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Datasheet for the decision of 24 May 2007

Case Number: T 0044/04 - 3.3.09

Application Number: 00302580.6

Publication Number: 1025764

IPC: A23P 1/14

Language of the proceedings:

Title of invention:

Puffed food starch product and method for making the same

Patentee:

THE QUAKER OATS COMPANY

Opponents:

Mars, Incorporated Pirouwafer N.V. United Biscuits (UK) Limited

Headword:

Relevant legal provisions:

EPC Art. 54, 111(1), 123(2) RPBA Art. 10a, 10b

Keyword:

- "Main request (not allowable lack of novelty)"
- "Auxiliary requests (admissible)"
- "Auxiliary request I (not allowable added subject-matter)"
- "Auxiliary requests II-III (not allowable lack of novelty)"
- "Auxiliary request IV (novelty acknowledged)"
- "Remittal for examination of inventive step"

Decisions cited:

T 0840/93

Catchword:



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Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0044/04 - 3.3.09

DECISION of the Technical Board of Appeal 3.3.09 of 24 May 2007

Appellant: THE QUAKER OATS COMPANY

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Abel & Imray 20 Red Lion Street London WC1R 4PQ (GB) Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 23 December 2003 revoking European Patent No. 1025764 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Kitzmantel
Members: N. Perakis

M.-B. Tardo-Dino

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Summary of Facts and Submissions

- I. Mention of the grant of European patent No. 1 025 764 in respect of European patent application No. 00302580.6 in the name of THE QUAKER OATS COMPANY, which had been filed on 29 March 2000 claiming a US priority of 29 March 1999 (US 281991), was announced on 12 September 2001 (Bulletin 2001/37). The patent, entitled "Puffed food starch product and method for making the same", was granted with nineteen claims. Independent method Claims 1, 9 and 14, product-by-process Claim 13 and apparatus Claim 17 read as follows:
 - "1. A method of making a puffed food starch material product from a bulk amount of food starch material, the method comprising the steps of:

providing a puffing chamber having inner surfaces and a chamber volume;

placing a bulk amount of the food starch material into the puffing chamber;

causing a volumetric expansion of the bulk amount of food starch material; and

constraining expansion of the bulk amount in at least a first dimension, while permitting unconstrained expansion of the bulk amount in at least a second dimension."

"9. A method of puffing a food starch material capable of becoming amorphous into a food starch material product comprising the steps of:

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preparing a flour of the food starch material;

gelatinizing the floured food starch material in an extruder under a pressure and temperature;

extruding the gelatinized food starch material;

forming pellets from the extruded food starch material;

placing the pelletized food starch material into a puffing chamber having a pressure and temperature;

increasing the pressure and the temperature in the chamber until the pelletized food starch material is amorphous;

quickly reducing the pressure in the chamber sufficient for the amorphous starch material to expand; and

constraining expansion of the amorphous pelletized food starch material in at least a first dimension, while permitting unconstrained expansion in at least a second dimension."

- "13. A puffed food starch product obtainable according to the method of any of claims 1-12."
- "14. A method of making a puffed starch-containing food product by puffing a precursor so that it expands and forms the product, wherein the puffing comprises allowing the precursor to expand freely in a first

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dimension whilst constraining expansion of the precursor in a second dimension."

"17. Apparatus for making a puffed starch-containing food product, comprising:

an expansion chamber for puffing a precursor to form the product; means for heating the expansion chamber; and control means arranged to effect a reduction in pressure in the expansion chamber so that the precursor is able to expand freely in a first dimension but is constrained in a second dimension."

Claims 2 to 8 were dependent either directly or indirectly on Claim 1. Claims 10 to 12 were dependent either directly or indirectly on Claim 9. Claims 15 and 16 were dependent either directly or indirectly on Claim 14. Claims 18 and 19 were dependent directly or indirectly on Claim 17.

II. Three Notices of Opposition were filed against the patent by Mars Incorporated (Opponent I) on 12 June 2002, by Pirouwafer N.V. (Opponent II) on 12 June 2002 and by United Biscuits (UK) Ltd. (Opponent III) on 11 June 2002.

The Opponents requested the revocation of the patent in its full scope, relying on Articles 100(a), 100(b) and 100(c) EPC.

