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Datasheet for the decision
of 14 October 2016

Case Number: T 0306/14 - 3.3.09
Application Number: 02750984.3
Publication Number: 1401295
Language of the proceedings: EN

Title of invention: Hard bouillon tablet

Patent Proprietor: Nestec S.A.

Opponent: Unilever N.V. / Unilever PLC

Headword:

Relevant legal provisions: EPC Art. 84, 123(3), 56
Keyword:
Clarity (yes)
Amendments - extension of protection conferred (no)
Inventive step (yes)

Decisions cited:
G 0003/14, T 0174/14, T 1360/11, T 0287/11, T 0999/10

Catchword:
Case Number: T 0306/14 - 3.3.09

DECISION
of Technical Board of Appeal 3.3.09
of 14 October 2016

Appellant: Nestec S.A.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 6 December 2013 revoking European patent No. 1401295 pursuant to Article 101(3)(b) EPC.

Composition of the Board:
Chairman W. Sieber
Members: J. Jardón Álvarez
E. Kossonakou
Summary of Facts and Submissions

I. This decision concerns the appeal filed by the proprietor of European patent No. 1401 295 against the decision of the opposition division to revoke it.

II. With the notice of opposition the joint opponents had requested revocation of the patent in its entirety on the grounds of Article 100(a) (lack of novelty and inventive step) and 100(b) EPC, and had cited inter alia the following documents:

D1: EP 0 780 058 A1;

D2: CA 2 308 929 A1; and

E8: Experimental report Unilever, C. Grun et al., dated 1 November 2013, (10 pages).

III. The opposition division's decision was based on two sets of claims, namely a main request filed on 25 November 2008 and a first auxiliary request filed on 13 November 2013 during the oral proceedings. Claim 1 of the main request read as follows (features deleted from or added to claim 1 as granted struck through and underlined, respectively):

"1. A hard bouillon and/or seasoning tablet which comprises, in total tablet weight %, from 1 to 20% of an oil and possibly fat, up to 80%, preferably from 4 to 80% of a milled filler, up to 95% of a non milled filler, from 4 to 35%, preferably from 4 to 20% of a stickening or sticking agent, and, in total oil and fat weight %, up to 40% or preferably up to 30%, even more preferably up to 20% or even up to 10%, and still even more preferably up to only 5% fat or even up to only 1%
fat, as well as optionally spices, flavours, dehydrated vegetables, herb leaves and/or plant extracts; wherein oil means oil or mixture of oils which is liquid at room temperature and which has a solid fat content (SFC) of less than 5% at 20°C; wherein the milled filler is a milled crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 µm; and in which the stickening or sticking agent comprises an ingredient the addition of which (combined with an adequate increase of the Aw value) is capable of imparting a glass transition temperature to the final mixture which may be exceeded during tableting, and which comprises, as stickening or sticking agent, from 10 to 20% maltodextrin having a DE value of from 5 to 60, preferably of from 10 to 60, more preferably of from 20 to 50 and even more preferably of from 10 to 30, and from 0.8 to 1.2% added water."

IV. The opposition division acknowledged that the claimed invention was sufficiently disclosed, and that the subject-matter of claim 1 was clear and fulfilled the requirements of Article 123(3) EPC.

However, it revoked the patent because the subject-matter of claim 1 lacked inventive step. In this regard it merely indicated that the data presented in the experimental report E8 showed that by varying parameters such as the oil content, the fine salt granulometry, the content or type of maltodextrin, no free-flowing powder could be obtained. The obtained tablet was crumbling and could not be considered a hard tablet. The opposition division also stated as an obiter dictum that a problem-solution approach based on D1 (pursued only in writing) would not have been successful.
The opposition division did not admit the first auxiliary request into the proceedings because it had been filed at a late stage in the proceedings.

V. The patent proprietor (in the following: the appellant) filed an appeal on 5 February 2014. The statement setting out the grounds of appeal was filed on 11 April 2014. It included a main request, an auxiliary request and the following document and experimental evidence:

D13: WO 2006/063690 A1; and


VI. With their reply dated 8 August 2014, the opponents (in the following: the respondents) requested that the appeal be dismissed.

