Datasheet for the decision
of 3 November 2011

Case Number: T 0800/09 - 3.3.09
Application Number: 03076936.8
Publication Number: 1491101
IPC: A23L 1/40, A23P 1/02
Language of the proceedings: EN

Title of invention:
Marbled bouillon, broth, soup, sauce or seasoning cube and process for preparing the same

Applicants:
Unilever N.V.
Unilever PLC

Opponent:
NESTEC S.A.

Headword: -

Relevant legal provisions:
EPC Art. 56

Keyword:
"Main request, auxiliary requests I, II: Inventive step (no)"
"Auxiliary request III: not admitted"

Decisions cited: -

Catchword: -
Case Number: T 0800/09 - 3.3.09

DECISION
of the Technical Board of Appeal 3.3.09
of 3 November 2011

Appellant: NESTEC S.A.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
3 February 2009 concerning maintenance of
European patent No. 1491101 in amended form.

Composition of the Board:

Chairman: W. Sieber
Members: W. Ehrenreich
R. Menapace
Summary of Facts and Submissions

I. Mention of the grant of European patent No. 1 491 101 in respect of European patent application No. 03 076 936.8, filed on 23 June 2003 in the name of Unilever N.V. and Unilever PLC, was announced on 6 December 2006 in Bulletin 2006/49.

The patent was granted with 7 claims. Claim 1 read as follows:

"1. Process for preparing bouillon, broth, soup, sauce or seasoning cube comprising two phases of ingredients 1 and 2, wherein fraction 1 is in the form of granules, and which process comprises the steps of:

a. mixing granules fraction 1 with ingredients fraction 2.
b. compressing a portion of mixed granules 1 and fraction 2 to a cube,

wherein ingredients fraction 1 and fraction 2 have different colours, wherein at least 80% (wt) of the granules have a diameter of 0.5-10 mm, and wherein the fractions are present in a minimum amount of 5% (wt)."

Independent claim 2 related to the same process as defined in claim 1 except that the wording "wherein fraction 1 is in the form of granules" was replaced by the process step:

"a. preparing granules of ingredients fraction 1",

and steps "a." and "b." were renamed to read "b." and "c.".
Claims 3 to 7 were dependent claims.

II. Opposition was filed by Nestec S.A. on 5 September 2007 on the grounds of Articles 100(a) (lack of novelty, lack of inventive step), 100(b) and 100(c) EPC. The opponent inter alia referred to the following documents:

D1 EP-A 1401 295;
D2 EP-A 1401 296;
D3 WO-A 02/069742;
D8 CA-C 2 308 929.

III. With its interlocutory decision announced orally on 18 December 2008 and issued in writing on 3 February 2009 the opposition division maintained the patent on the basis of auxiliary request I submitted with the letter dated 15 April 2008 as "Main Request" and made auxiliary request I with the letter dated 17 October 2008. Independent claims 1 and 2 of this request differed from claims 1 and 2 as granted by the reformulation of the feature "diameter of 0.5 and 10 mm" into "diameter of between 0.5 and 10 mm" and of the feature "wherein the fractions are present in a minimum amount of 5% (wt)" into "wherein each of the fractions are present in a minimum amount of 5% (wt)" (emphases added).

In view of the above (underlined) amendments to the claims of the auxiliary request the opposition division no longer saw a non-compliance with Article 123(2) EPC.

Concerning the issue of novelty it was the opposition division's view that neither of the relevant documents D1, D2 and D8 unambiguously disclosed granules which
should make at least 5% by weight of the composition and of which at least 80% have a diameter of between 0.5 and 10 mm.

The opposition division considered D8 representative of the closest prior art for the assessment of inventive step from which, in its view, the claimed process differed in the percentage portion of the granules of fraction 1 with a certain diameter range. The opposition division argued that the examples of the patent showed that the granules having the claimed range of diameter ensured a marble-like appearance of the cubes resulting from the claimed process. As D8 did not focus on the optical appearance of bouillon cubes, there was no incentive for a skilled person to choose the claimed parameters for the granules used in D8 in order to arrive at cubes with a marbled appearance.

