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Datasheet for the decision of 18 April 2012

Case Number: T 0838/09 - 3.3.09

Application Number: 01933486.1

Publication Number: 1282367

IPC: A23L 1/32, A23L 1/30, A23K 1/18, A23K 1/14

Language of the proceedings: EN

Title of invention:
Eggs with balanced lipid composition

Patentee:
Belovo
Egg Science and Technology

Opponent:
Cargill, Inc.

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 84
RPBA Art. 12(1)(c), 13(1)

Keyword:
"Clarity - no (main request and auxiliary request I)"
"Late-filed novelty objection - not admitted"
"Novelty - yes (auxiliary request II)"
"Inventive step - yes (auxiliary request II)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0838/09 **-** 3.3.09

D E C I S I O N
of the Technical Board of Appeal 3.3.09
of 18 April 2012

Respondent: (Patent Proprietor)
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Decision under appeal:
Interlocutory decision of the Opposition Division of the European Patent Office posted 3 February 2009 concerning maintenance of European patent No. 1282367 in amended form.

Composition of the Board:

Chairman: W. Sieber
Members: M. O. Müller
R. Menapace

Summary of Facts and Submissions

I. This decision concerns the appeals by both the proprietor (withdrawn by letter of 5 April 2012) and the opponent against the decision of the opposition division that European patent EP 1 282 367, in the form of auxiliary request I filed during the oral proceedings before the opposition division, met the requirements of the EPC.

II. The opponent had requested revocation of the patent in its entirety on the grounds that the claimed subject-matter was neither novel nor inventive and that the patent contained subject-matter which extended beyond the content of the application as filed (Article 100(a) and (c) EPC).

The documents submitted during the opposition proceedings included:

D1: K. Eder et al, "Laying performance and fatty acid composition of egg yolk lipids of hens fed diets with various amounts of ground or whole flaxseed", Arch. Geflügelk. 1998, volume 62(5), pages 223-228;

D2: J. S. Sim, "Designer Eggs and Their Nutritional and Functional Significance" in "The Return of ω3 Fatty Acids into the Food Supply. I. Land-Based Animal Food Products and their Health Effects", A. P. Simopoulos (ed.), World Rev Nutr Diet 1998, volume 83, pages 89-101; and

D3: G. Huyghebaert, "Incorporation of polyunsaturated fatty acids in egg yolk fat at varying dietary fat levels and compositions", Arch. Geflügelk. 1995, volume 59(2), pages 145-152.

III. The decision of the opposition division, which was announced orally on 10 November 2008 and issued in writing on 3 February 2009, was based on the main request filed by letter dated 1 August 2007 as well as on auxiliary request I filed during the oral proceedings.

(a) Claims 1, 8 and 10 of the main request read as follows:

"1. An egg obtained from a domesticated bird, in particular a layer, having a lipid fraction balanced in seed and green plant-type ω6 and ω3 fatty acids according to the ratio of seeds plant-type ω6 fatty acids / green plant-type ω3 fatty acids = 1:1 ± 10% and having a lipid fraction balanced between polyunsaturated and saturated fatty acids according to the ratio of polyunsaturated / saturated fatty acids = 1:1 ± 10%."

"8. A feed composition of exclusive vegetarian origin for poultry, in particular layers, able to produce the egg according to any one of the preceding claims, characterised in that it satisfies the mathematical model of Huyguebaert (Huygebaert (Arch. Geflügelk (1995) 59(2), p. 145-152)), said composition containing no animal fat and comprising as ingredients 4 to 10% (w:w) of

total fat, seed ω6 and green ω3 plant-type fatty acids contributing to total fat content in steadily decreasing manner, 40 to 15% (w:w) and from 50 to 30% (w:w), respectively, and ω6:ω3 essential fatty acid ratio being in favour of the green ω3 plant type fatty acids and decreasing from 0.8 to 0.5, the total (w:w) of the ingredients of the composition being 100%."

"10. A food composition comprising, as a food ingredient, the whole egg, the egg white or the egg yolk of the egg according to any one of the claims 1 to 7, in particular a food composition suitable for human consumption."

(b) The claims of auxiliary request I were identical to those of the main request except that the egg white alternative in claim 10 had been deleted.