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- III. The Oppositions were *inter alia* supported by the following documents:
 - D10: W0-A-92/12646
 - Dl1: Global New Products Database "Quaker Crispy Mini's Rice Snacks"
 - D12: Observations under Art. 115 EPC filed by R. Van den Berghe dated 1 October 2001
 - Dl3: Declaration of Willy Depauw dated 6 June 2002
 - D14: US-A-4 328 741
 - D16: EP-B-0 359 740
 - D25: Operations Manual of Incomec Cerex grain processor (13 November 1997) & sales invoice of Incomec Cerex Grain Processor dated 30 March 1998
 - D28: Incomec Cerex grain processor brochure
 - D33: Photographs of products produced on the Incomec Cerex grain processor (Annexes A1 to A8)
 - D34: Photographs (Extract from Global New Products

 Database of Mintel International Group Ltd)
 - D35: Affidavit of René van der Berghe dated 5 December 2003
 - D36: Affidavit of Steven van Poucke dated
 11 November 2003
 - D37: Affidavit of Fu-Hung Hsieh dated 29 September 2002
 - D38: Affidavit of Thomas Vierhile dated 3 November 2003 & Exhibits (TRV1, TRV2, TRV3)
 - D39: Photographs of products produced on the Incomec

 Cerex grain processor (filed by Opponent III with

 letter dated 4 December 2003)
- IV. By its decision orally announced on 11 December 2003 and issued in writing on 23 December 2003 the

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Opposition Division revoked the patent. It held that the subject-matter of Claims 1, 13, 14 and 17 of the main request (the granted claims) as well as that of Claims 1, 14 and 17 of the auxiliary request lacked novelty over the disclosure of D25, which was considered to be the most relevant among the cited documents.

As to the objection under Article 100(c) EPC that the insertion of the word "unconstrained" during the examining stage amounted to new subject-matter, this was not accepted in view of the information in the application as filed that the expansion of the food product was necessarily unconstrained in at least one other dimension.

The Opposition Division also held that the claimed invention was sufficiently disclosed with regard to the meaning of the term "precursor" and the expression "unconstrained expansion".

Further, the objection under Article 53(2)(b) EPC that granted product Claim 13 concerned an aesthetic creation was held to be unfounded because this product definition comprised technical features.

Finally, in an *obiter dictum*, the Opposition Division considered that the subject-matter of Claim 9 was novel over the disclosure of D25.

V. On 15 December 2003 the Patent Proprietor (Appellant) lodged an appeal against the decision of the Opposition Division and paid the appeal fee on the same day.

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In the Statement setting out the Grounds of Appeal filed on 22 April 2004, the Appellant contested the decision of the Opposition Division and argued that the subject-matter of both the main and the auxiliary requests was novel over D25 if properly interpreted in the light of D10, D16, D28 and D35. On that basis, the conclusion would be that the products were in the form of slices with regular thickness and form, not exhibiting the wavy top and bottom surfaces required by the claimed invention. For the same reasons D14 was not novelty destroying.

As to the assessment of inventive step, the Appellant requested that for this purpose the case should be remitted to the first instance.

The Appellant further argued that the Opposition Division, by not informing it of the Division's provisional opinion, by deciding on the main and auxiliary requests simultaneously during the oral proceedings, and by not allowing the filing of further auxiliary requests, committed substantial procedural violations. It thus requested the refund of the appeal fee.

Together with the Statement of Grounds of Appeal the Appellant also filed auxiliary requests I to IV.

Auxiliary request I corresponded to the granted claims with independent Claims 1, 9 and 14 amended so that they contained the following additional feature at the expansion (last) step: "thereby forming the puffed food starch material product having upper and lower surfaces

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having a substantially wavy contour comprising hills and valleys".

Thus Claim 1 reads as follows (emphasis added by the Board to indicate the amendments with respect to granted Claim 1):

"1. A method of making a puffed food starch material product from a bulk amount of food starch material, the method comprising the steps of:

providing a puffing chamber having inner surfaces and a chamber volume;

placing a bulk amount of the food starch material into the puffing chamber;

causing a volumetric expansion of the bulk amount of food starch material; and

constraining expansion of the bulk amount in at least a first dimension, while permitting unconstrained expansion of the bulk amount in at least a second dimension, thereby forming the puffed food starch material product having upper and lower surfaces having a substantially wavy contour comprising hills and valleys."

Auxiliary request II corresponded to the auxiliary request of the appealed decision. It differed from the granted claims only in the restriction of the dependency of the method Claim 13 to Claims 5 to 12 (in lieu of "1 to 12").

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<u>Auxiliary request III</u> corresponded to the main request from which the product Claim 13 was deleted and the subsequent claims renumbered.

Auxiliary request IV resulted from the combination of granted Claims 1 and 5 and the renumbering of the subsequent claims. Claim 1 reads as follows (emphasis added by the Board to indicate the amendments with respect to granted Claim 1):

"1. A method of making a puffed food starch material product from a bulk amount of food starch material, the method comprising the steps of:

providing a puffing chamber having inner surfaces and a chamber volume;

placing a bulk amount of the food starch material comprising a plurality of individual pellets formed from starchy flour into the puffing chamber;

causing a volumetric expansion of the bulk amount of food starch material; and

constraining expansion of the bulk amount in at least a first dimension, while permitting unconstrained expansion of the bulk amount in at least a second dimension."