VII. In a communication dated 26 April 2016 the board indicated the issues to be discussed during the oral proceedings.

VIII. In their submission of 16 September 2016, the respondents raised for the first time in appeal various fresh issues, including objections under Article 123(3) EPC. The following further documents and experimental evidence were also filed:

D14: Bouillon cubes with oil from 1998 and 2000 (2 pages); taken from "The Mintel Global New Products Database" (GNPD);
D15: Four documents originating from different sources and cited as "Common General Knowledge" (11 pages);

E10: Experimental report, T. Blijdenstein et al.
Unilever R&D Vlaardingen, The Netherlands, dated 14 September 2016 (13 pages); and

E11: Picture of Sapal wrapping machine (1 page).

IX. By letter dated 7 October 2016 the appellant filed first, second and third auxiliary requests to deal with the new objections under Article 123(3) EPC.

X. On 14 October 2016 oral proceedings were held before the board. At the beginning of the oral proceedings the appellant, in the light of the discussion between the same parties in case T 0174/14 the previous day, filed an amended main request, consisting of six claims, which ultimately became its sole request. The respondents withdrew all arguments based on E10 and E11.

Independent claims 1 and 5 of the main request read as follows:

"1. A hard bouillon and/or seasoning tablet which comprises, in total tablet weight %, from 1 to 20% of an oil and possibly fat, from 4 to 80% of a milled filler, up to 95% of a non milled filler, from 4 to 35%, preferably from 4 to 20% of a stickening or sticking agent, and, in total oil and fat weight %, up to 40% or preferably up to 30%, even more preferably up to 20% or even up to 10%, and still even more preferably up to only 5% fat or even up to only 1% fat, as well as optionally spices, flavours, dehydrated vegetables, herb leafs and/or plant extracts;
wherein the milled filler is a milled crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 μm; and in which the stickening or sticking agent comprises an ingredient the addition of which (combined with an adequate increase of the Aw value) is capable of imparting a glass transition temperature to the final mixture which may be exceeded during tableting, and which comprises, as stickening or sticking agent, from 10 to 20% maltodextrin having a DE value of from 5 to 60, preferably of from 10 to 60, more preferably of from 20 to 50 and even more preferably of from 10 to 30, and from 0.8 to 1.2% added water; wherein the total amount of milled filler is up to 80%.

"5. A process for the production of a hard bouillon tablet, which consists of preparing a dry premix of powdered constituents comprising, in total tablet weight %, from 4 to 80% of a milled filler and up to 95% of a non milled filler, atomising, in total tablet weight %, from 1 to 20% of an oil and possibly fat onto the dry premix while further mixing, optionally adding dehydrated vegetables and/or herb leafs, and tableting the final mixture thus obtained, wherein, in total tablet weight %, from 4 to 35%, preferably from 4 to 20% of a stickening or sticking agent and optionally spices, flavours, and/or plant extracts are added to the dry premix or to the mixture of dry premix and oil, and wherein, in total oil and fat weight %, up to 40% or preferably up to 30%, even more preferably up to 20% or even up to 10%, and still even more preferably up to only 5% or even up to only 1% fat are added to the dry premix or to the oil;
wherein the milled filler is a milled crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 μm; and in which the stickening or sticking agent comprises an ingredient the addition of which (combined with an adequate increase of the Aw value) is capable of imparting a glass transition temperature to the final mixture which may be exceeded during tableting, and which comprises, as stickening or sticking agent, from 10 to 20% maltodextrin having a DE value of from 5 to 60, preferably of from 10 to 60, more preferably of from 20 to 50 and even more preferably of from 10 to 30, and from 0.8 to 1.2% added water; wherein the total amount of milled filler is up to 80%.

 XI. The arguments of the appellant may be summarised as follows:

- The claimed subject-matter was clear. The expressions "milled filler" and "non milled filler" were present in granted claim 1 and could not be discussed under Article 84 EPC in opposition proceedings. The milled crystalline ingredient was defined by the mean diameter, that is to say, mathematically, and was entirely clear for the skilled person. In any case, the claim was directed to a hard bouillon and/or seasoning tablet and the mean diameter of the filler could be determined by the skilled person.

- The amendment "wherein the total amount of milled filler is up to 80%" had been made to overcome the Article 123(3) EPC objection and it was analogous to the amendments allowed in decisions T 0287/11 and T 1360/11. It was also clear, as it established
a double condition ensuring that the total amount of milled filler was not over 80%, as in the granted claims.

