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Datasheet for the decision of 26 November 2009

Case Number: T 0467/07 - 3.3.09

Application Number: 99909969.0

Publication Number: 1063897

IPC: A23K 1/00

Language of the proceedings: EN

Title of invention:
Multicomponent food product and methods of making and using the same

Patentee:
Mars, Inc.

Opponents:
NESTEC S.A.
Hill's Pet Nutrition Inc.
Société d'Exploitation du Site des Angles (SESA)
animonda petfood GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 83, 84, 123(2)

Relevant legal provisions (EPC 1973):
-

Keyword:
"Main request - does not fulfil the requirements of Article 123(2) EPC"
"First auxiliary request - support (yes), clarity (yes), sufficiency (yes), novelty (yes), inventive step (no)"
"Second auxiliary request - inadmissible"

Decisions cited:
–

Catchword:
–

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0467/07 **-** 3.3.09

D E C I S I O N
of the Technical Board of Appeal 3.3.09
of 26 November 2009

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Decision under appeal:

Interlocutory decision of the Opposition Division of the European Patent Office posted 11 January 2007 concerning maintenance of European patent No. 1063897 in amended form.

Composition of the Board:

Chairman: N. Perakis
Members: W. Ehrenreich
K. Garnett

Summary of Facts and Submissions

I. Mention of the grant of European patent No 1 063 897 in respect of European patent application No 99909969.0 in the name of Kal Kan Foods, Inc (now Mars, Inc) which had been filed as International application No PCT/US99/05445 on 12 March 1999 and published as WO-A 99/47000 on 23 September 1999, was announced on 19 November 2003 (Bulletin 2003/47). The patent, entitled "Multicomponent food product and methods of making and using the same", was granted with twelve claims. Independent Claim 1 read as follows:

"1. A dual texture pet or animal food product comprising a cereal based shell component completely surrounding an inner component to form a dual textured pet or animal food product formed by co-extrusion, wherein the shell component is harder than the inner component;
said shell component having a total moisture content of less than about 20 wt% and containing at least one ingredient comprising a carbohydrate, fat, protein or combination thereof; and
said inner component having a water activity, a_w, of less than about 0.65, a total moisture content of less than about 15 wt% and comprising a mixture of lipid and solid ingredients."

II. Notices of opposition were filed against the patent by ***NESTEC S.A.*** (opponent 1) and ***Hill's Pet Nutrition*** (opponent 2) on 19 August 2005. Further notices of opposition were filed by the alleged infringers ***Société d'exploitation du Site Des Angles*** (opponent 3) and ***Animonda Petfood GmbH*** (opponent 4), which oppositions

were later withdrawn with the letters dated 20 October 2006 (opponent 3) and 16 September 2008 (opponent 4). The opponents 1 and 2 requested the revocation of the patent in its entirety, relying on Articles 100(a), 100(b) and 100(c) EPC.

The following documents were ***inter alia*** filed during the opposition proceedings:

A1 : US-A- 4 777 058
A3 : EP-A- 0 088 574
A7 : US-A- 4 847 098

III. By an interlocutory decision orally announced on 24 October 2006 and issued in writing on 11 January 2007 the opposition division maintained the patent on the basis of Claims 1 to 11 of the main request filed during the oral proceedings.

IV. Claim 1 of the main request corresponded to claim 1 as granted with the amendment that it related exclusively to **a pet food product,** the reference to an animal food product having been deleted.

V. The opposition division considered that the claimed subject-matter fulfilled the requirements of Article 123(2) EPC. The expressions "completely surrounding", "formed by co-extrusion", as well as the specific values of moisture and water activity of the inner component, were considered to have been disclosed in the originally filed application. The opposition division further considered that the originally filed application disclosed the subject-matter of claim 1, which no longer comprised the feature that "said first

component does not contain an aqueous phase", which had been in claim 1 of the WO-publication.

With regard to novelty, the opposition division considered that the claimed subject-matter was novel over the disclosures of A1 and A3. The opposition division considered that A1 did not disclose that the inner component was totally surrounded by the shell and A3 did not disclose or imply an inner component with a water activity of below 0.65.