VI. Respondent I (Opponent I), Respondent II (Opponent II) and Respondent III (Opponent III) presented their arguments in written submissions dated

27 September 2004 and 28 September 2004.

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VII. The Respondents maintained that the subject-matter of the main request (granted claims) was not new over the information contained in D25. In this respect reference was made to D12 and D13, as well as to documents D33 to D39. A separate novelty objection was raised on the basis of D14.

In relation to the product of Claim 13, reference was also made to the novelty destroying character of general common knowledge, as exemplified by the puffing of popcorn in a saucepan, and of "Quaker Crispy Mini's Rice Snacks", as evidenced by D11, D34, D37 and D39.

Objections were also filed with regard to lack of sufficiency of disclosure.

As to the auxiliary requests, the issues of lack of clarity, of added subject-matter and of obviousness were raised.

- VIII. With the letter dated 4 October 2006 Respondent I (Opponent I) announced that it would not attend the oral proceedings.
- IX. In the communication dated 21 December 2006 the Board expressed its provisional, non-binding opinion on some of the various issues raised by the parties.
- X. With the letter dated 23 March 2007 the Appellant filed two further requests, namely auxiliary requests V and VI. It argued that these requests were filed in reaction to the comments set out in the communication of the Board.

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Auxiliary request V is derived from the main request (granted claims) by restriction of the claimed subject-matter to that of granted Claims 9 to 13.

Auxiliary request VI is derived from auxiliary request I by restriction of the claimed subject-matter to that of Claims 9 to 13.

XI. On 24 May 2007 oral proceedings were held before the Board.

At these proceedings the Appellant submitted revised auxiliary requests I and IV replacing the previous auxiliary requests I and IV on file.

Revised auxiliary request I consisted of Claims 1 to 13 of auxiliary request I.

Revised auxiliary request IV consisted of Claims 1 to 3 and 5 to 12 of auxiliary request IV.

The Appellant withdraw its request for the refund of the appeal fee.

- XII. The oral submissions made by the Appellant in addition to those presented in writing, insofar as they are relevant to the present decision, can be summarized as follows:
 - The subject-matter of the main and auxiliary requests was novel over all cited prior art.
 - The unconstrained expansion of the food starch material took place in both directions of a single dimension, whereas the prior art disclosed an

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unconstrained expansion taking place in only one direction of a single dimension.

- D25 could not be considered on its own, since it was a manual, which was only meaningful when the relating apparatus was available and its actual operating conditions were taken into consideration.
- D25 should be considered together with either D28 (the brochure of Incomec Cerex Grain Processor), D35 (the affidavit of René van der Berghe), and D16 (a patent document seemingly disclosing the Incomec Cerex Grain Processor).
- The appealed decision however relied solely on D25 and did not take into account the information contained in D28, D10 and/or D16, nor did it provide convincing reasons for disregarding these documents.
- D25 disclosed that position 0 of the hydraulics switch provided thick "slices", a "slice" being a thin flat piece cut from something having regular thickness and form (cf also D25, Chapter 4: "Troubleshooting"). The production of slices was only possible if the expansion was constrained in all dimensions.
- The prior art products disclosed by D25, like those disclosed by D14, were different from the claimed products by having only one wavy surface comprising hills and valleys whereas those currently claimed had irregular bottom and top surfaces resulting from the unconstrained expansion in both directions of a single dimension.
- The products represented in the photographs of D39 did not anticipate the claimed products nor the claimed method since they were prepared by operating the Incomec Cerex Grain Processor with the knowledge of the patent in suit, which went beyond D25's

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- disclosure. Moreover, D39 did not mention the amount of the food starch material used or its conditioning.
- The auxiliary requests should be admitted as they were respectively either filed with the Statement of Grounds of Appeal or in due time before the oral proceedings.
- The revised auxiliary request I should also be admitted since the revision was triggered by arguments put forward during the oral proceedings against the apparatus claims, which did not concern the method claims maintained.
- The subject-matter of Claim 1 of the revised auxiliary request I was supported by the originally filed patent application (cf. A publication, paragraphs [0039] and [0052]).
- XIII. The oral submissions made by the Respondents, in addition to those presented in writing, insofar as they are relevant to the present decision, can be summarized as follows:
 - It was irrelevant at least for the main request whether any prior art disclosed products having both upper and lower surfaces with a wavy contour comprising hills and valleys.
 - The methods of the main request were not limited to the manufacture of products having the appearance shown in the drawings of the opposed patent.
 - The Appellant had failed to show that unconstrained expansion invariably resulted in a product having no imprint of the mould on its upper and lower surfaces, i.e. a flattened upper and lower surface.

