Datasheet for the decision of 13 December 2007

Case Number: T 0031/06 - 3.2.07
Application Number: 00912519.6
Publication Number: 1161382
IPC: B65D 65/46
Language of the proceedings: EN

Title of invention: Water soluble package

Patentee: UNILEVER PLC, et al

Opponents: Reckitt Benckiser (UK) Limited
The Procter & Gamble Company

Headword:

Relevant legal provisions:
EPC Art. 54, 56, 84
EPC R. 115(2)

Keyword:
"Novelty (all requests) - yes"
"Inventive step (main and first to fourth auxiliary request) - no"
"Clarity (fifth auxiliary request) - no"
"Clarity of disclaimer (sixth to tenth auxiliary requests) - no"

Decisions cited:

Catchword:
Case Number: T 0031/06 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 13 December 2007

Appellant: UNILEVER PLC
(Patent Proprietor)
Unilever House
Blackfriars
London EC4P 4BQ (GB)
UNILEVER N.V.
Weena 455
NL-3013 AL Rotterdam (NL)

Representative: Elliott, Peter William
Unilever Patent Group
Colworth House
Sharnbrook
Bedford MK44 1LQ (GB)

Respondent I: Reckitt Benckiser (UK) Limited
(Opponent I)
103-105 Bath Road
Slough
Berks SL1 3UH (GB)

Representative: Brown, Andrew Stephen
Reckitt Benckiser plc
Group Patents Department
Dansom Lane
Hull HU8 7DS (GB)

Respondent II: The Procter & Gamble Company
(Opponent II)
One Procter & Gamble Plaza
Cincinnati
Ohio 45202 (US)

Representative: Samuels, Lucy Alice
Gill Jennings & Every LLP
Broadgate House
7 Eldon Street
London EC2M 7LH (GB)
Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 13 December 2005 revoking European patent No. 1161382 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: H. Meinders
Members: P. O'Reilly
          E. Dufrasne
Summary of Facts and Submissions

I. Oppositions were filed against European patent No. 1 161 382 as a whole based on Article 100(a) EPC (lack of novelty and lack of inventive step).

The opposition division decided to revoke the patent. The opposition division held that the subject-matter of claim 1 of each of the main and first auxiliary requests was not novel, and that the subject-matter of claim 1 of each of the second and third auxiliary requests did not involve an inventive step.

II. The appellant (proprietor) filed an appeal against that decision.

III. Oral proceedings were held before the Board on 13 December 2007. The appellant did not appear at the oral proceedings. In a telephone conversation with the registrar of the Board the representative of the appellant stated that she had decided not to attend the oral proceedings, but had forgotten to inform the Board of this intention.

IV. The appellant requested in the written part of the appeal proceedings that the decision under appeal be set aside and that the patent be maintained unamended (main request). Alternatively, the appellant requested that the patent should be maintained in amended form on the basis of one of the ten auxiliary requests filed with the appeal grounds dated 24 April 2006.

Respondents I and II (Opponents I and II respectively) each requested that the appeal be dismissed.
V. Claim 1 of the main request (patent as granted) read(s) as follows:

"1. A water soluble package containing a fluid substance for release on dissolution of the package, characterised in that the package has a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the package is generally dome shaped."

Claim 1 of the first auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold):

"1. A water soluble package containing a fluid substance for release on dissolution of the package, characterised in that the package has a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the package is generally dome shaped, and in that the maximum height of the body wall above the base wall is less than or equal to the maximum width of the base wall."
Claim 1 of the second auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold or struck through):

"1. A water soluble package containing a **domestic consumer** fluid substance for release on dissolution of the package, characterised in that the package has a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the package is being generally dome shaped, and in that the fluid substance contained within the package is a liquid having a viscosity of from 100 to 1000 centipoise when measured at 20°C 105s⁻¹."

Claim 1 of the third auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold or struck through):

"1. A water soluble package containing a **domestic consumer** fluid substance for release on dissolution of the package, characterised in that the package has **having** a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the
package is generally dome shaped, characterised in that the base wall is generally circular or generally oval."

