

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

**Datasheet for the decision
of 19 December 2012**

Case Number: T 0408/12 - 3.2.07
Application Number: 06024708.7
Publication Number: 1927554
IPC: B65D 83/38, B65D 79/00
Language of the proceedings: EN

Title of invention:
Pressurized can, such as an aerosol can

Applicant:
Ardagh MP Group Netherlands B.V.

Headword:
-

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step - no; numerical values for parameters of known embodiment derivable from the disclosure concerning this embodiment (points 7.3.1, 7.3.2)"

Decisions cited:
-

Catchword:
-



Case Number: T 0408/12 - 3.2.07

D E C I S I O N
of the Technical Board of Appeal 3.2.07
of 19 December 2012

Appellant: Ardagh MP Group Netherlands B.V.
(Applicant) Zutphenseweg 51051
D-7418 AH Deventer (NL)

Representative: Prins, Hendrik Willem
Arnold & Siedsma
PO Box 18558
NL-2502 EN The Hague (NL)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 4 October 2011
refusing European patent application
No. 06024708.7 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: H. Meinders
Members: H.-P. Felgenhauer
E. Kossonakou

Summary of Facts and Submissions

- I. The applicant (appellant) has filed an appeal against the decision of the examining division by which the European patent application No. 06 024 708.7 has been refused.

The appellant requested that the decision under appeal be set aside and that a patent be granted in the version filed with its submission of 18 November 2012. In case sufficiency of disclosure should be critical for the decision to be taken remittal to the examining division was requested.

- II. Claim 1 reads as follows:

"Pressurized metal can, such as an aerosol can, having a bottom comprising a panel connected with a panel radius R4 to a countersink having a panel wall angle A2, a foot wall angle A1, and a countersink radius R3, which countersink is connected to a foot having a foot radius R2 and the foot is connected to a can body wall, which panel has a substantially non-concave form, wherein:

- the foot wall angle A1 is in the range of about 0° to 45°;
- the panel wall angle A2 is in the range of about 0° - 45°;
- the foot radius R2 is in the range of about 0.5 to 1,5 mm;
- the countersink radius R3 is in the range of about 0,5 to 1,5 mm;
- the panel radius R4 is in the range of about 1,0 to 1,5 mm;

- the unit depth H1 is in the range of about 5 - 15 mm;
 - the panel depth H2 is in the range of about 2 - 10 mm; and
 - the center panel radius R5 is larger than about 20 mm
- wherein the can has a diameter in the range of about 20 - 80 mm, a bottom wall thickness in the range of about 0,2 - 0,7 mm, and having a pressure resistance up to about 15 bar".

III. The following document, considered in the decision under appeal, is referred to:

D1 US-A-4 177 746.

Furthermore, reference is made to the declaration of Mr Niec submitted with appellants letter dated 18 November 2012 (in the following: D3).

IV. According to the impugned decision the subject-matter of claim 1 lacks novelty over the pressurized metal can according to the embodiment disclosed in connection with figure 2 of D1 (reasons, points 7.2.1 to 7.2.3 and 7.3).

In section "III. ADDITIONAL COMMENTS" of the impugned decision it is further indicated that in case D1 is considered as not disclosing parameter values falling within the ranges defined in claim 1 (since D1 remains silent with respect to the values of some parameters of the bottom of the can according to figure 2), it needs to be taken into account that the skilled person would follow the shape of the can shown in figure 2), when

attempting to construct such a can. Proceeding in this way one would arrive at values for the parameters defining the bottom falling within the value ranges for these parameters as defined by the subject-matter of claim 1 or being similar thereto. Consequently the can according to claim 1 does not involve an inventive step over the can according to figure 2.

V. The submissions of the appellant can be summarized as follows:

- (a) Compared to the can of claim 1 the cans according to document D1 belong to a substantially different technical field as outlined in D3.
- (b) The reason is that the can defined by claim 1 is designed for high pressure resistance while it still has a minimum thickness. It has a pressure behavior which combines the ability to withstand pressures without permanent deformation and shows elastic deformability to a given volume. Deformations up to about 15 bars should not be visible. A can of this type is thus suited to be used as an aerosol can as indicated in claim 1.
- (c) The cans of the type disclosed in D1 are not designed to withstand high internal forces, instead they should withstand external forces. These cans are designed such that compressive forces cause initial deflection in the bottom of the container which undergoes a relatively large distortion before the can undergoes catastrophic failure such as in its side wall or neck. In this connection D1 refers to the cans being tested by

the application of "off-axis" and "on-axis" loads. Further, it needs to be taken into account that the structure disclosed in D1 results in cans having high energy absorption capabilities; their failure-mode is predominantly in the bottom portion thereof. The intended use of the cans of D1 is derivable from the referral to a pressurized container of the conventional "beer can" type.

