Datasheet for the decision of 20 December 2011

Case Number: T 0540/09 - 3.2.07
Application Number: 00830486.7
Publication Number: 1172301
IPC: B65D 5/74, B65D 5/06
Language of the proceedings: EN

Title of invention:
Sealed package for pourable food products, and relative production method

Patent Proprietor:
Tetra Laval Holdings & Finance SA

Opponent:
SIG Technology Ltd.

Headword: -

Relevant legal provisions:
EPC Art. 54, 56, 107
EPC R. 99(1)(a), 101(2)

Keyword:
"Admissibility of the appeal (name and address): yes"
"Novelty (main request): yes"
"Inventive step (main request): yes"

Decisions cited:
T 0525/94, T 0097/98, T 0047/11

Catchword: -
Case Number: T 0540/09 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 20 December 2011

Appellant: SIG Technology Ltd.
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Composition of the Board:
Chairman: H. Meinders
Members: K. Poalas
E. Dufrasne

C7275.D
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division concerning maintenance of the European patent No. 1 172 301 in amended form.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC (lack of novelty and inventive step).

The Opposition Division found that the subject-matter of claim 1 of the patent as granted and claim 10 as filed with telefax on 8 September 2006 met the requirements of the EPC.

III. The following documents of the opposition proceedings are mentioned in the present decision:

D2 = GB-A-593 278
D3 = US-A-4 184 624
D4/T4 = JP-A-1 1-91792 and its translation into German
D5 = EP-A-0 838 325 was filed with the statement of grounds of appeal.

IV. Oral proceedings took place before the Board on 20 December 2011 followed by the oral proceedings in case T 47/11 relating to the divisional application of the present.
(a) The appellant requested that the decision under appeal be set aside and that the European patent No. 1 172 301 be revoked.

(b) The respondent (patent proprietor) requested that the appeal be dismissed (main request) or, in the alternative, that the decision under appeal be set aside and the patent be maintained on the basis of claim 1 of one of the first to third auxiliary requests filed with letter dated 18 November 2011. The admissibility of D4/T4 and D5 was not challenged any longer.

V. The independent claims 1 and 10 according to the main request, i.e. of the patent as upheld by the opposition division read as follows (amendments over claim 10 as granted are marked in bold or struck through):

"1. A sealed package (1, 1') for pourable food products, made from sheet packaging material and comprising a top wall (6) crossed by at least one transverse sealing band (15) forming a flat projecting tab (21) folded coplanar with and onto the top wall (6) along a bend line (22), and an opening device (8) fitted to a portion of said top wall (6) bounded on one side by said sealing band (15); characterized in that said tab (21) comprises a non-sealed flat striplike auxiliary portion (25) interposed between said sealing band (15) and said bend line (22), so that the area of the portion of said top wall (6) available for said opening device (8) is increased by the width of the auxiliary portion (25)."
"10. A method of producing a sealed package \((1, 1')\) of a pourable food product from sheet packaging material, said method comprising the steps of:
- forming a box-shaped element \((60)\) open at the top and filled with said food product;
- forming a top wall \((6)\) for closing said box-shaped element \((60)\) and crossed by at least one transverse sealing band \((15)\) forming a flat projecting tab \((21)\) bounding, on one side, a portion of the top wall \((6)\) for receiving an opening device \((8)\);
- folding said tab \((21)\) coplanar with and onto said top wall \((6)\) along a bend line \((22)\) formed beforehand on said packaging material;
characterized in that said step of forming said top wall \((6)\) is performed by sealing the top of said box-shaped element \((60)\) at a predetermined distance \((2)\) from said bend line \((22)\) on said packaging material, so that, when folded, said tab \((21)\) comprises, between the bend line \((22)\) and said sealing band \((15)\), a flat striplike auxiliary portion \((25)\), the width of which increases the area of the portion of said top wall \((6)\) available for receiving said opening device \((8)\); said method comprising the step of applying the opening device on the portion of the top wall bounded, on one side, by said sealing band and whose area is increased by said flat striplike auxiliary portion".

In view of the outcome of the proceedings there is no need to recite the wording of the independent claims of the auxiliary requests.