IV. The opposition division's position can be summarized as follows:

(a) The amendments in claim 8 of the main request (carried out in order to meet an objection under Article 100(c) EPC) met the requirements of Article 84 EPC. In particular, the term "steadily decreasing" as such was clear and had to be interpreted as encompassing any type of decrease provided that during the overall decrease no local increase occurred.

(b) The subject-matter of claim 1 of the main request was novel over D1 and the subject-matter of claim 8 was novel over D3. Since, however, the egg

white referred to in claim 10 could not be distinguished from the egg white of other eggs, the "egg white alternative" of claim 10 lacked novelty.

As the egg white alternative of claim 10 had been deleted in auxiliary request I, novelty of the claims of this request could be acknowledged.

(c) As to inventive step of auxiliary request I, the problem to be solved by the opposed patent was the provision of an egg from domesticated birds comprising a lipid profile which was balanced in saturated and polyunsaturated fatty acids as well as in ω6 and ω3 fatty acids. It had not been contested that the opposed patent solved this problem and there was also no reason to believe that the posed problem was not solved. There was no hint in D1 or D3 how to change the hen diets disclosed in these documents in order to arrive at the egg of claim 1. It had not been shown that the hen diet disclosed in D3 automatically led to such an egg. Therefore inventive step of the egg of claim 1 had to be acknowledged in view of these documents.

V. On 2 April 2009, the opponent filed a notice of appeal against the above decision and paid the prescribed fee on the same day. A statement setting out the grounds of appeal was filed on 2 June 2009 together with

A1: Analysis of feed composition 9 of D3.

VI. On 12 April 2009, the proprietor equally filed a notice of appeal against the above decision and paid the prescribed fee on the same day. A statement setting out the grounds of appeal was filed on 15 June 2009.

Since, however, the proprietor's appeal was withdrawn by letter of 5 April 2012, the proprietor has only the status of a respondent. Therefore, in the following the proprietor will be referred to as "respondent" and the opponent as "appellant".

VII. The respective reply of each party was filed by letter of 21 October 2009 (appellant) and 15 January 2010 (respondent).

VIII. In the annex to the summons to oral proceedings, dated 12 July 2011, the board communicated its preliminary opinion to the parties that claim 8 lacked clarity and that the novelty of the subject-matter of claims 1 and 10 was questionable.

IX. By letter of 16 March 2012, the respondent filed

Exhibit 1: A. P. Simopoulos, "THE OMEGA-6/OMEGA-3 RATIO: THE SCIENTIFIC EVIDENCE AND THE NEED TO RETURN THE OMEGA-3 FATTY ACIDS INTO EGGS AND OTHER FOODS", in "The Amazing Egg", J. S. Sim et al (ed.), 2006, pages 195-198;

Exhibit 2: M. A. Crawford et al, "Fatty Acid Ratios in Free-Living and Domestic Animals", in "Modern Dietary Fat Intakes in Disease Promotion, Nutrition and Health", F. de

Meester et al (ed.), Springer Science+Business Media, LLC 2010, page 95;

Exhibit 3: "Omega-6 fatty acid" from Wikipedia; and

Exhibit 4: "Omega-3 fatty acid" from Wikipedia,

together with a new main request and new auxiliary requests I-III.

(a) The only claim of the main request and of auxiliary request I relevant for this decision is claim 8, which reads as follows:

"8. A feed composition of exclusive vegetarian origin for poultry, in particular layers, able to produce the egg according to anyone of the preceding claims, characterised in that it satisfies the mathematical model of Huygebaert (Huygebaert (Arch. Gflügelk (1995) 59(2), p. 145-152)), said composition containing no animal fat and comprising as ingredients 4 to 10% (w:w) of total fat, seed ω6 and green ω3 plant-type fatty acids contributing to the total fat content in steadily decreasing manner from respectively 40 to 15% and 50 to 30%, when total fat increases from 4 to 10%, the ω6/ω3 essential fatty acid ratio being in favour of the green ω3 plant type fatty acids and decreasing concomitantly from 0.8 to 0.5, the total (w:w) of the ingredients of the composition being 100%."