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- The expression "unconstrained expansion in at least a second dimension" should not be construed to mean an expansion exclusively in both directions of a single dimension because the patent in suit explicitly disclosed unconstrained expansion only in the upward direction of the height dimension (paragraphs [0033] and [0059]).

- The only question to be determined with regard to the issue of novelty was whether the total volumetric expansion of the puffed products in the prior art had been unconstrained in at least one dimension while constrained in at least one other dimension.
- D25 was correctly assessed by the Opposition Division, who concluded that the subject-matter of granted Claims 1, 13, 14 and 17 lacked novelty. It was correctly considered as a complete disclosure on its own, since D25 detailed the apparatus involved, its functioning, the manufacturing method of the products concerned and the resulting products.
- The person skilled in the art would not disregard the teaching of a manual merely on the ground that it was less detailed that a patent application.
- The terms "unconstrained expansion", "full expansion" and "free expansion" were equivalent in the art and could not be technically differentiated. They all concerned an expansion which was free of any boundaries. The terms "unconstrained" and "free" were indiscriminately used by the Patentee in granted Claims 1 and 14.
- D25 disclosed that operating the apparatus at position 0 of the hydraulics switch gave a freely expanded, thick slice resulting from the free volumetric expansion of a bulk amount of the food

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starch, achieved by the constrained expansion in at least one dimension and the unconstrained expansion in at least one other dimension.

- The term "slice" used in D25 related to the approximately circular form of the product with no particular limitation of the structure of the upper and/or bottom surface, which depended on the conditions of expansion, constrained or unconstrained, in the corresponding dimension.
- The evidence of D39, i.e. the photographs of popcorn cakes, by confirming the information in D25, established that the products obtained when operating the Incomec Cerex Grain Processor at the switch position 0 exhibited an irregular wavy surface comprising hills and valleys and a regular circumference.
- For assessing novelty over D25, there was no need to consider other documents such as D28, D10 or D16; brochure D28 was less comprehensive than the manual D25; the types of apparatus disclosed in D10 and D16 were different from that disclosed in D25, which was published much later, i.e. five and nine years after the publication of D10 and D16, respectively.
- The Opposition Division was right to revoke the patent for lack of novelty in view of D25 but it was wrong to find that the claimed subject-matter was novel, having regard to the other prior art cited in the opposition procedure.
- The subject-matter of granted Claim 1 further lacked novelty in view of the Incomec Cerex Grain Processor of D28.
- The subject-matter of granted Claim 1 as well as that of Claim 13 and 14 also lacked novelty in view of D14. This document disclosed a process for

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producing rice crackers in which the rice mixture was heated and compressed and then subjected to instantaneous full expansion, while steam was exhausted, permitting the material to expand upwards from a lower wall. The lower mould portion of the apparatus of D14 remained stationary while the upper mould portion moved upwards. The product of Figure 5 had a flat bottom surface and a non-flat top surface having a wavy contour exhibiting hills and valleys. This was supported by the affidavit of René van den Berghe (D35).

- Apparatus Claim 17 lacked novelty in view of the Incomec Cerex Grain Processor disclosed in D25 and D28, in view of D14 and also in view of the acknowledgement in the description of the patent in suit that such types of apparatus were commercially available (column 12, lines 13 to 15).
- In view of the pending divisional application based on the same parent application and in accordance with T 0840/93 (OJ 1996, 335; points 3.2.2 and 3.2.3 of the Reasons) the late-filed auxiliary requests I, III and IV, and the revised form of some of them, should not be admitted in the proceedings; moreover, admission of these late-filed requests would lead to an extension of the proceedings for a number of years, to the obvious advantage of the Appellant.
- Claim 1 of revised auxiliary request I, which was the same as Claim 1 of the previously submitted auxiliary request I, furthermore contravened the requirements of Article 123(2) EPC because the patent nowhere referred in general terms to a method that resulted in a product with upper and lower surfaces having a substantially wavy contour comprising hills and valleys. The passages cited by

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the Appellant, with or without the assistance of the drawings, did not provide the necessary support without (a) a limitation to products having a generally regular perimeter, (b) a reference to the appearance of individual kernels joined together and (c) some further description of the nature of the hills and valleys.

