

**Internal distribution code:**

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

**Datasheet for the decision  
of 17 October 2018**

**Case Number:** T 0339/15 - 3.3.09

**Application Number:** 06734067.9

**Publication Number:** 1845799

**IPC:** A23G3/42, A23G3/50, A23G3/54,  
A23G4/20

**Language of the proceedings:** EN

**Title of invention:**  
Coated confectionary product

**Patent Proprietor:**  
Wm. Wrigley Jr. Company

**Opponent:**  
Perfetti Van Melle S.p.A.

**Headword:**

**Relevant legal provisions:**  
EPC Art. 84, 56

**Keyword:**  
Late-filed documents - admitted (yes)  
Amended claims - clarity (yes)  
Inventive step - (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 0339/15 - 3.3.09

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.09**  
**of 17 October 2018**

**Appellant:** Perfetti Van Melle S.p.A.  
(Opponent) Via XXV Aprile, 7/9  
20020 Lainate (MI) (IT)

**Representative:** Minoja, Fabrizio  
Bianchetti Bracco Minoja S.r.l.  
Via Plinio, 63  
20129 Milano (IT)

**Respondent:** Wm. Wrigley Jr. Company  
(Patent Proprietor) Global Innovation Center  
1132 W. Blackhawk Street  
Chicago, IL 60642 (US)

**Representative:** Dehns  
St. Brides House  
10 Salisbury Square  
London EC4Y 8JD (GB)

**Decision under appeal:** **Interlocutory decision of the Opposition**  
**Division of the European Patent Office posted on**  
**22 December 2014 maintaining European patent**  
**No. 1845799 in amended form**

**Composition of the Board:**

**Chairman** W. Sieber  
**Members:** J. Jardón Álvarez  
D. Prietzel-Funk

## Summary of Facts and Submissions

I. This decision concerns the appeal filed by the opponent against the interlocutory decision of the opposition division finding that European patent No. 1 845 799 as amended met the requirements of the EPC.

II. The opponent had requested revocation of the patent in its entirety on the grounds of Article 100(a) (lack of novelty and inventive step) and (b) EPC. The documents cited during the opposition proceedings included:

A1: EP 0 724 837 A1;

A5: F. Antonietti *et al.*, "Mentos Candies - Structure determination by penetration test", 14 pages, undated, but 2012 or later (cf. page 4, line 1);

A9: EP 1 006 128 A1;

A11: Silesia Confiserie Manual No. 3, "The NEW Handbook for the Confectionery Industry", Volume 2 by A. Meiners *et al.*, Silesia-Essenzenfabrik Gerhard Hanke K.G., 1984, pages 269 to 271; and

A16: Silesia Confiserie Manual No. 3, "The NEW Handbook for the Confectionery Industry", Volume 2 by A. Meiners *et al.*, Silesia-Essenzenfabrik Gerhard Hanke K.G., 1984, page 99.

III. The opposition division maintained the patent on the basis of the then pending auxiliary request I as filed on 30 September 2014. Independent claims 1 and 18 of this request read as follows:

"1. A method of preparing a confectionary product comprising:  
a) providing a chewy material comprising a sweetener;  
b) providing a candy material comprising an amorphous sweetener;  
c) creating nucleating sites in the candy material;  
d) coating the chewy material with the candy material by coextruding the chewy material and the candy material to form a jacketed material;  
e) coating the jacketed material with a hard shell coating; and  
f) allowing the amorphous sweetener to at least partially crystallize,

wherein the step (d) of coating the chewy material with the candy material to form a jacketed material occurs before, during, or after step (c) of creating nucleating sites in the candy material, and wherein the moisture content of the chewy material is greater than the moisture content of the candy material."

"18. A confectionary product comprising a chewy center comprising an indigestible dextrin, a sweetener, water, and flavour;  
an intermediate layer comprising a sweetener and flavour,  
wherein the intermediate layer includes a crystalline portion and an amorphous portion; and  
a crunchy hard shell outer layer comprising a sweetener and flavour."

Claims 2 to 17 and 19 to 23 were dependent claims.

