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

Datasheet for the decision
of 24 January 2020

Case Number: T 1384/16 - 3.3.09
Application Number: 08748937.3
Publication Number: 2136652
Language of the proceedings: EN

Title of invention:
REDUCING THE SENSORY COOLING EFFECT OF POLYOLS

Patent Proprietor: Cargill, Incorporated

Opponent: Vos, Derk

Headword:

Relevant legal provisions:
EPC Art. 100(b), 123(3)
RPBA Art. 12(2), 12(4)
RPBA 2020 Art. 13(1)
Keyword:
Main request and auxiliary request 1 - Sufficiency of disclosure (no)
Auxiliary request 8 - Extension of the scope of protection (yes)
Auxiliary requests 2 to 7 and 9 to 17 - Admission into the appeal proceedings (no)

Decisions cited:
G 0001/03, T 2017/07, T 1360/11

Catchword:
Case Number: T 1384/16 - 3.3.09

DECISION
of Technical Board of Appeal 3.3.09
of 24 January 2020

Appellant: Cargill, Incorporated
(Patent Proprietor)
15407 West McGinty Road West
Wayzata, MN 55391-1063 (US)

Representative: Jantschy, Jasmin
Cargill R&D Centre Europe BVBA
Bedrijvenlaan 9
2800 Mechelen (BE)

Respondent: Vos, Derk
(Opponent)
Maiwald Patentanwalts -und
Rechtsanwaltsgesellschaft mbH
Elisenhof
Elisenstraße 3
80335 München (DE)

Representative: Maiwald Patent- und Rechtsanwaltsgesellschaft
mbH
Elisenhof
Elisenstraße 3
80335 München (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted on 11 March 2016
revoking European patent No. 2136652 pursuant to
Article 101(3)(b) EPC.
Composition of the Board:

Chairman: N. Perakis
Members: A. Veronese
         E. Kossonakou
Summary of Facts and Submissions

I. The appeal was filed by the patent proprietor against the decision of the opposition division to revoke the European patent No. 2 136 652.

II. With its notice of opposition, the opponent had requested revocation of the patent in its entirety on the grounds under Article 100(a) (lack of novelty and inventive step) and 100(b) EPC.

III. In its decision the opposition division found that the invention claimed in the granted patent met the requirement of sufficiency of disclosure. However, it found that claim 7 as granted lacked novelty over D5. The subject-matter of auxiliary requests 1 and 2 was found to be novel over D3 to D7 but to lack inventive step over D8, alone or in combination with D9. Auxiliary request 3, filed during the oral proceedings before the opposition division, was found not to comply with Article 123(3) EPC. Auxiliary requests 4 to 10 were not admitted into the proceedings.

IV. The patent proprietor (appellant) requested that the decision be set aside and that the opposition be dismissed (main request) or, alternatively, that the patent be maintained on the basis of one of auxiliary requests 1 to 16, all filed with the statement setting out the grounds of appeal. The appellant filed documents D15 to D20 and the experimental report D21 with the statement setting out the grounds of appeal.

V. Granted claim 1 reads:

"1. Use of sugar esters and/or fibers selected from pectin, guar gum, xanthan gum, locust bean gum,
alginate, carrageenan, soluble cocoa fiber, soluble fiber of guar gum, cellulose, cellulose derivatives, beta-glucan, acetylated distarch adipate, n-OSA starch, hydroxypropyl starch phosphate, partially depolymerised fibers and mixtures of two or more thereof to reduce the cooling effect, in particular, the sensory cooling effect of erythritol and wherein the ratio of the combined weight of fibers and/or sugar esters to the weight of erythritol is from 1:5 to 1:300, preferably from 1:10 to 1:300."

Granted claim 7 reads:

"7. A confectionery composition including erythritol and sugar esters and/or fibers selected from pectin, guar gum, xanthan gum, locust bean gum, alginate, carrageenan, soluble cocoa fiber, soluble fiber of guar gum, cellulose, cellulose derivatives, beta-glucan, acetylated distarch adipate, n-OSA starch, hydroxypropyl starch phosphate, partially depolymerised fibers and mixtures of two or more thereof, wherein the weight ratio of sugar esters and/or fibers to erythritol is from 1:5 to 1:300, preferably from 1:10 to 1:300."