As to the opponent's objection under Article 100(b) EPC that the claims embraced the combination of two differently water-based granules, which constituted non-working embodiments as set out in paragraph [0024] of the patent specification, the opposition argued that the same paragraph made clear that this problem could be overcome by a gluing agent and that it was common knowledge for a skilled person to find suitable gluing agents in the field of bouillon cubes.

With regard to the further objection concerning the lack of a definition of the term "different colour" it was the opposition division's view that this term related to different colours which had to be distinguishable by the ordinary user of soup cubes without technical equipment.
IV. Notice of appeal against the decision was filed by the opponent (hereinafter: appellant) on 1 April 2009. The prescribed fee was paid on the same day. The statement of the grounds of appeal was received on 3 June 2009. Enclosed with the grounds of appeal were documents A3 to A6.

The appellant maintained its objections of lack of novelty and lack of inventive step and reiterated its position that the invention was insufficiently disclosed because it embraced non-working embodiments and because the essential feature of a "different colour" for fractions 1 and 2 was not further defined in claim 1.

V. In its letter of response to the grounds of appeal dated 20 November 2009 the patent proprietor (hereinafter: respondent) defended the maintenance of the patent on the basis of the claims as allowed by the opposition division and filed two sets of claims as bases for auxiliary requests I and II.

In claims 1 and 2 of auxiliary request I the diameter of the granules in feature (d) is limited to a range between 1 and 10 mm.

Claims 1 and 2 of auxiliary request II require, in addition to claims 1 and 2 of the main request, that the granules of fraction 1 are fat-based granules.

VI. Further arguments were provided by the appellant with the letter dated 24 March 2010, wherein inter alia objections under Article 84 were raised against the
introduction of the feature into claims 1 and 2 of auxiliary request II that the granules are "fat-based granules".

VII. The respondent filed, with its letter dated 7 September 2011, a further set of claims as basis for auxiliary request III.

VIII. On 3 November 2011 oral proceedings were held before the board during which the issues of sufficiency of disclosure, clarity, novelty and inventive step of the subject-matter of the main request and auxiliary requests I and II were discussed. Auxiliary request III was replaced during the oral proceedings by a new auxiliary request III. This new auxiliary request III was not admitted into the proceedings.

IX. Concerning inventive step the appellant adopted two approaches, one starting from D8 as closest prior art, the relevant arguments as forwarded in writing and orally in support of that approach being essentially the following:

Examples 2 and 3 of D8 described a process for the preparation of a bouillon cube by mixing a granule fraction 1 with ingredients fraction 2, the latter mainly containing sodium bicarbonate and salt, which were white in colour, and thereafter compressing the mixture to form a cube. The presence of spices and a chicken emulsion in granule fraction 1 gave this fraction a colour which was clearly different from white. Fractions 1 and 2 were therefore different in colour.
The granules used in example 2 were "fines" with a diameter smaller than 1.7 mm and the granules used in example 3 had a diameter of less than 4.75 mm. Both values were well in the claimed range of between 0.5 (1) and 10 mm.

The claimed process differed therefrom only in that the percentage of granules within a certain diameter range was defined for fraction 1. With regard to the desired achievement of a marbled appearance of the bouillon cubes resulting from the claimed process, the selection of granules with a certain diameter range was, however, arbitrary. This all the more, as the experimental report provided with the declaration of Astrid Huber, A5, showed that a marbled appearance of bouillon cubes could also be obtained by processing granules of a diameter below the claimed range. It had therefore to be assumed that a marbled pattern was an inherent property of the cubes resulting from examples 2 and 3 of D8.

X. The counterarguments of the respondent may be summarized as follows:

The requirement of a different colour of the granules of fraction 1 and the ingredients of fraction 2, as well as the presence of a certain percentage portion of granules with a defined diameter range was essential for achieving the desired marble-like effect for the cubes resulting from the claimed process.

There was no pointer in D8 relating to the appearance of bouillon cubes. Neither in the description nor in the examples 2/3 of D8 the colour of the cubes or the
importance of the granule size for achieving optical effects was dealt with. There was thus no incentive for the skilled person to modify the colour of the fractions and the diameter of the granules in the examples of D8 in order to arrive at cubes with a marbled appearance.

XI. The appellant requested that the decision under appeal be set aside and that the patent be revoked. It further requested that auxiliary request III filed during the oral proceedings not be admitted into the proceedings.