IV. The opposition division's decision may be summarised as follows:

- The opposition division rejected the main request of the patent proprietor (granted claims) because the subject-matter of claim 1 lacked inventive step in view of A1 alone.
- The opposition division admitted the first auxiliary request into the proceedings and found that it complied with the requirements of the EPC.
- Concerning inventive step, the opposition division considered A1 to be the closest prior-art document for the subject-matter of claim 1 and defined the problem to be solved as "to provide an alternative method of preparing a confectionery product having 3 layers (a chewy center, an intermediate layer at least partially crystallized and an outer shell coating) and in the same time to induce a softening of the intermediate layer". In its view the claimed solution according to claim 1 involved an inventive step because there was no reason for the skilled person to combine A1 with any of the other cited prior-art documents.
- Concerning the subject-matter of claim 18, Mentos as disclosed in A5 was considered to represent the closest prior art. An inventive step was acknowledged because the prior use had not been proven "up to the hilt".
- Lastly, the opposition division also decided not to admit A16 into the proceedings on the grounds that it was late-filed and not *prima facie* relevant.

V. This decision was appealed by the opponent (hereafter: the appellant). With the statement setting out the grounds of appeal filed on 21 April 2015, the appellant

requested that the decision under appeal be set aside and that the patent be revoked in its entirety. It further requested that A16 filed at the oral proceedings before the opposition division be admitted into the proceedings and submitted the following new documents:

A17: G. Bussiere *et al.*, "Confectionery and water activity determination of  $a_w$  by calculation", in "Properties of Water in Foods", D. Simatos *et al.* (editors), 1985, pages 627 to 645;

A18: T. Richardson "Chewy candies", The Manufacturing Confectioner for December 1981, pages 43 to 44;

A19: T.P. Labuza *et al.*, "Moisture migration and control in multi-domain foods", Trends in Food Science & Technology 9, 1988, pages 47 to 55; and

A20: Silesia Confiserie Manual No. 3, "The NEW Handbook for the Confectionery Industry", Volume 2 by A. Meiners *et al.*, Silesia-Essenzenfabrik Gerhard Hanke K.G., 1984, "Table of contents", pages 3 to 8.

VI. With its reply filed on 4 September 2015, the patent proprietor (hereafter: the respondent) disputed the arguments of the appellant and requested that the appeal be dismissed (main request), or alternatively that the patent be maintained on the basis of the claims according to any of auxiliary requests I to VI filed with the reply. Additionally, it offered to delete the equivalent of claims 18 to 23 as allowed by the opposition division from any set of claims should that prove necessary.

It further requested that A17 to A20 not be admitted into the proceedings and that the inventive-step attack against claim 18 based on A1 as the closest prior art be rejected as inadmissible.

- VII. The appellant filed a further submission on 8 January 2016.
- VIII. In a communication dated 15 May 2018, the board indicated the points to be discussed during the oral proceedings scheduled for 17 October 2018.
- IX. Both parties replied to the board's communication.
- X. On 17 October 2018, oral proceedings were held before the board. During the oral proceedings the respondent withdrew its request that the appellant's inventive step attack against claim 18 based on A1 as the closest prior art be rejected as inadmissible.
- XI. The appellant's relevant arguments may be summarised as follows:
- A17 to A20 were filed as a direct reaction to the admission of auxiliary request I during the oral proceedings before the opposition division. They should be admitted into the proceedings, because the notice of appeal was the first opportunity for the appellant to react.
  - The amended claims were not clear. The use of the expression "moisture content" rendered the claims unclear. Additionally, there were inconsistencies between the claim and the description and claim 1 lacked an essential feature, namely that the water



activity of the chewy material was greater than the water activity of the candy material.

- A1 represented the closest prior art. It disclosed explicitly or implicitly all the features of the method of claim 1 except that the moisture content of the chewy material was greater than the moisture content of the candy material. This feature was, however, obvious for the skilled person from the teaching of A1 or was common general knowledge in the field of filled candies.
- Similar arguments applied to the subject-matter of claim 18. The product obtained by the process disclosed in A1 included most of the features of the claimed product. The ingredients not explicitly mentioned in A1 were usual ingredients in the art of confectionery products and could not justify an inventive step.

XII. The respondent's arguments, where relevant for the present decision, may be summarised as follows:

- The subject-matter of claim 1 was clear. It merely required that there was more moisture in one layer than in another layer. No lack of clarity arose from the amendment made.
- A1 disclosed a coextrusion machine for producing a "sausage" having a chewing gum core enveloped by boiled sugar. The disclosure of A1 focused on the mechanical features of the extruder used and not on the nature of the prepared confectionery product. The problem to be solved by the patent was to provide a method of preparing a confectionery product having three layers with an induced

softening of the intermediate layer. This problem was solved by the claimed method that differed from the method of A1 by several features, such as the presence of a sweetener in the chewy layer, the mandatory creation of nucleation sites in the candy layer, the moisture level in the layers and the presence of a hard-shell coating.