(b) Auxiliary request II contains two independent claims directed to an egg (claim 1) and a food

composition (claim 8). Claims 1 and 8 of this request are identical to claims 1 and 10 of auxiliary request I found allowable by the opposition division (see point III(a) and (b) above).

X. By letter of 4 April 2012, further comments were made by the appellant. The appellant's subsequent letter of 16 April 2012 included novelty attacks against claim 1 on the basis of D1 and D2.

XI. On 18 April 2012, oral proceedings were held before the board. During the oral proceedings, the appellant requested that the respondent's main and auxiliary requests should not be admitted into the proceedings. The respondent requested that the appellant's novelty objections against claim 1 raised in its letter of 16 April 2012 should not be admitted into the proceedings. A description adapted to the claims of auxiliary request II was filed.

XII. So far as relevant to the present decision, the appellant's arguments can be summarized as follows:

Admissibility

The respondent's main and auxiliary requests should not be admitted into the proceedings as these requests were late-filed, added extra complex matters to the proceedings and did not directly overcome the board's objections raised in the annex to the summons to oral proceedings.

Main request and auxiliary request I

Claim 8 of the main request and auxiliary request I lacked clarity. It was not clear what types of decrease were covered by this claim. In fact there was an infinite number of possibilities as to how to interpret the claim in this respect. It was also impossible to know whether the claim would be infringed when selling one single feed composition, as this could only be decided with a multitude of feed compositions at hand. During the oral proceedings, the board illustrated its understanding of this argument by reference to an example of a feed composition.

Auxiliary request II

The appellant conceded that the novelty objection against claim 1 on the basis of D1, raised in the letter of 16 April 2012, was indeed filed late. It was also true that the ω6/ω3 fatty acid ratio in this letter was based on the total amount of all ω6 and ω3 fatty acids while claim 1 referred to the plant-type ω6/ω3 fatty acid ratio.

The appellant further stated that the novelty objection against claim 1 on the basis of D2, which had been equally raised in the letter of 16 April 2012, was no longer relied upon.

The appellant raised the further objection that the egg of claim 1 was not novel over eggs of domesticated birds living in a natural environment, since there was a "high probability" that such

eggs had a composition as required by claim 1. This was confirmed by paragraphs [0004] and [0013] of the patent specification and the abstract of exhibit 1.

As to inventive step, D3 represented the closest prior art. The egg obtained by dietary treatment 9 in table 3 of this document had a plant-type ω6/ω3 fatty acid ratio of 1.08, which was within the claimed range. The ratio between the polyunsaturated and saturated fatty acids given in the table was 1.11. Even though the egg contained further polyunsaturated fatty acids, the amounts of which were not given in the table, these further acids were present only in small amounts such that the polyunsaturated/saturated fatty acid ratio was only slightly higher than 1.11 and thus only slightly above the upper limit of the claimed range. Consequently, the objective technical problem solved by this difference had to be seen in the provision of an alternative egg with a reduced polyunsaturated/saturated fatty acid ratio. It could be derived from D2 that such a reduced ratio was beneficial with regard to human health. The skilled person would therefore have carried out standard experiments of trial and error by varying the constituents of the feed composition known from D3 and would have evaluated the effect of such modified feed compositions on the fatty acid profile of the egg in the hope of slightly reducing the polyunsaturated/saturated fatty acid ratio. D3 even taught the skilled person how to do this, namely by means of reducing the flaxseed content in the feed composition. In particular,

the skilled person would have compared the egg obtained by diet 9 in table 3 of D3 with the egg obtained by diet 8 in this table and would have deduced therefrom that a reduction of the flaxseed oil content led to a reduction of the polyunsaturated/saturated fatty acid ratio. The alternative chosen in claim 1 therefore lacked inventive step in view of D3.

XIII. So far as relevant to the present decision, the respondent's arguments can be summarized as follows:

Admissibility

The main and auxiliary requests constituted a reaction to the board's objection raised in the annex to the summons to oral proceedings against claims 8 and 10. Consequently, the requests should be admitted into the proceedings.

Main request and auxiliary request I

Claim 8 of the main request and auxiliary request I was clear. The opponent itself had stated on page 8 of the notice of opposition that the term "steadily decreasing" in claim 8 became clear on the basis of paragraph [0042] of the application as filed and it was this paragraph according to which claim 8 had now been amended. In particular, this term implied that with increasing total fat content, the amounts and the ratio of ω6 and ω3 fatty acids did not increase or stop decreasing.