- Starting from D1 as closest prior art, the appellant saw the technical problem to be solved by the invention as to provide a hard bouillon and/or seasoning tablet which in its composition had basically solid fat replaced by liquid oil. The claimed solution using a liquid oil, a milled filler and a stickiness agent (maltodextrin) was not obvious in view of D1. Actually, there was no teaching that a liquid oil could be used to replace the solid or hardened fat and oil mixture used in D1 in the making of a hard bouillon and/or seasoning tablet. On the contrary, D1 taught that such a mixture would be a paste, not a powder, and hence taught away from considering using a liquid oil. Additionally, the combination of D1 with D2 performed by the respondents was flawed because D1 taught away from using maltodextrin.

XII. The arguments of the respondents, insofar as they are relevant for the present decision, may be summarised as follows:

- The subject-matter of the claims was not clear. The wording "milled filler", "non milled filler" and "milled crystalline ingredient" were unclear because according to the specification the milled ingredients did not need to have been milled at all and the non-milled filler could have been milled. Apart from that, the expression "milled filler" in claim 1 had two different meanings and the "mean diameter" was an unclear "pseudo-product feature" as it was lost in the final powder.
- The introduction of the particle size range in claim 1 extended the scope of the granted claims, which now embraced embodiments not covered by the granted claims. The situation in this appeal was different from the one in T 1360/11. The wording "milled filler" had two different meanings in the claim, thus invalidating the reasoning in that decision where no objection under Article 84 EPC had been raised.

- The subject-matter of claim 1 was obvious in view of the combined teaching of D1 and D2. Example 4 of D1 represented the closest prior-art embodiment. The subject-matter of claim 1 was distinguished from this disclosure by the use of a lower amount of hard fat and by the use of maltodextrin as stickening or sticking agent. The objective technical problem to be solved by the patent was (i) to provide a healthier product and (ii) to improve the hardness of the tablet. It would be obvious for the skilled person to increase the amount of oil to provide such a healthier product. D1 itself gave a hint by using products with different amounts of oil; and in any case, to increase the oil amount to provide a healthy product was within the common general knowledge of the skilled person. Furthermore, D2 gave a hint towards the combined use of maltodextrin and water to obtain a harder bouillon tablet.

- Additionally, the claims lacked inventive step also because the technical problem was not solved over the whole scope of the claims. The experimental evidence supplied showed that, over a considerable range of the claimed scope, the intermediate mixes
that were prepared using the claimed method were insufficiently free-flowing to render them useful in the industrial manufacture of hard bouillon tablets.

XIII. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of claims 1 to 6 of the main request filed on 14 October 2106 during the oral proceedings.

The respondents requested that the appeal be dismissed.

Reasons for the Decision

MAIN REQUEST

1. Amendments

1.1 Claim 1, with a feature analysis added by the board, reads (features deleted from or added to claim 1 as granted struck through and in bold, respectively):

A hard bouillon and/or seasoning tablet which comprises, in total tablet weight %,
(i) from 1 to 20% of an oil and possibly fat,
(ii) up to 80%, preferably from 4 to 80% of a milled filler,
(iii) up to 95% of a non milled filler,
(iv) from 4 to 35%, preferably from 4 to 20% of a stickening or sticking agent, and,
(v) in total oil and fat weight %, up to 40% or preferably up to 30%, even more preferably up to 20% or even up to 10%, and still even more preferably up to only 5% fat or even up to only 1% fat, as well as
(vi) optionally spices, flavours, dehydrated vegetables, herb leaves and/or plant extracts;
(vii) wherein the milled filler is a milled crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 μm; and
(viii) in which the stickening or sticking agent comprises an ingredient the addition of which (combined with an adequate increase of the Aw value) is capable of imparting a glass transition temperature to the final mixture which may be exceeded during tableting,
(ix) and which comprises, as stickening or sticking agent, from 10 to 20% maltodextrin having a DE value of from 5 to 60, preferably of from 10 to 60, more preferably of from 20 to 50 and even more preferably of from 10 to 30, and
(x) from 0.8 to 1.2% added water;
(xi) wherein the total amount of milled filler is up to 80%.