Claim 1 of auxiliary request 1 is identical to claim 1 of the main request.

Claim 2 of auxiliary request 8 reads:

"2. A confectionery composition including erythritol and sugar esters and/or fibers selected from pectin, guar gum, xanthan gum, locust bean gum, alginate, carrageenan, soluble cocoa fiber, soluble fiber of guar gum, cellulose, cellulose derivatives, beta-glucan, acetylated distarch adipate, n-OSA starch,
hydroxypropyl starch phosphate and mixtures of two or more thereof, wherein the weight ratio of sugar esters and/or fibers to erythritol is from 1:5 to 1:300, preferably from 1:10 to 1:300, characterised in that the confectionary composition is a chocolate composition."

VI. In its reply to the statement setting out the grounds of appeal, the opponent (respondent) requested that the appeal be dismissed. The respondent further requested that auxiliary requests 2 to 7 and 9 to 16 as well as D15 to D21 not be admitted into the appeal proceedings.

VII. In a communication pursuant to Article 15(1) RPBA the board drew attention to the points to be discussed during the oral proceedings. During these proceedings, which took place on 24 January 2020, the appellant filed auxiliary request 17. The respondent requested that this request not be admitted into the proceedings, but withdrew its request that D21 not be admitted.

VIII. The appellant's arguments, where relevant for the decision, may be summarised as follows.

The invention defined in claim 1 of the granted patent and of auxiliary request 1 was sufficiently disclosed. The experimental setting used to carry out the tests described in the patent and in D21 was suitable to show whether a fibre reduced the cooling effect induced by erythritol. The tests were simple to carry out and were conducted by a skilled person expected to take all measures necessary for obtaining consistent results.

The tests provided evidence that, when used in the weight ratio specified in the claims, the fibres listed in the claims were effective in reducing the cooling
effect of erythritol. The appellant admitted that, as showed in D21, inulin, one of the tested fibres, did not induce this effect. However, inulin was a homopolymer, whereas the invention focused primarily on the use of heteropolymers. The appellant conceded, nonetheless, that not all the fibres listed in claim 1 were heteropolymers.

Contrary to the respondent's argument, claim 2 of auxiliary request 8 did not extend the scope of protection beyond that conferred by the granted patent. The composition defined in this claim did not contain other fibres beyond those listed in the claim; alternatively, if this claim were interpreted to contain other fibres, then the specified weight ratio between the fibres and erythritol had to apply to all fibres present in the composition.

Auxiliary requests 2 to 7 and 9 to 16 had to be admitted into the proceedings. They all addressed objections raised during the opposition proceedings and in the decision under appeal. Auxiliary requests 9 to 15 corresponded to requests which the opposition division had wrongly decided not to admit into the proceedings. Auxiliary request 17 was filed during the oral proceedings before the board in reaction to the unexpected findings on the issues of sufficiency of disclosure and extension of the scope of protection.

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

The invention defined in claim 1 of the granted patent and in auxiliary request 1 was not sufficiently disclosed. The tests relied on by the appellant were unsuitable to show that fibres reduced the cooling
effect of erythritol. The testing method was inadequately defined and did not take into account the influence of factors such as external temperature, evaporation, size of the testing apparatus and dilution of erythritol. Thus, the results were insignificant. Furthermore, D21 showed that inulin did not provide a reduction of the cooling effect when combined with erythritol in the weight ratio specified in the claims. Therefore, the alleged technical effect was not achieved over the entire scope claimed. The results observed with the tested fibres could not be generalised to all the listed fibres.

Claim 2 of auxiliary request 8 extended the scope of protection beyond that conferred by the granted claims. The weight ratio between the fibres and erythritol in claim 2 of auxiliary request 8 related to the listed fibres only, but the composition could comprise other fibres, such as the deleted "partially depolymerised fibers", in an undefined weight ratio, contrary to the requirement of claim 7 as granted.

