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Datasheet for the decision of 13 November 2008

| IPC: | A22C 13/00 |
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| Publication Number: | 1018301 |
| Application Number: | 99500003.1 |
| Case Number: | T 1881/06 - 3.2.04 |

Language of the proceedings: EN

Title of invention:

Non-edible collagen casing ready-to-stuff

Patentee:

Naturin GmbH & Co.

Opponent:

Devro plc

Headword:

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Relevant legal provisions:

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Relevant legal provisions (EPC 1973): EPC Art. 84, 100a

Keyword:

"Main request and auxiliary requests 1-5 and 12-16, Clarity of claim 1 (no)" "Auxiliary requests 6-11 and 17-23, inventive step (no)"

Decisions cited:

G 0009/91

Catchword:

-



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Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 1881/06 - 3.2.04

DECISION of the Technical Board of Appeal 3.2.04 of 13 November 2008

| Appellant: (Opponent) | Devro plc Moodiesbum Chryston (GB) |
|---|--|
| Representative: | Wilson, Gary Harrison Goddard Foote 106 Hope Street Glasgow G2 6PH (GB) |
| Respondent: (Patent Proprietor) | Naturin GmbH & Co Badeniastrasse 13 D-69469 Weinheim (DE) |
| Representative: | Carpintero Lopez, Francisco Herrero & Asociados, S.L. Alcalá 35 ES-28014 Madrid (ES) |
| Decision under appeal: | Interlocutory decision of the Opposition Division of the European Patent Office posted 20 October 2006 concerning maintenance of European patent No. 1018301 in amended form. |

Composition of the Board:

| Chairman: | М. | Ceyte |
|-----------|----|------------|
| Members: | С. | Scheibling |
| | С. | Heath |

Summary of Facts and Submissions

- I. In its interlocutory decision posted 20 October 2006, the Opposition Division found that, taking into consideration the amendments made by the patent proprietor, the European patent and the invention to which it relates met the requirements of the EPC. On 12 December 2006 the Appellant (opponent) filed an appeal; the appeal fee was paid on 13 December 2006. The statement setting out the grounds of appeal was received on 27 February 2007.
- II. The patent was opposed on the grounds based on Articles 100 a) and b) EPC 1973. During the Opposition proceedings, an objection under Article 123(2) EPC was raised against claim 1 as finally accepted by the opposition division.
- III. The following documents played a role in the present proceedings:
 - D1: WO-A-94/07372
 - D2: GB-A-2 019 344
 - A: Article taken from the journal "Maso 2/98"
 - D: Brochure Teepak ® Custin "Collagen Casing" 1991
- IV. Oral proceedings took place on 13 November 2008 before the Board of Appeal.

The Appellant requested that the decision under appeal be set aside and that the patent be revoked. He mainly argued as follows:

The added feature "said casing being packed" introduces a lack of clarity into the claims, so that the main request and the first to fifth auxiliary requests are not allowable. Furthermore, there is no strict distinction between edible and non-edible collagen casings. Thus, D1 discloses a collagen casing which can also be used as a non-edible collagen casing and which exhibits all the features of claim 1 of the sixth auxiliary request except the precise water content and the fact that the casing is packed under vacuum or protective gas. In D1 wet collagen casings have a water content of above 25%. It is only an optional feature in this citation that the water content is between 50% and 90%. D1 therefore discloses a water content of above 25% which may be below 50%, thus anticipating the claimed moisture range. Packing under vacuum or protective gas is a commonly used technique in the food industry. Therefore the subject-matter of claim 1 of the sixth auxiliary request does not involve an inventive step. The further features added to claim 1 of seventh to twenty third auxiliary requests or the change of category of these claims do not alter in substance the claimed subject-matter and are thus not relevant for the assessment of inventive step.

The Respondent (patentee) contested the arguments of the Appellant and submitted in essence that the added feature "said casing being packed" meets the requirement of clarity. The fact that casings should be packed under vacuum or under protective gas, is not an essential feature of the invention. At the priority date of the invention there was a prejudice against providing readyto-stuff pre-soaked non-edible collagen casings. Since D1 refers exclusively to edible collagen casings, a skilled person would not even have taken this document into consideration. D2 appears to be concerned with edible casings too rather than with non-edible ones, since D2 mentions collagen casings providing a better chewability than natural casings. Furthermore, the water content of the casings of D1 and D2 is so different that a skilled person would never combine the teaching of D2 with that of D1.

The Respondent requested that the decision under appeal be set aside and that the patent be maintained on the basis of the claims of the main request or alternatively on the basis of the claims of one of the first to twenty third auxiliary requests, all filed with letter dated 9 October 2008.

IV. Claim 1 of the main request reads as follows:

"1. A ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing characterized in that it comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, and said casing being packed."

Claim 1 the first auxiliary request differs from claim 1 of the main request by the addition "for distribution to a meat-packer".

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Claim 1 of the second auxiliary request reads as follows:

"1. A product comprising a ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing characterized in that the casing comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, and said casing being packed."

Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request by the addition "for distribution to a meat-packer".

Claim 1 of the fourth auxiliary request reads as follows:

"1. Use of a ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing and which comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, and said casing being packed,

characterised in that the use comprises supplying said casing, packed and ready-to-stuff without any need for performing any additional moisturizing treatment, from a manufacturer of said casing for stuffing by a meat packer." Claim 1 of the fifth auxiliary request reads as follows:

"1. Method of supplying a non-edible collagen casing to a meat packer,

manufacturing a ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing and which comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, and packing said casing,

and supplying said casing, packed and ready-to-stuff without any need for performing any additional moisturizing treatment, for stuffing by a meat packer."

Claim 1 of the sixth auxiliary request reads as follows:

"1. A ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing characterized in that it comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, and said casing being vacuum packed or packed under protective gas."

Claim 1 the seventh auxiliary request differs from claim 1 of the sixth auxiliary request by the addition of the wording "for distribution to a meat-packer". Claim 1 of the eighth auxiliary request reads as follows:

"1. A product comprising a ready-to-stuff non-edible collagen casing which does not need an additional soaking step before stuffing characterized in that the casing comprises a moisture amount between 27 % and 49 % by weight based on total casing weight and a salt amount between 4 % and 20 % by weight based on dry casing weight, and said salt being compatible with food and commodity regulations, wherein said casing is vacuum packed or packed under protective gas."

Claim 1 of the ninth auxiliary request differs from claims 1 of the eighth auxiliary request by the addition "for distribution to a meat-packer".

Claim 1 of the tenth auxiliary request differs from claim 1 of the fourth auxiliary request by the addition "said casing being vacuum packed or packed under protective gas".

Claim 1 of the eleventh auxiliary request differs from claim 1 of the fifth auxiliary request by the addition "vacuum packing said casing or packing said casing under protective gas".

The claims of the twelfth to twenty third auxiliary requests correspond to the claims of the main request to the eleventh auxiliary request with all the process claims based on original claims 7 to 15 deleted.

Reasons for the Decision

- 1. The appeal is admissible.
- Main request, first to fifth and twelfth to sixteenth auxiliary requests - clarity:
- 2.1 Claim 1 of these requests has been inter alia amended by the addition of the feature "said casing being packed". According to the decision of the Enlarged Board of Appeal G 9/91 (OJ EPO, 1993, 408; see point 19) such an amendment is to be fully examined as to its compatibility with the requirements of the EPC.
- 2.2 According to the established case law, Article 84 EPC 1973 has to be interpreted as meaning not only that a claim must be comprehensible from a technical point of view, but also that it must define the object of the invention clearly, that is, indicate all the essential features thereof, i.e. all features which are necessary for solving the technical problem with which the patent is concerned.
- 2.3 The introductory part of the description sets out the problems associated with the necessity of having a certain humidity degree in the collagen casings before stuffing. In paragraph [0028] it is stated "Due to the previous reasons there is a need in the market of a nonedible collagen casing which can be provided by the manufacturer with the correct moisture amount to avoid additional treatments before stuffing, which can be stored for a large time period and overcomes all the mentioned problems".

Reference is also made to paragraph [0055] of the patent specification dealing with examples of the invention stating that "Immediately after humidification the sticks were packed in a plastic bag under protective gas (nitrogen/ carbon dioxide after removal of oxygen" (emphasis added).

In the Board's judgement the above object of the invention can only be achieved by ready-to-stuff nonedible collagen casings which are packed under vacuum or under protective gas. It is precisely this feature that is missing from the present claims 1 which therefore do not meet the requirement of Article 84 EPC 1973 first sentence, since they do not define the claimed subjectmatter by reference to all its essential features.

- 2.4 The Respondent submitted that a skilled person would understand, when reading the claim that not any way of packaging would be suitable, for example wrapping the casings into paper would obviously not achieve the expected result. Thus a watertight packaging would be implicit. However, vacuum packaging or packaging under protective gas would only be required in case it is intended to store the casings for a long time.
- 2.5 The Board is unable to accept such reasoning since there is no indication in the patent specification that the casings might be used without substantial delay, so that packing under vacuum or protective gas can be omitted. On the contrary, the patent specification only refers to extended storage periods, as indicated in paragraph [0036]: "In the development of the present invention many factors were taken into account, as ready-to-stuff casings would have to fulfill the following requirements: compliance with the legal regulations ... shelf life of

the casing at least a year without significant change of properties..."

Accordingly, the main request, the first to fifth and twelfth to sixteenth auxiliary requests must fail.

- 3. Sixth and seventeenth auxiliary requests inventive step:
- 3.1 The contested patent refers to non-edible collagen casings. In paragraph [0006] it is stated "Collagen casings may be edible or non-edible, the distinction being that non-edible casings are of higher diameter and they are normally peeled before the sausage encased therein is consumed. These casings are, normally, of a thicker wall than the edible ones and are not eaten because of their unpleasant mouthfeel."

