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**Datasheet for the decision
of 13 January 2011**

Case Number: T 1587/08 - 3.3.09

Application Number: 00904928.9

Publication Number: 1063899

IPC: A23L 1/164

Language of the proceedings: EN

Title of invention:

Manufacture of granola and snack-food products

Patentee:

THE QUAKER OATS COMPANY

Opponent:

KELLOGG COMPANY

Headword:

-

Relevant legal provisions:

EPC Art. 54

RPBA Art. 13(1),(3)

Relevant legal provisions (EPC 1973):

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Keyword:

"Main and Auxiliary request: novelty (no)"

"Further auxiliary request: not admitted"

Decisions cited:

-

Catchword:

-



Case Number: T 1587/08 - 3.3.09

DECISION
of the Technical Board of Appeal 3.3.09
of 13 January 2011

Appellant: THE QUAKER OATS COMPANY
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 6 June 2008
revoking European patent No. 1063899 pursuant
to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: W. Sieber
Members: N. Perakis
R. Menapace

Summary of Facts and Submissions

I. Mention of the grant of European patent No. 1 063 899 in respect of European patent application No. 00904928.9 in the name of The Quaker Oats Company, which had been filed as international application No. PCT/EP00/00363 on 18 January 2000, was published on 5 April 2006 (Bulletin 2006/14). The patent was granted with 25 claims. Independent Claim 1 reads as follows:

"1. A method of making granola or snack-food products, comprising:
a. at elevated temperature, mixing ingredients for the products with liquid binder to obtain a formable mixture, wherein the binder is liquid at elevated temperature and sets when cooled to room temperature;
b. at elevated temperature, whilst the binder is still liquid, cutting the mixture into a plurality of product precursors; and
c. cooling the plurality of product precursors to set the binder, thereby obtaining the snack-food products."

The granted patent comprised further independent claims, namely method Claim 12, apparatus Claim 18 and product Claim 23.

II. A notice of opposition was filed by Kellogg Company on 5 January 2007 requesting revocation of the patent in its entirety on the grounds that the claimed subject-matter was neither novel nor inventive (Articles 100(a) EPC) and that the subject-matter of the European patent extended beyond the application as filed (Article 100(c) EPC). The subject-matter of Claim 1, however, was contested for lack of novelty and inventive step only.

The documents cited during the opposition proceedings included the following:

D1 : CA 2 164 280 A1 and

D11: G. Ridderbusch, "Forming of Coated and Uncoated Cereal Bars", Confectionery Production, 1985, 51(12), 686-690.

III. By a decision announced orally on 10 April 2008 and issued in writing on 6 June 2008 the opposition division revoked the patent on the basis of Article 101(3)(b) EPC. It considered that neither the main request nor the auxiliary request, both filed during the oral proceedings held on 10 April 2008, was allowable. Regarding the main request, it considered that dependent Claims 4 and 5 and independent Claims 18 and 23 did not fulfil the requirements of Article 123(2) EPC. Regarding the auxiliary request, it considered that the subject-matter of independent Claim 1, which was identical to Claim 1 of the main request and to Claim 1 as granted, though novel over D1, did not involve an inventive step. The opposition division held that D1 did not unambiguously disclose or imply that the binder was in a liquid form during the cutting step. Nevertheless, this difference was considered to be obvious for the skilled person on the basis of the disclosure of D1.

IV. On 18 August 2008, the patent proprietor appealed the decision of the opposition division. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was submitted on 18 October 2008 and