Auxiliary requests 2 to 7 and 9 to 16 were not to be admitted into the appeal proceedings. These requests should have been filed during the opposition proceedings and/or had correctly not been admitted by the opposition division. Furthermore, they had been filed with the statement setting out the grounds of appeal without any explanation as to why the amendments overcame the objections raised during the opposition proceedings. This was an abuse of procedure.

Auxiliary request 17, filed during the oral proceedings before the board, was not to be admitted either. There was no reason to file it at this late stage.
Reasons for the Decision

Main request

1. Sufficiency of disclosure

1.1 Claim 1 of the granted patent relates to the use of specific fibres and/or sugar esters to reduce the cooling effect caused by erythritol.

1.2 The fibres which according to claim 1 can be used to achieve this effect are selected from: pectin, guar gum, xanthan gum, locust bean gum, alginate, carrageenan, soluble cocoa fibre, soluble fibre of guar gum, cellulose, cellulose derivatives, beta-glucan, acetylated distarch adipate, n-OSA starch, hydroxypropyl starch phosphate and partially depolymerised fibres. The ratio between the combined weight of the fibres and/or sugar esters and that of erythritol ranges from 1:5 to 1:300.

1.3 Since claim 1 is directed to the use of certain compounds for achieving a technical effect, the effect is a functional technical feature characterising the claim. Thus, the issue of whether this effect is achieved is relevant for the assessment of whether the claimed invention meets the requirement of sufficiency of disclosure (G 1/03, Reasons 2.5.2).

1.4 As evidence that the compounds listed in claim 1 decrease the cooling effect of erythritol, the appellant referred to the tests described in the examples of the patent in suit and in the experimental report D21. These tests were designed to show that the decrease in temperature observed when erythritol is
dissolved in water is reduced if the erythritol is co-melted in the claimed weight ratio with some of the fibres listed in claim 1 and/or certain esters.

1.5 The respondent raised doubts as to whether the experimental setting used to carry out the tests was appropriate to detect a cooling effect and its reduction. In its opinion, factors such as ambient temperature, evaporation, size of the apparatus and dilution of the erythritol could affect the results.

1.6 These doubts were, however, unsubstantiated. Furthermore, as noted by the appellant, what counts in the present case is not the determination of absolute calorimetric values, but rather the detection of differences in temperature after dissolution of compositions comprising erythritol alone and in combination with the tested agents. The apparatus and the method used for the tests are very simple. Furthermore, it can be assumed that the tests were carried out by a skilled person in a consistent and repeatable manner, under the same working conditions.

1.7 The significant differences in temperature observed when dissolving compositions according to the invention and those used as a reference cannot result from the dilution of erythritol either. The difference in the amount of erythritol in the tested compositions is, in fact, too modest to explain the results.

1.8 Thus, it is concluded that the results of the tests provide credible evidence that the tested compounds, in the given weight ratio, induce the claimed effect.

1.9 What remains to be established is whether it is credible that this effect can be achieved across the
entire scope of the claim. This is so because, of all the fibres listed in claim 1, only the following were tested: pectin, guar gum, partially depolymerised guar gum, xanthan gum, alginate, carrageenan and soluble cocoa fibre. The question then arises as to whether the results observed with these fibres can be generalised to all the listed fibres.

1.10 During the appeal proceedings the appellant filed an experimental report (D21) showing that, unlike other tested fibres, inulin does not offset the cooling effect of erythritol in the claimed amount ratio. This result indicates that not all fibres behave in the same manner when they are mixed with erythritol. This finding is not surprising since, as stated by the opposition division in its decision (Reasons 6.2.5), fibres can differ considerably in terms of physico-chemical properties. This was not contested by the appellant. Consequently, in the absence of any evidence that all the fibres listed in claim 1 share a common property or structure which is not also shared by inulin, the results of the aforementioned tests cannot be generalised to all the fibres listed in claim 1.

1.11 During the oral proceedings the appellant argued that the invention focused on the use of heteropolymers rather than homopolymers, such as inulin. However, it then conceded that cellulose and its derivatives, as well as starch derivatives, which are among the fibres listed in claim 1, cannot be considered heteropolymers.