With regard to the issue of inventive step it was the opposition division's position that A1 represented the closest state of the art since it related to a biologically stable, dual-texture pet food. As regards the technical problem to be solved it considered this to be the provision of a shelf-stable pet food with satisfactory organoleptic properties. The opposition division argued that the skilled person starting from A1 and seeking to solve the above problem would not find in the state of the art any motivation to cover the inner component with a shell which completely surrounded it. The opposition division thus concluded that the subject-matter of claim 1 was not obvious and consequently that it involved an inventive step.

VI. On 21 March 2007 opponent 2 (appellant) lodged an appeal against the decision of the opposition division and paid the appeal fee on the same day. The statement setting out the grounds of appeal was filed on 21 May 2007.

VII. The appellant disputed the conclusions of the opposition division as regards the amendments under

Article 123(2) EPC, novelty and inventive step and requested the revocation of the patent in its entirety. In support of its arguments the appellant, in its letter dated 18 November 2009, referred to the following documents already filed in the opposition proceedings:

A20: Kirk-Othmer, Encyclopedia of Chemical Technology, 3rd edition, vol 11, pp 173-174
A42: "The Technology of Extrusion Cooking", N D Frame, 1995, pp 127-133

and filed the following further documents with its grounds of appeal:

A52: WO-A-89/12442
A53: US-A-5 723 164
A54: EP-A-0 795 275

VIII. With the letters dated 19 October 2007 and 25 September 2009 the respondent (patent proprietor) contested the arguments of the appellant. It essentially argued that the decision of the opposition division was correct on each issue that it had dealt with. With its last submissions the respondent filed thirteen auxiliary requests which corresponded to the auxiliary requests filed previously during the oral proceedings before the opposition division.

IX. On 26 November 2009 oral proceedings were held before the board. At these oral proceedings the respondent maintained its main and first auxiliary requests already on file and was given the opportunity to file a further auxiliary request. It filed auxiliary request 2.

The board, in the context of the discussion of the clarity and sufficiency of disclosure of the first auxiliary request, introduced into the proceedings A7, which had already been cited in the proceedings before the opposition division.

Claim 1 of auxiliary request 2 corresponded to claim 1 as granted with the following amendments: (i) the definition of the claimed product was limited exclusively to a pet food product and (ii) the definition of the inner component was limited by the following features which were added at the end of the granted claim: "wherein the inner component does not contain an aqueous phase and wherein the inner component comprises 40-80wt% solids and 20-60 wt% lipids".

X. The arguments put forward by the appellant (opponent 2) in its written submissions and at the oral proceedings can be summarized as follows:

- The subject-matter of claim 1 did not fulfil the requirements of Article 123(2) EPC because it did not contain the feature "the inner component does not contain an aqueous phase". This feature was part of the originally filed claim 1. Moreover there was no disclosure in the originally filed application, either in the description or the claims, which would provide support for the combination of the features constituting the subject-matter of the granted claim 1.
- The subject-matter of claim 1 of the first auxiliary request, which overcame the above objection, lacked clarity. Neither the claim nor the description

disclosed the meaning of the term "aqueous phase" used in the definition of the inner component. This term did not have a generally accepted meaning for the skilled person. As a further consequence the skilled person was not able to reproduce a pet food with this property and the claimed invention was not sufficiently disclosed for it to be carried out by a skilled person.

- The subject-matter of the first auxiliary request lacked novelty in view of A1, which disclosed a core composition being at least partially surrounded by a shell composition, this feature including the claimed complete surrounding of the core by the shell. The subject-matter of the first auxiliary request lacked novelty also over A3 since the claimed water activity of less than about 0.65 was implicit. Still further, documents A53, A54 and A42 anticipated the claimed subject-matter.
- The subject-matter of the first auxiliary request also lacked an inventive step. Documents A1 or A3 could be considered to represent the closest state of the art. Starting from A1 and considering that the technical difference was that the shell completely surrounded the core, the technical problem could only be to provide an alternative protection for the inner core of a pet food product. The claimed alternative of fully surrounding the core by the shell was obvious either on the basis of A1 alone, which envisaged the possibility of fully surrounding the core, or in combination with A3, which disclosed this specific feature. As to the alleged technical problems of improved shelf-stability, improved palatability and improved

protection from heat, light and oxygen, they should be disregarded in the absence of comparative data.