Auxiliary request II

The appellant's novelty objections raised on the basis of D1 and D2 against claim 1 should not be admitted into the proceedings as they were late filed and were ***prima facie*** not relevant. The objections were based on the ratio of all ω6 and ω3 fatty acids while claim 1 referred to the ratio of plant-type ω6 and ω3 fatty acids.

The appellant's allegation that the egg of claim 1 lacked novelty over eggs of domesticated birds living in a natural environment was not convincing. First of all, what existed were wild birds living in a natural environment and domesticated birds living in a non-natural environment. Domesticated birds living in a natural environment however no longer existed as totally natural habitats were very rare with frequent contamination by artificial elements such as human food supplements and the presence of chemical fertilisers, pesticides or disposals. Secondly, the passages of the opposed patent cited by the appellant could not prove its allegation. In particular, paragraph [0013] referred to fat depots of animals rather than to eggs. As regards the egg described in the abstract of exhibit 1, this egg did not have the fatty acid ratio as required by claim 1. It was also unclear how it was possible to find at present still completely natural conditions.

As to inventive step, D3 constituted the closest prior art. While the plant-type ω6/ω3 fatty acid ratio in the egg resulting from diet 9 in table 3

of this document was as required by claim 1, this table did not give the amounts of C20- and C22-polyunsaturated fatty acids, such that it was impossible to calculate the polyunsaturated/saturated fatty acid ratio. There was thus no reason for the skilled person to take any egg of this table and to modify it such as to arrive at the polyunsaturated/saturated fatty acid ratio of claim 1. Furthermore, no information was present in D3 as to how this ratio could be reduced such that a value within the claimed range was obtained. In particular, D3 did not mention anything about the influence of the dietary fat level on the C20- and C22-polyunsaturated fatty acids in the egg. Moreover, it was not easy to modify the polyunsaturated/saturated fatty acid ratio without leaving the claimed range for the plant-type ω6/ω3 fatty acid ratio. In this respect, a comparison of the eggs obtained in table 4 of D1 with 15% ground and whole flaxseed was very instructive as it followed from this comparison that it was impossible to bring the polyunsaturated/saturated fatty acid ratio into the claimed range while at the same time obtaining a plant-type ω6/ω3 fatty acid ratio that was equally within the claimed range.

XIV. The appellant (opponent) requested that the decision under appeal be set aside and that European patent No. 1 282 367 be revoked in its entirety.

XV. The respondent (patent proprietor) requested that the decision under appeal be set aside and that the patent

be maintained on the basis of the main request or one of the auxiliary requests I-III filed on 16 March 2012.

Reasons for the Decision

1. The appeal is admissible.

Admissibility

2. The main request and auxiliary requests I and II were filed by the respondent with its letter of 16 March 2012. The claims of these requests correspond to those accepted by the opposition division ("auxiliary request I") with amendments having been carried out in claims 8 and/or 10. These amendments represent a reaction to the board's objections in the annex to the summons to oral proceedings against claims 8 and 10. The requests were therefore admitted into the proceedings (Article 13(1) RPBA).