A11 addressed a completely different problem, and the skilled person would have had no motivation to combine this document with A1 to prepare a product as claimed. The combination of A1 with A11 was made with hindsight knowledge of the invention.

- Similar considerations applied to the subject-matter of claim 18, which was directed to a preferred confection with a softened candy layer and specific ingredients not mentioned at all in A1.

XIII. The appellant requested that the decision under appeal be set aside and that European patent No. 1 845 799 be revoked in its entirety.

The respondent requested that the appeal be dismissed (main request), or alternatively that the patent be maintained on the basis of the claims of one of auxiliary requests I to VI filed on 4 September 2015 with the reply to the statement of grounds of appeal.

## **Reasons for the Decision**

### *1. Admission of D16 and D17 to D20*

1.1 A17 to A20 were filed as a direct reaction to the finding in the appealed decision that the subject-matter of the then pending auxiliary request I involved an inventive step. They were filed at the earliest possible stage of the proceedings to support arguments in relation to the feature added to the claim.

Since, furthermore, the respondent conceded during the oral proceedings before the board that it was prepared to deal with the documents, the board saw no reason not to admit A17 to A20 into the proceedings.

1.2 Concerning A16, the board noted during the oral proceedings that the respondent itself had used A16 in its written argumentation. The respondent did not object to its admission into the proceedings, and so the board also decided to admit A16 into the proceedings.

MAIN REQUEST (claims as maintained by the opposition division)

### *2. Clarity*

2.1 Claim 1 of the main request is based on granted claim 1 with the addition of the following feature:

"and wherein the moisture content of the chewy material is greater than the moisture content of the candy material." (see: page 5, lines 7 to 9, of the application as filed).

2.2 Basically, the appellant argued that claim 1 lacked clarity in view of (i) the expression "moisture content", (ii) the inconsistencies between claim 1 and the description and (iii) the lack of an essential feature (in its view water activity was the relevant parameter for achieving the desired result and not moisture content).

2.3 The board is not persuaded.

2.3.1 The term "moisture content" in relation to a material is the amount of water present in the material. This is perfectly clear. The added feature merely requires there to be more water in one layer (the chewy material) than in another layer (the candy material).

2.3.2 There are also no inconsistencies between claim 1 and the specification. Paragraph [0020] of the granted specification relied upon by the appellant reads:

"The method of producing the confectionary product includes providing a chewy material and a candy material. While not intending to be bound by any particular theory, the relative chewiness and crunchiness of the layers of the confectionary product are determined in part by the crystallinity and moisture content of the respective layers. The candy material includes a sweetener. The sweetener is at least in part amorphous. The water activity of the chewy material is greater than the water activity of the candy material. Water activity is the relative availability of water in a substance. Water activity is defined as the vapor pressure of water in a material divided by the vapor pressure of pure water at a given temperature. Water tends to migrate from a material with a high water activity to a material with a lower

water activity. In one embodiment, the moisture content of the chewy material is greater than the moisture content of the candy material. The chewy material and the candy material are disposed adjacent to each other. Nucleating sites are created in the candy material to promote crystallization. Nucleating sites may also be created in the chewy center, which will then all[ow] crystallization to begin at the interface between the chewy center and the candy material. Water is allowed to migrate from the chewy material to the candy material. The amorphous candy material is allowed to crystallize at least in part. Thus, the crystallinity and moisture content of the candy material increases, making it less crunchy and more chewy."

Claim 1 has been limited to the preferred embodiment explicitly disclosed in this paragraph, wherein the moisture content of the chewy material is greater than the moisture of the candy material. No inconsistency arises from the incorporation of this feature into the claim.

There is also no inconsistency due to the fact that in the same paragraph it is stated that "the water activity of the chewy material is greater than the water activity of the candy material". Indisputably, moisture content and water activity are different parameters and paragraph [0020] mentions both next to each other. The respondent was free to introduce one of these two parameters (or both) into the claim. The fact that only the moisture content has been introduced into the claim is not in contradiction with paragraph [0020] of the description and is not inconsistent with it.

2.3.3 Lastly, concerning the objection that the water activity would be an essential feature of the claimed

method but is not present in claim 1, this objection relates rather to the question whether the problem underlying the invention has been credibly solved or not, that is to say, in relation to inventive step and not to the clarity of the claimed subject-matter.

2.4 For these reasons the subject-matter of claim 1 of the main request satisfies the requirements of Article 84 EPC.

3. *Inventive step*

3.1 The invention is directed to confectionery products having a chewy centre, an intermediate coating, and a crunchy outer layer. The preparation of such products is said to be associated with processing difficulties, especially with controlling the crystallinity and moisture levels in the product. According to paragraph [0002] of the specification, it is difficult to coat a soft centre with a hard coating.