Claim 1 of the fourth auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold or struck through):

"1. A water soluble package containing a fluid substance for release on dissolution of the package, characterised in that wherein the package has a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the package is generally dome shaped, characterised in that the base wall is generally flat, and is an external wall, contacting the fluid substance on a single side."

Claim 1 of the fifth auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold or struck through):

"1. A water soluble package containing a fluid substance for release on dissolution of the package, characterised in that wherein the package has a body portion for containing the substance comprising a first sheet of a water soluble material thermoformed to form a body wall of the body portion, and a second sheet of water soluble material superposed on the first sheet and sealed thereto along a continuous region of the superposed sheets to form a base wall of the body portion, and in that the body portion of the package is generally dome shaped, characterised in that the base wall is generally flat, and is an external wall, contacting the fluid substance on a single side."
portion, and in that the body portion of the package is
generally dome shaped, characterised in that the base
wall is generally flat and is an external wall,
contacting the fluid substance on a single side, and
that at the point where the body wall meets the side
wall, the body wall is substantially convex."

The sixth to tenth auxiliary requests correspond to the
first to fifth auxiliary requests respectively though in
each case with the addition to the respective claim 1 of
the wording: ", with the exception of packages having a
rectangular shape shown at paragraph 27".

VI. The documents cited in the present decision are the
following:

D1: GB-A-2 305 931
D2: EP-A-0 608 910
D5: Handbook of Package Engineering, Second Edition,
   1984, pages 8-70 to 8-75
D8: WO-A-89/04282

VII. The arguments of the appellant relevant to this decision
as given in its grounds of appeal may be summarised as
follows:
(i) The expression "dome shaped" is clear and excludes shapes such as that shown in paragraph [0027] of the patent in suit and in figure 1 of D7.

(ii) The subject-matter of claim 1 of the main request is novel. D7 does not disclose a dome shape in figure 1 and figure 2 only shows a two-dimensional shape. In D5 the word "dome" is used but with a different meaning.

The subject-matter of the claim 1 involves an inventive step. The skilled person would not combine the teaching of documents D7 and D4 as they are in different technical fields and there is no teaching in D4 that a dome shape will improve resilience. The same applies to D1, D3 and D8.

(iii) The subject-matter of claim 1 of the first auxiliary request is novel and inventive. There is no disclosure in D7 of any dimension and no motivation for the skilled person to select the dimensions specified in the claim.

(iv) The subject-matter of claim 1 of the second auxiliary request is novel and inventive. The skilled person would not combine the teachings of D7 which relates to pesticides, and D12 which relates to laundry products because of their differing fields.

(v) The subject-matter of claim 1 of the third auxiliary request is novel and inventive. The circular and oval shapes avoid corners. D1 and D8
are silent regarding the shape of the base. The skilled person would not combine the teachings of D7 with D1 or D8.

(vi) The subject-matter of claim 1 of the fourth auxiliary request is novel and inventive. D7 requires a three-wall construction whereas in accordance with this claim there are only two outer walls.

(vii) The extra features of claim 1 of the fifth auxiliary request are disclosed in figures 1a to 1d of the patent in suit. The subject-matter of this claim is novel and inventive. The extra features are not disclosed in D7 nor are they suggested by D7.

(viii) Auxiliary requests six to ten correspond respectively to auxiliary requests one to five though with a disclaimer added. The disclaimer disclaims the shape shown in paragraph [0027] of the patent in suit. It is disclosed in paragraphs [0027] to [0029] of the patent in suit and in the corresponding part of the application as originally filed. The disclaimer further clarifies the distinction over the prior art.

VIII. The arguments of respondent I were given at the oral proceedings before the Board and may be summarised as follows:

(i) This respondent agrees with the arguments of respondent II.
IX. Respondent II submitted the following arguments in its submissions of 14 September 2006 and 17 August 2007, and explained them in the oral proceedings before the Board. The arguments therefrom relevant for the decision may be summarised as follows:

(i) The expression "dome shaped" must be seen as meaning "any raised portion".

