Datasheet for the decision
of 27 January 2009

Case Number: T 0371/07 - 3.3.09
Application Number: 95301644.1
Publication Number: 0732059
IPC: A23G 3/30

Language of the proceedings: EN

Title of invention:
Continuous chewing gum manufacture from base concentrate

Patent Proprietor:
WM. WRIGLEY JR. COMPANY

Opponent:
Cadbury Schweppes Plc

Headword:
-

Relevant legal provisions:
EPC Art. 56, 99, 100, 114
RPBA Art. 12

Relevant legal provisions (EPC 1973):
EPC R. 55(c)

Keyword:
"Fresh ground for opposition - inadmissible"
"Late-filed document - inadmissible"
"Inventive step - yes"

Decisions cited:
G 0010/91, G 0001/95, G 0007/95, T 1002/92

Catchword:
-
Case Number: T 0371/07 - 3.3.09

DECISION of the Technical Board of Appeal 3.3.09 of 27 January 2009

Appellant: Cadbury Schweppes Plc
(Opponent)

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 14 December 2006 rejecting the opposition filed against European patent No. 0732059 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Kitzmantel
Members: N. Perakis
M.-B. Tardo-Dino
Summary of Facts and Submissions

I. Mention of the grant of European patent No 0 732 059 in respect of European patent application No 95301644.1 in the name of WM. WRIGLEY JR. COMPANY, was announced on 04 June 2003 (Bulletin 2003/23). The patent entitled "Continuous chewing gum manufacture from base concentrate" was granted with forty claims. The sole independent Claim 1 reads as follows:

"1. A method of making a chewing gum having gum base ingredients, sweetener, flavour and other gum ingredients, the method comprising:

a) preparing a gum base concentrate comprising high molecular weight elastomer and a first portion of filler or lubricant or both and a first portion of one or more additional gum base ingredients selected from the group comprising elastomer, elastomer plasticizer, wax, softener, emulsifier and combinations thereof;
b) continuously feeding the gum base concentrate into a continuous mixer,
c) continuously feeding remaining filler, lubricant and any other gum base ingredients and ingredient portions, sweetener, flavour and other gum ingredients into the continuous mixer, and continuously mixing them with the gum base concentrate to form a chewing gum product; and
d) continuously discharging the chewing gum product from the continuous mixer."

II. A Notice of Opposition was filed against the patent by Cadbury Schweppes Plc on 4 March 2004. The Opponent requested the revocation of the patent in its entirety,
relying on Article 100(a) EPC, namely that the claimed subject-matter did not involve an inventive step.

The opposition was supported by the following documents:

D1: EP 0 160 726
D2: FR 2 635 441

III. By a decision issued in writing on 14 December 2006 the Opposition Division rejected the opposition on the ground that taking account of the cited prior art the method for making a chewing gum according to Claims 1 to 40 involved an inventive step.

The Opposition Division considered D1 to represent the closest state of the art, from the disclosure of which the method of independent Claim 1 differed in that the gum base ingredients and the non-gum base ingredients such as sweeteners and flavours were fed to a single continuous mixer.

According to the Opposition Division the skilled person starting from D1 and seeking to provide a method for continuously manufacturing a chewing gum composition, avoiding the manufacture of the gum base in a separate, distinct step, would not find in the state of the art such as D1 or D2 any indication or suggestion that the final step of incorporating the flavour and flavouring agents could be performed in the same single mixer.

IV. On 21 February 2007 the Opponent (Appellant) lodged an appeal against the decision of the Opposition Division and paid the appeal fee on the same day.
In the Statement setting out the grounds of appeal filed on 23 April 2007, the Appellant maintained the objection of lack of inventive step of all claims based on the prior art documents D1 and D2. It further argued that, in addition to the arguments filed in the Notice of opposition, a man skilled in the art was well aware that extruders could be used in both the initial and final steps of chewing gum production.

It filed a new document **D3: US 5 135 760** which it said had only recently come to its attention. On the basis of that document it raised a fresh ground for opposition, namely lack of novelty, against the subject-matter of at least Claim 1. Furthermore, it argued that in the alternative, at least Claim 1 lacked inventive step over D3 alone or in combination with D1 or D2.