- Alternatively, starting from A3 and having regard to the fact that it did not disclose the claimed water activity value of the inner component, the technical problem was to provide a pet food product with improved microbiological activity. The solution of manufacturing a core composition whose water activity was less than 0.65 would however have been obvious to the skilled person because this belonged to his general technical knowledge (A20: page 173, lines 32-33, A61: page 1, figure, A53: column 3, lines 58-64 and column 4, lines 10-15, and A42: page 173, lines 3-11).
- The second auxiliary request should not be admitted in the proceedings because it was filed at a very late stage of the proceedings and did not correspond to a combination of previous auxiliary requests. Furthermore the subject-matter of this request contained a completely new combination of features which did not find support in the application as originally filed, contrary to Article 123(2) EPC.

XI. The arguments put forward by the respondent (patent proprietor) in its written submissions and at the oral proceedings can be summarized as follows:

- Claim 1 of the main request met the requirements of Article 123(2) EPC. Contrary to the objection of the appellant the contested feature "the inner component does not contain an aqueous phase" was not an essential, compulsory feature of the invention, as disclosed in the originally filed application, despite the fact that it had been a feature of claim 1 of the originally filed application. The

broader definition of the invention in granted claim 1 found support in the description and claims of the originally filed application.

- Concerning the subject-matter of claim 1 of the first auxiliary request it fulfilled the requirements of Article 123(2) EPC since it included the disputed feature. Furthermore, this subject-matter was clear under Article 84 EPC because the term "water phase", used for the definition of the inner component, was a conventional one and thus known to the skilled person. An applicant did not have to provide the definition of all conventional terms in a patent application.
- Furthermore the claimed invention was sufficiently disclosed and could be carried out by the skilled person as no technical difficulties had to be overcome. The appellant's argument was merely an allegation and was not supported by any technical evidence.
- The subject-matter of claim 1 of this request was also novel over all opposed pieces of prior art. Indeed, none of the prior art documents disclosed a pet food product with the combination of the claimed features.
- Finally this subject-matter involved an inventive step when considering either A1 or A3 as closest state of the art. A1 disclosed open-ended products in view (i) of the implemented process and (ii) of the interfacial adhesion needed to prevent the core from falling out. Prevention of the core composition from spilling out was the technical problem to be solved starting from A1. However, this document did not provide any hint in the direction of completely surrounding the core by the shell in order to solve

the problem. Nor would the skilled person, looking for its solution, consider A3 because it did not disclose that complete surrounding of the core prevented it from spilling out.

- As far as A3 was concerned, it neither disclosed nor implied a water activity value of less than about 0.65 since potassium sorbate, an antimycotic, was used in order to provide microbiological stability. The technical problem starting from A3 was to provide an alternative pet food product with microbiological stability. The replacing in the core composition of the antimycotic composition according to A3 by a composition with a reduced water activity in order to achieve microbial stability was not simply one of many available solutions but would be surprising to the skilled person.
- The second auxiliary request should be admitted into the proceedings. The additional feature of claim 1 of this request compared to claim 1 of the first auxiliary request was comprised in the subject-matter of claim 1 of auxiliary request 9 filed during the oral proceedings before the opposition division. Furthermore this feature was derived from the originally filed application (page 14, lines 24-28) and on this basis it should be considered to fulfil the requirements of Article 123(2) EPC.

XII. Opponent 1, party as of right, did not file any request or submission in appeal phase and did not attend the oral proceedings held before the board.

XIII. The appellant (opponent 2) requested that the decision under appeal be set aside and the European patent No. 1 063 897 be revoked.

XIV. The respondent (patent proprietor) requested that the appeal be dismissed, alternatively that the European patent be maintained on the basis of the first auxiliary request filed with letter dated 25 September 2009, alternatively on the basis of the second auxiliary request filed during the oral proceedings.

Reasons for the Decision

1. The appeal is admissible.

Main Request

2. *Amendments - Article 123(2) EPC*

2.1 The board, contrary to the arguments of the patent proprietor and the opposition division, considers that the subject-matter of claim 1 of the main request does not fulfil the requirements of Article 123(2) EPC.

