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D E C I S I O N
of 19 June 2002

Case Number: T 0457/01 - 3.2.7

Application Number: 94908757.1

Publication Number: 0636089

IPC: B65D 1/02

Language of the proceedings: EN

Title of invention:
Hot fill plastic container having a radial reinforcement rib

Applicant:
Schmalbach-Lubeca AG

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 54, 111(1)

Keyword:
"Main request: Novelty (no)"
"Auxiliary request: Novelty (yes)"
"Remitted to the first instance (yes)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0457/01 - 3.2.7

D E C I S I O N
of the Technical Board of Appeal 3.2.7
of 19 June 2002

Appellant: Schmalbach-Lubeca AG
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 4 October 2000 refusing European patent application No. 94 908 757.1 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: A. Burkhart
Members: K. Poalas
U. J. Tronser

Summary of Facts and Submissions

I. The Appellant (applicant) lodged an appeal against the decision of the Examining Division refusing the European patent application No. 94 908 757.1.

II. The Examining Division held that the subject-matter of claim 1 was not new compared with the prior art disclosed in the document

D1: EP 0 423 406 A.

III. Oral Proceedings before the Board of Appeal took place on 19 June 2002.

The Appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the following claims:

Main request

Claims 1 to 8 as filed with the letter of 6 October 1999;

Auxiliary request

Claims 1 to 8 as submitted at the oral proceedings named "1st auxiliary request".

IV. Claim 1 of the main request reads as follows:

"A thin-wall container (10) formed from a heat set plastic material and adapted to be filled with a liquid at a temperature elevated above room temperature and

then sealed, said container having an upper portion (14) which includes a sealable closure (15) and an upper walled portion, a lower portion including a base (16) closing the bottom of the container, and a sidewall portion (12) which is generally tubular in shape and being formed integrally with and extending between said upper walled portion and said lower portion, said side wall portion (12) including a plurality of elongated vertically oriented vacuum panels (24) which are adapted to flex inwardly due to filling and sealing of the container with a liquid at an elevated temperature and subsequent cooling of the liquid, each of said vacuum panels (24) having an upper edge (25), a lower edge (26), and a panel portion intermediate said upper and lower edges, said upper edges of said vacuum panels being spaced apart from said upper walled portion and thereby defining an upper label mounting area (29) above said vacuum panels (24), and said lower edges of said vacuum panels being spaced apart from said lower portion and thereby defining a lower label mounting area (30) below said vacuum panels (24), said container being characterized by at least one annular reinforcement rib (31, 32) within one of said label mounting areas (29, 30), said reinforcement rib extending around the circumference of said sidewall portion (12), said reinforcement rib supporting said vacuum panels (24) along at least one of their edges (25, 26) to hold said supported edges fixed while permitting said panel portions intermediate said edges (25, 26) to flex inwardly during filling and sealing of the container and resisting deformation of said vacuum panels (24) subsequent to inward flexing of said vacuum panels (24) after filling and sealing of said container."

Claim 1 of the auxiliary request reads as follows:

"A thin-wall container (10) formed from a heat set plastic material and adapted to be filled with a liquid at a temperature elevated above room temperature and then sealed, said container having an upper portion (14) which includes a sealable closure (15), an upper walled portion and an upper label bumper (21), a lower portion including a base (16) closing the bottom of the container and a lower label bumper (22), and a sidewall portion (12) which is generally tubular in shape and being formed integrally with and extending between said upper label bumper (21) and said lower label bumper (22), said side wall portion (12) including a plurality of elongated vertically oriented vacuum panels (24) which are adapted to flex inwardly due to filling and sealing of the container with a liquid at an elevated temperature and subsequent cooling of the liquid, each of said vacuum panels (24) having an upper edge (25), a lower edge (26), and a panel portion intermediate said upper and lower edges, said upper edges of said vacuum panels being spaced apart from said upper portion and thereby defining an upper label mounting area (29) above said vacuum panels (24), and said lower edges of said vacuum panels being spaced apart from said lower portion and thereby defining a lower label mounting area (30) below said vacuum panels (24), said container being characterized by at least one annular reinforcement rib (31, 32) within one of said label mounting areas (29, 30), said reinforcement rib extending around the circumference of said sidewall portion (12), said reinforcement rib supporting said vacuum panels (24) along at least one of their edges (25, 26) to hold said supported edges fixed while permitting said panel portions intermediate said edges

(25, 26) to flex inwardly during filling and sealing of the container and resisting deformation of said vacuum panels (24) subsequent to inward flexing of said vacuum panels (24) after filling and sealing of said container."