1.12 Since no concept can be identified which makes it credible that all the fibres listed in claim 1 in the claimed amount ratio reduce the cooling effect of erythritol, the invention defined in claim 1 does not
meet the requirement of sufficiency of disclosure (Article 100(b) EPC).

**Auxiliary request 1**

2. **Sufficiency of disclosure**

2.1 Claim 1 of auxiliary request 1 is identical to claim 1 of the main request. Thus, the conclusions reached above apply equally to the invention defined in claim 1 of auxiliary request 1 (Article 100(b) EPC).

**Auxiliary request 8**

3. **Extension of the scope of protection**

3.1 Claim 2 of auxiliary request 8 relates to a chocolate confectionery composition which includes erythritol and sugar esters and/or fibres selected from a certain list. The **weight ratio** of the listed fibres and/or sugar esters to erythritol ranges from 1:5 to 1:300.

3.2 Claim 2 differs from granted claim 7 in that the claimed composition is a chocolate and in that partially depolymerised fibres have been deleted from the listed fibres. The opposition division decided that this deletion resulted in an extension of the scope of protection, contrary to the requirements of Article 123(3) EPC. The respondent has maintained this objection and referred to T 2017/07.

3.3 The problem underlying this objection is well known in the case law (see e.g. T 2017/07, mentioned by the respondent; also T 1360/11 and the decisions cited therein). As explained in T 1360/11 (Reasons 3.1), this problem arises when a granted claim directed to a
composition defined in an open manner, typically by means of the term "comprising" or "including", and specifying the presence of a component belonging to a class or list of compounds in a quantity defined by a range, is amended by limiting the definition of the class or list of compounds. In such a case, in spite of the apparent limitation due to the explicit or implicit deletion of some members of the class or list of compounds, the result of the amendment is such that the deleted compounds, which according to the granted claim had to be present in an amount within a specific range, can still be present, but in an unspecified amount. In this case the protection conferred by the amended claim extends beyond that of the granted claim, contrary to the requirements of Article 123(3) EPC.

3.4 This situation has been created by deleting the depolymerised fibres from the list of fibres in granted claim 7.

3.5 Granted claim 7 and, correspondingly, claim 2 of auxiliary request 8 require the weight ratio between the combined amount of fibres and/or sugar esters and erythritol to be within a specific range. It is readily apparent to the skilled reader that this weight ratio relates only to the amount of the fibres listed in those claims and that other fibres possibly present in the composition are not taken into account. Otherwise, the claims would encompass compositions including amounts of the listed fibres that are insignificant compared to the amount of erythritol present. This would render the mention of those fibres in the claims meaningless. It is also noted that, as argued by the respondent, the listed fibres are those which, according to the patent and to the appellant's submissions, are needed to counteract the cooling
effect of erythritol. Thus, a claim construction in which the mention of the weight ratio between the specified fibres and erythritol becomes practically irrelevant is to be ruled out.

3.6 The open wording used in the claims by means of the term "including" does not, however, exclude the presence of other fibres in the composition beyond those that are specifically listed in the claims. There is no technical reason to assume that the presence of those other fibres is excluded by the wording of the claims. It is also noted that the composition of claim 2 is a chocolate, which necessarily comprises other ingredients and may well contain other dietary fibres.

3.7 For these reasons, the result of the deletion of the partially depolymerised fibres from granted claim 7 is that these fibres, which had to be present in a given weight ratio with respect to erythritol according to that granted claim, can still be present in the composition, but in an unspecified weight ratio. As shown by the respondent, a composition comprising 1 part by weight of pectin, 1 part of a partially depolymerised fibre and 5 parts of erythritol would not fall within the scope of claim 7 as granted but would fall within the scope of claim 2 of auxiliary request 8. Accordingly, claim 2 extends the scope of protection beyond that conferred by the granted patent (Article 123(3) EPC).

**Auxiliary requests 2 to 7 and 9 to 16**

4. Admission into the appeal proceedings

4.1 Auxiliary requests 2 to 7 and 9 to 16 were filed with the statement setting out the grounds of appeal.
Auxiliary requests 2 to 7 are new requests in which, inter alia, all use claims were deleted.