- It further contravened the requirements of
 Article 84 EPC for the reason that the additional
 feature of this claim "thereby forming the puffed
 food starch material product having upper and lower
 surfaces having a substantially wavy contour
 comprising hills and valleys", referred to
 characteristics defined in the most vague and
 subjective way and attempted to define the claimed
 invention by the result to be achieved.
- This amendment also contravened Article 83 EPC because the skilled person would not know, without undue burden, when he was working within the scope of the claims.
- The subject-matter of the revised auxiliary request I also lacked novelty for the same reasons as for the main request.
- Auxiliary requests II and III were not allowable for the same reasons as for the main request.
- The subject-matter of revised auxiliary request IV was formally allowable and satisfied the novelty criterion.
- The case should be remitted to the Opposition
 Division for the consideration of the issue of
 inventive step.
- XIV. The Appellant requested that the appealed decision be set aside or, alternatively, the patent be maintained

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on the basis of Claims 1 to 13 of auxiliary request I as limited during the oral proceedings (revised auxiliary request I), or Claims 1 to 19 of auxiliary request II or Claims 1 to 18 of auxiliary request III, both filed with the grounds of appeal, or Claims 1-11 of the auxiliary request IV filed during the oral proceedings (revised auxiliary request IV), or on the basis of auxiliary requests V or VI filed with the letter dated 23 March 2007.

XV. The Respondents all requested that the appeal be dismissed.

Respondent III (Opponent III) requested that the auxiliary requests I to IV be not admitted, being late filed, and also objected to the admission of revised auxiliary request I submitted during the oral proceedings. It withdrew its other originally filed request (apportionment of costs in case of remittal of the case to the Opposition Division).

Reasons for the Decision

- 1. The appeal is admissible.
- Main request (the granted claims)
- 2.1 Interpretation of the expression "unconstrained expansion of the bulk amount in at least a (first or second) dimension"

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2.1.1 All independent claims comprise the feature of unconstrained or free expansion in at least one dimension (see below, emphasis by the Board).

Thus, the method of independent Claim 1 comprises the feature "constraining expansion of the bulk amount in at least a first dimension, while permitting unconstrained expansion of the bulk amount in at least a second dimension".

The method of independent Claim 9 comprises the feature "constraining expansion of the amorphous pelletized food starch material in at least a first dimension, while permitting unconstrained expansion in at least a second dimension".

The method of independent Claim 13 comprises the step of "allowing the precursor to expand freely in a first dimension whilst constraining expansion of the precursor in a second dimension".

The apparatus of independent Claim 17 is defined "so that the precursor is able to <u>expand freely in a first</u> dimension but is constrained in a second dimension".

2.1.2 The Appellant has argued that the claimed "unconstrained" or "free" expansion should be construed as relating to both directions of a specific dimension, i.e. the upward and the downward direction in the case of the height dimension. As a result the puffed product should have upper and lower surfaces with substantially wavy contour comprising hills and valleys. Contrary to the Appellant, the Respondents have argued that the patent in suit does not, at least not exclusively, relate to an unconstrained or free expansion in both directions of a dimension, since it only exemplified the unconstrained expansion in one direction of a dimension. Only one of the upper and lower surfaces of the resulting puffed product had a substantially wavy contour comprising hills and valleys. (As an aside: the Respondents also contested the sufficiency of the disclosure for the execution of an "unconstrained or free expansion in both directions")

2.1.3 It is thus of fundamental importance that the Board interprets the disputed expression, which is determinative for the outcome on the substantive issues. For this purpose the Board applies the general principle laid down by the boards of appeal that a patent has to be read as a whole with the consequence that it is possible to interpret the claims in the light of the description and the drawings.

With regard to the patent specification the Board notes (i) that the term "dimension" used in the claims is disclosed there to have its usual geometrical meaning, namely height, width or depth (column 12, line 34) with particular preference given to the height dimension (column 5, lines 15-16; column 7, line 3; claims 3, 18) and with no limitation of a dimension to one of its two possible directions, no such limitation being stated anywhere in the patent in suit and (ii) that the expression "unconstrained" or "free expansion" is not limited to expansion in both directions of a dimension but covers expansion in either one or in both directions, although with a

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particular preference being given to expansion in the upward direction of the height dimension. This is disclosed in paragraph [0033], in which a typical apparatus is described having an expansion chamber comprising an upper wall, a lower wall and side walls, the upper and lower walls being moveable relative to each other, and "the dimension in which the precursor is allowed to expand, the so-called first dimension, is height, that is to say usually upwards from the lower wall". This is also confirmed in the example of paragraph [0059], in which it is stated that "(a)fter a(n) ... heating time cycle, upper mould insert 24 raises to release pressure in chamber 20, as shown in FIGURE 4", and in the series of Figures 1 to 6, particularly Figure 5, which shows the upper mould portion in a fully retracted position (emphasis added by the Board).

In the Board's understanding, the upwards movement of the upper wall of the expansion chamber in the above cited passages allows the unconstrained expansion of the starch material upwards from the lower mould surface on which it was deposited. At the same time, because of the law of gravity, the material remains in permanent contact with the lower mould surface which thus exerts a constraint in the downward direction of the height dimension.