3.2 The patent aims to overcome these difficulties. With the claimed method a soft chewy centre can be easily coated with an amorphous candy material. Then, the hardness of the candy is reduced as sugar recrystallises and water migrates, thus creating a chewy candy layer.

3.3 The set of claims of the main request (see point III above) includes two independent claims directed to a method for preparing such confectionery products (claim 1) and to specific confectionery products which can be produced by the method of claim 1 (claim 18).

### 3.4 Closest prior art

3.4.1 In the opposition proceedings the appellant relied on A1 as the closest prior art for the method claim and on A5 for the product claim, whereas in the appeal proceedings it relied on A1 for both claims. The respondent argued that A1 focused on the machinery for use in a (conventional) coextrusion method and wondered whether A1 could serve as a strong starting point for inventive step. Nevertheless, it agreed during the oral proceedings that A1 was the closest prior-art document on file.

3.4.2 A1 discloses a coextrusion machine for producing a "sausage"-shaped composite having a core of chewy material coated with a layer of cooked sugar (column 1, lines 3 to 6).

3.4.3 A1 aims at optimising the automation of confectionery production to allow continuous rather than semi-continuous manufacture and so increase yields and decrease costs (column 2, lines 19 to 26).

This is achieved by a device for coextrusion including two feed channels for the cooked sugar and the chewy material which converge in a V-shape towards the coextrusion device. The device further comprises a compression-extrusion head which ensures compression and dispersion of both materials to obtain, at the extrusion die head, a cylindrical "sausage" with a core of chewy material and an outer shell of cooked sugar (column 3, lines 8 to 18).

3.4.4 The focus of A1 is on the machinery and not on the confectionery product. There is little information on the product produced with the coextrusion device.

Basically, the information on the product is given in column 1, where prior-art products and their preparation are discussed. The composition of the products that are or could be produced with the claimed coextruder is not given in A1. In fact, there is no working example of a specific confectionery product obtained using the coextruder.

3.5 Problems to be solved and their solutions

- 3.5.1 According to both parties, the problem underlying the method of claim 1 in the light of A1 is to provide a method of preparing a confectionery product having three layers (a chewy centre, a partially crystallized intermediate layer and an outer shell coating) with an induced softening of the intermediate layer.
- 3.5.2 By analogy, the problem underlying product claim 18 is to provide a confectionery product having three layers (a chewy centre, a partially crystallized intermediate layer and an outer shell coating) with an induced softening of the intermediate layer.
- 3.5.3 These problems are solved by the method of claim 1 and the products of claim 18, in particular by creating nucleating sites in the candy material and providing a greater moisture content in the chewy material than in the adjacent candy material. By these measures the amorphous sweetener in the intermediate layer is allowed to partially crystallize, and water is allowed to migrate from the chewy material to the candy material, thereby making the intermediate layer chewier (cf. "induced softening").
- 3.5.4 The examples in the patent specification show that these problems have been credibly solved. The claimed



method is said to have the benefit of being able to coat the individual candy pieces while hard, while during the normal distribution time a portion of the layer became soft. The confectionery products are said to have acceptable properties (examples 1 to 8 and paragraph [0037]).

3.5.5 The appellant did not dispute that the formulations of the examples of the patent had the required properties but argued during the oral proceedings that it was questionable whether the same results would be obtained for all the chewy materials covered by the claims. It was doubtful whether the water could migrate from the chewy material to the candy material in all materials covered by the claim, because water migration was associated with the water activity and not with the moisture content.

3.5.6 The board is not convinced. In the absence of any experimental evidence showing that the use of chewing materials as claimed would not result in products with the required properties, the board has no reason to doubt that the problem has been credibly solved by the claimed measures.

3.6 Obviousness - claim 1

3.6.1 In the appellant's view claim 1 would be obvious from the combined teaching of A1 and A11.

A11 is an excerpt from a confectionery textbook and relates to the graining process or controlled recrystallisation and its application in the production of sweets. The appellant relied in particular on chapter 4.6.2 concerning the production of "highly

filled sweets" which can be produced by one of three methods, namely:

- "1. Induce a controlled recrystallisation of the sugar casing, as described in the previous section.
2. Induce a softening of the sweets through the filling from inside out, by the action of a certain amount of free water (not chemically bound).
3. Use a combination of 1 and 2 above."