- included a main and an auxiliary request. Claim 1 was the same in both requests and identical to granted Claim 1.
- V. The respondent (opponent) filed observations with letter dated 27 February 2009. It reiterated *inter alia* that the subject-matter of Claim 1 lacked novelty in view of the disclosure of D1.
- VI. Oral proceedings were held before the board on 13 January 2011. During the oral proceedings the appellant filed a further auxiliary request (Auxiliary Request II), which, however, was not admitted into the proceedings.
- VII. The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main or the auxiliary request submitted with the statement setting out the grounds of appeal.
- VIII. The respondent (opponent) requested that the appeal be dismissed.
- IX. The arguments put forward by the appellant in its written submissions and at the oral proceedings can be summarised as follows:
- The opposition division correctly acknowledged novelty of the subject-matter of Claim 1 which was the same in the main and the auxiliary request. Indeed D1 did not disclose cutting the mixture of the food product ingredients at elevated temperature whilst the binder was still liquid. D1 disclosed

partial cooling using air fans of the compressed and sheeted mixture before cutting it into strips. The partial cooling led to the solidification of the binder (page 7, lines 26-37). Moreover, solidification was identified as critical in order to obtain a proper cutting operation (page 8, lines 5-27).

- The disclosure in D1 concerning carrying out the cutting step without previous cooling of the strips surface down to 35-52°C by repositioning the cooling device after the cutting step was not novelty-destroying. This disclosure was inconsistent with the whole disclosure of D1 (independent Claims 1 and 16) and the purposive partial cooling of the strips which led to the binder solidification (page 7, lines 22-25). Most importantly, D1 included a warning against cutting/guillotining the strips at excessively hot temperatures, because the bound popcorn would not cut or would reattach or sugar strings would form at the cut surfaces. Anyway, D1 did not provide instructions regarding the operation of knives/cutters in cutting/guillotining the strips in a manner which could allow repositioning of the cooling device and simultaneously avoid reattachment and formation of sugar strings.

- The further auxiliary request (Auxiliary Request II) filed at the oral proceedings should be admitted into the proceedings. It had been filed as a reaction to the decision of the board to reject the hierarchically higher requests (main and auxiliary) for lack of novelty although the opposition decision had acknowledged the novelty of those requests.

There had also been no reason to file further requests earlier in anticipation of a potential decision refusing novelty of the submitted requests. The further auxiliary request should also be considered *prima facie* admissible since Claim 1 resulted from the combination of granted Claims 1 and 4, such combinations of granted claims being common practice and hence not surprising to the respondent.

X. The arguments put forward by the respondent in its written submissions and at the oral proceedings can be summarised as follows:

- The subject-matter of independent Claim 1, common to the main and the auxiliary request, lacked novelty over the disclosure of D1, contrary to the decision of the opposition division and the appellant's assertions. D1 disclosed step (b) according to which the mixture of ingredients and liquid binder was cut at elevated temperature, whilst the binder was still liquid. The teaching of D1 should be compared to the claimed subject-matter after having interpreted the terms "elevated temperature" and "liquid binder" used therein. In fact these terms were relative and ambiguous. "Elevated temperature" should mean any temperature above room temperature, at which the binder was sufficiently fluid to be workable under processing conditions such as mixing, cutting and forming into a desired shape (column 2, lines 26-30; column 3, lines 9-12). At such an elevated temperature the binder was admittedly partly solid and sufficiently set, but still sufficiently liquid so that it did not break or become brittle. This

interpretation was consistent with the common general knowledge of the skilled person according to which the binder should be soft enough to be manipulated (D11: page 688, lines 36-40). Anyway, the term "liquid binder" should be interpreted in a pragmatic manner, seen through the eyes of the person skilled in the art reading the claim; it should not be given an absolute scientific or laboratory interpretation.

- In case the board did not agree with the above interpretation, reference was made to D1 which disclosed as an alternative that the cooling device for the partial cooling of the mixture to be cut could be repositioned after the cutting apparatus. In such a case the binder was at a higher temperature and still liquid (page 8, lines 33-39). Such a cutting was not new in the art but belonged to the general technical knowledge of the skilled person (D11: page 688, lines 36-40).

- Concerning the further auxiliary request (Auxiliary Request II), it had been filed at a very late stage of the procedure and should be considered inadmissible in view of Article 13(3) RPBA. This auxiliary request could have been submitted earlier as the objection of lack of novelty had always been upheld by the respondent. Furthermore this request raised new issues, namely an objection under Article 123(2) EPC concerning the subject-matter of renumbered dependent Claim 3.