2.1.4 Therefore, the Board concludes on the basis of the information in the patent specification that "an unconstrained" or "free expansion of the food starch material in one dimension", as defined in the claimed subject-matter, is not limited to free expansion in - 21 - T 0044/04

both directions of this dimension but also encompasses expansion in only one direction of this dimension.

- 2.1.5 It follows that the Board cannot agree with the interpretation by the Appellant of the disclosure "(a)t least one of the upper and lower surfaces has a substantially wavy contour" (emphasis added by the Board), disclosed in paragraph [0017] of the patent specification, that the unconstrained or free expansion of the food starch material takes place necessarily in both directions of a dimension. Rather, this disclosure relates to both alternatives, the one corresponding to a product with one irregular surface and the other with two irregular surfaces, only the second alternative being related to a free expansion in both directions of the height dimension.
- 2.2 The method claims; novelty (Article 54 EPC)
- 2.2.1 The Board, in agreement with the Respondents, considers that the method of Claim 1 lacks novelty in view of the disclosure of document D25.

The operations manual of the Incomec Cerex Grain
Processor D25 discloses a method of making a puffed
food starch material product, such as grain cakes, from
a bulk amount of food starch material such as rice,
wheat, popcorn (Chapter 1, point 1.3), by providing the
moulds (dies) of the Grain Processor as puffing chamber
having inner surfaces and a chamber volume (Chapter 2,
point 2.1), by placing the material in the moulds
(Chapter 3, point 3.3) and puffing it, ie by submitting
it to a volumetric expansion (Chapter 3, point 3.1;
Chapter 4, point 4.8) while implicitly constraining the

expansion within the moulds in the two horizontal dimensions, namely width and depth (Chapter 3, point 3.1.2), and allowing the unconstrained expansion of the material upwards in the height dimension thus producing a freely expanded thick slice (Chapter 2, point 2.1.7, Note; Chapter 4, points 4.2, 4.6, 4.7). That the unconstrained expansion of the material following the method of D25 takes place in the upward direction of the height dimension is a logical conclusion from the recommendation to adjust the position of the upper mould in order to control the thickness of the final product (Chapter 4, points 4.2, 4.6 and 4.7). It follows from this that D25 specifically discloses the unconstrained expansion of the material only in one direction of the height dimension, i.e. upwards.

The Board thus concludes that D25 discloses all the features of the subject-matter of Claim 1, which consequently lacks novelty.

2.2.2 The Appellant has contested the use of D25, an operations manual, firstly as a prior art and secondly as a per se sufficient prior art. It argued on the one hand that D25, which is a manual, was not a piece of prior art unless the apparatus it disclosed was available and operated, and on the other hand that this document should be read and interpreted only in conjunction with D10, D16, D28 or D35.

With regard to the first point the Board notes that D25, an operations manual, is a written description which was not disputed to be available to the public before the relevant filing date of the patent in suit (cf.

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sales invoice for INCOMEC CEREX-21-MI dated 30 March 1998 attached to D25), thus falling within the definition of the state of the art provided by Article 54(2) EPC. Furthermore, the Board does not see any reason to make its interpretation dependent on the availability and operation of the apparatus disclosed, such a requirement going beyond the requirements of the EPC. In any event, however, the Board notes that the sales invoice attached to D25 establishes that the relevant apparatus INCOMEC CEREX-21-MI was a commercial product at this time. This was not in dispute.

With regard to the second point the Board considers that D25 need not be read in combination with any of the mentioned documents as its content is detailed and clear to the skilled reader. The Board further considers that neither D10 nor D16 is necessarily helpful for the understanding of D25 since they both relate to generations of Incomec grain processors older than that of D25, as is shown by the dates of publication of these documents (D10: 6 August 1992; D16: 7 September 1988; D25: 13 November 1997) and confirmed by D28 (page 1, under item "Introduction") which discloses that "(o)ver the years, the machine has been gradually upgraded ... In July 1996 a new version of the patented machine was developed with substantial improvements... The new and improved grain processor is sold under the name Incomec Cerex Grain Processor". With regard to the brochure of the Incomec Cerex Grain Processor D28, it is less detailed than D25 and does not provide any additional information complementing the disclosure of D25. Also D35, the affidavit of René van den Berghe, who is the inventor of the processors

disclosed in D10, D16 and D25, though informative, does not add anything relevant to the content of D25.

2.2.3 The Appellant has disputed that D25 discloses any unconstrained expansion of the puffed material. It has argued that even when operating the apparatus with the hydraulics switch at the position 0, which allows expansion of the material in the height dimension, this expansion does not take place to the full expansion capacity of the material. The Appellant has based this interpretation on the disclosure in D25 that position 0 leads to the production of a "free expanded" thick slice.

