Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 26 April 2012

Case Number: T 1412/09 - 3.3.09

Application Number: 01925516.5

Publication Number: 1280414

IPC: A23G 3/00

Language of the proceedings: EN

Title of invention:
Confectionery product containing functional ingredients

Applicant:
Société des Produits Nestlé S.A.

Opponent:
Cadbury Holdings Limited

Headword:
-

Relevant legal provisions:
EPC Art. 54

Keyword:
"Novelty (no) - Features of claim 1 implicitly disclosed in prior art documents"

Decisions cited:
-

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1412/09 - 3.3.09

D E C I S I O N
of the Technical Board of Appeal 3.3.09
of 26 April 2012

Appellant: (Patent Proprietor)
Société des Produits Nestlé S.A.
Case Postale 353
CH-1800 Vevey (CH)

Representative:
Wright, Robert Gordon McRae
Elkington and Fife LLP
Prospect House
8 Pembroke Road
Sevenoaks
Kent TN13 1XR (GB)

Respondent: (Opponent)
Cadbury Holdings Limited
Cadbury House
Sanderson Road
Uxbridge, Middlesex UB8 1DH (GB)

Representative:
Ward, David Ian
Marks & Clerk LLP
Alpha Tower
Suffolk Street
Queensway
Birmingham B1 1TT (GB)

Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 8 April 2009 revoking European patent No. 1280414 pursuant to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: W. Sieber
Members: W. Ehrenreich
K. Garnett

Summary of Facts and Submissions

I. Mention of the grant of European patent No. 1 280 414 in respect of European patent application 01 925 516.5, filed as international application PCT/EP2001/003675 in the name of *Société des Produits Nestlé S.A.,* was announced on 28 September 2005 in Bulletin 2005/39.

II. The patent was granted with 28 claims, claim 1 reading as follows:

"1. A confectionery product which comprises at least one functional ingredient wherein it has a casing and a filling enclosed within the casing wherein the filling comprises at least one confectionery material having properties that confer to the filling a perceivable effect when the filling is released in the mouth; wherein the casing is capable of forming release means upon the action of the saliva in the mouth which acts to liberate the filling out of the casing and wherein the confectionery material has dissolution properties effective to act together with the release means so as to enable the casing to be left substantially as an empty shell before it has entirely dissolved in the mouth."

Claims 2 to 28 were dependent claims.

III. An opposition against the patent was filed by

Cadbury Schweppes Plc - now Cadbury Holdings Limited

on 27 June 2006.

The opponent requested revocation of the patent on the grounds of Article 100(a) EPC (lack of novelty and lack of inventive step) and Article 100(b) EPC.

The documents submitted during the opposition proceedings included

D4 Hintlian "Filled Hard Candy"; The Manufacturing Confectioner (October 1995) pages 61-65;
D6 JP 02-222649, English Translation;
D8 US-A 4 762 719;
D34 Aggett et al. "Concepts of Functional Foods in Europe Consensus Document", British Journal of Nutrition (1999) no. 81, pages S1-S27.

Furthermore, a number of documents as basis for several alleged prior public uses were filed.

IV. By its decision announced orally on 24 March 2009 and issued in writing on 8 April 2009 the opposition division revoked the patent. The decision was based on the claims as granted.

The opposition division found that the invention was sufficiently disclosed and complied with Article 83 EPC. In its view, however, the subject-matter of claim 1 was anticipated by the disclosure of D6. D6 disclosed a confectionary product comprising a casing, a filling comprising sorbitol which created a cooling sensation in the mouth, and *inter alia* citric acid which represented a functional ingredient. In figure 2 of D6 an embodiment was shown in which the filling was positioned off-centre and which therefore provided zones of reduced thickness in the casing. As sorbitol

and citric acid were present in powdered form and thus dissolved quicker in the mouth than the surrounding casing, the casing was inevitably left as an empty shell before it had entirely dissolved in the mouth. D6 therefore disclosed all the technical features of the product of claim 1.

The alleged prior public uses and the issue of inventive step were not discussed in the decision.

V. On 16 June 2009 the patent proprietor (hereinafter appellant) filed an appeal against the decision of the opposition division and paid the prescribed fee on the same day. The statement of the grounds of appeal was received on 7 August 2009, wherein the appellant requested that the decision of the opposition division be set aside and that the patent be maintained as granted.

VI. With its letter of response dated 10 December 2009 the opponent (hereinafter respondent) cited further documents in order to confirm its position that citric acid and sorbitol were functional ingredients in the sense of the patent in suit, *inter alia*

D35 Sugino et al. J. Clin Biochem Nutr. 2007 November; 41(3): 224-230 "Effects of Citric Acid and $_{L}$Carnitine on Physical Fatigue

D39 Aviram et al. Pediatrics Vol. 80 No. 6 December 1987, pp. 894-897 "Monitoring Theophylline Therapy Using Citric Acid-Stimulated Saliva in Infants and Children with Asthma"

D42 Translation of excerpt from Nikkei Business Publications webseite

http://bio.nikkeibp.co.jp/bio/recommend pub/tokuho.pdf.