VI. The appellant argued essentially as follows:
Admissibility of the appeal

The mention of SIG Combibloc Systems GmbH in the notice of appeal was a error, to be corrected to SIG Technology AG.

Claim 1: Novelty – Article 54 EPC

It has to be remarked first that claim 1 does not require the top wall with the opening device to be horizontal, when folded flat on the rearward top wall. This means that the claim allows for a slightly inclined top wall as well. Figures 2 and 3(b) of D4/T4 depict only a specific embodiment of a sealed package with a specific inclination angle for the top wall surface 3T induced by the corresponding inclination angle of the fold lines "e" in the side panels 2 and 4. However, the second sentence of paragraph 0011 of D4/T4 allows for another package with a less inclined top wall ("in etwa schräg"), resulting in bend lines "e" on the side panels 2 and 4 running practically at right angles to the bend lines a - d and an additional bend line positioned on the rearward top wall surface 1T situated remote from the sealing band 3TP. This produces a portion between that bend line and the sealing band as claimed in the characterising part of claim 1.

Claim 1: Inventive step – Article 56 EPC

The teaching of D4/T4 considered alone

The skilled person starting from the package according to figure 3(b) of D4/T4 would be confronted with the
problem of minimising the head space of said package, as the effect of the differing features is that the headspace is reduced. He would be guided by the above-mentioned teaching of the second sentence of paragraph 0011 of D4/T4 to decrease the inclination angle of the bend lines "e" of the side panels 2 and 4 in order to achieve this. During this modification the skilled person would neither modify the top wall surface 3T nor the width of the sealing band 3TP, but he would simply choose less inclined bend lines "e" in the side panels 2 and 4. Thus lowered bend lines "e" on the side panels 2 and 4 would have the same effect as discussed above for novelty.

Combination of the teachings of D4/T4 and D3 (and D5)

The problem of reducing head space is mentioned in D3 in column 1, lines 26 to 29 and 39 to 42 and also in column 2, lines 47 to 52.

D3 teaches the person skilled in the art how to flatten the gable top part of a finished package by using an additional bend line 30 in one of the top walls which are not folded in.

The person skilled in the art seeking to reduce the head space of the package known from figure 3(b) of D4/T4 would provide such an additional bend line to the rearward top wall 1T of said package without exercising an inventive activity. By doing so the person skilled in the art immediately recognises that this bend line increases the area of the top wall 3T available for an opening device positioned on that top wall.
The person skilled in the art is not hindered to implement the idea of the additional bend line 30, even though the package of D3 does not disclose an opening device and its top walls fold flat only temporarily for transportation purposes. In this respect, however, D5 documents that gable top containers, figures 1 and 1B, and flat top containers having opening devices on their corresponding top walls are well known to the person skilled in the art before the filing date of the patent in suit.

**Combination of the teachings of D4/T4 and D2**

The person skilled in the art starting from the package according to figure 3(b) of D4/T4 and seeking to solve the problem of reducing the head space of said package would take into consideration the teaching derivable from the packages depicted in figures 5 and 12 of D2. Said figures show parallelepiped packages having each a non-sealed flat striplike portion on the top wall of said packages extending between the bend lines 15, 37 and the sealing bands 13, 35, whereby said portion increases the portion of the respective top wall available for an opening device. By applying said teaching of D2 to the package according to figure 3(b) of D4/T4 the person skilled in the art would arrive at the package according to claim 1 without the exercise of an inventive activity.

**Claim 10: Novelty and inventive step — Articles 54 and 56 EPC**

The arguments concerning novelty and inventive step of the subject-matter of the product claim 1 are
accordingly applicable to the subject-matter of the method claim 10.

VII. The respondent argued essentially as follows:

Admissibility of the appeal

No arguments were presented in this respect.

Claim 1: Novelty – Article 54 EPC

The second sentence of paragraph 0011 of D4/T4 refers to the inclination angle of the top wall surface 3T of the package shown in figure 3(b) and accordingly also to the inclination angle of the bend lines "e" on the side panels 2 and 4 shown in figure 2 of D4/T4. It clearly does not concern (a) different embodiment(s) with a bend line "e" at practically the same level in all panels 1 - 4, at right angles to the bend lines a - d. The additional bend line allegedly resulting in the top wall 1T cannot arise from itself; it has to have been provided in the blank before. No such bend line is derivable from D4/T4.