- (d) Due to these differences in the ability to withstand loads and the intended use the skilled person has no reason to consider the can of the type disclosed in D1 as prior art in an attempt to provide a can which, as the one defined by claim 1, is of the type having a high internal pressure resistance.
- (e) There is even less reason to consider a can of the type disclosed by D1 as the closest prior art for inventive step.
- (f) Moreover, even if D1 is considered in the examination of inventive step as closest prior art it does not render the pressurized metal can of claim 1 obvious.
- (g) Firstly, there is no reason for the skilled person to select as starting point from the two embodiments disclosed in D1 the one according to figure 2 and its corresponding description over the embodiment disclosed by figure 8 and its corresponding description.

- (h) Secondly, in case the embodiment of figure 2 is considered it needs to be taken into consideration that the countersink has a panel wall angle A_2 having a value which by far exceeds the value of the upper limit of the value range given in claim 1 for A_2 .

- (i) This applies irrespective of whether the bottom of the can is, according to an option referred to in D1, additionally provided with a bead since the provision of such an additional element cannot be considered as essentially changing the shape of the bottom. Consequently, the understanding of the disclosure of this embodiment with respect to the countersink remains the same irrespective of whether a bead is provided or not.

- (j) The can defined by claim 1 thus differs essentially from the one according to the embodiment disclosed in connection with figure 2 of D1 by the shape of the countersink. Since D1 does not give any indication leading to the shape of the countersink as defined by claim 1 and since this applies likewise with respect to the further prior art document mentioned in the impugned decision the subject-matter of claim 1 involves an inventive step over the available prior art.

VI. In the annex to the summons to oral proceedings dated 18 September 2012 the Board indicated i.a. that concerning novelty it appears to be decisive that, with the exception of the countersink radius, D1 does not disclose particular value ranges for the parameters

defined in claim 1 with the exception of the countersink radius (cf. points 6.6.3, 6.6.4).

Furthermore, the disclosure of D1 concerning the embodiment shown in figure 2 and described in connection with this figure has been discussed (cf. points 6.4.1 - 6.4.4).

Concerning inventive step it has been indicated that based on the disclosure given in D1 with respect to the embodiment of figure 2 and considering customary design practice employed to fill gaps in the disclosure concerning this embodiment, the reasoning of the impugned decision in section "III. ADDITIONAL COMMENTS" was not seen to be incorrect (cf. points 6.7.1, 6.7.2)

VII. In response to the annex the amended set of claims has been filed with letter dated 18 November 2012.

VIII. Oral proceedings before the Board were held 19 December 2012.

Reasons for the Decision

1. *Oral proceedings*

1.1 The Board indicated at the beginning of the oral proceedings that novelty is not an issue, referring to its finding as given in the annex (cf. points 6.6.3, 6.6.4). The subject-matter of claim 1 is novel over the cans disclosed in D1 since at least for some of the parameters for which value ranges are defined in claim 1 this document cannot be considered to directly and

unambiguously disclose values lying within these ranges. This issue needs no further consideration in view of the finding that the subject-matter of claim 1 lacks inventive step over D1.

1.2 The Board further indicated at the beginning of the oral proceedings that concerning the **examination of inventive step two lines of reasoning** (and possibly their combination) may need to be considered.

1.2.1 The **first line**, on which the present decision is based, focuses on the prior art given by the embodiment of D1 disclosed in connection with figure 2 (in the following: first embodiment), taking into consideration which dimensional values are to be considered as being derivable for the first embodiment from D1 when this embodiment is to be reduced to practice.

1.2.2 The **second line of reasoning** focuses on the question which effect(s) is/are derivable from the combination of features of claim 1 for the whole extent of the value ranges defined by these features, taking into account that within claim 1 many and mainly broad value ranges are defined.

1.2.3 In view of the result of the consideration of the first line of reasoning as given in the following, the second line of reasoning, which has not been further discussed during the oral proceedings, need not be further pursued.