Auxiliary requests 9 to 15 correspond to auxiliary requests 3 to 7 filed during the opposition proceedings. These requests, renumbered as auxiliary requests 4 to 10 during the oral proceedings before the opposition division, were not admitted into the opposition proceedings.

Auxiliary request 16 is a new request based on auxiliary request 2 filed during the opposition proceedings, where claims 7 and 8 were amended.

4.2 Pursuant to the transitional provisions of Article 25(2) RPBA 2020 (revised Rules of Procedure of the Boards of Appeal, RPBA 2020, entered into force on 1 January 2020) the admission of facts, evidence or requests is in the present case to be decided in accordance with Article 12(4) RPBA 2007, the corresponding amended provisions not being yet applicable.

4.3 According to Article 12(4) RPBA 2007, without prejudice to the power of the Board to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first-instance proceedings, everything presented by the parties under Article 12(1) RPBA 2007 is taken into account by the Board if and to the extent it relates to the case under appeal and meets the requirements in Article 12(2) RPBA 2007.

4.4 According to Article 12(2) RPBA 2007, the statement of grounds of appeal must contain the party's complete case and 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.

4.5 In the present case, the statement setting out the grounds of appeal does not fulfil those requirements. It does not provide any argument as to why the aforementioned auxiliary requests overcome the objections on which the decision under appeal is based. As far as auxiliary requests 2 to 7 are concerned, when discussing the admissibility of the requests, the appellant merely states that these are submitted in reaction to points raised during the oral proceedings and in the decision of the opposition division. In relation to auxiliary requests 9 to 15, it states only that the opposition division applied different standards when not admitting the requests. Nothing is said in relation to auxiliary request 16. The appellant then states, again generically, that all the requests fulfil the EPC requirements for "reasons presented hereinabove".

4.6 Such blanket statements do not make it possible to establish whether and to what extent the aforementioned auxiliary requests address and overcome the objections raised or whether the opposition division erred in its treatment of them, thus not allowing the board to reach a substantive conclusion in the matter. Accordingly, regarding these requests the appellant did not provide a complete case as required by Article 12(2) RPBA 2007.

4.7 For these reasons, auxiliary requests 2 to 7 and 9 to 16 are not admitted into the appeal proceedings.
Auxiliary request 17

5. Admission into the appeal proceedings

5.1 Auxiliary request 17 was filed during the oral proceedings before the board. The appellant justified the late filing as a reaction to the board's conclusions that the invention claimed in the main request lacked sufficiency of disclosure and that auxiliary request 8 extended the scope of protection.

5.2 These reasons do not justify such a late filing. Sufficiency of disclosure was indicated as a point to be discussed in the communication issued by the board in preparation for the oral proceedings. Reference was also made therein to the issue of whether the purported technical effect was achieved over the entire scope of the claims. Furthermore, in the decision under appeal, the examining division had already discussed this issue and come to a negative decision on inventive step (Reasons 6.2.5).

5.3 The objection of extension of the scope of protection was also mentioned in the board's communication. Furthermore, claim 2 of auxiliary request 8 had been found to extend the scope of protection by the opposition division (decision, Reasons 8, where reference is made to auxiliary request 3).

5.4 Consequently, there was no reason for the appellant to wait until the last minute in the oral proceedings in order to file a request addressing the aforementioned objections. The appellant could not have expected the board to provide an exhaustive reasoning on all as yet unanswered questions and all pending requests in its communication nor should it have waited until there was
an outcome on the different issues in the oral proceedings to decide its line of defence and tailor the claims accordingly.

5.5 Therefore, taking into account the stage of the appeal proceedings and the need for procedural economy, the board decided not to admit auxiliary request 17 into the appeal proceedings (Article 13(1) RPBA 2020, applicable according to the transitional provisions of Article 25(1) RPBA 2020).

6. Further issues

6.1 In view of the conclusions reached above, there is no need to discuss the issues of novelty, inventive step and the admissibility of documents D15 to D20.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  The Chairman:

D. Magliano  N. Perakis

Decision electronically authenticated