According to the Appellant, there is an overlap between edible and non-edible collagen casings at least when considering casings of smaller diameters. The Respondent submitted that non-edible collagen casings differ also from the edible ones in that they need a high moisture content of 27% or more to be readyto-stuff. However, longer storage periods in the wet state are prohibited because of mold development. Therefore, non-edible casings are usually delivered to the meat-packer in a dry state (i.e. with a water content of 25% or less) and have to be soaked to be ready for use, whereas edible collagen casings can be stuffed in their dry state.

3.2 D1 discloses a ready-to-stuff wet (e.g. 50 to 90% of moisture content) edible collagen casing, which may have

a diameter up to 32 mm (Table 6, first position). Thus, the collagen casing of D1 due to its diameter and its high moisture content cannot be distinguished from a non-edible collagen casing of smaller diameter that is soaked in water / brine prior to stuffing so as to present a higher moisture content. Thus the term "nonedible" in claim 1 provides no technical feature that clearly distinguishes over D1.

On page 3, second paragraph of D1, it is stated "by wet condition we mean that the casing has a high water content compared with conventional dried collagen casings... [which] have water content in the region 15 to 25%. The wet collagen casing of the present invention may have a water content of 50 to 90%..." Thus, although the invention according to D1 contemplates a water content of 50 to 90%, casings with a water content exceeding 25% (since wet) are not excluded.

Moreover, on page 4 third paragraph of D1 it is indicated that salt e.g. sodium chloride is "present in an amount of 5 to 15% of the total weight". The casing is treated in a salt solution comprising 10 to 25% by weight of salt preferably sodium chloride (page 6, end of third paragraph). In the fourth paragraph of page 3 it is stated "... in a preferred embodiment the collagen casing is packed in its wet state (...) but not surrounded by liquid. For example the wet casing may be packed within a hermetically sealed pouch formed of ... a plastics coated foil.

3.3 Thus the casings of claim 1 of the sixth and seventeenth auxiliary requests differ from the casing of D1 in that

the moisture amount is between 27 and 49% and that they are vacuum packed or packed under protective gas.

D1 specifically refers to a water content of 50%. It is purely a matter of routine experimentation for a skilled person to determine water contents at the limit of the preferred range, i.e. casings with a water content of slightly less than 50%, e.g. 49%, all the more because claim 1 of D1 refers to a casing packed in its wet state and according to the description "wet" means a water content of above 25%, so that water contents of 26 to 49% although not preferred are encompassed by the subject-matter of claim 1 of D1.

3.4 The problem solved by packaging the casings under vacuum or under protective gas may be seen in avoiding mold development during storing in spite of the high moisture content of the ready-to-stuff non-edible collagen casings and thus in improving the shelf life of the casings.

In D1 it is stated, page 3, lines 21 to 23: "the wet casing may be packed with a hermetically sealed pouch formed of a conventional material such as a plastics coated foil."

Thus D1 teaches to hermetically pack high moisture collagen casings and packing under vacuum or under protective gas is a commonly used technique in the food industry. Finally, packing collagen casings of high moisture content under protective gas in order to avoid mold formation and enhance shelf live is already taught by D2 (see page 1, lines 41 to 45, 52 and 53). The Respondent submitted that there is no hint in the conventional methods that would prompt the skilled person to consider soaking the non-edible casings at the manufacturer's end prior to packing and sending them to the meat packer.

However such methods are disclosed in D1 and D2 for casings which by reason of their size and high moisture content can also be used as non-edible ones.

He further alleged that there was a technical prejudice against storing collagen casings having a high moisture content and referred to documents A and D.

However, document A states "It is possible to dry casings that have not been used and use them again after repeated soaking in the saturated solution" and document D specifies "Casings not used that were soaked should be drained free of water, placed in a plastic bag, and stored in a cool room. These casings should be used first at the next stuffing." Thus, none of these documents clearly excludes the possibility of storing wet casings under predetermined conditions.

Furthermore, D1 and D2 relate to collagen casings of high moisture content. The water content is of 50 to 90% in D1 (abstract) and of 40% or more in D2 (see page 1, lines 52 and 53) wherein it is further stated that the casings can be stored for many months (page 3, lines 3 and 4) by packing them under protective gas. Accordingly the Respondent's allegations are traversed.

3.5 Consequently, the subject-matter of claim 1 of the sixth and seventeenth auxiliary requests does not involve an inventive step. 3.6 The subject-matter of claim 1 of the seventh to eleventh and of the eighteenth to twenty third auxiliary requests does not differ in substance from the subject-matter of claim 1 of the sixth and seventeenth auxiliary requests. Accordingly, the above reasoning applies mutatis mutandis to the subject-matter of claim 1 of these requests. This point has not been challenged by the parties.

It follows that the subject-matter of claim 1 of the seventh to eleventh and of the eighteenth to twenty third auxiliary requests does not involve an inventive step either.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked

The registrar:

The Chairman:

G. Magouliotis

M. Ceyte