1.2 The respondents maintained that the amendments made to the claims gave rise to objections under Articles 84 and 123(3) EPC.

2. Amendments (clarity, Article 84 EPC)

2.1 The respondents objected to the clarity of claim 1 for several reasons, namely that:

(a) the terms "milled filler" in feature (ii) and "non milled filler" in feature (iii) had the same meaning because a milled filler did not necessarily have to be milled, as was apparent from paragraph [0014] of the patent;

(b) the term "milled crystalline ingredient" in feature (vii) was unclear; according to
paragraph [0025] of the specification the milled crystalline ingredient may have been milled (emphasis by the respondents), which implied that it may not have been milled and was thus at odds with the wording of the claim;

(c) the term "milled filler" used in claim 1 had two different meanings, namely a broader one in features (ii) and (xi) and a more specific one in feature (vii); and

(d) the mean diameter was a "pseudo-product feature" that introduced a lack of clarity; this feature was irrevocably lost in the end product after the milled filler and the unmilled filler had been mixed, especially if the milled filler and the unmilled filler were of the same chemical nature.

2.2 Concerning (a) it is noted that the terms "milled filler" and "non milled filler" formed part of claim 1 as granted. Taking into account that in G 0003/14 it was decided that:

"the claims of the patent may be examined for compliance with the requirements of Article 84 EPC only when, and then only to the extent that, the amendment introduces non-compliance with Article 84 EPC" (see order),

the above terms cannot be examined under Article 84 EPC at this stage of the proceedings.

2.2.1 Notwithstanding the above, it is necessary for the board to establish the meaning of these terms in order to arrive at a technically meaningful interpretation of the claim.
According to paragraph [0014] of the specification the expression "milled filler" means:

"a powdered filler which has been milled to an especially fine granulometry or which has an especially fine granulometry";

and according to paragraph [0015] the expression "non milled filler" means:

"a powdered filler which has not been milled to an especially fine granulometry or which does not have an especially fine granulometry".

2.2.2 Thus, according to paragraphs [0014] and [0015] the broadest definition for "milled filler" is simply a powdered filler having an especially fine granulometry. Thus, in contrast to its literal meaning, a "milled filler" does not have to be milled at all. Similarly, the broadest definition for "non milled filler" is a powdered filler which does not have such an especially fine granulometry. In other words, a non-milled filler is simply coarser than the milled filler.

Summing up, a "milled filler" is an ingredient with a finer granulometry than a "non milled filler", regardless of whether it has actually been subjected to a milling step. At the same time, a non-milled filler includes, despite its literal meaning, embodiments which have been milled, provided they have a coarser granulometry than the milled filler.

2.3 Concerning (b), feature (vii) has been introduced into claim 1 and further specifies that the milled filler is a milled crystalline ingredient which has been milled
to fine particles having a mean diameter of from 5 to 80 µm. Thus, via the cascade-like formulation in claim 1, it is now mandatory that the milled filler is a crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 µm. Bearing in mind that the non-milled filler was defined as not having the especially fine granulometry of the milled filler, the skilled reader would understand that the non-milled filler in amended claim 1 would still have a coarser granulometry than the milled filler, i.e. a mean diameter above 80 µm.

Feature (vii) now mandatorily requires that the milled filler has been milled to the specified granulometry. As pointed out by the respondents, paragraph [0025] will have to be amended accordingly when adapting the description to the allowed claims.

2.4 Concerning (c), the board cannot follow the respondents' objection. As already said, the claim defines the presence of the milled filler in a cascade-like manner. Feature (ii) requires that the hard bouillon and/or seasoning tablet contains a component - defined rather broadly in functional terms as a milled filler - in amounts of from 4 to 80%, in total tablet weight. Feature (vii) further requires that the milled filler is a milled crystalline ingredient having been milled to fine particles having a mean diameter of from 5 to 80 µm. The skilled reader would understand from such a claim construction that the only milled filler which can be present in the claimed hard bouillon and/or seasoning tablet is a crystalline ingredient that has been milled to the specified granulometry in the amounts indicated in feature (ii). Other milled fillers which fulfil the broader functional definition of feature (ii) can no longer be
present, due to further requirement (vii). In other words, the only milled filler that can be present in the hard bouillon and/or seasoning tablet is a milled crystalline ingredient that has been milled to fine particles having a mean diameter of 5 to 80 μm and which are present in the amount specified in feature (ii).