1.3 The appellant argued with respect to the first line of reasoning as indicated above (point V).

2. *Subject-matter of claim 1*

2.1 Claim 1 is directed to a pressurized metal can, such as an aerosol can.

2.1.1 For the can it is defined that it has a bottom and a body wall and that its diameter is in the range of about 20 - 80 mm. According to a further feature the can has a pressure resistance up to about 15 bar.

2.1.2 For the bottom it is defined that it comprises a panel, a countersink and a foot connected to the can body wall.

Further definitions given with respect to the elements making up the bottom are as follows:

The panel, for which a center panel radius $R5$ is referred to, has a substantially non-concave form.

The countersink is defined as having a panel wall angle $A2$, a foot wall angle $A1$ and a countersink radius $R3$.

The foot has a foot radius $R2$.

With respect to the arrangement of these elements it is defined that the panel is connected with a panel radius $R4$ to the countersink, which is connected to the foot. The foot is connected to the can body wall.

For the heights of the bottom reference is made to the unit depth $H1$ measuring from the upper end of the countersink to the lower end of the foot and to the

panel depth H2 measuring from the upper end of the countersink to the upper surface of the panel.

Claim 1 defines value ranges for these heights as well as for the radii and angles.

- 2.2 According to the description it is the object of the subject-matter of claim 1 to provide a pressurized can having a bottom which can withstand internal pressure (such as up to 15, preferably 18 bar) but still has a minimum bottom wall thickness which is thinner than conventional pressurized cans, while still providing volume expansion (paragraphs [0004] and [0006]). It is further indicated that "The can according to the invention should have a pressure behaviour which combines the ability to withstand pressures without permanent deformation and elastic deformability to a given volume. Up to a particular pressure the bottom may deflect to a certain extent and ultimately will form buckles. In relation to the elastic deformability it is according to the invention that up to about 15 bars deformations should not be visible. However, the pressurized can should be deformable up to a given volume under pressure" (paragraph [0006]).

Furthermore it is indicated "A can according to the invention should have an optimal axial load resistance. Such axial load resistance provide a narrow footing with an increase of the vertical load. Accordingly, there is less deformability against axial load" (paragraph [0008]).

3. *Disclosure of document D1*

3.1 The Board remains of the opinion as expressed in the annex (cf. points 6.4.1 to 6.4.4) that D1 discloses "a pressurized can with a bottom comprising, corresponding to the bottom defined by claim 1, a panel 34 having a substantially non-concave form, and a panel 36 which is connected via a countersink 60 and a foot 28 to the can body wall 26 (cf. figure 2)" (point 6.4.1). The panel 36 should, as indicated by the Board during the oral proceedings, more precisely and in line with the terminology of the application in suit (cf. claim 4; paragraph [0017]; figure 1) be referred to as "panel outer ring" having an outer ring slope (cf. D1, column 3, lines 3 - 12; figure 2).

3.2 The disclosure referred to concerns the embodiment (in the following: the first embodiment) disclosed with respect to figure 2. According to this embodiment the bottom comprises a bead 60 shown in this figure in interrupted lines and referred to as optional in the description (column 7, lines 27 - 46). As indicated in the annex, the Board equates this bead with the countersink referred to in claim 1 of the application in suit.

3.3 Figure 2 (drawing in full lines) and the corresponding description further disclose an embodiment (second embodiment) differing from the first embodiment in that the bottom is without a bead.

3.4 A further embodiment of D1 (in the following: third embodiment) is disclosed in connection with figure 8 (cf. column 7, lines 47 - 58; column 8, lines 39 - 52).

The can according to this embodiment has a bottom comprising a flat bottom-closing portion connected via a first and a second semi-torroidal portion 70, 72 and a first frusto-conical portion 68 connected to side walls 66 of the can.

4. *Consideration of D1 as prior art in the examination of inventive step*

4.1 The appellant objected to D1 being considered as prior art in connection with the can of claim 1 and to the understanding by the Board of the disclosure given for the bottom according to the first embodiment.

4.2 Its objection concerning the consideration of D1 as prior art is based on the argument that the can according to claim 1 and the cans disclosed in D1 belong to substantially different technical fields due to differences concerning their capacities to sustain loads and their intended uses.

4.3 The Board cannot follow these arguments for the following reasons:

Differences concerning the intended uses of the cans according to claim 1 and D1 cannot be taken into account since in claim 1 the "aerosol can" is not an obligatory feature but is referred to only as an example; D1 only refers to a pressurized container of the conventional "beer can" type (cf. column 3, lines 44 - 55; column 3, line 66 - column 4, line 1).