Furthermore, a declaration from Mr. Parsons (A11) was filed, wherein it was explained that the preparation of the candies in D4, D6 and D8 followed a conventional candy-forming process including stamping and pinching a powder-filled candy rope. Owing to this method of manufacture, the casing of the resulting powder-filled hard candy inevitably comprised a zone of reduced thickness or even a hole. On that basis the respondent maintained its objections of lack of novelty over D4, D6 and D8. The objections of prior public use were also maintained but were not substantiated in the appeal proceedings.

VII. On 5 March 2012 the board issued a communication and gave its preliminary observations on essential issues of the case, in particular concerning the questions whether:

(a) citric acid and sorbitol were functional ingredients in the sense of the patent;
(b) granted claim 1 included the embodiment that the confectionery material of the filling can simultaneously be a functional ingredient;
(c) the casing of the confectionery products disclosed in D4, D6 and D8 had zones of reduced thickness and/or a hole in accordance with granted claim 5, owing to their production by a conventional candy-forming process.

VIII. With its letter dated 2 March 2012 the appellant submitted five sets of claims as bases for auxiliary

requests 1 to 5. In its letter dated 11 April 2012 the respondent took the position that the appellant's new requests were late-filed and should not be admitted into the proceedings.

IX. Oral proceedings before the board were held on 26 April 2012, during which the issue of novelty of the subject-matter of claim 1 as granted (main request) over D6 and D8 was discussed. Following the discussion of the main request the appellant withdrew all auxiliary requests. Consequently, the claims as granted constitute the appellant's sole request.

X. The arguments of the appellant concerning novelty over D6 and D8, provided in writing and orally, may be summarized as follows:

According to claim 1 as granted, five features are essential for the invention:

(1) the confectionery product including a functional ingredient;
(2) the casing and the filling of the product;
(3) the perceivable effect of the confectionery material in the filling;
(4) the capability of the casing of forming release means;
(5) the dissolution properties of the confectionery material in the filling acting together with the release means.

As regards feature (1), the meaning of "functional ingredient" is explained in paragraph [0027] of the patent with reference to document D34. According to

this, a functional ingredient is a substance that is added to foods in order to fulfil a specific physiological or health function. Accordingly, the term "functional feature" in the patent means that such a health effect has also to be reached in the claimed confectionery product by providing the functional ingredient in an effective concentration.

Concerning features (2) and (3), the confectionery material in the filling has to provide a perceivable sensory effect, e.g. a cooling effect, caused by a negative solution enthalpy, which is different from the perception of the casing. It is not the function of the confectionery material to provide a physio-logical/health effect. In paragraph [0023] of the patent specification the sensory effect of the confectionery carrier is considered complementary to the functional ingredient. Thus, the confectionery material has to be considered as being distinct from a functional ingredient.

The presence of the release means in the casing (feature (4)) is an unambiguous and expressly defined feature in the claim, and it is doubtful whether this feature is an inherent property of the confectionery products of the cited prior art.

Furthermore, it is clearly stated in the claim that the dissolution properties of the confectionery material (5) act together with the release means (4) to enable the casing to be left as an empty shell. This feature is also not unambiguously referred to in the prior art.

The sorbitol filling in the confectionery product of D6 has a negative enthalpy and therefore provides a perceivable (cooling) effect in the mouth. Although it was known in the prior art that sorbitol, when applied in certain doses, could also act as a laxative, it was not intended to provide such a laxative effect by the sorbitol filling in the candy of D6 because its concentration was too low. Sorbitol was therefore not a functional ingredient in D6. Likewise, the role of citric acid in D6 was exclusively intended to be one of an acidulant. No physiological function was intended for citric acid in D6, and it was therefore not a functional ingredient either. Hence, D6 was not novelty-destroying for the subject-matter of claim 1.

It is doubtful whether the dextrose monohydrate filling used in the confectionery product according to example 1 of D8 provides a perceivable sensory effect. This is also stated in the decision of the opposition division, wherein it is assumed that the perceivable effect provided by the filling of the candy in D8 is generated because of the presence of the active ingredient, ie the menthol/eucalyptus mixture, rather than of the confectionery material. Furthermore, there is no unambiguous disclosure in D8 that the casing is left as an empty shell before it is entirely dissolved in the mouth. This view is confirmed by the disclosure in column 3, lines 24 to 32 that the candy could be chewed in order to release the centre-fill into the mouth.