Accordingly, the appellant's line of arguments based on a particular interpretation of the above-mentioned sentence of D4/T4 is invalid and D4/T4 fails to disclose the characterising features of claim 1.
Claim 1: Inventive step — Article 56 EPC

The teaching of D4/T4 considered alone

Due to the fact that D4/T4 neither addresses the problem of reducing the head space of the package depicted in figure 3(b) nor discloses any information towards the required modification of the existing bend lines and the addition of new bend lines in the panels 1T, 2T (partly) and 4T (partly), which are necessary to obtain what is proposed by the appellant, it is self-evident that the teaching of D4/T4 considered alone cannot lead the person skilled in the art to a package having a non-sealed flat striplike auxiliary portion according to the characterising part of claim 1 and therefore it cannot render the subject-matter of claim 1 obvious.

Combination of the teachings of D4/T4 and D3 (and D5)

The person skilled in the art would not consider the teaching of D3 in order to solve the problem of reducing the headspace of the package known from figure 3(b) of D4/T4 because the gable top flattening method disclosed in D3 is not applicable to a package provided with an opening device on its top wall, see in particular figure 2 of D3.

D3 discloses a package which instead of having an opening device positioned on the package's top wall is provided with a pouring spout, see column 2, lines 44 to 46.
In view of the above, the combination of the teachings proposed by the appellant would lead the person skilled in the art to a package in which the opening device of the package of figure 3(b) of D4/T4 is removed and replaced by the bend lines 29 for forming the pouring spout in combination with the bend line 30. Such a package would be completely different from the one of claim 1.

The fact that document D5 discloses a gable top package and a parallelepiped-shaped package, both provided with respective opening devices on their top walls, cannot change the situation in respect of D3, as the solution offered by the latter to the problem of reducing the stacking volume of a plurality of gable top packages always implies the prohibition of having an opening device on the corresponding top walls.

Even considering the portion bounded on one side by the bend line 30 and on the other side by the lower limit 26 of the sealing band 24 of figure 5 of D3 as equivalent to the non-sealed auxiliary portion claimed in claim 1, there is no indication in D3 that such a portion or its counterpart on the other top wall surface 22 is there to be used to receive an opening device. In practice, the characterising feature of claim 1 cannot be obtained by the combination of the teachings of D4/T4 and D3, even considered together with the teaching of D5, other than with hindsight.

**Combination of the teachings of D4/T4 and D2**

Since D2 discloses a parallelepiped package without an opening device and it does not address the problem of
reducing the headspace of a package according to figure 3(b) of D4/T4 it would not be taken into consideration by the person skilled in the art seeking to solve the above-mentioned problem.

Even if the person skilled in the art would have taken into consideration the teaching of D2 he would not have arrived at a package according to claim 1 since it does not disclose any teaching concerning the positioning of an opening device within the region extending between the centreline 15, 37 and the bend line 14, 36 shown in figures 5 and 12 of D2.

Claim 10: Novelty and inventive step – Articles 54 and 56 EPC

The arguments concerning novelty and inventive step of the subject-matter of the product claim 1 are accordingly applicable to the subject-matter of the method claim 10.

Reasons for the decision

1. Admissibility of the appeal

The opposition was originally filed in the name of SIG Technology AG. During the opposition proceedings the opponent filed further submissions as SIG Combibloc Systems GmbH. In the minutes of the oral proceedings the opponent is identified as SIG Technology Ltd. The opposition division's decision refers to SIG Technology AG. The notice of appeal was filed in the name of SIG Combibloc Systems GmbH.
In its communication dated 20 May 2009 the Board noted that due to the above-mentioned situation the notice of appeal appeared to contain an inconsistency concerning the name/identity of the appellant (Rules 101(2) and 99(1)(a) EPC), which has to be a registered party to the opposition proceedings (Article 107 EPC) and a legal entity still existing at the filing date of the notice of appeal (T 525/94 of 17 June 1998). The Board noted further that the appellant’s address was missing in the notice of appeal, contrary to the requirements under Rule 99(1)(a) EPC.