In its view, this information in A11 would have provided the skilled person with the incentive to induce softening of the intermediate candy layer of A1 by using a higher moisture content in the chewy material on the basis of common general knowledge in the field of filed candies.

- 3.6.2 However, the board notes that A11 is not about chewy materials, while A1 is about a device for the manufacture of chewy materials with a sugar coating. The sweets discussed in A11 are praline-type sweets, which are sometimes also filled with liqueur or alcohol (A11, page 271, penultimate paragraph). These are completely different confectionery products which are normally not produced by coextrusion.

The combination of A1 with A11 is not a combination that the skilled person would make, because the two documents are unrelated.

- 3.6.3 No other conclusion could be reached if the teaching of A11 were to be considered part of the common general knowledge of the skilled person in the field. Why would the skilled person modify the process of A1 so that the moisture content of the chewy material is greater than the moisture content of the candy material? Certainly

not because some non-specified sweets (those of A11) can be softened by the action of a certain amount of free water. This attack is clearly made with knowledge of the invention and must fail.

3.6.4 As to the argument of the appellant that A1 was not limited to chewy materials but included other sweets such as "bonbons fourrés" (stuffed candies) mentioned in the background section of A1, the board agrees with the respondent that A1 is indeed limited to a coextrusion process with a centre made of chewy material. This is clear from column 2, lines 4 to 7, where the object of the invention is defined in A1 as to provide a coextrusion process for the production of a composite with a centre of chewy material and a sugar coating.

3.6.5 Lastly, A17 and A19 have also been cited by the appellant in relation to claim 1, but they do not improve the appellant's inventive-step attack.

Basically, A17 is concerned with the determination of the water activity of confectionery products by calculation. Table 1 on page 628 merely lists the moisture content and water activity of confectionery products but gives no hint to focus on a greater moisture content in the chewy material than in the candy material to solve the above-stated problem. In any case, the values in table 1 of A17 show that chewing gum can have a water content of 3% and a boiled sweet can have a water content of 5%. This shows that the moisture content of a chewy material is not always higher than the moisture content of the candy material.

A19 is about moisture migration and control in multi-domain foods, but does not specifically mention chewing

gums and sugar coatings. The appellant relied on page 47, right column, lines 7 to 10, where it is stated that: "Multi-domain systems are dynamic. Moisture loss or gain from one region or food component to another region will continuously occur in order to reach thermodynamic equilibrium". This phenomenon has never been disputed. In fact, it is mentioned in paragraph [0020] of the patent in slightly different terms. A19 does not provide a hint towards modifying the coextrusion method of A1 in order to solve the posed problem.

3.6.6 In summary, there is no incentive in the prior art cited by the appellant for the skilled person to modify the coextrusion method of A1 in order to arrive at the method of claim 1.

3.7 Obviousness - claim 18

3.7.1 The appellant argued that the subject-matter of claim 18 would be obvious starting from A1 because in its view A1 already directly and unambiguously disclosed confectionery products in which the intermediate layer was partially amorphous. Furthermore, the specific components required in the claim were usual ingredients in the art of confectionery products. Thus, dextrins were already known to be compounds having a low calorific value and a low cariogenic power utilisable in the food industry in the preparation of confectionery products, in particular chewing gums (A9, paragraphs [0019], [0034] and [0075]).

3.7.2 The board is not persuaded. As discussed above (see point 3.4.4), A1 is completely silent on the composition of the confectionery products. The fact

that the confectionery products now claimed include ingredients usual in the field does not automatically make them obvious alternatives.

Moreover, A1 does not disclose the essential feature of claim 18, namely that the intermediate layer includes a crystalline portion and an amorphous portion making the layer chewier. In fact, A1 does not disclose partial crystallisation. Thus, there is no information at all in A1 that the cooked sugar could undergo partial crystallisation in the intermediate layer to form a blend of amorphous and crystalline portions. A1 is completely silent on partial crystallisation of the intermediate layer and cannot give any hint at the subject-matter of claim 18.

3.7.3 Under these circumstances, there is no need for the board to investigate whether the use of an indigestible dextrin for the chewy centre would be obvious or not.

3.8 For these reasons, the subject-matter of independent claims 1 and 18 involves an inventive step. This conclusion also applies to the preferred embodiments defined in dependent claims 2 to 17 and 19 to 23.

#### AUXILIARY REQUESTS

Since the main request of the respondent is allowable, there is no need for the board to deal with the further auxiliary requests.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



M. Cañueto Carbajo

W. Sieber

Decision electronically authenticated