a lower face (bottom 117; Fig. 6) where [one] side (right 117; Fig. 6) of the contour [is] provided with at least one recess (open area between 23/117; Fig. 6).

However Paula fails to teach the elements of beveled corners where the four sides of the contour are provided with at least one recess arranged between the flanges.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of beveled corners where the four sides of the contour are provided with at least one recess arranged between the flanges, and none of the cited references cure the deficiencies of Paula discussed in this written opinion.

Regarding claim 14, the prior art of record, individually or in combination, does not teach or fairly suggest the carrier device, according to claim 13, characterized because such hole is formed by an incomplete circular cut with one or more connecting bridges which keep it weakly attached to such upper central area of the device.

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Regarding claim 20, the prior art of record, individually or in combination, does not teach or fairly suggest a template to form a carrier device to group and transport a set of cans of beverages forming a package, of the type described in claim 1, formed by a flat laminated plate, characterized because the template comprises a contour with four parallel perimeter sides in pairs, each with a recess centered on a side and with beveled corners; a central area from which arched portions extend radially, bases of the arched portions of which point towards the central area and each of which surrounds corresponding receiving openings of polygonal-elliptical shape which are partially covered by a flap also of polygonal-elliptical shape, where a contour of the openings comprises a series of radial cuts extending into the arched portions, which are grouped in pairs to form two different types of retainer fins; while intercalated between the arches there are radial transition areas with concave sides extending from the central area to each of the recesses on the perimeter sides of the template.

The following prior art is made of record to support and further define the reasons that claim 20 meets the criteria set out in PCT Article 33(2)-(3):

Paula teaches a template (113; "blank 113"; paragraph [0026]; Fig. 5) to form a carrier device (Figs. 5-7) to group and transport a set of cans (C; Figs. 4, 6) of beverages forming a package (Fig. 6), formed by a flat laminated plate (113; "The blanks can also be laminated or coated with one or more sheet-like materials at selected panels or panel sections"; paragraph [0036]; Fig. 5), characterized because the template comprises a contour (perimeter of 113; Fig. 5) with four parallel perimeter sides (19, 23, 27, 31; Fig. 5) in pairs, a recess (outer 61/63; Fig. 5); a central area (center 113; Fig. 5) from which arched portions (144; Fig. 5) extend radially, bases of the arched portions (inner 144; Fig. 5) of which point towards the central area and each of which surrounds corresponding receiving openings (137; "receptacles 137"; paragraph [0027]; Fig. 5) which are partially covered by a flap (141; Figs. 5-7), where a contour (139; Fig. 5) of the openings comprises a series of radial cuts (142; Figs. 5-7) extending into the arched portions, which are grouped in pairs to form two different types of retainer fins (144; Figs. 6, 7).

However Paula fails to teach the elements of the template comprises a contour with four parallel perimeter sides in pairs, each with a recess centered on a side and with beveled corners; receiving openings of polygonal-elliptical shape which are partially covered by a flap also of polygonal-elliptical shape; while intercalated between the arches there are radial transition areas with concave sides extending from the central area to each of the recesses on the perimeter sides of the template.

British teaches a template (Fig. 3), formed by a flat laminated plate ("The plastics cover sheet may be a laminate of a polyolefin"; paragraph [0063]; Fig. 3), characterized because the template comprises a contour (2a; Examiner Figure 2) with four parallel perimeter sides in pairs, each with a recess (2b; Examiner Figure 2) centered on a side; a central area (2c; Examiner Figure 2) from which arched portions (2d; Examiner Figure 2) extend radially, bases (2e; Examiner Figure 2) of the arched portions of which point towards the central area and each of which surrounds corresponding receiving openings (101; Fig. 3), where a contour (105; Fig. 3) of the openings comprises a series of radial cuts (106-109; Fig. 3) extending into the arched portions, which are grouped in pairs to form retainer fins (2f; Examiner Figure 2).

However British fails to teach the elements of the template comprises a contour with four parallel perimeter sides in pairs, each with beveled corners; receiving openings of polygonal-elliptical shape which are partially covered by a flap also of polygonal-elliptical shape, where a contour of the openings comprises a series of radial cuts, which are grouped in pairs to form two different types of retainer fins; while intercalated between the arches there are radial transition areas with concave sides extending from the central area to each of the recesses on the perimeter sides of the template.

Tanzer teaches a template (Fig. 1), characterized because the template comprises a contour (perimeter of 10; Fig. 1), each with a recess (15; Fig. 1) centered on a side; a central area (16; Fig. 1) from which arched portions (10; Fig. 1) extend radially, bases of the arched portions (inner 10; Fig. 1) of which point towards the central area and each of which surrounds corresponding receiving openings (11; col. 2, lines 33-38; Fig. 1) of elliptical shape.

However Tanzer fails to teach the elements of a template formed by a flat laminated plate, characterized because the template comprises a contour with four parallel perimeter sides in pairs, each with beveled corners; receiving openings of polygonal-elliptical shape which are partially covered by a flap also of polygonal-elliptical shape, where a contour of the openings comprises a series of radial cuts extending into the arched portions, which are grouped in pairs to form two different types of retainer fins; while intercalated between the arches there are radial transition areas with concave sides extending from the central area to each of the recesses on the perimeter sides of the template.

None of the cited prior art references taken alone or in combination disclose or suggest the specific elements of the template comprises a contour with four parallel perimeter sides in pairs, each with beveled corners; corresponding receiving openings of polygonal-elliptical shape which are partially covered by a flap also of polygonal-elliptical shape; while intercalated between the arches there are radial transition areas with concave sides extending from the central area to each of the recesses on the perimeter sides of the template, and none of the cited references cure the deficiencies of Paula, British and Tanzer discussed in this written opinion.

Claims 21-36 depend from claim 20, and therefore meet the criteria set out in PCT Article 33(2)-(3) for at least the same reasons as claim 20.

Claims 1-11 and 13-36 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

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Examiner Figure 2