Thereupon the Board requested from the appellant to provide explanations, in case it applied evidence concerning its status as a party in the present proceedings, and - insofar as possible - to remedy the deficiencies.

In its reply dated 29 July 2009 the appellant submitted that the mention of SIG Combibloc Systems GmbH as the appellant in the notice of appeal dated 2 March 2009 as well as in the letter stating its grounds of appeal dated 4 May 2009 did not originate from any change as to the status of opponent but resulted from an unjustified modification introduced in its electronic file already during the opposition proceedings. It further indicated (supported by a copy of an extract of the Handelsregister des Kantons Schaffhausen) that SIG Technology AG and SIG Technology Ltd were the two different official names of the same company. It finally mentioned the address of the appellant. It requested to consider the notice of appeal and the statement of grounds of appeal as filed by the
registered opponent SIG Technology AG and thus admissible.

On that basis, the Board, concurring with its opinion expressed in its communication dated 1 September 2009, sees no element which would support any intention of the appellant to have the appeal filed in the name of a legal person different from the opponent registered as such at the EPO nor does the Board have any reason to consider any matter related to a possible transfer of the status of opponent. The Board considers the discrepancy between the registered opponent and the mentioned appellant as an error.

The Board further notes that both the notice of appeal and the statement of grounds have been sent by the representative of the opponent in the first instance proceedings, under the same internal references, referring to the same patent, the same patent proprietor and mentioning the correct date of the impugned decision.

Therefore, in line with the case-law established by T 97/98, OJ EPO 2002, 183 and the decisions following it, the Board holds that only a mistake occurred in the name indicated and that sufficient elements are provided in order to allow its correction in this sense indicated by the opponent.

As above-mentioned, the appellant also mentioned its address in its reply to the communication, so complying with the requirements of Rule 99(1)(a) EPC.
The respondent questioned at no point in these appeal proceedings the admissibility of the appeal.

Taking the above into consideration the Board finds the appeal admissible.

2. **Claim 1: Novelty – Article 54 EPC**

2.1 A sealed package according to the preamble of claim 1 is undisputedly known from D4/T4.

2.2 The question at stake is therefore, whether also the characterising features of claim 1 that the tab comprises a non-sealed flat striplike auxiliary portion interposed between the sealing band and the bend line, so that the area of the portion of the top wall available for the opening device is increased by the width of the auxiliary portion are also known from D4/T4.

2.3 The appellant assumes that figures 2 and 3(b) of D4/T4 depict a specific embodiment of a sealed package with a specific, relatively steep, inclination angle for the top wall surface 3T induced by the specific, correspondingly relatively steep, inclination angle of the fold lines "e" in the side panels 2 and 4. The appellant assumes further that the second sentence of paragraph 0011 of D4/T4 mentioning that the top panel of the package is "slanted to some degree" ("etwa schräg") allows for an embodiment different from the one depicted in figures 2 and 3(b), said embodiment having a more horizontal top wall in the standing package, with bend lines "e" in the side panels 2 and 4 running almost at right angles to the bend lines a - d.
and continuing in the bend lines "e" in the panels 1 and 3. Folding a blank according to such an embodiment into a package with folded down top wall 3T would result automatically in the lowering of the level of the bend line "e" on the rear panel 1 and in the corresponding enlarging of the top wall surface 1T, producing thereby additional packaging material in the top wall 1T of the package. Due to said additional material an additional bend line situated on the top wall surface 1T positioned remote from the sealing band 3TP would be automatically generated. The strip corresponding therewith on the top wall surface 3T lying between said bend line and the sealing band 3TP would then define a non-sealed flat striplike auxiliary portion interposed between the sealing band and the bend line in the sense of the characterising portion of claim 1.