Reasons for the Decision

1. The appeal is admissible.

The main request

2. Interpretation of Claim 1
- 2.1 Claim 1 relates to a method of making granola or snack-food products which comprises three steps:

Step (a): mixing of the ingredients for the product with liquid binder in order to obtain a formable mixture. This step is claimed to be carried out at elevated temperature, when the binder is liquid. It is specified that the binder sets when cooled to room temperature.

Step (b): cutting the mixture into a plurality of product precursors. This cutting is claimed to take place at elevated temperature, whilst the binder is still liquid.

Step (c): cooling the plurality of product precursors in order to set the binder and obtain the snack-food products.

Thus, one of the essential steps of the claimed method is step (b), the cutting of the mixture of ingredients and liquid binder at "*elevated temperature*", whilst the binder is "*still liquid*".

- 2.2 The terms "*elevated temperature*" and "*liquid binder*", which are essential to define the scope of the opposed claims, are relative and as such undefined terms. Hence for assessing novelty of the claimed method these terms

have to be interpreted by the skilled person, taking into account the further information provided in the patent specification.

In column 2, lines 26-30 it is stated that: "By elevated temperature it is intended to mean a temperature at which the binder is in a liquid state and is **sufficiently liquid** for snack-food product ingredients to be mixed with the binder by conventional mixing equipment" (emphasis added).

As reported in column 3, lines 9-12: "Whatever concentration is adopted, the binder must be **sufficiently liquid** under the chosen processing conditions for the mixture to be formed into the desired shape of product precursor" (emphasis added).

Furthermore, step (a) of Claim 1 specifies that the binder "sets when cooled to room temperature".

- 2.3 Based on the above information "*elevated temperature*" is to be understood, in the given context, as any temperature above room temperature at which the binder is sufficiently liquid to be mixed and the mixture to be formed into product precursors. A binder is "*sufficiently liquid*" if it is sufficiently fluid to be workable, namely to be mixed and the mixture to be formed into a desired shape, i.e. not yet set. The board concurs with the respondent that the term "*sufficiently liquid*" as understood by the person skilled in this specific technical field should not be given a strictly scientific or laboratory interpretation, i.e. opposed to the term "solid". This term should rather include any state other than "set"

and should embrace a "soft", "partially solidified" or "partially set" binder.

Moreover, it is worth noticing that Claim 1 does not require that the elevated temperature at which the liquid binder is mixed with the granola ingredients be equal to the elevated temperature at which the obtained mixture is cut into product precursors. Therefore, a method wherein the cutting step is carried out at a temperature lower than the temperature of the mixing step is within the scope of the opposed claims.

3. Novelty

3.1 Taking into account the above considerations and turning to the disclosure of D1, the board observes that this document (Claim 1; page 4, line 34 to page 5, line 13; page 7, lines 9-25) discloses a method of making a coated popcorn bar (i.e. a snack food product within the meaning of the patent in suit) by evenly coating popped popcorn with a molten binder whose most preferred embodiment is a caramel syrup at 121-132°C. Since the binder is disclosed to be in a molten state, i.e. liquid, and the applied temperature is undoubtedly elevated, the requirements set out in step (a) of Claim 1 are satisfied, with the consequence that D1 discloses claimed step (a).

3.2 D1 (page 5, lines 13-26; page 6, lines 26-31; page 7, lines 9-25; page 8, lines 5-33; Figure 1) further discloses that the coated popcorn is cooled to reduce its tendency to stick to the surface of the conveyor belt of a compressing and sheeting device, preferably using an air manifold, after which it is compressed and

sheeted at a temperature in the order of 99°C. The formed sheet is further cooled at a temperature in the order of 82°C so that the binder solidifies and binds the popped popcorn in the sheet; subsequently the sheet is cut into strips which are then cut into bars with a guillotine knife. The temperature of the strip surfaces when guillotined ranges between 35°C and 52°C - i.e. above room temperature (cf. contested patent, column 2, lines 49-52), whereas the temperature of the strip centre is in the order of 82°C.