The board reaches this conclusion because the subject-matter of granted claim 1 did not comprise the feature "the inner component does not contain an aqueous phase", which was a feature of the originally filed claim 1.

2.2 The board considers that this feature is disclosed in the description of the originally filed application as essential and should therefore be included in the definition of the product to be claimed (page 5, line 31 to page 6, line 7; page 10, lines 18-23; page 19-21). Specifically the section "Detailed description of the invention" of the WO document

discloses that the inner component has a minimal water content, in particular because no water has been added during the extrusion, and remarks that if water is present it is located in the shell component.

2.3 The board does not accept the patent proprietor's arguments that the examples in the patent application or the originally filed claim 58 provide a sound basis for an inner component comprising an aqueous phase.

2.3.1 With regard to the examples, the board notes that in the list of inner component compositions (see tables 2, 4, 6-13) water is neither mentioned nor can possibly be present because the listed ingredients always have a total of 100 wt%. Not only this, but also these examples should not be considered since they relate to the **starting composition** of the inner component, ie before the extrusion step, and not to the final composition, which is what is actually claimed.

This is also the case for the moisture content of approximately 6 wt% of the inner component according to examples 3-11 (see page 33, lines 1-3). This moisture content can only relate to the inner component before extrusion. This is the only interpretation possible for the skilled reader in view of the sentence which follows (page 33, lines 3-7), which makes reference to the moisture content prior to extrusion of the outer shell composition. This interpretation is confirmed by the last sentence of this paragraph (page 33, lines 11-13) which, on the one hand, refers to the moisture content of the final product and, on the other, discloses the moisture content of this final product. The fact that the moisture content of the final product

is less than about 12 wt%, ie less than the sum of 6 wt% + 10 wt%, is a clear indication that the disputed value of approximately 6 wt% does not correspond to the final moisture content of the inner component but to the moisture content before extrusion.

2.3.2 With regard to originally filed independent claim 58 and its corresponding part of the description (page 6, lines 9-18), the board considers that it is clear that these disclosures refer to the inner composition **before extrusion** since the disclosed moisture contents relate to compositions which are going to be co-extruded and not to those already co-extruded. Therefore this part of the originally filed application also does not provide any basis for the presence of a water phase in the final manufactured product.

2.4 Under these circumstances the board concludes that the main request contravenes the requirements of Article 123(2) EPC with the consequence that this request is rejected.

First auxiliary request

3. *Amendments - Article 123(2) EPC*

3.1 The subject-matter of claim 1 of the first auxiliary request, compared with that of the main request, comprises the feature: "the inner component does not contain an aqueous phase" and therefore fulfils the requirements of Article 123(2) EPC.

3.2 The board further considers, contrary to the arguments of the appellant, that the features of claim 1 are not

only disclosed in the originally filed application individually but also in combination. The combination of the following features was objected to by the appellant:

- (i) the shell component is a cereal based component,
- (ii) the shell component is harder than the inner component
- (iii) the shell component completely surrounds the inner component
- (iv) the food product is formed by co-extrusion,
- (v) the inner component has a water activity of less than about 0.65, and
- (vi) the total moisture content is of less than about 15 wt%.

The board considers the subject-matter of claim 1 of the first auxiliary request to be based on the subject-matter of claim 1 as originally filed to which the above features have been incorporated from the description:

- page 10, lines 27-28, discloses the combination of features (i) and (ii), which provide a preferred combination of a specific shell component and the inner component;
- page 13, line 10-17 (particularly line 13) and page 14, lines 10-14, disclose the combination of the broader definition of the inner component water activity (feature (v)) with a more advantageous value of the total moisture content of this inner component (feature (vi));
- page 15, lines 29-32 and page 23, lines 23-28 disclose feature (iii), which defines the preferred connection of the shell component to the inner

component, thus limiting the definition of the connection provided in original claim 1, according to which the shell "at least partially surrounds" the inner component. Even though different terminology is used in each of the above passages ("totally encapsulated", "completely encased") the board considers that they all have the same technical meaning;

– Finally page 22, lines 7-10 discloses feature (iv), which relates to the only disclosed method of manufacture of the food product leading to a shell completely surrounding the inner component.