Main request

3. *Amendments - Article 84 EPC*

3.1 Claim 8 (point IX(a) above) contains the following requirement:

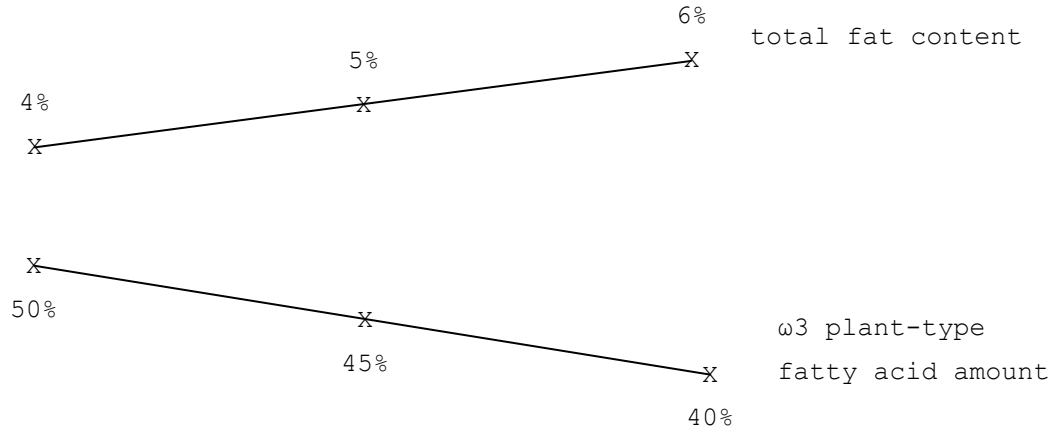
"comprising as ingredients 4 to 10% (w:w) of total fat, seed ω6 and green ω3 plant-type fatty acids contributing to the total fat content in a steadily decreasing manner from respectively 40 to 15% and 50 to 30%, when total fat increases from 4 to 10%, the ω6/ω3 essential fatty acid ratio being in favour of the green

ω3 plant type fatty acids and decreasing concomitantly from 0.8 to 0.5, ...".

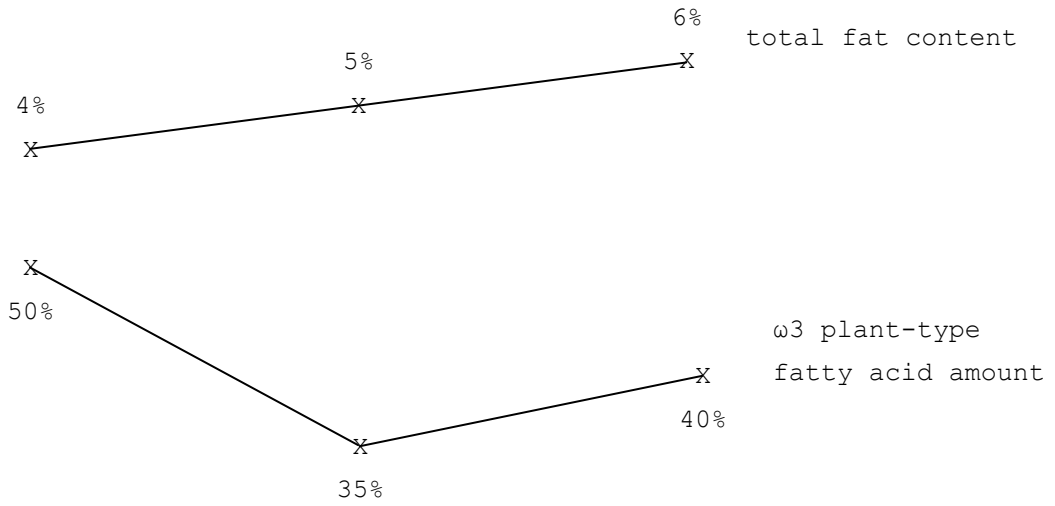
This requirement was not part of the granted claims and thus is open to clarity objections in opposition-appeal proceedings.

3.2 During the oral proceedings, the respondent (proprietor) argued that the term "steadily decreasing" in claim 8 implies that the amounts and the ratio of the ω6 and ω3 plant-type fatty acids and the ω6/ω3 fatty acid ratio "must not increase or stop decreasing". It is however impossible to tell whether this requirement of steady decrease is fulfilled for a given feed composition.

To illustrate this, a feed composition containing 6% total fat and 40% ω3 plant-type fatty acids is taken as an example (in the following "illustrative feed composition"). Such an illustrative feed composition would fulfil the requirement of a steady decrease with regard to the ω3 plant-type fatty acid amount if one assumes a hypothetical further feed composition to exist having a total fat content of 5% and an ω3 plant-type fatty acid amount of 45%. In such a case, the ω3 plant-type fatty acid amount would steadily decrease from 50% (upper end of the ω3 plant-type fatty acid amount of claim 1) to 45% and subsequently to 40% when the total fat content increases from 4% (lower limit of the fat content of claim 1) to 5% and subsequently to 6%:



Claim 8 does not, however, contain any limitation with regard to the hypothetical further feed composition and hence one is free to choose a different hypothetical further feed composition having eg an ω3 plant-type fatty acid amount of 35% at a total fat content of 5%. In this case the illustrative feed composition would not fulfil the requirement of a steady decrease as the ω3 plant-type fatty acid amount would first decrease from 50% to 35% and then would again increase to 40%:



Hence, a given feed composition either fulfils or does not fulfil the requirement of a steady decrease in claim 8, depending on which hypothetical further feed

composition is chosen. This implies that if one considers one single feed composition, it is impossible to tell whether it is inside or outside of the scope of claim 8. Claim 8 therefore is unclear and the main request is not allowable.

Auxiliary request I

4. Claim 8 of auxiliary request I is identical to claim 8 of the main request. Therefore the above objection under Article 84 EPC still applies. Auxiliary request I is therefore not allowable either.

Auxiliary request II

5. *The claimed subject-matter*

The only independent claims of auxiliary request II are claims 1 and 8.

Claim 1 refers to an egg obtained from a domesticated bird which has

- a ratio of seeds plant-type ω6 fatty acids/green plant-type ω3 fatty acids (in the following referred to as "plant-type ω6/ω3 fatty acid ratio") of 1:1 ± 10% and
- a ratio of polyunsaturated/saturated fatty acids (in the following referred to as "polyunsaturated/saturated fatty acid ratio") of 1:1 ± 10%.

Claim 8 refers to a food composition which, by way of referring back to the whole egg or the yolk of the egg

according to any of claims 1 to 7, contains all the features of claim 1 (for the exact wording of claims 1 and 8, see point IX in combination with points III(a) and (b)).

6. *Amendments - Articles 100(c)/123(2), 84 and 123(3) EPC*

No objections were raised by the appellant and with the previously contested claim 8 of the main request having been deleted, the board is satisfied that the requirements of these Articles are met.

7. *Novelty*

7.1 The appellant attacked the novelty of the eggs of claim 1 on the basis of eggs of domesticated birds living in a natural environment. The appellant in particular argued that eggs of domesticated birds living in a natural environment had existed before the priority date of the opposed patent and that there was a "high probability" that such eggs had a composition as required by claim 1.

However, a bird is either a wild bird and then lives in a "wild", ie natural, environment or is a domesticated bird, in which case, however, it lives in a "domesticated" environment, ie an environment created by humans, in which the bird's food comprises human food supplements and wastes rather than what is available in a natural environment. In other words, domesticated birds living in a natural environment do not exist and did not exist before the priority date of the opposed patent. The starting point of the appellant's argument thus is not valid.

Moreover, even if one assumes in the appellant's favour that eggs from domesticated birds living in a natural environment did exist, the allegation of it being highly probable that these had a fatty acid profile as required by claim 1 is not enough to deny novelty. What would be required is proof by the appellant of its allegation. In this respect, the appellant merely referred to paragraphs [0004] and [0013] of the opposed patent and to the abstract of exhibit 1 to substantiate its position. Paragraph [0004] of the opposed patent however refers to eggs of wild birds, which are not necessarily the same as eggs obtained from domesticated birds as referred to by claim 1. Paragraph [0013] of the opposed patent refers to the lipid profile in animals' fat depots rather than in eggs. Finally the egg referred to in the abstract of exhibit 1 ("egg under complete natural conditions") is not necessarily an egg of a domesticated bird and does not necessarily have a fatty acid profile as required by claim 1. Consequently the passages referred to by the appellant are not suitable to prove its allegation.

In the absence of the required proof, therefore, novelty of the egg of claim 1 over eggs of domesticated birds living in a natural environment must be acknowledged.

7.2 Additional novelty objections

7.2.1 In its letter of 16 April 2012, ie one day before the oral proceedings, the appellant attacked the novelty of the egg of claim 1 in view of ***inter alia*** D1. As acknowledged by the appellant, this objection had not

been raised previously during the appeal proceedings, and thus was clearly late-filed. Furthermore, this objection is based on a parameter which is in fact not relevant to the novelty of the subject-matter of claim 1. More particularly, the objection is based on the ratio between all ω6 and ω3 fatty acids ("total omega-6" and "total omega-3" on page 3 of the appellant's letter), and this ratio is not what is referred to in claim 1, namely the plant-type ω6/ω3 fatty acid ratio. The appellant's objection thus clearly lacks any ***prima facie*** relevance.