2.4 The Board cannot follow this argument for the following reasons:

2.4.1 The Board notes that the first two sentences of paragraph 0011 of D4/T4 refer to one and the same embodiment of the invention described therein, namely the one depicted in figures 2 and 3(b), because of the start of the second sentence with "Hier wird ..." ("Here...", i.e. "In this package..."). The inclined top wall 1T, 3T referred to ("schräge" ... "in etwa schräg") is therefore the one shown in figure 3(b) requiring accordingly that the particular bend lines "e" on the side panels 2 and 4 are as shown in figure 2, i.e. angled with respect to the fold lines a - d. The direct and unambiguous disclosure of D4/T4 is therefore contrary to what is argued by the appellant.
2.4.2 D4/T4 shows in figure 2 a specific blank out of which the package shown in figure 3(b) is made. In these two figures a specific inclination angle for the top wall 3T and the corresponding inclination angles of the bend lines "e" in the side panels 2 and 4 are depicted. No other specific inclination angle is disclosed in D4/T4, as it was also acknowledged by the appellant. An inclination angle different from the one shown in figures 2 and 3(b) creates automatically a new blank and its corresponding package which is, however, not disclosed in D4/T4. According to the appellant's argument, the presence of a bend line positioned on the top wall surface 1T remote from the sealing band is created automatically. However, the Board considers this not to be the case, since to have such a bend line a pre-scored line in the blank is required, running through panels 1T, 2T (partly) and 4T (partly). Such a pre-scored line is not disclosed as such in D4/T4, as also argued by the respondent.

2.4.3 The Board considers therefore that there is no disclosure in D4/T4 of a non-sealed flat striplike auxiliary portion as required by the characterising part of claim 1.

2.5 Accordingly, the subject-matter of claim 1 is novel and meets the requirements of Article 54 EPC.
3. **Claim 1: Inventive step — Article 56 EPC**

3.1 **The teaching of D4/T4 considered alone**

3.1.1 The appellant argues that the skilled person starting from the blank and the package according to figures 2 and 3(b) of D4/T4 and being confronted with the problem of minimising the headspace of said package, would be guided by the teaching of the second sentence of paragraph 0011 of D4/T4 to decrease the inclination angle of the bend lines "e" of the side panels 2 and 4 to an inclination angle of about 0°. Following this teaching, the skilled person would neither modify the top wall surface 3T (as it had already sufficient space for the opening device) nor the width of the sealing band 3TP, but he would simply realise less inclined bend lines "e" in the side panels 2 and 4. Less inclined bend lines "e" on the side panels 2 and 4 would induce lowering of the level of the bend line "e" on the rear panel 1 and so enlarging of the top wall surface 1T. Due to the additional material in the top wall surface 1T an additional bend line would be automatically generated (or would anyway be known to the person skilled in the art) when folding the blank to build the package having a configuration similar to the one shown in figure 3(b), but with a less inclined top wall 3T. The corresponding strip on the top wall surface 3T lying between said bend line and the sealing band 3TP would then define a non-sealed flat striplike auxiliary portion according to the characterising part of claim 1.
3.1.2 The Board cannot follow this argument for the following reasons:

3.1.3 The object of the invention disclosed in D4/T4 is the provision of a package for liquids "which can be provided with a pourer having a relatively large opening device and having excellent performance as regards disposal for environmental relief", see last sentence of paragraph 0003 of D4/T4. It can therefore be accepted that the problem as defined in the patent is already solved in D4/T4: to maximise the space for the pourer.

3.1.4 The package of claim 1 differs from D4/T4's package by the characterising features. The effect of these is, as argued by the appellant, a reduction of the headspace.

3.1.5 The Board notes, in the first place, that D4/T4 is entirely silent about the headspace or any problems associated with it. It is also not "indifferent" regarding the angle the top wall needs to make. To the contrary, it requires that relatively pronounced angle for enlarging the space available for the pourer.

3.1.6 The argument of the appellant requires technically to lower the bend line "e" in the rear panel 1. This, however, goes against the teaching in D4/T4 that the inclination of the top wall is necessary to provide sufficient space to receive the pourer, by moving the bend line "e" in the front panel 3 downward. For the Board, this already means that the skilled person, starting from D4/T4's package and method, would not even consider such a measure.
3.1.7 Secondly, it requires the provision of a further bend line in the top wall 1T and in the sides 2T and 4T (partly), for which there is no indication available in D4/T4 either.