The subject-matter of claim 1 of the main request lacks novelty over the embodiments of each of figures 1 and 2 of D7. The shape of the package in figure 1 is dome shaped as interpreted above. Even in two dimensions the skilled person would understand that the shape of the package shown in figure 2 is dome shaped. Also, D1, D2 and D8 take away the novelty of the package of claims 1 and 11.

Even if it were considered to be novel the subject-matter of claim 1 of the main request lacks an inventive step starting from any of D1, D2, D7 or D8.

(ii) The subject-matter of claim 1 of the first auxiliary request lacks an inventive step. The appellant has not indicated any problem solved by the extra feature which is known from each of D1, D7 (figure 2) and D8. Moreover, D5 indicates that the depth of draw should be less than the width of the cavity.

(iii) The subject-matter of claim 1 of the second auxiliary request lacks an inventive step. D7 concerns packages for pesticides which can be used
in a garden and hence are a "domestic consumer product". There is no technical effect achieved by the specified viscosity range which is no more than a definition of a liquid. This viscosity range is disclosed in D12 which also concerns a domestic consumer product.

(iv) The subject-matter of claim 1 of the third auxiliary request lacks an inventive step. According to the appellant generally circular shapes ensure that there are no corners. In D6, Table 7.9 it is stated that corner radii should be increased to avoid cracking so that the adoption of a circular shape is obvious to the skilled person.

(v) The subject-matter of claim 1 of the fourth auxiliary request lacks an inventive step. There is no evidence that the external wall contacting the fluid on only one side would increase package strength. This feature is moreover already disclosed in D7 (figure 1) as well as in D3, D4 and D5. The provision of a flat base wall has no demonstrated effect. In any case, the feature is known from each of D3, D4, D5 and D7 (figure 1).

(vi) Amongst other things, claim 1 of the fifth auxiliary request lacks clarity. The amendments made to these claims refer to "substantially convex". It is not, however, clear from which direction the package is being considered when identifying this shape. The scope of this claim is thus not clearly defined as required by Article 84 EPC.
(vii) Amongst other things, the claim 1 of each of the sixth to tenth auxiliary requests lacks clarity. The claims are directed to a three-dimensional shape, i.e. a dome shape, but the disclaimer which has been added disclaims a two-dimensional shape.

X. In a communication accompanying the summons to oral proceedings the Board set out its provisional opinion. In the provisional opinion the Board made reference to the relevance of D5 and D6 with respect to the question of inventive step of claim 1 of the main request.

Reasons for the Decision

1. Absence of representative at the oral proceedings

Although duly summoned the appellant was not represented at the oral proceedings. The representative of the appellant had decided not to attend the oral proceedings (see point III above). In accordance with Rule 115(2) EPC the oral proceedings were held in the absence of the appellant.

Main request

2. Novelty

2.1 The respondents alleged a lack of novelty in view of each of D1, D2, D7 and D8.
2.2 There were two critical points regarding the interpretation of claim 1 which affect the question of novelty.

The first point is the feature that the first sheet is thermoformed to form a body wall of the body portion. The respondents argue that this feature should not be taken into consideration for assessing novelty of a product claim since it was only related to the method of making the product which, however, would not produce a corresponding property in the final product.

The Board cannot agree with this argument of the respondents since the respondents did not produce any evidence to back it up. The mere allegation that a specified process feature in a claim will not produce any inherent distinguishing properties of the final product is not sufficient to cause the feature to be disregarded. Since there was no evidence to suggest that thermoforming would not result in an inherent property of the resulting product the Board could not agree with the respondents on this point.