The argument concerning different capacities of the cans according to claim 1 and D1 are based on the assumption that the can according to claim 1 has to be able to withstand high internal pressures (cf. paragraphs [0004] and [0006]) whereas the cans according to D1 need to withstand only external forces.

The Board is of the opinion as indicated during the oral proceedings, that in both cases the cans have to withstand internal pressures as well as external forces since these are loads normally to be carried by pressurized cans. In this respect besides the pressure referred to in the application in suit (cf. e.g. column 7, lines 39 - 46) its axial load resistance with respect to a vertical load is also referred to (paragraph [0008]). In D1 it is stated that the cans have to sustain compressive forces (column 1, lines 27 - 30; lines 56 - 58); all cans configured according to figure 2 (i.e. cans according to the first embodiment as referred to above) have to withstand axial loads (column 6, lines 56 - 66).

As indicated by the Board during the oral proceedings it also needs to be taken into consideration that for cans according to claim 1 as well as cans according to D1 the aim is for an improved load carrying capacity via the manner in which the bottom is designed (cf. e.g. application in suit: claim 1, paragraph [0004]; D1: column 7, lines 27 - 43). Moreover, as likewise indicated by the Board during the oral proceedings, it is to be expected that since the can as defined by claim 1 of the application in suit and the one according to the first embodiment of D1 have the same structure as can be derived from the following (cf.

points 6.1 - 6.3) they also have corresponding load carrying capacities with respect to external and internal loads.

The Board thus considers D1 as prior art to be considered in relation to the can according to claim 1.

4.4 Having been informed during the oral proceedings that D1 is not considered as lying in a technical field which is substantially different from that of the can of the application is suit and that therefore the first embodiment of D1 can be considered as prior art in the examination of inventive step, the appellant argued that the bead 60, provided on the bottom of the can, cannot be understood as constituting a countersink as defined in claim 1.

This objection was essentially based on three arguments.

4.4.1 According to the first argument the bead (cf. D1, lines 27 - 32; figure 2) is only optionally provided. In the normal situation in which no such a bead is provided (the second embodiment) the countersink is constituted by a foot wall 32, a panel wall 36 and a section joining these two walls which has a radius 64. These elements together constitute the countersink and do not lose this capacity merely by adding an optional element to the bottom at the radius 64 such as the bead.

4.4.2 According to the second argument even if a bead is provided at the container bottom shown in figure 2 it cannot be considered as constituting a countersink as defined by claim 1, since such a bead is not connected to the panel via a panel radius and does not have a

panel wall angle, nor a foot wall angle, nor a countersink radius. Moreover, since according to D1 "the bead 60 subtends an arc 62 of greater than 100° and preferably on the order of 180°" (column 7, lines 32 - 38) it has to be assumed that for the preferred angle of 180° the bead is non-existent as it is flattened due to this large angle. In that case it lacks a countersink radius. The appellant referred in this respect also to the criticality of the values for these parameters of the countersink with respect to the pressure resistance as explained in D3.

4.4.3 According to the third argument the countersink according to claim 1 significantly contributes to the bottom having the defined pressure resistance of up to about 15 bar whereas for the optional bead according to the first embodiment of D1 no such effect is disclosed. This becomes even more evident considering the second and third embodiment of D1, for which it is apparent that a bead is not foreseen, not even optionally.

4.5 Concerning these arguments the Board is of the following opinion as expressed during the oral proceedings.

4.5.1 As referred to above D1 discloses clearly a first and a second embodiment in connection with figure 2 and a third one according to figure 8: each of these three embodiments has its own particular structure of the bottom for the can. In the first embodiment the bottom comprises a bead which is not the case for the second or the third embodiment. Despite the optional nature of the bead the disclosure of the first embodiment needs to be taken into consideration independently of the

second and the third embodiment, the bottoms of which do not comprise a bead.

4.5.2 With respect to the second argument it needs to be taken into account that as defined by claim 4 of the application in suit and figure 2, the claimed bottom can comprise a panel outer ring having a length L_1 and a panel outer ring slope A_3 in the range of about $2 - 35^\circ$. (cf. paragraph [0017]). The appellant failed to give a convincing reason why an element connected outwardly of the (inner) substantially non-concave panel, namely the outer ring, is an element different from the third frustoconical portion 36 disclosed in the first embodiment of D1 (cf. column 3, lines 8 - 12; figure 2) which is arranged in exactly the same manner with respect to the (inner) panel 34 of substantially non-concave form (column 3, line 8 - 12).