V. With a letter dated 12 March 2008 the Appellant, in addition to its lack of novelty arguments, filed detailed arguments concerning its lack of inventive step objections involving D3. The Appellant argued in essence that D3 disclosed a method for preparing a chewing gum which involved (i) the continuous feeding of a first portion of a gum base composition into an extruder, (ii) the subsequent feeding of a second portion of this gum base composition, which according to the terminology of the patent in suit corresponded to the "remaining" gum base ingredients, and (iii) the completion of the chewing gum composition by the final introduction of additional chewing gum ingredients. The Appellant thus argued that the skilled person starting from D3 would arrive at the claimed process without the exercise of inventive skill. Following a further line
of argument it contended that the skilled person would arrive at the same conclusion if D1 was considered to represent the closest state of the art. The reason was that the missing feature of continuously incorporating the flavouring agents and sweeteners into a single continuous mixer was to be found in the disclosure of D3.

VI. With a letter dated 28 August 2007 the Respondent (Patent Proprietor) filed observations with regard to the Statement setting out the grounds of appeal. It requested that the fresh ground for opposition under Article 100(a), namely lack of novelty, be not introduced into the proceedings. It also requested that the late filed document D3, on which that objection was based, be not admitted and be not considered in relation to the sole remaining issue of inventive step since no reasons had been provided for its relevance. According to the Respondent not only was D3 not relevant for novelty but it was also irrelevant for the issue of inventive step. It considered that D3 was actually not concerned with the claimed simplified process of directly preparing a final chewing gum from a gum base concentrate, ie without proceeding via an intermediately isolated gum base concentrate. It argued that such a process was not derivable from the combination of D3 with either D1 or D2.

VII. With a letter dated 22 January 2009 the Respondent filed two auxiliary requests accompanied by arguments in support of an inventive step of the claimed subject-matter.
VIII. Oral proceedings were held before the Board on 27 January 2009.

IX. The arguments put forward by the Appellant (Opponent) in its written submissions and at the oral proceedings can be summarized as follows:

- Document D3 should be admitted into the proceedings in view of its relevance for the novelty issue of the claimed subject-matter. At least Claim 1 lacked novelty over D3.

- The lack of novelty was particularly apparent from the disclosure of Figure 1. This figure disclosed the addition to a continuous mixer, i.e. an extruder, of two portions of a liquid gum base composition, which corresponded to the gum base concentrate of the patent in suit. This addition occurred at two spaced-apart locations of the extruder, namely ports 7 and 8. The addition to the mixture of remaining ingredients required for the completion of the gum base composition also occurred in the extruder at ports 16 (texturizer) and 18 (colorant). These further ingredients were cited in D3 as typical ingredients of a gum base composition (column 6, lines 36-42; column 9, Table 1). The addition of the flavour and flavouring agents to the thus manufactured gum base composition also occurred in the extruder through port 20 and finalized the manufacture of the chewing gum. Thus the disclosed method could not be distinguished from that claimed.

- If, however, the novelty objection was not admitted, then the claimed subject-matter should be considered obvious on the basis of the disclosure of that same document. The reason was that as the claimed method
could not be distinguished from the disclosure of D3, it *prima facie* lacked an inventive step.

- Additionally, D3 should be admitted into the proceedings because it was more relevant for the issue of inventive step than D1, the latter having been considered by the Opposition Division in its decision to represent the closest state of the art.

- Not only did D3 solve a problem associated with continuous processing for the manufacture of chewing gums, it also solved the problem addressed by the opposed patent.

- Thus the skilled person would conclude that the claimed method lacked an inventive step over either D3 taken alone or in combination with D1 or D2.

- Furthermore, the person skilled in the art would also find that the claimed method lacked an inventive step in view of the combination of D1 with D2, as argued before the Opposition Division. In that respect the Appellant contended that at the filing date of the opposed patent a man skilled in the art was well aware that extruders could be used in both the initial and final steps of chewing gum production.

X. The arguments put forward by the Respondent (Patent Proprietor) in its written submissions and at the oral proceedings can be summarized as follows:

- Document D3 should not be admitted in the proceedings. It was filed in support of the fresh ground of opposition of lack of novelty, the consent of the Respondent/Proprietor to the admittance of such ground at this stage being refused in accordance with G 1/95 (OJ EPO 1996, 555). Since the
Statement setting out the grounds of appeal failed to substantiate the relevance of D3 for the assessment of inventive step, there was no justification for D3's admittance on this reason either.