XI. The counterarguments of the respondent were as follows:

The sorbitol filling in D6 contains citric acid as one possible additive. Although citric acid is mentioned only as an acidulant in D6, it is evident from the prior art that citric acid was principally there to provide a physiological effect in the body, for example in that it stimulated the saliva in the mouth (D39/D40) or attenuated physical fatigue (D35). Citric acid therefore possesses the quality of a functional ingredient. The question whether citric acid is a functional ingredient is a matter of its suitability rather than of its quantity. This all the more, as neither in D34 nor in the patent in suit is a concentration level defined in which the functional ingredient has to be present.

In the declaration A11, Mr. Parsons explained that conventional candy-forming processes, including the stamping and pinching of filled candy ropes, inevitably lead to zones of reduced thickness or even holes in the candy shell. The process aspects for candy-forming discussed in D4 and the position of the fillings in the filled candies depicted in Figure 5 of D4 confirm this view. Because D6, as well as D8, uses conventional processes for the manufacture of the candies (D6, page 315, paragraph 4; D8, column 3, lines 56 to 64), inevitably zones of reduced thickness or holes are obtained. The embodiment of granted claim 5 of the patent is therefore an inherent property of the candies of D6 and D8.

Dextrose monohydrate used as powder-filling in the candy of example 1 of D8 has a negative solution

enthalpy of -105 J/g and therefore necessarily provides a perceivable (cooling) effect in the mouth. It therefore represents a confectionery material in the sense of the patent. The menthol-eucalyptus blend used in the example is clearly a functional ingredient.

As regards the appellant's allegation that the candy of D8 was chewed, the respective disclosure in column 3, line 24 only says that biting into the centre is one possibility of exposing the centre-fill. In contrast thereto, the variant of providing the casing according to the patent as a chewing gum material is proposed in paragraphs [0065/0066] of the patent specification.

Both D6 and D8 were therefore novelty-destroying for the claimed subject-matter.

XII. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted.

XIII. The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. The claimed invention relates to a filled confectionery product, e.g. a filled candy. According to claim 1 as granted the confectionery product is characterised by the following features:

(a) it comprises at least a functional ingredient;

(b) it has a casing and a filling enclosed within the casing;

(c) the casing:

(i) is capable of forming release means, e.g. in the form of zones of reduced thickness and/or holes (in the embodiment of claim 5), upon action of the saliva in the mouth;

(ii) acts to liberate the filling out of the casing upon action of the release means with the saliva in the mouth;

(d) the filling comprises at least one confectionery material which:

(i) has properties that confer on the filling a perceivable effect when the filling is released in the mouth; in one embodiment the perceivable effect is a cooling sensation caused by the negative heat of solution of the confectionery material (claim 8);

(ii) has dissolution properties effective to act together with the release means of the casing ((c)(i) above) to leave the casing as an empty shell before it has entirely dissolved in the mouth.

3. Novelty

The relevant documents relied upon by the respondent in the oral proceedings with regard to novelty are D6 and D8.

When considering novelty it has to be assessed whether all features embraced by claim 1 as granted are either explicitly or implicitly disclosed in one single document. In this context it is a matter of importance

to assess whether the features (a), (c)(i), (c)(ii), (d)(i) and (d)(ii) of claim 1, which are not literally disclosed in D6 and D8, are implicit features of the confectionery products disclosed in these documents.

3.1 Novelty over D6

D6 discloses a centre-filled hard candy comprising a centre containing a sugar alcohol and a hard candy member covering this centre, ie a shell (page 315, items 1., 2.). Feature (b) of claim 1 is therefore disclosed.

According to the last paragraph on page 315 the filling is powdered sorbit, which is characterised as providing a strong, cooling mouthfeel. When dissolved in the mouth, saliva cools because of the heat absorption by the powder sorbit. Sorbit has a negative heat of solution and is one of the preferred sugar polyols in the patent providing a perceivable (ie cooling) effect in the mouth (paragraphs [0020] and [0021] in the patent specification). Thus, also feature (d)(i) of claim 1 is disclosed in D6.