V. In essence, the Appellant's arguments with respect to novelty are as follows:

Main request

Document D1, as seen in Figure 4, discloses a blow molded plastic container (1) having a body (2) between the upper end (8) and a lower end (4). The body (2) is generally cylindrical and corresponds to the main body of the present invention. Provided within this body (2) are a series of vacuum panels(3). Immediately above and below the body(2) are rib portions (5) which protrude radially outward from the body (2). Since the rib portions (5) of document D1 define the largest diameter of the container (1), these rib portions (5) are comparable to the upper and lower bumpers of the container of the present invention. The appropriate label mounting areas of the container of document D1 would be seen to be between the upper and lower most areas of the rib portions (5) and the upper and lower edges of vacuum panels(3). Notably, these areas on document D1 have very little axial length and are not provided with any reinforcement, such as ribs.

Claim 1 requires a "sidewall portion (12) which is generally tubular in shape" and having "at least one annular reinforcement rib (31,32) within one of said label mounting areas, said reinforcement rib extending around the circumference of said sidewall portion

(12)". Thus, the rib (31, 32) according to the present invention located within one of the cylindrical label mounting areas (29, 30) must be located in the cylindrical sidewall portion (12) and likewise, the ribs also within the sidewall portion (12). The rib also must extend circumferentially in the cylindrical sidewall portion (12).

Contrary to the above, Figure 4 of document D1 shows that the rib portions (5) are located outside of the cylindrical sidewall of the body, and therefore, they are also outside of the label mounting area. Document D1 only discloses unreinforced label mounting areas adjacent to the edges of the vacuum panels (3).

Therefore, document D1 does not disclose the following features of claim 1:

1. The sidewall portion is generally tubular in shape and defining upper and lower label mounting areas with at least one annular ribwithin the label mounting areas which must be also cylindrical and

2. The sidewall portion has integrally formed vacuum panels with the ribs supporting the vacuum panels along their edges, to hold the edges fixed while permitting the panel portion to flex, which prevents deformation in the label mounting areas.

Therefore, the subject-matter of claim 1 of the main request is novel with respect to the disclosure of document D1.

Auxiliary request

The features of claim 1 of the auxiliary request, requiring that an upper label mounting area is defined between the upper edges of the vacuum panels and the upper portion, said upper portion having an upper label bumper, and a lower label mounting area is defined between the lower edges of the vacuum panels and the lower portion, said lower portion having a lower label bumper, whereby at least one annular reinforcement rib is provided within one of said label mounting areas, said reinforcement rib extending around the circumference of the sidewall portion, said reinforcement rib supporting said vacuum panels along at least one of their edges, are not present in the container disclosed in document D1.

Therefore, the subject-matter of claim 1 of the auxiliary request is novel with respect to the disclosure of document D1.

Reasons for the Decision

1. *Novelty*

1.1 Main request

Document D1 (fourth embodiment according to Figure 4 and column 8, lines 19 to 30) discloses a thin-wall container (1) formed from a heat set plastic material and adapted to be filled with a liquid at a temperature elevated above room temperature and then sealed, said container having an upper portion (part of the bottle above the two upper ribs 5) which includes a sealable closure and an upper walled portion, a lower portion (part of the bottle below the two lower ribs 5)

including a base closing the bottom of the container, and a sidewall portion (part of the bottle which is situated between the upper and the lower portions including the ribs 5) which is generally tubular in shape and being formed integrally with and extending between said upper walled portion and said lower portion, said side wall portion including a plurality of elongated vertically oriented vacuum panels (3) which are adapted to flex inwardly due to filling and sealing of the container with a liquid at an elevated temperature and subsequent cooling of the liquid (see column 5, lines 50 to 52), each of said vacuum panels (3) having an upper edge, a lower edge, and a panel portion intermediate said upper and lower edges, said upper edges of said vacuum panels being spaced apart from said upper walled portion and thereby defining an upper area above said vacuum panels (3)and said lower edges of said vacuum panels being spaced apart from said lower portion and thereby defining a lower area below said vacuum panels 3.