- Moreover, it was not discernable why this document could not have been found by a regular search and filed in time before the Opposition Division.

- If notwithstanding this argument the document were to be admitted, the case should be remitted to the Opposition Division for proper consideration of this reference.

- Even if, in defiance of the above circumstances, D3 was considered, it was not novelty destroying *inter alia* because it did not disclose the feeding into the extruder of a gum base concentrate but of a pre-prepared gum base. Furthermore D3 did not disclose feeding the remaining filler into the continuous mixer and continuously mixing it with the gum base concentrate to form a chewing gum product, as required in part (c) of the opposed patent.

- Nor was D3 relevant to the issue of inventive step of the claimed subject-matter.

- The patent in suit essentially dealt with the simplification of gum base manufacture by developing gum base concentrates which contained less than all the necessary ingredients for a particular gum base and thus enabled their use for the preparation of a large number of different gum base compositions. Such a gum base concentrate was subsequently used as a starting composition for the in-line preparation of a final gum base composition which was further processed to provide a chewing gum.
In essence, the invention arose from the realisation that it was not necessary to isolate the final chewing gum base before it was further processed into chewing gum end product. In this way, starting from a gum base concentrate the entire chewing gum mixing process could be carried out in a single continuous mixer.

Due to the fact that the gum base concentrate could be used directly in a variety of different chewing gum products, the gum base and chewing gum production processes were simplified.

Neither D3 nor any other prior art document was concerned with the specific problem of reducing the number of discrete steps involved in preparing a final chewing gum when a gum base concentrate was used as the starting material.

D3 was concerned with the preparation of a final chewing gum, specifically with the final stage of the preparation of a chewing gum by mixing a standard gum base with conventional ingredients. D3 sought to overcome the problem of agglomerations of solid ingredients in the gum mass by mixing the powdered chewing gum ingredients with a first portion of a liquid gum base followed by the addition of the second portion of this liquid gum base in order to provide the final chewing gum composition. D3 neither disclosed how the gum base should be prepared nor gave any indication that it could be prepared via a gum base concentrate.

D1 was concerned with a process for the preparation of a gum base containing all the usual gum base ingredients. It did not disclose any subsequent steps leading to the final chewing gum product.
D2 was concerned with gum base concentrates for subsequent conversion into gum base, which was an intermediate product that could be separately marketed.

Even the combination of D3 with D1 or D2 would not provide the claimed method. Thus the combination of D1 with D3 would provide a process for preparing a chewing gum according to which the gum base would be prepared by the particular method of D1. However, there was nothing in D1 or D3 to suggest that the gum base needed not be prepared independently and that the chewing gum could be prepared directly from a gum base concentrate.

Also the combination of D2 with D3 did not lead to the claimed method. D2 contemplated the preparation of a gum base concentrate to be used in the manufacture of an intermediate, isolated gum base. For the gum base concentrate of D2 to be used in the process of D3 the skilled person would have to convert it into a gum base using the procedure of D2, which is a conventional procedure. However, there was nothing to suggest to the skilled person that a final chewing gum could be prepared directly from the gum base concentrate without firstly preparing an intermediate gum base.

Finally, the decision of the Opposition Division was correct. Neither D1 nor D2 was relevant to the inventive step of the claimed method. No indication or suggestion was to be found in those documents that a final chewing gum could be prepared directly from the gum base concentrate without intermediate preparation of a gum base.

The Appellant did not give any reasons as to why the Board should depart from the finding of the
Opposition Division, since it simply made reference to the facts and arguments filed in support of the Notice of Opposition without supplementing them or indicating why the Opposition Division's decision was wrong.

XI. The Appellant (Opponent) requested that the decision under appeal be set aside and that the European patent No 0 732 059 be revoked.

XII. The Respondent (Patentee) requested that the appeal be dismissed or, alternatively, that the patent be maintained in amended form on the basis of one of the auxiliary requests 1 or 2 filed with the letter dated 22 January 2009. It further requested that Document D3 should not be admitted and that, if it was, the case be remitted to the Opposition Division for further prosecution.