The board observes that during the above-mentioned treatment of the coated popcorn, whose purpose - similar to step (b) of Claim 1 - is the production of product precursors by cutting, firstly the temperature is above room temperature and hence an "elevated temperature" as required by the claimed method, and secondly, the binder, despite its gradual cooling, is not yet completely set and hence corresponds to the "liquid" (i.e. sufficiently liquid) state required by the claimed subject-matter. Therefore the method of D1 comprises an elevated temperature and a liquid binder during the cutting of the sheeted and stripped coated popcorn and, therefore, anticipates step (b) of the claimed method.

- 3.3 The appellant contested the above interpretation and argued that the binder in the outer surfaces of the strips before cutting had a temperature between 35°C and 52°C, which meant that it was set/solidified. However, in view of the broad interpretation given to Claim 1 (point 2.3 above) the appellant's argument is not convincing.

Apart from that, D1 also discloses a cutting of the strips without previous partial cooling (page 8, lines 27-38):

"If the temperature of the sheet or strips when cut or guillotined is too hot, the bound popcorn won't be cut or tends to reattach, and strings of sugar extending from the cut surfaces may result which is aesthetically undesirable. On the other hand, if the temperature is too cold, the bound popcorn is too brittle and tends to break or shatter. In this regard, if knives 50 and cutter 54 are operable in a satisfactory manner at higher temperatures, cooling device 42 could be repositioned after cutter 54 and/or knives 50, with cutter 54 and/or knives 50 providing a cleaner cut without breakage or shattering of the popped corn in the compacted sheet and strips".

Thus, D1 discloses directly and unambiguously, as an alternative embodiment, a method wherein the cooling device 42 is positioned after the knives and cutter. In this alternative embodiment the temperature of the strip surfaces and strip centre would be higher than in the embodiment with the cooling system positioned before the knives and the cutter. In other words, in this alternative embodiment of D1 the cutting is carried out when the binder is still liquid enough to be shaped, at an elevated temperature that allows the popcorn not to be brittle, and not to break or shatter.

This disclosure is relevant and may not be ignored. In fact, this alternative embodiment was not unusual, nor was it disclosed for the first time in D1. It belonged to the technical background knowledge of a person

skilled in the art and had also been industrially implemented, as illustrated by D11 (page 688, left-hand column, lines 36-40). Thus the board does not accept the appellant's contention that this alternative was technically unrealistic. In view of the above considerations, this variation of the general method of D1 also anticipates step (b) of the claimed method.

3.4 D1 (page 9, lines 17-24) discloses cooling of the bars to a temperature in the order of 27-32°C, which according to the contested patent (column 2, lines 49-52) falls within room temperature, and finally wrapping them in a suitable packaging for sale. Thus D1 also discloses step (c) of the claimed method.

3.5 On the basis of the above considerations the board concludes that D1 discloses all steps of the claimed method, with the consequence that Claim 1 lacks novelty over the disclosure of D1. Hence the main request is not allowable.

The auxiliary request

4. Claim 1 of the auxiliary request submitted with the statement of grounds of appeal is identical with Claim 1 of the main request. Therefore the considerations set out above regarding the main request apply *mutatis mutandis* also to the auxiliary request, which consequently is not allowable either.

The further auxiliary request

5. Though the further auxiliary request (Auxiliary Request II) filed during the oral proceedings was admittedly

submitted in an effort to overcome the lack of novelty of Claim 1 of the hierarchically higher requests, this objection had already been raised in the notice of opposition and was upheld in the observations filed by the respondent in appeal. Such a request should therefore have been filed earlier. Furthermore, as correctly pointed out by the respondent, the incorporation of a dependent claim into Claim 1 of the new request *prima facie* raised new issues under Article 123(2) EPC against a remaining dependent claim. Thus, exercising its discretion under Article 13(1) and (3) RPBA, the board did not admit this further auxiliary request into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Röhn

W. Sieber