In exercising its discretion under Article 13(1) RPBA, the board therefore did not admit the appellant's novelty objection on the basis of D1 into the proceedings.

7.2.2 An additional novelty objection against the egg of claim 1 was made in the appellant's letter on the basis of D2. This objection was however no longer relied upon during the oral proceedings before the board. There is hence no need to decide on the admissibility of this objection.

7.3 No further novelty objections were made by the appellant and the board is satisfied that the egg of claim 1 and thus also that of dependent claims 2-7 is novel.

7.4 Novelty of the egg of claims 1-7 implies novelty of the food composition of claim 8, which contains the whole egg or the yolk of the egg according to claims 1-7. Novelty of the subject-matter of claim 8 is hence equally acknowledged.

8. *Inventive step*

8.1 The opposed patent is directed to eggs which have an improved balanced lipid composition and which are compatible with modern recommendations on healthy dietary habits, in particular with regard to cholesterol levels and cardio- and cerebrovascular diseases (page 2, lines 5-16).

D3 deals with the role of dietary cholesterol and fatty acid compositions in the etiology of cardiovascular diseases (first paragraph of the left column on page 145). D3 in particular examines the effects of laying hen diets on the fatty acid composition of egg yolk lipids (last paragraph of the left column on page 145). Hence, D3 is in the same technical field as the opposed patent and, as acknowledged by both parties, can therefore be considered to represent the closest prior art.

8.2 The opponent based its inventive step attack on the egg obtained with diet 9 in D3, the fatty acid composition of which is disclosed in table 3 on page 146 of this document. This egg has an amount of seed plant-type ω6 fatty acid (C18:2) of 15.5, an amount of green plant-type ω3 fatty acid (C18:3) of 14.4 and thus a plant-type ω6/ω3 fatty acid ratio of 1.08, which is within the range required by claim 1 (0.9-1.1).

The saturated fatty acids contained in this egg are the "C16:0" and "C18:0" fatty acids, the contents of which are 20.1% and 6.8%, respectively, resulting in a total amount of saturated fatty acids of 26.9%. The

polyunsaturated fatty acids given in the table are the "C18:2" and "C18:3" fatty acids, the contents of which are 15.5% and 14.4%, respectively, amounting to 29.9% in total. Hence, the ratio of the polyunsaturated and saturated fatty acids given in the table is 1.11, which is above the upper limit of claim 1. However, as acknowledged by both parties, the table is not complete as to the polyunsaturated fatty acids since further polyunsaturated acids such as eicosapentaenoic and docosahexaenoic acid are additionally present in an egg. Hence, the polyunsaturated/saturated fatty acid ratio in the egg in fact is even higher than 1.11.

Consequently, the egg of claim 1 differs from that disclosed in table 3 by way of a reduced polyunsaturated/saturated fatty acid ratio.

8.3 No evidence has been provided by the respondent that by way of this reduced ratio, any unexpected technical effect is obtained. Therefore, it can be assumed that the objective technical problem is the provision of an alternative egg.

8.4 The appellant argued that in view of this problem, the skilled person would have carried out standard experiments of trial and error by varying the constituents of the feed composition known from D3 ("diet" in this document) and would have evaluated the effect of such modified feed compositions on the fatty acid profile of the egg in the hope of slightly reducing the polyunsaturated/saturated fatty acid ratio. The board however cannot follow this argument.

8.4.1 First of all, not only does table 3 of D3 lack any explicit disclosure of the polyunsaturated/saturated fatty acid ratio but it is in fact even impossible to calculate this ratio on the basis of the table, as the amounts of eg eicosapentaenoic and docosahexaenoic acid are missing. The skilled person looking for alternative eggs would therefore not have any reason on the basis of table 3 to try and reduce the polyunsaturated/saturated fatty acid ratio.

8.4.2 Secondly, even if he tried to do so, he would not know which feed composition to choose for the hen in order to achieve the desired reduction of the polyunsaturated/saturated fatty acid ratio in the resulting egg.