The Board does not concur with the Appellant and considers that the expression "free expanded" relating to the puffed material implies that expansion takes place up to the full expansion capacity of the material (i) since this would be the normal understanding of this expression by the skilled reader, (ii) in view of D25 (Chapter 4, Troubleshooting, points 4.2, 4.6 and 4.7) which discloses the possibility of the formation of an uneven/irregular expanded material (cake), with an incorrect and irregular thickness, and (iii) on the basis of the technical evidence of D33 and D39. These pieces of evidence comprise photographs of expanded material obtained by operating the Grain Processor with the hydraulics switch at position 0 and show that during such an operation free upwards expansion of the material in the moulds is permitted, avoiding flattening of the curved upper surface of the expanded material, as would have been evident if the upper mould had contacted the expanding material during expansion.

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Furthermore, the Board does not consider that the term "slice" indicates that the material was not expanded without constraint in the height dimension. To the Board's understanding, a slice designates an object having a periphery-limited regular shape whose thickness may vary (cf. positions 0 to 9 of the hydraulics switch) but which is always relatively small as compared to the horizontal dimensions. This shape in the context of D25 results on the one hand from the constraints exerted by the side walls of the puffing chamber in the horizontal dimensions, namely width and depth, and on the other hand from the possible constraint exerted by the upper mould portion in the upper direction of the vertical dimension. It is however apparent from the language used in the Note in point 2.1.7 of Chapter 2 of D25 that, dependent on the setting of the hydraulics switch - in position 0 or in one of the positions 1 to 9 - a distinction is to be made between the structure of the upper surface of the various types of "slice" obtained. Indeed, for position O the "thick slice" is "free expanded" whereas for positions 1 to 9 the "thinner slices" are said to have "a smooth surface on both sides". It follows that in the case of position 0 the upper surface of the "slice" is not smooth because otherwise this difference in the wording would not make sense. The term "free expansion" of course presupposes that the amount of material to be expanded is appropriate having regard to the available mould cavity.

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2.3 The apparatus claims; novelty (Article 54 EPC)

The subject-matter of Claim 17 defines the apparatus by reference to the structural features of a chamber, the means for heating the chamber and the control means arranged to effect a reduction of the pressure in the chamber. Quite apart from the fact that an apparatus with these structural features is commonplace and that the Appellant itself acknowledges in the patent in suit that such types of apparatus were known in the art (column 12, lines 11-15), the claimed apparatus lacks novelty in view of the disclosure of D25.

This document discloses an apparatus for making a puffed starch-containing food product, such as cakes made out of rice, wheat or popcorn grains (page 4, point 1.3; page 9, point 3.1) comprising moulds as an expansion chamber for the puffing of the cereal grains (chapter 3), means for heating the moulds (page 5, points 2.1.2 and 2.1.3) and a hydraulic pump motor which effects the reduction in the pressure in the moulds (page 6, points 2.1.6 and 2.1.7) and which at position 0 gives a freely expanded thick slice, which as set out above (see section 2.2.1) results from the free expansion of the grain material in the height dimension while the expansion is constrained in the other two dimensions.

- 2.3.1 Consequently the subject-matter of Claim 17 lacks novelty.
- 2.4 As the subject-matter of Claims 1 and 17 lacks novelty the main request is not allowable.

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- 3. Admissibility of the auxiliary requests II and III and of the revised auxiliary requests I and IV
- 3.1 The auxiliary requests II and III were filed with the Statement setting out the Grounds of Appeal and are therefore in line with the requirements set out in the Article 10a RPBA. They are consequently admissible.
- 3.2 The revised auxiliary requests I and IV, filed on 24 May 2007 at the oral proceedings before the Board, are derived from the auxiliary requests I and IV filed with the Statement setting out the Grounds of Appeal, the latter also being filed in line with the requirements of Article 10a RPBA.

Revised auxiliary request I corresponds to the previously filed Auxiliary request I, from which the method claims 14 to 16 and the apparatus claims 17 to 19 were deleted.

Revised auxiliary request IV corresponds to the previously filed auxiliary request IV, from which method claims 4, 13 to 15 and apparatus claims 16 to 18 were deleted.

The Board, exercising its discretion under Article 10b RPBA, considers that these revised auxiliary requests are admissible. The reason is that by not containing any new subject-matter and by not raising new factual and/or legal issues they do not take the respondents by surprise and do not have any negative impact on the procedural economy.

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3.3 As to the objection that the auxiliary requests should not be admitted inter alia because there is a pending divisional application based on the same parent application and that admission of such requests would extend the proceedings for a number of years to the obvious advantage of the Appellant, the Board considers it of no relevance in the present case for the following reasons.