Since a label mounting area is an area onto which labels can be mounted, the above mentioned upper and lower areas of the container of document D1 are areas onto which labels can be mounted. Therefore, said upper and lower areas can also be designated as upper and lower label mounting areas.

The container according to Figure 4 of document D1 has also annular reinforcement ribs 5 within said label mounting areas, said reinforcement ribs extending around the circumference of said sidewall portion. Being positioned in said upper and lower label mounting areas said reinforcement ribs support said vacuum panels along their edges to hold said supported edges

fixed while permitting said panel portions intermediate said edges to flex inwardly during filling and sealing of the container and resisting deformation of said vacuum panels 3 subsequent to inward flexing of said vacuum panels 3 after filling and sealing of said container.

The Board cannot agree to the view of the appellant that the following features of claim 1 were not disclosed in the bottle according to Figure 4 of document D1:

1. The sidewall portion is generally tubular in shape and defining upper and lower label mounting areas with at least one annular ribwithin the label mounting areas which must be also cylindrical and

2. The sidewall portion has integrally formed vacuum panels with the ribs supporting the vacuum panels along their edges, to hold the edges fixed while permitting the panel portion to flex, which prevents deformation in the label mounting areas.

Firstly, the expressions "bumpers" and "smooth cylindrical sidewall" used in the appellants argumentation are not present in claim 1.

Secondly, in claim 1 the sidewall portion is defined as a portion which is generally tubular in shape, being formed integrally with and extending between the upper walled portion and said lower portion and having vacuum panels. The container of Figure 4 of document D1 has also such a sidewall portion extending from the utmost upper rib 5 to the utmost lower rib 5. This sidewall portion has vacuum panels 3 and reinforcement ribs,

i.e. the ribs next to the panels, extending around the circumference of said sidewall portion, said reinforcement ribs are able to support said vacuum panels along their edges to hold said supported edges fixed while permitting said panel portions intermediate said edges to flex inwardly during filling and sealing of the container and resisting deformation of said vacuum panels 3 subsequent to inward flexing of said vacuum panels 3 after filling and sealing of said container.

Therefore, the subject-matter of claim 1 is not novel over the container known from Figure 4 of document D1.

For this reason, the main request is not allowable with respect to Articles 54(1) and (2) EPC.

1.2 Auxiliary request

The Board agrees with the appellant that the subject-matter of claim 1 according to the auxiliary request is novel over the container known from Figure 4 of document D1.

In claim 1 of the auxiliary request the sidewall portion is defined as the portion of the container extending between an upper label bumper and a lower label bumper.

The label bumpers being positioned upwardly and downwardly of the label mounting area protect said label mounting area from lateral impact forces.

At column 8, lines 42 to 49 of document D1 it is stated that:

"The circumferential rib acts as a reinforcing rib. Accordingly, the mechanical durability of the lower end of the body (and the upper end of the body) with respect to the lateral load can be considerably increased. Accordingly, the occurrence of the buckling deformation of the lower end of the body (and the upper end of the body) when the container is pressed and slidably conveyed can be prevented."

Due to the intended effect as indicated in the passage above, both pairs of circumferential ribs 5 provided above the upper end and below the lower end of the sidewall portion 2 of the container disclosed in document D1 define upper and lower label bumper areas capable to protect labels mounted on the sidewall portion 2 intermediate the edges of the vacuum panels 3 and said upper and lower label bumper areas.

However, in the container according to document D1 there exists no annular reinforcement rib within an upper or lower label mounting area, said upper or lower label mounting area being part of the sidewall portion 2 and extending between the upper or lower edges of the vacuum panels 3 and the upper or lower label bumper areas, respectively.

For these reasons, the subject-matter of claim 1 of the auxiliary request is novel with respect to the container known from Figure 4 of document D1.

2. *Remittal to the first instance*

Since claim 1 of the auxiliary request has been amended in order to establish novelty over the prior art, and since the examining division has not yet examined and

decided the issue of inventive step of such a claim, the Board exercises its discretion under Article 111(1) EPC to remit the case for further prosecution to the examining division.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution on the basis of claims 1 to 8 of the auxiliary request submitted at the oral proceedings named "1st auxiliary request".

The Registrar: The Chairman:

A. Townend A. Burkhart