XII. The respondent requested that the appeal be dismissed (main request) or, alternatively, the decision under appeal be set aside and the patent be maintained on the basis of auxiliary request I or II filed with the letter dated 20 November 2009, or on the basis of auxiliary request III filed during the oral proceedings.

Reasons for the Decision

1. The appeal is admissible.

2. Inventive step - main request

2.1 The patent is concerned with the preparation of cubes for preparing bouillon, broth, soup, sauce or for use as seasoning. It is the aim of the invention to provide a process which results in cubes having an attractive appearance, ie a marbled pattern ([0001], [0009]).

According to claim 1 of the main request this aim is achieved by a process with the steps
(a) granules of fraction 1 are mixed with ingredients of fraction 2;
(b) the mixture obtained in (a) is compressed to a cube; whereby
(c) ingredients of fractions 1 and 2 have different colours;
(d1) fraction 1 is in the form of granules;
(d2) of which at least 80% by weight have a diameter of between 0.5 and 10 mm;
(e) each of the fractions is present in a minimum amount of 5% by weight.

2.2 Document D8 relates to the preparation of bouillon articles by forming a bouillon precursor particulate mixture from bouillon-forming ingredients and shaping a blend including the above ingredients by pressing it (page 2, lines 5-11 and page 2a, lines 4-10). The final article can have the shape of a cube (page 4, lines 24-27). The document therefore lies in the technical field of the claimed invention and is regarded as the closest prior art.

2.2.1 According to example 2 of D8 a pre-blended granulated first fraction is mixed with ingredients of a second fraction. After mixing further ingredients (water, anti-caking agent) into the blend, the final blend is compressed to form a cube. The process of example 2 of D8 has therefore the process steps (a) and (b) in common with the claimed process.

2.2.2 Essential ingredients of the dried pre-blended first granulated fraction used in example 2 of D8 are a chicken emulsion (10-20% by weight) and a pre-blended
dry bouillon (36-40% by weight) including 25-45% spices. Without any doubt, the colours of a chicken emulsion and the spices are different from colourless or white. Consequently, the granulated first fraction is coloured. The main ingredients of the second fraction are white (sodium bicarbonate, 5-9% by weight; salt, 2-6% by weight). Although it cannot be exactly determined whether or not the balance (dry spices, flavoured salts, powders) constitutes a third, eventually coloured fraction (which is not excluded by the claimed process), at least the first and second fraction are different in colour. Feature (c) of claim 1 "different colour" is therefore also fulfilled in example 2 of D8.

2.2.3 The first fraction is present in an amount of 75-90% by weight and the ingredients of the second fraction (sodium bicarbonate, salt) are present in an amount of (5-9%) + (2-6%) = 7 to 15% by weight. Thus, also feature (e) of the claimed process is fulfilled.

2.2.4 According to example 2 of D8, the dried product of the first fraction is ground and classified into a "fines" lot with a particle size smaller than 1.7 mm and a "coarse" lot with a particle size of between 1.7 mm and 4.75 mm. The fines lot is then used for mixing it with the ingredients of the second fraction and the final blend is compressed to a cube. Although D8 neither define the minimum diameter of the fines nor the percentage of particles within a certain diameter range it has to be noted that the fines lot includes, at least to a certain extent, granules having a diameter below 1.7 mm but greater than 0.5 mm, ie particles whose size is well in the claimed range of between 0.5 and 10 mm. The portion of particles whose diameter is
well in the claimed range is further increased in example 3 by including the coarse lot with a particle diameter between 1.7 mm and 4.75 mm.

2.3 The claimed process differs therefrom by feature (d2) in that the amount of granules within a diameter range of between 0.5 and 10 mm is at least 80% by weight, which means that the maximum amount of particles with diameters of 0.5 mm or less is limited to 20% by weight.

In view of that sole distinguishing feature it has to be noted that the claimed range also embraces a granulated fraction 1 wherein at least 80% of the particles are on the small end of the range with diameters only slightly above 0.5 mm and wherein up to 20% can be even smaller than 0.5 mm. For such an embodiment all or nearly all particles are considerably smaller in diameter than granules with a diameter of 1.7 mm or 4.75 mm which are present, at least partly, in the granule fraction of examples 2 and 3 of D8.