The second point is the interpretation of the feature "generally dome shaped". The respondents considered that this feature would mean "any raised portion" (for example the submission of respondent II dated 14 September 2006, paragraph 2.8). Also they considered that the cube and triangle shapes referred to in paragraphs [0039], [0039] and [0040] of the patent in suit were examples of the invention, which showed that "dome shaped" is a completely general feature.
The Board cannot agree with the interpretation of the respondents on this point. Paragraphs [0024] to [0031] of the patent in suit give a description of film thinning during thermoforming. In paragraph [0027] of the patent in suit a two-dimensional rectangular shape is shown with measuring points A to E (for film thickness). In paragraph [0029] a reference is made to a dome shaped package which has measuring points of only A and E. In paragraph [0030] there is a table of results of measurement at points A and E for two shapes each specified as "Dome" and at points A to E for two shapes specified as "Triangle" and "Cube" respectively. In paragraph [0031] the conclusion is reached that for the dome shape thinning is less than the others and is uniform.

The description in paragraphs [0032] to [0040] gives a description of impact testing. The same four packages were tested as for the thinning test. The result is given in paragraph [0040] that the impact resistance of the "Dome" is greater than that of the "Cube" or "Triangle" (identified in paragraph [0037] as meaning triangular pyramid). From this it is quite clear that a dome shape is being contrasted - favourably - with a cube or triangular pyramid shape. The skilled reader would, hence, conclude that these latter shapes are not to be considered as falling within the scope of the claimed expression "generally domed shaped". The respondents referred to the drawings of the patent in suit which show in figures 2 to 5 square, oval, triangular and rectangular base wall shapes. These embodiments however only deal with the base wall shape and not the three-dimensional shape. Figure 2 for instance shows a package with a square base wall with
steeply inwardly curved side walls which contrast with the vertical side walls to be expected from a cube shape. The Board can agree that the expression "generally domed shaped" can have a broad meaning. However, the Board cannot go so far as to endorse the meaning desired by the respondents, i.e. "any raised portion". In particular, the expression excludes three-dimensional cube and triangular pyramid shapes having distinct edges.

The respondents sought to interpret the claim using D5. D5 is an extract from a handbook on package engineering. With regard to thermoforming there is indeed a reference therein to "the dome" on page 8-73 and to "THICK DOME" and "THIN DOME" in figure 24. However, the document makes no reference to dome being an indication of shape. The reference to dome could be interpreted to mean the part of the die which contrasts with the flange. D5 is a general document and the dies are depicted in figure 24 in two dimensions to explain how film thickness varies across the die. The skilled person would not, therefore, consider that the document was using the term "dome" to identify a shape but rather that it is used to identify a position. The Board therefore considers that this document does not lead to a different interpretation of the expression "generally domed shaped" to that obtained when the patent in suit is read.

2.3 The novelty arguments of the respondents with respect to D1 relied upon "thermoforming" not being a limiting feature of the claim. The Board considers that it is a limiting feature and that this feature is not disclosed in D1.
The novelty arguments of the respondents with respect to D2 relied upon "generally domed shaped" being interpreted as "any raised portion". Since the Board considers that this is not the case and D2 does not specify any shape this feature is not disclosed in D2.

The novelty arguments of the respondents with respect to D7 (figure 1) relied upon "generally domed shaped" being interpreted as including rectangular shapes. Since the Board considers that this is not the case and D7 shows in two dimensions only a rectangular shape with edges it is considered that this feature is not disclosed in D7 (figure 1).

The novelty arguments of the respondents with respect to D7 (figure 2) relied upon "thermoforming" not being a limiting feature of the claim. The Board considers that it is a limiting feature and that this feature is not disclosed in D7 (figure 2).

The novelty arguments of the respondents with respect to D8 relied upon "thermoforming" not being a limiting feature of the claim. The Board considers that it is a limiting feature and that this feature is not disclosed in D8.

Independent process claim 11 contains features which correspond to the product features of claim 1 so that the same considerations apply to this claim as to claim 1. Likewise, claim 14 which is directed to a washing process using the package of claim 1 is subject to the same considerations as apply to claim 1 in this respect.
2.4 Therefore, the subject-matter of the claims 1, 11 and 14 of the main request is novel in the sense of Article 54 EPC.

3. Inventive step

3.1 The respondents offered a number of attacks against claim 1 based on differing combinations of documents and with reference to general knowledge. Only one of these attacks needs to be considered here.