In one embodiment, the sorbit filling is combined with citric acid in a ratio of 80:20 (pages 317/318, examples 6 to 10). It is not expressly mentioned in D6 that citric acid acts as a functional ingredient, ie fulfils a certain physiological or health function in the body in the sense of D34. However, it emerges clearly from e.g. D35 and also D39 that citric acid is able to reduce physiological stress and to attenuate physical fatigue (D35, Summary) and that it stimulates saliva (D39). Therefore citric acid is capable of

providing physiological or health functions in the body. The appellant's argument that the expression "functional ingredient" in the patent in suit has to be read as requiring a certain concentration at which such a physiological or health function is provided, cannot be accepted by the board. In the patent specification and in D34, which the patent refers to, the term "functional ingredient" is defined in terms of its quality as health promoter or component which can fulfil specific physiological functions rather than in terms of its concentration level which is necessary for achieving such an effect. In the list in paragraph [0028] of the patent specification a number of groups of possible functional ingredients is mentioned without giving a concentration in which the ingredients have to be present in the claimed confectionery product. In the board's judgment, the meaning of "functional ingredient" in the patent therefore merely relates to its inherent suitability to provide such a physiological or health function. Because, as shown e.g. in D35 or D39, citric acid provides such a function, it follows that is a functional ingredient within the teaching of the patent. Thus, feature (a) of claim 1 is also disclosed in D6.

In the declaration A11, Mr. Parsons explained in point 8 that D6 describes a conventional process for preparing powder-filled candies using a batch former having a powder ingredient supply, followed by stamping. A relevant disclosure is found in D6 on page 315, in the two paragraphs below the heading "Description of the prior Art". Although these passages refer to conventional prior art processes, it is evident that the production of the candies in D6 does not deviate

from this principle of candy-manufacture. According to the sections at page 316 below the headings "Problem(s) to be Solved by the Invention" and "Means for Solving the Problem" the invention in D6 merely aims at enabling a stable supply of the centre filling (e.g. sorbit) by modifying the composition of the hard external layer. Furthermore, in the examples of D6 apparently such a conventional batch former was used. In addition, it has not been shown by the appellant that the conclusion drawn by Mr. Parsons in point 9 of A11 that (owing to this conventional process) the casing of the D6 hard candies inevitably would have zones of reduced thickness or even a hole, where the candy rope has been stamped, was wrong. The board therefore accepts that feature (c)(i) and, upon action of the candy by the saliva in the mouth, also feature (c)(ii) are inherent properties of the candy of D6.

The filling of the candy in D6 is powdered sorbitol, one of the preferred fillings according to the patent in suit. It is therefore clearly the case that sorbitol has dissolution properties effective to act together with the release means of the casing to leave the casing as an empty shell before it has entirely dissolved in the mouth. Thus, feature (d)(ii) is also disclosed by the candy of D6.

From the above it follows that the hard candy of D6 meets all requirements of claim 1 of the granted patent and therefore anticipates the claimed confectionery material.

3.2 Novelty over D8

D8 discloses a cough drop in the form of a hard candy comprising a hard candy outer shell and a powdered centre-fill (corresponding to feature (b) of claim 1) containing a rapidly-dissolving powder such as dextrose monohydrate, xylitol or sorbitol, and an active ingredient such as a menthol-eucalyptus blend (D8, abstract and column 1, lines 16 to 24 and 50 to 60).

All the above-mentioned powder fillings have a negative heat of solution and accentuate the cooling effect of the active ingredient formed by the menthol-eucalyptus blend. Eucalyptus as an active ingredient in D8 corresponds to one possible functional ingredient mentioned in paragraph [0044] of the patent specification as being a member of the group "botanical extracts". Thus, features (a) and (d)(i) are disclosed.

According to example 1 of D8 a powder-filled cough drop comprising a hard candy shell and filling composed of dextrose monohydrate, a menthol-eucalyptus liquid blend and a menthol-eucalyptus spray-dried powder is prepared by placing the hard candy outer shell around a powder centre filling tube in a heated batch-former and filled with the powder blend and tabletted with conventional candy forming equipment (column 3, lines 60 to 64). Thus, the explanations given in A11 in conjunction with conventional candy-forming processes also apply here and features (c)(i) and (c)(ii) are disclosed. Consequently, feature (d)(ii) is also disclosed because the dissolution properties of the filling in D8 are effective to act with the release means of the casing and leave the casing as an empty shell.

As regards the appellant's argument that the candies of D8 are chewed, the board notes that the passage in column 3 lines 24 to 28 of D8 discloses the following two alternatives for releasing the active ingredient: "When placed in the mouth the centerfill is exposed due to dissolution of the outer shell or by biting into the center, the powdered centerfill containing the rapidly-dissolving powder enhances the release of active ingredient into the oral and nasal cavities." Of course, it depends on the consumer whether he releases the centre filling by slowly dissolving the shell in the mouth or by biting into it. This has no effect on the inherent properties of the casing. Moreover, paragraph [0065] of the patent specification proposes a variant where the casing may be made of a chewing gum material. In other words, even the confectionery product of claim 1 may be chewed.

Since the candy disclosed in D8 discloses all features of claim 1 of the patent as granted, it anticipates the claimed subject-matter.

4. For the above reasons the claims of the sole request are not allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar The Chairman

G. Röhn W. Sieber