The board considers that since these features correspond to preferred embodiments of originally claimed features or to the broader definition of newly added features, which all are disclosed in the originally filed application, their introduction and combination in the subject-matter of originally filed claim 1 is directly and unambiguously derivable in compliance with Article 123(2) EPC.

4. *Clarity - Article 84 EPC*

4.1 The board concurs with the patent proprietor that the subject-matter of claim 1 is clear and supported by the description. Although the originally filed application does not provide a definition of the "water phase" of the inner component, the board in agreement with the patent proprietor considers that this is a common term in this field, and is clear for the skilled person. The board further notes that the description does not have to comprise the definition of every single term having a conventional meaning.

4.2 In this context the board considers that the expression "water phase" concerns the free water which is present in a discrete phase (continuous or discontinuous such as eg a water-in-oil emulsion) of the inner component. This free water is distinguished from the water which is bound to the constituents of the inner component and is therefore not free (cf A7: column 6, lines 57-61; column 2, lines 31-41). It is distinguished also from the free water which is dissolved in the organic phase (cf letter of the appellant dated 21 May 2007, page 3, lines 17-19).

5. *Sufficiency of disclosure - Article 83 EPC*

In the board's judgment the invention of claim 1 is disclosed in the opposed patent in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. The patent specification (see tables 2, 4-13 and page 33, lines 1-3 and 11-13) discloses the ingredients of the composition which would allow the manufacture of a product with an inner component having a water activity of less than about 0.65 and a total moisture content of less than about 15 wt% - the inner component not containing an aqueous phase. This was further supported by the appellant itself who argued in the context of the novelty issue (see point 6 below) that such an inner component was known from A1, A3 and A42, which argument is understood by the board to mean that the prior art taught the skilled person how such inner components could be manufactured. In view of the above, the board considers that the skilled person would have no technical difficulties when manufacturing the

claimed inner component. Furthermore the board remarks that the appellant has not substantiated its allegation of insufficient disclosure with any technical evidence. Under these circumstances the objection of the appellant amounts to an unfounded allegation.

6. *Novelty - Article 54 EPC*

6.1 The appellant contested the novelty of the subject-matter of claim 1 based on the disclosure of documents A1, A3, A42, A53 and A54.

The board, in agreement with the patent proprietor, considers that none of the opposed documents anticipates the subject-matter of this claim.

6.2 **A1** (column 1, lines 9-12 and 54-65; column 2, lines 3-39 and 44-50; column 3, lines 44-50; column 4, lines 12-16; column 5, lines 1-2 and 33-36; column 6, lines 40; column 7, lines 11-14) discloses a composite food for pets such as dogs and cats which comprises a relatively soft core and a crunchy outer shell. The shell material is extruded in the form of a continuous hollow cylinder and the core material is injected into the shell. The shell comprises starch- and protein-containing materials while the core comprises edible fat, sugar and salts, the last two components being soluble solids. The shell has a maximum moisture content of about 12 wt% and the core has a moisture content within the range of about 5 wt% to about 20wt% and a water activity of below about 0.6.

The food product of claim 1 differs from that of D1 only as regards the extent to which the outer shell

covers the inner component. According to claim 1 the shell component completely surrounds the inner component. In contrast, A1 discloses that the outer shell component at least partially surrounds the core.

The board, does not concur with the appellant that a complete surrounding of the inner component by the shell component is implicit for the skilled person in the light of the disclosure of A1. On a pure theoretical basis it could be argued that the complete surrounding corresponds to the extreme situation of the "at least partial surrounding" disclosed in A1. However, on a realistic basis this extreme situation cannot be considered part of the technical content of the disclosure of this document. The board refers to column 6, lines 39-40, which concerns the preparation method of this prior art food products. According to this method the extruded product is cut into segments and the possibility of crimping the cut ends, a necessary operation in order to provide a complete surrounding, is neither explicitly nor implicitly disclosed. On the contrary, column 8, lines 11-14, discloses that interfacial adhesion between the core and the shell helps to prevent the core from falling out of the finished product. This technical information clearly indicates that the structure of the food product is open at both cut ends.