3.2 Starting from D7 (figure 1) the distinguishing feature of claim 1 is that the body portion is "generally domed shaped".

The problem to be solved is to improve the rupture resistance (see paragraph [0006] of the patent in suit). The Board notes that the respondents offered an alternative argument that the problem is not solved over the whole scope of the claim so that the problem could be seen as to find an alternative solution. That alternative argument need not be considered as will become apparent below.

From D5 it is generally known that small radii should be avoided when thermoforming (see page 8-73, last paragraph). D6, which is an extract from a book on thermoforming, refers to increasing radii as a solution to corner cracking in thermoforming.

It is therefore clear to the skilled person wishing to improve the rupture resistance of the package disclosed in D7 (figure 1) that the situation at the edges should be improved by increasing radii. When the edge radii of
the shape depicted in D7 (figure 1) are increased then a dome shape is approached. The largest possible increase in radii is achieved by a dome shape. Such a shape already appears in the prior art in D1, D3, D4, D7 (figure 2) and D8. The dome shape is not disclosed in these documents as a shape to increase rupture resistance but these documents show that it is a shape that is well known in the art, so there is no prejudice against using this shape. The skilled person would thus arrive in an obvious manner at the subject-matter of claim 1 when solving the problem.

3.3 Therefore, the subject-matter of claim 1 of the main request does not involve an inventive step in the sense of Article 56 EPC.

First auxiliary request

4. Inventive step

4.1 Claim 1 of the first auxiliary request contains the extra feature, compared to claim 1 of the main request, that the maximum height of the body wall above the base wall is less than or equal to the maximum width of the base wall.

The appellant argued that the skilled person had no motivation to select the relative dimensions given by the feature. The respondents argued that the feature does not solve any problem so that its provision would not involve an inventive step. The respondents further referred to D5 which indicates that the depth of draw should be less than the depth of the cavity.
The Board agrees with the respondents. There is no indication in the description of the patent in suit or in the arguments of the appellant that the feature has any technical effect or solves any problem. The feature appears in the schematic drawings of D1, D7 (figure 2) and D8. Whilst dimensions may not be derived from schematic drawings the skilled person would at least be aware of this general shape from these documents. The feature is, in particular, suggested by D5 as being generally desirable in thermoforming.

4.2 Therefore, the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step in the sense of Article 56 EPC.

Second auxiliary request

5. Inventive step

5.1 Claim 1 of the second auxiliary request contains the extra features, compared to claim 1 of the main request, that the fluid is a domestic consumer fluid substance and that it is a liquid with a viscosity in a particular range of values.

5.2 The appellant argued that D7 concerned agricultural products so that the skilled person considering domestic consumer products would not consider its teaching. The respondents argued that D7 concerned pesticides which are domestic consumer products since they may be used in a private garden. In this respect the patent on page 3, lines 25 to 28 makes it clear that domestic consumer products are not limited to laundry products but include
disinfectants, personal care products and the like, so that the expression can be judged broadly.

The Board agrees with the respondents in this respect. Pesticides are used in private gardens and on balconies by domestic consumers so that D7 falls into the category of a domestic consumer product.

5.3 With respect to the range of viscosity values the appellant argued that the dome shape allows a liquid of low viscosity to be used whereas D7 suggested increasing the viscosity. The respondents argued that the specified viscosity is just that of a liquid.

The Board agrees with the respondents in this respect. The patent in suit on page 3, lines 20 to 25 states that if the substance is a liquid then it preferably has the specified viscosity range. There is no indication that this range of viscosity values is out of the ordinary or has any special effects. D7 in column 3, lines 26 and 27 explains that the pesticide may be in liquid, solid or gel form. When it is in a liquid form there is no indication that it should have a viscosity outside the range of values specified in the claim.

5.4 Therefore, the subject-matter of claim 1 of the second auxiliary request does not involve an inventive step in the sense of Article 56 EPC.
Third auxiliary request

6. Inventive step

6.1 Claim 1 of the third auxiliary request contains the extra features, compared to claim 1 of the main request, that the fluid substance is a domestic consumer fluid and that the base wall is generally circular or generally oval.