Reasons for the Decision

1. Admissibility of the appeal

The appeal is admissible.

2. Admissibility of the fresh ground for opposition

2.1 The Appellant raised for the first time in the Statement setting out the grounds of appeal a fresh ground for opposition, namely that the subject-matter of at least Claim 1 lacked novelty (Article 100(a) EPC) over the disclosure of document D3, which was filed together with said Statement.
The Board considers that the case law of the boards of appeal is unambiguous on the matter concerning the submission of fresh grounds for opposition, ie grounds raised after the expiry of the nine month period set out in Article 99 EPC in conjunction with Rule 55(c) EPC 1973. The Board makes reference to the opinion of the Enlarged Board of Appeal G 10/91 (OJ EPO 1993, 420; Headnotes I and III) which sets as a principle that "a Board of Appeal is not obliged to consider all grounds for opposition referred to in Article 100 EPC, going beyond the grounds covered by the statement under Rule 55(c) EPC 1973". This opinion further stipulates that if it does, then such a "fresh ground for opposition may be considered in appeal proceedings only with the approval of the patentee".

The Board makes also reference to the later decision of the Enlarged Board of Appeal G 7/95 (OJ EPO 1996, 626; Headnote) which stipulates that in the particular case of a patent opposed under Article 100(a) EPC on the ground that the claims lacked an inventive step in view of documents cited in the notice of opposition, the ground of lack of novelty based upon Articles 52(1) and 54 EPC is a fresh ground for opposition and accordingly may not be introduced into the appeal proceedings without the agreement of the patentee.

In the present situation, the Patent Proprietor (Respondent) unambiguously stated (see letter dated 28 August 2007, pages 1 and 2) that it did not consent to the introduction into the appeal proceedings of the fresh ground for opposition and made a formal request that it not be introduced.
Under these circumstances the Board has to reject the request of the Appellant to introduce novelty as a new ground for opposition in these proceedings.

3. **Admissibility of document D3**

3.1 The Appellant filed this document with the Statement setting out the grounds of appeal and it was therefore **late filed**. This document was primarily and essentially submitted as evidence for the substantiation of the fresh ground for opposition, lack of novelty. Since the Board decided not to introduce this fresh ground in these proceedings, the above status of D3 would as a corollary entail its inadmissibility.

3.2 As to the statements in the grounds of appeal (last page) associating D3 with the valid ground for opposition of lack of inventive step: "In the alternative, at least claim 1 lacks inventive step from D3 alone or in combination with D1 or D2" and "D3 confirms that the extruder can be used to incorporate the flavour and the flavouring agents", the Board concludes that they do not meet the requirements of Article 12 RPBA and in particular paragraph 12(2) according to which the Statement of grounds of appeal shall contain the party's complete case and shall set out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the facts, arguments and evidence relied on. The above statements in the grounds of appeal are of purely declaratory nature and do not contain the slightest argumentation as to why any of the three suggested
obviousness attacks, that based on D3 alone, and the two others combining D3 with either D1 or D2, would render the claimed subject-matter obvious. These statements cannot therefore provide a justification for the admittance of D3 into the appeal proceedings.

3.3 The Board also considered whether D3, albeit late filed and not substantiated in due time as to its inventive step relevance, should be considered under Article 114(1) EPC and in the light of G 10/91 (OJ 1993, 420) and T 1002/92 (OJ 1995, 605) in view of its alleged prima facie relevance for the sole valid ground for opposition, namely lack of inventive step, in accordance with the later submitted substantive arguments brought forward by the Appellant in its letter dated 12 March 2008.

3.4 The result of this exercise was that also under this aspect admittance of D3 is not justified because it is prima facie at least no more relevant than D1, which was considered by the Opposition Division in its decision to represent the closest state of the art. Though both D3 and D1 belong to the general technical field of chewing gum manufacture, as is confirmed by their international classification in A 23 G 3/30, D3 represents a more remote state of the art than D1 from the point of view of the technical problem it addresses. D3 (abstract; column 1, lines 7-10; column 3, lines 21-29; column 4, lines 38-44) concerns the provision of a method for the quick elimination of agglomerated masses from chewing gums made by continuous extrusion, whereas D1 (page 1, lines 1-4) concerns a process for the manufacture of gum base starting from what in the patent in suit is regarded as a gum base concentrate.
This is closer to the technical problem set out in the patent in suit (paragraphs [0001], [0011] and [0012]), namely the provision of a method for the manufacture of chewing gum without separate manufacture of gum base and constitutes the more promising starting point for the assessment of inventive step.