Since, in view of the Board, the panel outer ring 36 of the first embodiment of D1 is to be considered as part of the panel it cannot, corresponding to the definitions given in claim 1, be considered part of the countersink. Consequently, the latter is formed by the bead 60. Rounded portions (necessary due to manufacturing / tooling constraints) connect this bead / countersink to the foot on the one hand and the panel wall given by the panel outer ring (as defined by claim 4) on the other. This countersink has a countersink radius R_3 having a value lying within the range of about 0.5 to 1.5 mm as defined by claim 1 (cf. point 7.3.2 below).

This applies also taking the argument of the appellant into account that "the bead 60 subtends an arc 62 of greater than 100° and preferably on the order of 180° ". For the Board, this statement of D1 cannot be understood as indicating that for larger angles of extension of the bead the latter loses its shape of a section of a circle. For 180° it simply means that the shape of the bead is half a circle, just as shown in figure 2 by the interrupted lines.

4.5.3 Concerning the third argument that the countersink according to claim 1 significantly contributes to the bottom having the defined pressure resistance of up to about 15 bar, whereas for the optional bead according to the first embodiment of D1 no such effect is disclosed: no convincing reason has been given why the claimed countersink on the one hand and the bead of the first embodiment on the other would be different. They have - qualitatively - the same structure and are arranged in the same manner in the bottom, they therefore should have the same effect with respect to the pressure resistance of the can. This is all the more so since the influence of the bead on the pressure resistance is explicitly referred to in D1 (column 7, lines 42 - 46). Consideration of the second and third embodiment cannot alter this assessment since admittedly according to these embodiments a bead is not even optionally foreseen.

4.5.4 The explanations given in D3 with respect to the criticality of the countersink on the one hand and the nature of the bead of the first embodiment on the other hand, cannot alter the above assessment either since they start from the premise that the bead cannot be

equated with the countersink of claim 1, to which premise the Board, however, cannot subscribe.

4.6 To complete the analysis of the disclosure of the first embodiment of D1, it discloses further the following remaining parameters of claim 1, starting from the center of the bottom

- the center panel radius
- the panel radius between the panel outer ring 36 and the bead 60
- the countersink radius of the bead 60 (see also point 4.5.2 and 7.3.2 below)
- the foot radius at bottom bead 28
- the panel wall angle between the vertical and the inward wall of bead 60
- the panel wall angle between the vertical and the outward wall of bead 60
- the unit depth and the panel depth.

That these parameters are present in this embodiment is corroborated by D3, annex 2, where this first embodiment is called the "figure 2A bottom".

5. *Consideration of the can according to the first embodiment of D1 as closest prior art*

The can according to the first embodiment (cf. point 3.1, 3.2 and 4.6 above) with its bottom having a bead 60 is the one having more features in common with the can of claim 1 than the second or third embodiment. As pointed out in point 4.3 above, it also serves the same purpose: withstanding internal and external loads.

This embodiment satisfies thus the conditions which, in line with the well established approach followed by the boards of appeal, have to be considered in establishing the closest prior art for the examination of inventive step.

In this respect the argument of the appellant that according to the disclosure of D1 the third embodiment has further advantages as compared to the second embodiment need not be considered since even if it holds true it is based on a comparison between the embodiments disclosed in D1 and not on one in which each of these embodiments is compared with the can defined by claim 1.

It is in any case clear that a comparison of the can according to the third embodiment (cf. point 3.3 above) shows less agreement with the subject-matter of claim 1 than it is the case for the first embodiment (cf. point 3.1 above).

6. *Features distinguishing the can of claim 1 from the one according to the first embodiment of D1*

6.1 As indicated above (points 3.1, 3.2 and 4.6) the can according to the first embodiment of D1 comprises, in accordance with the can defined by claim 1, a bottom having a panel, a countersink in the form of bead 60 and a foot, these elements having together the same **parameters** as in claim 1.

6.2 Consequently, in line with the "ADDITIONAL COMMENTS" of the decision under appeal the Board is, as indicated in the annex (cf. points 6.7.1 and 6.7.2), of the opinion

that the can according to claim 1 is distinguished from the one according to the first embodiment by the **value ranges** defined for the parameters associated with the elements constituting the bottom.