3.1.8 For the above-mentioned reasons the Board considers that the teaching of D4/T4 considered alone cannot lead the person skilled in the art to the subject-matter of claim 1 and therefore it cannot render the subject-matter of claim 1 obvious.

3.2 Combination of the teachings of D4/T4 and D3 (and D5)

3.2.1 D3 discloses a symmetrical gable top package, which is lacking an opening device and which can have two different configurations:
- a gable top configuration for normal use, as shown in figure 4 and in figure 5 in dotted line; and
- a flattened top configuration for transportation, as shown in figure 5 in continuous line.

The package top is flattened only for transportation but is raised again during normal use and in particular at the moment of opening.

3.2.2 In order to obtain flattening of the gable top the packages are forced by a push plate 38 to pass through a tunnel 42 having a slanted top plate 44 converging downwards in the advancing direction of the packages (arrow 36 of figure 2); as indicated in column 3, lines 33 to 37, of D3, "at the outlet end of the tunnel, i.e. to the left as viewed in Fig. 2 the vertical distance between converging plate 44 and surface 42 is only slightly in excess of the vertical dimension of the
side container panels is 14, 18". Under these conditions, an opening device cannot be present on the package's top wall, otherwise it would not be able to pass through the tunnel 42.

3.2.3 Therefore, even through the additional bend line 30 of the package of D3 could ease downward folding of the gable top, D3 does not present the skilled person with a solution which he would adopt in the package and method of D4/T4, as it would require to dispense with the opening device, exactly the feature for which the package of D4/T4 needed more space on the top wall.

The Board, contrary to the appellant, also does not see any indication in D3 that the additional bend line 30 can be isolated from the other features of the package disclosed therein.

3.2.4 The fact that D5 documents that both a gable top package with an opening device on its top wall and a parallelepiped-shaped package having also an opening device on its top wall were well known to the person skilled in the art before the filing date of the patent in suit, has no influence on the assessment of the teaching of D3 by the Board, as the solution offered by the latter to the problem of reducing the stacking volume of a plurality of gable top packages always requires the absence of an opening device positioned on that top wall. Furthermore, D5 does not address the problem of reducing the package head space.

3.2.5 For the above mentioned reasons the Board considers that the person skilled in the art would not have
combined the teachings of D4/T4 and D3 (even together with the teaching D5).

3.3 Combination of the teachings of D4/T4 and D2

3.3.1 The appellant argues further that the person skilled in the art starting from the package according to figure 3(b) of D4/T4 and seeking to solve the problem of reducing the head space of said package would take into consideration the teaching derivable from the packages depicted in figures 5 and 12 of D2. Said figures show parallelepiped packages having each a non-sealed flat striplike portion on the top wall of said packages extending between the bend lines 15, 37 and the sealing bands 13, 35, whereby said portion would increase the portion of the respective top wall available for an opening device. By applying said teaching of D2 to the package according to figure 3(b) of D4/T4 the person skilled in the art would arrive at the package according to claim 1 without the exercise of an inventive activity.

3.3.2 The Board cannot follow the above-mentioned appellant's argument for the following reasons:

The Board notes firstly that D2 discloses a package without an opening device. It notes further that D2 does not address the problem of reducing the headspace of a package. Finally, the manner in which the blank is folded into a package is different from the manner in which the gable top package of D4/T4 is produced.

3.3.3 In view of the above, the Board considers that the person skilled in the art is not prompted to take into
consideration the teaching of D2 in order to solve the problem of reducing the head space of a package according to figure 3(b) of D4/T4.

3.4 From the above the Board concludes that the subject-matter of claim 1 involves an inventive step and meets therefore the requirements of Article 56 EPC.

4. Claim 10: Novelty and inventive step – Articles 54 and 56 EPC

Since, as also acknowledged by the parties, the arguments concerning novelty and inventive step of the subject-matter of the product claim 1 are accordingly applicable to the subject-matter of the method claim 10, also the subject-matter of claim 10 meets the requirements of Articles 54 and 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  The Chairman:

G. Nachtigall  H. Meinders