3.5 The Board does not accept the argument of the Appellant that, since D3 was allegedly novelty destroying for at least the subject-matter of Claim 1, a ground for opposition not admitted in appeal, it was automatically relevant prior art for the issue of inventive step of that subject-matter. The Board notes that this argument seeks to rely on the conclusion of the Enlarged Board of Appeal in its decision G 7/95 (see decision of consolidated proceedings G 1/95, OJ 1996, 615; section 7.2) according to which with regard to the case underlying G 7/95 it is stated: "... if the closest prior art document destroys the novelty of the claimed subject-matter, such subject-matter obviously cannot involve an inventive step. Therefore, the finding of lack of novelty in such circumstances inevitably results in such subject-matter being unallowable on the ground of lack of inventive step" [emphasis added].

In the Board's judgment, the factual framework underlying G 7/95 is fundamentally different from the present situation in that D3 does not qualify as closest prior art document while in the former case the document under consideration represented the closest prior art on which the previously raised obviousness objections had been based. If only for that reason the above quoted conclusion of the Enlarged Board of Appeal in G 7/95 does not apply here.
3.6 In view of the above considerations the Board decided not to admit D3.

4. Inventive step (Article 56 EPC)

4.1 Closest state of the art

The Board in agreement with the Respondent and the Opposition Division considers D1 to represent the closest state of the art (see also point 3.4 above). D1 (page 1, lines 1-4; page 3, line 17 to page 4, line 7; page 8, lines 1-16; claims 1 and 10; Figure) deals with the problems encountered during the preparation of a gum base. The disclosed method comprises at least two mixing steps, the first step providing a blend of the essential gum base ingredients to which additional ingredients are added at each subsequent mixing step. The composition of the first blend corresponds to the gum base concentrate of the claimed method.

D2 (page 1, lines 4-9; claim 1) is less relevant than D1. While it specifically relates to the preparation of a gum base concentrate intended for the preparation of a gum base (page 1, lines 20-33) it does not address the further processing of the concentrate to arrive at the final chewing gum.

The method of Claim 1 differs from the method of D1 in that according to the invention there is no separate preparation of the final gum base composition but the gum base concentrate is directly introduced and continuously processed in the continuous mixer, including the later feeding of the remaining gum base
ingredients, additives and bulk ingredients into the same mixing device, thus directly leading at the mixer exit to the final chewing gum composition.

4.2 The technical problem to be solved

The Board, in agreement with the Respondent, considers that the technical problem to be solved is to provide a method for making chewing gum continuously and directly from a gum base concentrate, i.e. without an intermediate gum base finishing stage and without alteration of an existing or typical chewing gum formulation, the chewing gum mixing process being a continuous process (patent specification, paragraphs [0011] and [0012]).

The patent specification contains convincing technical evidence (see examples 2 to 5) which illustrates that this technical problem has successfully been solved. This fact has not been contested by the Appellant.

4.3 Obviousness

The Board considers that the skilled person starting from the disclosure of D1 and aiming at providing a method for the manufacture of a chewing gum in a continuous mixer directly from a gum base concentrate would not find any disclosure or hint of the claimed solution in the state of the art about how this result could be obtained.

The Board does not dispute that at the filing date of the opposed patent the person skilled in the art was well aware that extruders could be used in both the initial and final steps of gum production (see the
However the Board considers that only in the light of an *ex post facto* analysis would the skilled person consider the modification of the conventional preparation and finishing of a gum base according to the claimed method as obvious, arriving thereby at a process wherein apart from the initial preparation of a gum base concentrate all further steps leading to completion of the final chewing gum composition were performed in a single continuous mixer, namely an extruder.

4.4 Consequently the Board considers that the claimed subject-matter involves an inventive step.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:  
C. Moser

The Chairman:  
P. Kitzmantel