6.3 According to these value ranges

- the foot wall angle A1 is in the range of about 0° to 45°;
- the panel wall angle A2 is in the range of about 0° - 45°;
- the foot radius R2 is in the range of about 0.5 to 1,5 mm;
- the countersink radius R3 is in the range of about 0,5 to 1,5 mm;
- the panel radius R4 is in the range of about 1,0 to 1,5 mm;
- the unit depth H1 is in the range of about 5 - 15 mm;
- the panel depth H2 is in the range of about 2 - 10 mm; and
- the center panel radius R5 is larger than about 20 mm

wherein the can has a diameter in the range of about 20 - 80 mm, a bottom wall thickness in the range of about 0,2 - 0,7 mm, and having a pressure resistance up to about 15 bar.

7. *Obviousness*

7.1 The effect of the distinguishing features can thus be seen in the provision of concrete numerical values for the parameters defining the bottom.

7.2 The problem which can be formulated from this effect would be to provide numerical values for the parameters disclosed for the bottom of the can according to the first embodiment, i.e. how to reduce this can bottom to practice.

7.3 Examining whether the solution to this problem as provided by the can as defined by claim 1 is obvious means: will the skilled person arrive at values falling in these ranges when reducing the can according to the first embodiment into practice. In this respect the disclosure of D1 is of concern.

7.3.1 Concerning the disclosure given to a skilled person by the first embodiment of D1, with respect to numerical values for the parameters in question, the following distinction was indicated by the Board during the oral proceedings: in the examination of novelty, the disclosure of D1 to be considered is limited to what is directly and unambiguously disclosed in the document; the situation is different concerning the disclosure which is to be considered in the examination of inventive step. In the latter case the disclosure needs to be evaluated taking into account not only the direct and unambiguous disclosure, but also quantitative values the skilled person would derive for the relevant parameters from figure 2 and the associated description in an attempt to reduce the can according to the first embodiment into practice.

7.3.2 Following this approach, referred to already in the impugned decision (cf. point V), the skilled person would arrive at the values for the parameters which correspond between claim 1 and the description and

figure 2 as discussed above in points 3.1, 3.2 and 4.6. Figure 2 is considered as a schematic section of the lower part of the can concerned showing the elements constituting the bottom and thus also their defining parameters (angles, radiuses and heights) in correct proportion:

foot wall angle (between the outer and wall of bead 60 and the vertical): approximately 10° (thus in the range given for A1 of about 0° to 45°);

panel wall angle (between the inward wall of bead 60 and the vertical): approximately 15° (thus in the range given for A2 of about 0° - 45°);

foot radius: in the range for R2 of about 0.5 to 1,5 mm;

countersink (bead) radius 60: in the range of 0.030 to 0.187 inch (0,762 to 4,75 mm) as given in column 7, lines 39 - 42 of D1 (thus with values in the range for R3 of about 0,5 to 1,5 mm);

panel radius: in the range for R4 of about 1,0 to 1,5 mm;

unit depth: in the range for H1 of about 5 - 15 mm;

panel depth: in the range for H2 of about 2 - 10 mm;
and

center panel radius: corresponding to R5 larger than about 20 mm.

7.3.3 Concerning the above values being derivable from the first embodiment of D1 it has not been disputed that the value ranges given for the radii come in any case within regular design practice taking e.g. into account that certain minimal values for the radii have to be observed due to manufacturing requirements / tooling constraints. Concerning the height dimensions H1 and H2 likewise it has not been disputed that the values derivable from D1 for the first embodiment lie within the value ranges defined in claim 1.

7.3.4 The can according to the first embodiment furthermore has, since it is of the conventional beer can type (cf. column 3, lines 46 - 50), a diameter in the range as defined by claim 1 of about 20 - 80 mm. For the bottom wall thickness a value of about 0.0145 inch (0,37 mm) is referred to in D1 (column 5, lines 35 - 37) which lies in the range defined in claim 1 of about 0,2 - 0,7 mm.

7.3.5 Due to the correspondence between the bottom as defined by claim 1 and the one according to the first embodiment of D1 as discussed above it must be that the can according to D1 has a pressure resistance which is similar to the one referred to in claim 1 as "up to about 15 bar", otherwise the claimed can would not fulfil that condition over the whole extent of the claimed ranges.

7.4 Since it is apparent that for the can according to the first embodiment the parameter values obtainable from D1 by its reduction to practice are not singular ones but vary accordingly around the indicted values and since it has neither been argued nor proven that the

value ranges defined in claim 1 lead - in combination - to another particular effect, the can according to claim 1 does not involve an inventive step over the one of the first embodiment of D1 (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Nachtigall

H. Meinders