The respondents argued in relation to Article 123(3) EPC that such a claim would encompass a hard bouillon and/or seasoning tablet with 80% of milled crystalline filler with a mean diameter of 5 to 80 μm and 1% of a milled non-crystalline filler like milled maltodextrin, a constellation which was excluded from claim 1 as granted. Although a proper reading of the claim as set out above excludes the respondents' example, the appellant nevertheless inserted feature (xi), i.e. "wherein the total amount of milled filler is up to 80%", to overcome this objection. The board sees no clarity problem arising from this amendment, because it (maybe unnecessarily) repeats what feature (ii) already requires, namely that components which qualify as a milled filler can only be present in an amount up to 80%.

2.5 Lastly, the board disagrees with the respondents that the mean diameter is a "pseudo-product feature" that is lost after mixing the ingredients. This feature can indeed be determined in the final product, as maintained by the appellant during the oral proceedings and no longer disputed by the respondents.

2.5.1 This objection is essentially based on situations in which one and the same ingredient, for instance salt, glutamate and/or sugar, is used as the milled filler, but in fractions with different particle sizes. The
respondents' main concern in this respect was the purported difficulty for a skilled person trying to prepare a hard bouillonnement and/or seasoning tablet outside the scope of the claim. In this context, the respondents gave the following example:

Starting with two fractions of the same crystalline ingredient differing only in their particle size, namely

- 3% with a mean diameter of 4 μm, and
- 3% with a mean diameter of 100 μm,

one would arrive at a hard bouillonnement and/or seasoning tablet as claimed with 6% of a crystalline ingredient having a mean diameter within the claimed range, without ever having used a fraction having the required granulometry.

2.5.2 There is, however, no lack of clarity in the claim in this respect. The claim is directed to a hard bouillonnement and/or seasoning tablet per se, not to a method for its preparation. Therefore, what matters is the particle size in the product and not in the "starting" materials. In the respondents' example, the particle size distribution of the two initial, chemically identical fractions will be lost, and a new "overall" particle size distribution will emerge in the product. Thus, a skilled person aiming to work outside the scope of the claim cannot work outside its scope merely by using two separate "starting" fractions, because they would result, when mixed, in an embodiment as claimed.

2.5.3 In this context the board can also not accept the argument that the final product "theoretically"
contains two fractions of milled filler not covered by claim 1. As indicated above, due to the identical chemical nature of the particles of the milled filler a "new" mean diameter will be formed upon mixing the fractions.

In other words, a skilled person cannot circumvent the claim by dividing a given ingredient, falling within the scope of the claim, into two different fractions, both outside the scope of the claim, because the product obtained in both cases is the same, namely a product falling within the scope of the claim.

2.5.4 Similar considerations apply to the other hypothetical hard bouillon and/or seasoning tablets suggested by the respondents, using "10% salt with a mean diameter of 10 microns and 10% salt with a mean diameter of 200 microns" or "3.5% of salt with a mean diameter below 80 microns and 1% salt with a mean diameter above 80 microns". In every case the skilled person knows whether or not he is preparing a hard bouillon and/or seasoning tablet as claimed, either by analysing the final hard bouillon and/or seasoning tablet or by calculating the mean diameter that will be achieved by the starting materials in the bouillon product.

2.6 For these reasons the subject-matter of claim 1 fulfils the requirements of Article 84 EPC.

3. Amendments (extension of protection, Article 123(3) EPC)

3.1 As set out in point 2.4 above, the respondents argued that the introduction of the particle size range of the milled filler (feature (vii)) extended the scope of the granted claims (Article 123(3) EPC). For instance,
amended claim 1 would encompass a hard bouillon and/or seasoning tablet with 80% of milled crystalline filler having a mean diameter of from 5 to 80 μm and 1% of a milled non-crystalline filler like milled maltodextrin, i.e. an embodiment not covered by the granted claims wherein the total maximum amount of milled filler was limited to 80%.

However, as stated in point 2.4 above a proper reading of the amended claim excludes the respondents' example.

3.2 Furthermore, the respondents ignore the further amendment to the claim made by the appellant to overcome this objection, namely feature (xi) which requires that the total amount of milled filler is up to 80%.