First of all the Board makes a distinction between the auxiliary requests filed with the statement of the Grounds of Appeal, which are admissible as set out above (section 3.1), and the revised auxiliary requests I and IV, the admissibility of which is open to question.

Secondly the Board notes with respect to the procedural status of the admissibility of amendments made to requests in general, and of revised auxiliary requests I and IV specifically, that no specific procedural treatment is reserved in the EPC or RPBA in respect of a parent application when a related divisional application is pending. Basically, from the moment of their filing, provided they fulfil the requirements of Article 76 and Rule 25 EPC, divisional applications obtain an independent status both as regards their substantive aspects and as regards their procedural aspects. An applicant who obtains two patents as a result of such proceedings (i.e. parent and divisional applications) will acquire independent rights under each patent, the rights derived from one application being independent of the rights derived from the other.

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In support of their argument, the Respondents referred to T 0840/93 (OJ 1996, 335; points 3.2 to 3.6). The position of the Board as stated above does not conflict with the principle applied in that decision. In that decision the Board, exercising its discretionary power, took the view that in the specific circumstances of that case it was inappropriate to admit new requests filed during oral proceedings before the Board of Appeal. When looking at the reasons, the fact that divisional applications were still pending before the department of first instance was an additional circumstance for concluding that the late filed requests were neither immediately allowable nor bona fide attempts to overcome objections raised. However, the Board considers that that ratio decidendi does not apply to the circumstances of the present case, because the revised auxiliary requests I and IV are not new requests in the sense that they are directed to newly amended subject-matter. As explained above (section 3.2) they are derived from earlier, admissible requests, from which some of the contested claims have been deleted, with no amendment of the claimed subjectmatter.

- 4. Revised auxiliary request I
- 4.1 Added subject-matter (Article 123(2) EPC)

A comparison of the subject-matter of Claim 1 of this revised auxiliary request with that of granted Claim 1 reveals that the former has been limited by the addition of the following technical feature related to the volumetric expansion of the bulk amount of food starch material: "thereby forming the puffed food

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starch material product having upper and lower surfaces having a substantially wavy contour comprising hills and valleys".

This feature, however, does not find support in the originally filed application in the sense that the passages (page 4, lines 24 to 31 and page 11, lines 17 to 22) cited by the Appellant disclose the feature only in combination with another technical feature, which has not been introduced into the claimed subject-matter. The first passage (page 4, lines 24 to 31) cites that "(a)t least one of the upper and lower surfaces has a substantially wavy contour such that it appears as though individual kernels of grain are joined to one another" and the second (page 11, lines 17 to 22) cites that "(t)he upper surface 12 and the lower surface 14 have a substantially wavy contour, and each surface 12, 14 has a general appearance which permits visual discrimination between individual kernels of grain 16 as they are joined to one another" (emphasis added by the Board).

The Board notes that the Appellant, by not incorporating into the claimed subject-matter the feature which further defines the wavy contour of the upper and lower surfaces, namely that their appearance permits visual discrimination between individual kernels of grain as they are joined to one another, has dissociated two features which were interrelated in the originally filed application. By doing so, it has made an arbitrary generalisation out of the originally filed disclosure and has contravened the requirements of Article 123(2) EPC.

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Consequently revised auxiliary request I is not allowable.

5. Auxiliary requests II-III

5.1 Novelty under Article 54 EPC

These requests comprise claims corresponding to the method Claim 1 and the apparatus Claim 17 of the main request, namely Claims 1 and 17 of auxiliary request II and Claims 1 and 16 of auxiliary request III. The reasoning in relation to the main request (sections 2.2 and 2.3) applies mutatis mutandis to each of auxiliary requests II and III. Consequently the subject-matter of these auxiliary requests lacks novelty and the requests are not allowable.

6. Revised auxiliary request IV

6.1 Novelty under Article 54 EPC

The Respondents have acknowledged that the subjectmatter of both the independent method and product claim
not only is formally allowable but also satisfies the
novelty requirements in view of the cited prior art.
The Board concurs with this conclusion and acknowledges
that the claimed subject-matter is novel as none of the
relevant prior art documents D14, D25 or D28 discloses
that in a method of making a puffed food starch
material product, the bulk amount of the food starch
material comprises a plurality of individual pellets
formed from starchy flour.

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7. Remittal

Since the patent in suit was revoked by the Opposition Division for lack of novelty, the Board, exercising its power according to Article 111(1) EPC and in agreement with the parties, remits the case to the Opposition Division for consideration of the issue of inventive step.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside
- The case is remitted to the Opposition Division for further prosecution on the basis of Claims 1 to 11 of the auxiliary request IV as filed during the oral proceedings.

The Registrar: The Chairman:

G. Röhn P. Kitzmantel