2.3.1 It is an incontestable fact that the degree of visibility of coloured particles randomly distributed in a differently coloured environment increases with their particle diameter. In view of the above it is therefore immediately evident that particles with sizes around 1.7 mm or even 4.75 m as used in examples 2 and 3 of D8 should appear as a marbled pattern in the sense of the patent wherein a marbled pattern is defined in paragraph [0015] as the presence of randomly distributed optically distinguishable phases). This all the more as it emerges from paragraphs [0011] and [0012] of the patent specification that the desired marbled
appearance is also achieved by particles with sizes as low as 0.5 mm.

It follows therefrom that a marbled appearance is an inherent property of bouillon cubes produced by examples 2 and 3 of D8.

2.3.2 The respondent argued that D8 was completely silent on the optical appearance of the cubes. Therefore, a skilled person reading D8 was not incited to modify the size distribution of the granules in examples 2 or 3 in order to solve the problem of achieving a marble-like appearance according to the invention.

However, according to the established problem-solution-approach it is not decisive for the assessment of an inventive step which problem is indicated in the application as filed or in the patent specification. Rather, it has to be determined which objective problem is solved by the distinguishing feature in relation to the closest prior art.

Because, as shown above, the marbled pattern is also an inherent property of bouillon cubes obtained in examples 2 and 3 of D8 the objective problem to be solved by the distinguishing feature (d2) can therefore merely be seen in the provision of an alternative process for preparing bouillon cubes.

2.4 The responded has not shown, and it cannot be seen otherwise, that a particular technical effect is linked to the selection of the claimed percentage of granules with a certain particle diameter range. Therefore, the feature that at least 80% by weight of the granules of
fraction 1 have a diameter of 0.5 to 10 mm is to be considered an arbitrary selection which cannot contribute to an inventive step.

3. **Inventive step - auxiliary request I**

The only difference vis-à-vis the main request is the lower limit of the particle diameter, namely above 1 mm.

There is nothing which could support the view that the increase of the lower limit from above 0.5 mm to above 1 mm provides any specific technical effect. The considerations provided in points 2.2 to 2.4 therefore principally apply also to the process of claim 1 of auxiliary request I.

4. **Inventive step - auxiliary request II**

In addition to claim 1 of the main request, claim 1 of auxiliary request II requires that the granules of fraction 1 are fat-based granules. Apart from the fact that the feature "fat-based granules" is not further defined in the claim, it has to be noted that the granules in example 2 of D8 too, may to a certain extent fat-based because they have a low moisture content and include ingredients of a chicken emulsion which necessarily contains chicken fat. It is therefore doubtful whether the feature "fat-based granules" constitutes a further distinguishing feature over example 2 of D8.

In any event, there is nothing in support of the presence of a specific non-predictable technical effect.
caused by the use of fat-based granules, for instance over water-based granules.

5. For the reasons set out in points 2 to 4 the subject-matter of each claim 1 according to the main request and auxiliary requests I and II does not involve an inventive step. The requests are therefore not allowable, there being then no need to discuss these requests under the aspects of novelty, sufficiency of disclosure and clarity.

6. Admissibility of auxiliary request III

The claims of auxiliary request III filed during the oral proceedings are based on the claims according to the main request, the feature of the "different colours" having been more precisely defined by introducing into independent claims 1 and 2 the colour combinations indicated in paragraph [0014] of the description of the patent specification.

The feature "different colour" was however already attacked under Article 83 EPC in the appellant's grounds of appeal. Consequently, the respondent had had ample opportunity to react to this attack well before the date of the oral proceedings by filing an auxiliary request taking account of this Article 83 objection.

The board further notes that the above amendment was not a feature of the granted claims but stems from the description. The amendment would therefore likely make a new evaluation of the disclosure of the documents necessary which are relevant for the assessment of an inventive step. Thus, consideration of the subject-
matter of the new auxiliary request III in the light of the amended feature of the different colour at this very late stage of the proceedings would enhance the complexity of the case to an extent which is contrary to orderly and efficient proceedings, e.g. in that adjournment of the oral proceedings would become necessary.

The board therefore exercises its discretion under Article 13(3) of the Rules of Procedure of the Boards of Appeal of the EPO not to admit auxiliary request III into the proceedings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar                            The Chairman

G. Röhn                                W. Sieber