As in decisions T 0287/11 and T 1360/11 cited by the appellant, the added feature ensures that, as in granted claim 1, the total amount of milled filler in amended claim 1 does not exceed 80%.

3.3 The respondents argued that the situation in this case was different from the one in T 1360/11 and that the findings in that case did not apply to the present case. In particular, they again noted that the wording "milled filler" had two different meanings in the claim, thus invalidating the reasoning in that decision where no objection under Article 84 EPC had been raised.

3.4 The board disagrees. According to the jurisprudence of the boards of appeal, a problem indeed does arise when a granted claim directed to a composition defined in an open manner (cf. "comprising"), and including the presence of a component belonging to a class or list of
compounds in a quantity defined by a range, is later amended by limiting the definition of the class or list of compounds (see Case Law of the Boards of Appeal of the EPO, 8th edition 2016, Section II.E.2.4.13).

3.4.1 A possible way out of this situation is a sequential drafting of the claim (formulation "en cascade" as in T 999/10). Alternatively, T 1360/11 says that the result of amending the claim by inserting a "double condition" is that the claim does not extend the protection conferred by the patent.

3.4.2 As explained above, the appellant has chosen the second possibility and amended the claim by including a further limitation of the total amount of the milled filler (double condition), thus limiting the scope of the claim compared with its scope as granted. The board agrees with the respondents that the claims are not identical to the claims in decision T 1360/11, wherein the added condition also specified the amount of the specific components, but the idea is exactly the same. Adding the second condition ensures that the total amount of milled filler remains within the scope of the granted claims.

3.4.3 Insofar as the respondents objected that the milled filler could have two different meanings in the claim, this issue has already been dealt with above when discussing the clarity of the claim. In any case, the wording of feature (xi) is not open to interpretation: it reads "... the total amount of milled filler is up ..." and, thus, ensures that no more than 80% milled filler is present, as in granted claim 1.

3.5 Thus, the board concludes that the scope of protection conferred by claim 1, and by the same token that of
independent claim 5 which has been amended in the same way, has not been extended beyond the scope of the granted claims. The requirement of Article 123(3) EPC is satisfied.

4. Inventive step

4.1 The patent relates to a hard bouillon tablet and to a process for its production. It aims to provide a hard bouillon tablet which only or mainly contains oil and no or only little fat besides conventional non-fat bouillon ingredients (see [0004]). In particular, claim 1 is directed to a bouillon and/or seasoning tablet comprising features (i) to (xi) as specified in point 1.1 above.

4.2 Closest prior art

4.2.1 The board agrees with the parties that D1 represents the closest prior-art document. It discloses a process for producing a powdered, fat-containing product, the process comprising mixing at least one crystalline food ingredient and a fat to provide a paste, and milling the paste to reduce the size of the crystals of the crystalline ingredient and to coat the crystals with the fat, the milling continuing until a flowable powder forms (claim 1). If desired the powder is transferred to a suitable press for pressing into tablets (see claim 7).

4.2.2 The crystalline ingredient may be salt, monosodium glutamate or sugar (see page 2, lines 49 to 51). Preferably, the fat used includes a large proportion of a fat with a high melting point, and conventionally solid at room temperature (see page 2, lines 53 to 54).
The fats used in the process may be any suitable ones (see page 3, lines 19 to 26).

4.2.3 The fat mixture chosen is conveniently such that the fat is solid at room temperature (see page 3, lines 29 to 30). In examples 1 to 3 a fat mixture comprising about 80% by weight of hydrogenated palm oil fat and about 20% by weight peanut oil is used, and in example 4 the same mixture is used but in a ratio of 60% to 40% by weight.

4.3 Problem to be solved and its solution

4.3.1 According to the appellant, the technical problem underlying the patent in view of D1 is the provision of an alternative bouillon and/or seasoning tablet which in its composition has basically solid fat replaced by liquid oil (see [0004]).

4.3.2 As a solution to this problem the patent proposes the hard bouillon and/or seasoning tablet of claim 1 comprising a milled filler (features (ii) and (vii)) and a stickening or sticking agent (features (vii) to (ix)). By using these ingredients it is possible to obtain a hard bouillon tablet having only or mainly oil and no or only little entrapped fat (see paragraph [0016]).