With respect to the feature of the domestic consumer fluid substance the Board would refer to its comments made above concerning claim 1 of the second auxiliary request.

With respect to the claimed shapes of the base wall the appellant argued that the claimed shapes avoid corners. The respondents argued that the problem to be solved was the weakness at corners. The respondents further argued it was known from D5 and D6 to increase the radii of corners in order to solve this problem and that as these radii are increased you arrive at a circular shape.

The Board agrees with the respondents in this respect. The increase in the corner radii which the skilled person would make would also change the shape of the base wall towards a circular shape.

6.2 Therefore, the subject-matter of claim 1 of the third auxiliary request does not involve an inventive step in the sense of Article 56 EPC.
Fourth auxiliary request

7. Inventive step

7.1 Claim 1 of the fourth auxiliary request adds the features, compared to claim 1 of the main request, that the base wall is generally flat, and is an external wall contacting the fluid substance on a single side.

With respect to the feature of the base wall being flat the appellant argued without any further explanation that this was not disclosed in the D5, D7 or D9. The respondents argued that this is the case in D7 (figure 1).

The Board agrees with the respondents in this respect.

With respect to the feature that the base wall is an external wall contacting the fluid substance on a single side the appellant argued that the claim defined a two-walled package whereas the package disclosed in D7 (figure 1) is a more complicated three-walled package. The respondents argued that the base wall 6 of the package of D7 is external and contacts fluid on only one side.

The Board agrees with the respondents in this respect. As argued by the appellant the claim specifies (at least) two external walls. However, there is nothing in the claim to eliminate the possibility of a further interior wall such as disclosed in D7 (figure 1). Since this extra feature is already disclosed in the nearest prior art document it cannot contribute to an inventive step.
7.2 Therefore, the subject-matter of claim 1 of the fourth auxiliary request does not involve an inventive step in the sense of Article 56 EPC.

Fifth auxiliary request

8. Clarity

8.1 Compared to claim 1 of the fourth auxiliary request claim 1 of the fifth auxiliary request contains the extra feature that at the point where the body wall meets the side wall, the body wall is "substantially convex".

The appellant made no comment as to the clarity of this amended claim when filing it with the appeal grounds. The respondents have attacked the claim, amongst other grounds, on the basis that it is not clear whether the statement that the body wall is substantially convex is to be taken viewed from the inside or viewed from the outside of the package. The difference is important since the construction of the package will be quite different in the two differing interpretations. The appellant alleged that the feature is disclosed in figures 1a to 1d. However, in those drawings, which relate to a circular base wall, the body wall has curvature in more than one dimension so that they do not help to interpret this feature of claim 1.

8.2 The Board concludes that claim 1 of the fifth auxiliary request is not clear in the sense of Article 84 EPC.
Sixth to tenth auxiliary requests

9. **Clarity**

9.1 Compared to claim 1 of each of the first to fifth auxiliary requests claim 1 of each of the sixth to tenth auxiliary requests respectively contains the extra feature that packages having a rectangular shape shown at paragraph 27 are excepted.

The appellant made no comment as to the clarity of the amended claims when filing them with the appeal grounds. The respondents have attacked these claims amongst other grounds on the basis that the shape mentioned in paragraph 27 and now disclaimed is not clearly defined.

The amendment is in the form of a disclaimer and it is the package shown in paragraph 27 which is disclaimed. The shape which is claimed in claim 1 of each of these requests is a three-dimensional shape i.e. "dome shaped". The shape shown in paragraph 27 of the patent is only shown in cross-section, i.e. in two dimensions. A claim which defines a three-dimensional shape but then excludes a two-dimensional shape is unclear since it is three-dimensional shapes which have to be excluded if the claim is to be clear.

9.2 The Board concludes that claim 1 of each of the sixth to tenth auxiliary requests is not clear in the sense of Article 84 EPC.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Nachtigall H. Meinders