In view of the above considerations the board comes to the conclusion that the subject-matter of claim 1 is novel over the disclosure of A1.

6.3 **A3** (figures 1 to 3; page 1, line 20 to page 2, line 5; page 2, line 12 to page 3, line 7; page 4, line 24 to

page 5, line 12; page 5, line 22 to page 6, line 25; page 8, line 12 to page 9, line 19) discloses animal food, preferably dog and cat food, which comprises a hard closed external shell and a central core of a softer material. The food is produced by initially coextruding the shell and core materials followed by crimping the shell so that it completely surrounds the core. The shell includes a cereal and a proteinaceous component, whereas the central core comprises cheese and similar dairy products, ie a mixture of lipid and solid ingredients. The water content of both the shell and the central core does not exceed 15 wt%.

The subject-matter of claim 1 differs from the disclosure of A3 in that it specifies that the inner component has a water activity of less than about 0.65.

Contrary to the assertions of the appellant the board is not convinced that the claimed water activity value is inherent in the food product of A3. The board does not accept that this conclusion can be drawn from A42 (section 4.5.2.2, first paragraph), which discloses that a coextruded food product with final moisture of 2 - 8 wt%, be it a cheese filling or not, will have a water activity of 0.60 - 0.65. The board considers that this disclosure does not give any sound reason as to why the food products of A3 with a higher moisture content than that of A42, ie a moisture content up to 15 wt% or of 10 wt% (page 9, lines 16-18), will unavoidably have a water activity within the claimed range, ie less than about 0.65. In particular, A42 (section 5.3.5. fifth paragraph) discloses that a small moisture increase of 2 or 3 wt% can increase water activity levels to above 0.7 or 0.8.

In view of the above considerations the board comes to the conclusion that the subject-matter of claim 1 is novel also over A3.

6.4 **A42**, section 5, relates to pet food products which "have been engineered to provide optimum nutritional balance, functional properties and organoleptic characteristics". These pet food products do not comprise the claimed specific shell-component completely surrounding the inner component and in this sense they are different from those of claim 1. Therefore the subject-matter of claim 1 is novel also over A42.

6.5 Similarly **A53** discloses dual text texture food products for humans with no indication or hint that these products could also be suitable for pet animals. A53 discloses instead that the food products can comprise constituents which are undesirable for pets, eg chocolate (cf tables 6 and 10), which, as the appellant itself admitted, are deleterious for pets. Furthermore, A53 does not unambiguously disclose that the shell component (dough) completely surrounds the inner component (filling). In view of these distinguishing features, the subject-matter of claim 1 is novel over the disclosure of A53.

6.6 **A54** (abstract; claims 1-3; column 2, line 56 to column 4, line 9) discloses a pet food product with a shell component entirely surrounding the inner component. However A54 does not disclose the product's moisture content and water activity value. Therefore

the subject-matter of claim 1 is novel over the disclosure of A54.

7. *Inventive step - Article 56 EPC*

7.1 The closest state of the art

The board considers that A3 represents the closest state of the art because:

- A3 deals with the same technology as the opposed patent, namely food products for pets,
- A3 (page 1, line 26 to page 2, line 3) - as the opposed patent (page 4, line 34 to page 5, line 2; page 5, lines 21-23; page 10, lines 1-8 and 24-27; page) - aims at providing a pet food product which is microbiologically stable, and
- the same dual composite structure is described.

As already stated above (see section 6.3) the subject-matter of claim 1 is distinguished from the disclosure of A3 only in the water activity of the inner component, which is claimed to be of less than about 0.65.

7.2 The technical problem

The opposed patent discloses as technical problem to be solved the provision of a shelf-stable pet food product having improved palatability (page 5, lines 21-23). The shelf-stability is disclosed to be the result of microbiological stabilisation (see page 10, lines 18-26).

The board remarks, however, that A3 (see above section 7.1) deals also with this type of stabilisation

and provides as solution to the problem of shelf-stability the use of an antimicrobial/antimycotic agent (see page 9, line 7: use of potassium borate). Furthermore the board notes that the opposed patent does not contain comparative data in order to show that the claimed invention when compared to that of A3 provides an improvement in stabilisation, let alone about any improvement in palatability. Nor has the patent proprietor submitted at any stage of the opposition/appeal proceedings such comparative data. Under these circumstances the technical problem has to be redefined. The objective technical problem should consist in the provision of an alternative pet food product which is shelf-stable and palatable.