In this respect, the appellant's argument is not convincing that the skilled person would learn from a comparison of the egg obtained by diet 9 in D3 with the egg obtained by diet 8 that the desired reduction of the polyunsaturated/saturated fatty acid ratio can be obtained by reducing the amount of flaxseed oil in the feed composition. It is true that diet 9 has a flaxseed oil content of 6.0% while diet 8, which results in an egg with a decreased polyunsaturated/saturated fatty acid ratio (more than 0.72 compared to more than 1.11), has a reduced flaxseed oil content of 3.0% (see table 2). However, diets 8 and 9 in table 2 of D3 differ not only in terms of the amount of flaxseed oil. More particularly, the two feed compositions are composed of a "high lipid" fraction and a "low lipid" fraction, which differ in terms of the presence of the flaxseed oil (which is only contained in the high lipid fraction) and in terms of the amounts of numerous

further components, namely wheat, sorghum, Cassava-65, wheat middlings, oats, soybean oil meal-44, L-lys.HCl, Ca-carbonate, Bi-Ca-phosphate, and NaCl (table 1). What has been varied in diets 8 and 9 of D3 are the amounts of these two fractions and with that not only the amount of flaxseed oil but additionally the amounts of the numerous further components. Hence, contrary to the appellant's allegation, the skilled person considering the eggs obtained with diets 8 and 9 in D3 would have no reason to assume that it is the amount of flaxseed oil that is responsible for the reduction of the polyunsaturated/saturated fatty acid ratio in the eggs obtained with diet 8.

8.4.3 Thirdly, and most importantly, by changing the polyunsaturated/saturated fatty acid ratio in the egg, the plant-type ω6/ω3 fatty acid ratio is changed as well. As pointed out by the respondent, this becomes immediately apparent when comparing the eggs obtained with 15% ground and whole flaxseed in table 4 of D1. The relevant data of this comparison are shown below (amounts all extracted from table 4 of D1, ratios are calculated from these amounts):

	egg from 15% ground flaxseed	egg from 15% whole flaxseed
total amount of polyunsaturated fatty acids	31.4	27.6
total amount of saturated fatty acids	32.9	33.4
amount of ω6 plant-type fatty acids (18:2-6)	16.8	14.3
amount of plant-type ω3 fatty acids (18:3n-3)	11.7	10.4
polyunsaturated/ saturated fatty acid ratio	0.95	0.83
plant-type ω6/ω3 fatty acid ratio	1.44	1.83

As follows from these data, by increasing the polyunsaturated/saturated fatty acid ratio from 0.83 to a value within the claimed range, namely 0.95, the plant-type ω6/ω3 fatty acid ratio moves from 1.38 to 1.44, ie away from rather than towards values within the claimed range (1:1 ± 10%). This clearly shows that it is far from trivial and therefore clearly not a matter of standard experiments of trial and error (as alleged by the appellant) to reduce the polyunsaturated/saturated fatty acid ratio such that a value within the claimed range is obtained while at the

same time arriving at a value for the plant-type ω6/ω3 fatty acid ratio that is equally within the claimed range.

8.5 Hence, on the basis of table 3 of D3, the skilled person would have no motivation to reduce the polyunsaturated/saturated fatty acid ratio and even if he had, he would not know how to obtain the desired reduction and in particular how to achieve this reduction while at the same time arriving at a plant-type ω6/ω3 fatty acid ratio that is equally within the claimed range. Consequently, the alternative chosen in claim 1 is not obvious.

The subject-matter of claim 1 and hence also of dependent claim 2-7 is therefore inventive. This implies in turn that the food composition of claim 8, which contains the whole egg or the yolk of the egg according to claims 1-7, is also inventive.

9. *The amended description*

No objections were raised by the appellant against the amended description filed during the oral proceedings before the board. The board is also satisfied that the description as amended meets the requirements of the EPC.

Auxiliary request III

In view of the above, the admissibility and allowability of auxiliary request III need not be discussed.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent as amended in the following version:

   (a) claims 1-8 filed as auxiliary request II on 16 March 2012

   (b) description pages 2-15 filed during the oral proceedings before the board on 18 April 2012.

The Registrar: The Chairman:

G. Röhn W. Sieber