4.3.3 Although examples 1 to 3 in the patent show the preparation of tablets according to claim 1, the respondents maintained that the above problem was not solved over the whole scope of the claim. They relied mainly on experimental report E8 showing in their view that some bouillon tablets were very soft, crumbly and unstable (see tables in E8).
4.3.4 The board disagrees. As explained by the appellant in its statement of grounds of appeal and during the oral proceedings, the examples in E8 actually provide evidence that a tablet can be formed over the entire scope of the claim. Actually, the fact that all the cubes (tablets) in E8 can be visually inspected (see all tables) and that the hardness can be determined (see all tables) shows that a tablet has been obtained. The hardness value of below 15N provided by the respondents as a definition of what is and what is not a hard tablet is arbitrary, and certainly not a limiting feature of the claimed tablets. In any case, it is well known in the art that bouillon tablets actually post-harden significantly after production, both before and after wrapping.

4.3.5 Moreover, in order to demonstrate that hard bouillon tablets could be produced across all ranges claimed, the appellant replicated some of the experiments of E8 and concluded that all the bouillon mixes yielded stable hard bouillon tablets that could be handled and wrapped using an industrial table wrapping machine (see E9, page 16, conclusion).

4.3.6 In view of this experimental evidence, the board is satisfied that the problem underlying the patent in suit has been credibly solved.

4.4 Obviousness

4.4.1 It remains to be decided whether, in view of the available prior art, it would have been obvious for the skilled person to solve the technical problem, as defined above, by the means claimed.
4.4.2 D1 itself does not give any hint towards the claimed solution. On the contrary, it says that the presence of fat in solid, crystal form is an essential element for the preparation of the seasoning powder compositions. D1 addresses in particular the stability and distribution of the solid fat in the powder by providing a new process for coating other crystalline ingredients present in the powder with that fat.

Thus, D1 states on page 2, lines 53 to 54: "Preferably the fat used includes a major proportion of a fat with a high melting point. In this way, the fat is conveniently solid at room temperature". The examples of oils and fats to be used on page 3, lines 19 to 26, state that such suitable fats are usually hydrogenated or fractionated fats or oils. It is well known in the art that hydrogenation of a liquid oil, e.g. a vegetable oil such as sunflower oil or olive oil, hardens and solidifies it. Hence, the oil is no longer liquid at room temperature.

In examples 1 to 3 in D1, a fat mixture of 80% by weight hydrogenated palm oil fat and 20% by weight peanut oil is used; in example 4 a fat mixture of 60% by weight hydrogenated palm oil fat and 40% by weight peanut oil is used. The fat mixture is in all cases solid at room temperature (cf. page 4, line 43 it is stating that: "The fat mixture is then melted").

4.4.3 The board cannot accept the argument of the respondents that the claimed subject-matter lacks inventive step in view of D1 alone because it would be obvious for the skilled person to increase the amount of healthy oil from 40% (in example 4 of D1) to at least 60% as now claimed.
4.4.4 In the board's view, this attack is based on hindsight. It ignores the clear teaching of D1 discussed in 4.4.2 above that a solid fat is the key feature for the preparation of the powders of D1. The constant teaching of D1 is to use a fat mixture that is solid at room temperature, and there is no room in D1 to use a liquid oil as starting material for the preparation of the powder. If anything, the skilled person would tend to replace the solid non-healthy fat with a solid healthy fat, but not with a liquid oil.

4.4.5 Insofar as the replacement of fat for oil already justifies the presence of an inventive step, it is not necessary for the board to investigate whether the use of maltodextrin as stickening agent is suggested by D2, as stated by the respondents. Even if this were the case, the claimed subject-matter of claim 1 involves an inventive step.

4.5 For these reasons, the subject-matter of claim 1 involves an inventive step. This conclusion also applies to the process of independent claim 5, which is directed to the production of the hard bouillon tablet according to claim 1 and, for the same reasons, to the preferred embodiments defined in dependent claims 2 to 4 and 6.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of claims 1 to 6 of the main request filed in the oral proceedings before the board, after any necessary consequential amendment of the description.

The Registrar:  The Chairman:

M. Cañueto Carbajo  W. Sieber

Decision electronically authenticated