The products 3-11 exemplified in the opposed patent are reported to have a water activity below 0.65 (page 33, lines 11-13). Although no evidence has been made available with regard to their shelf-stability, the board acknowledges that the skilled person would be aware that a water activity below 0.65 provides antimicrobial protection to a food (see D20). Consequently the board is satisfied that the technical problem has been solved. Moreover the board has no reasons to doubt that the claimed products, normally destined to be commercialized, are palatable pet food products.

7.3 The question of obviousness

The question which remains to be answered is whether the skilled person, departing from the microbiologically stable and palatable pet food product of **A3** with the aim of finding an alternative pet food

product, would consider it obvious to manufacture products with a water activity of the inner component of less than about 0.65. In the board's judgment this question has to be answered in the affirmative when taking into consideration the general technical knowledge of the skilled person. This is illustrated in documents **D20** (page 173, under the heading "Reduction of Water Activity(Dehydration)", lines 1-10) and **D42** (section 5.3.5, fifth paragraph, lines 1-3). According to this general technical knowledge, food products dehydrated so as to have a moisture content equal to a water activity of below 0.65 are preserved against microbial spoilage. This constitutes a clear indication for the skilled person aiming at a food product alternative to that of A3. Furthermore, such an alternative product provides the required shelf-stability without using further agents, such as antimicrobial/antimycotic agents, but only by reducing the water activity of the inner component to less than 0.65. The board thus concludes that the subject-matter of claim 1 would be obvious to the skilled person.

7.4 The board does not concur with the patent proprietor who argued that the claimed solution is one out of many available solutions, which would mean that the skilled person would have to make a selection, for which however the state of the art did not provide any incentive. Rather, the board considers that in the logic of the problem solution approach it is sufficient that either the general background knowledge (as is the case here) or a disclosure in the state of the art (in other cases) provides to the skilled person a hint to the solution of the above technical problem independently of any qualitative considerations of the

solution - whether better or worse. The board considers that only a generally admitted technical prejudice could amount to a barrier to the use of background knowledge or of disclosed information leading to the claimed solution. In the present case no such technical prejudice has been reported in the art regarding the use of an inner constituent with a water activity of less than 0.65.

7.5 In view of the above considerations the subject-matter of claim 1 of the first auxiliary request lacks an inventive step with the consequence that this request should be rejected.

Second auxiliary request

8. *Admittance*

8.1 This request was filed in order to overcome the lack of inventive step of the first auxiliary request. The subject-matter of claim 1 corresponds to that of the first auxiliary request with the further limitation of the definition of the inner component by the insertion of the following feature: "wherein the inner component comprises 40-80 wt% solids and 20-60 wt% lipids".

8.2 The board does not consider that the subject-matter of this claim is based on the subject-matter of originally filed claim 1 with a combination of features inserted into it which were taken from the originally filed application. In fact the originally filed description does not disclose the added feature. Contrary to the argument of the patent proprietor, page 14, lines 24-28, discloses different ranges for the solids and the

lipids of the inner component, despite the fact that they are complementary. The added feature of the solids content derives from the combination of the disclosed lower limit of the advantageous solids content with the upper limit of the more advantageous solids content, while the added feature of the lipids content derives from the combination of the disclosed lower limit of the more advantageous lipids content with the upper limit of the advantageous lipids content. Moreover the combination of these features with the other features defining the inner component, namely the water activity of less than about 0.65 and the total moisture content of less than about 15 wt%, provides a definition of the inner component which not only does not find support in the application as originally filed but which the skilled person would not seriously contemplate as directly and unambiguously derivable from the originally filed application.

Since the subject-matter of claim 1 of the second auxiliary request does not fulfil the requirements of Article 123(2) EPC and since this request was filed at a late stage of the proceedings in order to overcome the lack of inventive step of a hierarchically higher request, the board considers that this request is not admissible.

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. Röhn N. Perakis