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Datasheet for the decision of 8 November 2017

Case Number: T 1768/15 - 3.3.06

Application Number: 06849452.5

Publication Number: 1941012

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Language of the proceedings: EN

Title of invention:
A PROCESS FOR THE REMOVAL OF STEROLS AND OTHER COMPOUNDS FROM GLYCEROL OILS

Patent Proprietor:
DSM Nutritional Products AG

Opponent:
BASF SE

Headword:
Low sterol marine oil / DSM

Relevant legal provisions:
EPC Art. 100(b), 100(c), 111(1)

Keyword:
Patent as granted not objectionable on the grounds of Article 100(b) and (c) EPC
Remittal for further prosecution (yes)

Decisions cited:
T 0608/07

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1768/15 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 8 November 2017

Appellant: (Patent Proprietor)	DSM Nutritional Products AG Wurmisweg 576 4303 Kaiseraugst (CH)
Representative:	Hoyng Rokh Monegier LLP Rembrandt Tower, 31st Floor Amstelplein 1 1096 HA Amsterdam (NL)
Respondent: (Opponent)	BASF SE 67056 Ludwigshafen (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 22 June 2015 revoking European patent No. 1941012 pursuant to Article 101(2) and 101(3)(b) EPC.**

Composition of the Board:

Chairman	B. Czech
Members:	M. Maremonti
	J. Hoppe

Summary of Facts and Submissions

I. The appeal by the Patent Proprietor lies from the decision of the Opposition Division to revoke the European Patent No. 1 941 012.

II. The sole independent claim of the patent as granted reads as follows:

"*1. A semi-refined marine oil composition prepared by*

(a) contacting a marine oil with an adsorbent to provide a mixture;
(b) heating the mixture to from 100 to 210°C; and
(c) removing the adsorbent from the mixture, so as to provide said composition;

wherein the composition comprises less than 2 milligrams of sterol per gram of the composition and has a p-Anisidine value of from 25 to 10, as determined by ISO 6885:1998".

III. The Opponent had raised objections on the grounds of Articles 100(a), (b) and (c) EPC.

The evidence cited during the opposition procedure included

D1: Young, V., The refining and Hydrogenation of Fish Oil, Fish Oil Bulletin 17, 1985; "Processing of Oils and Fats", pages 135 to 165;

D9: Kovacs Et al., "A simple method for the determination of cholesterol and some plant sterols in fishery-based food products"; Journal of Food Science, 1979, Volume 44, Pages 1299 to 1301 and 1305;

D10: Extract from "Long-chain omega-3 specialty oils", edited by Harald Breivik, 2012 (first published in 2007), pages 233, 236, 237; and

D12: Bimbo A.P., "Guidelines for characterising Food Grade Fish Oil"; Reprint from INFORM, Volume 9, No. 5, May 1998, pages 473 to 483.

The Opposition Division came *inter alia* to the conclusions

- that the patent as granted was not objectionable under Article 100(c)/123(2) EPC, but

- that the patent as granted, and as amended according to the then pending auxiliary request 1, was objectionable under Article 100(b)/83 EPC.

IV. In its statement of grounds, the Appellant (Patent Proprietor) *inter alia* contested the reasoning given by the Opposition Division as regards insufficiency of the disclosure and defended the patent as granted.

V. In its reply, the Respondent (Opponent) rebutted the arguments of the Appellant and maintained that the subject-matter of granted claim 1 extended beyond the content of the application as filed, that the invention was insufficiently disclosed, and that the claimed subject-matter lacked novelty and inventive step.

The Respondent also relied on some further newly filed items of evidence regarding adsorbents and common general knowledge on the use of marine oils for human nutrition, *inter alia*:

D14: Grace Materials & Packaging Technologies, Technical Information on TRISYL, March 2011; and

D15: Omega-3 fatty acids: chemistry, nutrition, and health effects, Fereidoon Shahidi, John W. Finley, editors; ACS Symposium Series 788, 2001; Chapter 1: Finley and Shahidi, The Chemistry, Processing, and Health Benefits of Highly Unsaturated Fatty Acids: An Overview, pages 2 to 11; Chapter 2: Newton, Long-Chain Fatty Acids in Health and Nutrition, pages 14 to 27.

VI. The parties were summoned to oral proceedings. In preparation therefor, the Board issued a communication stating its preliminary opinion on issues likely to be debated.

VII. Under cover of a letter dated 9 October 2017, the Appellant replied to the Board's comments, rebutted the objections and arguments of the Respondent and complemented its own argumentation.

VIII. Oral proceedings before the Board were held on 8 November 2017. The debate focused on the pending objections under Article 100(b) and (c) EPC raised with regard to claim 1 of the patent as granted.

IX. Final Requests

The **Appellant** requested that the decision under appeal be set aside and that the patent be maintained as granted.

The **Respondent** requested

- that the appeal be dismissed, or,
- in the event that the Board were to find that the grounds for opposition under Articles 100(b) and (c) do not prejudice maintenance of the patent, the

remittal of the case to the Opposition Division for the examination of novelty and inventive step.

X. The Appellant's arguments of relevance for the present decision can be summarised as follows.

Objection under Article 100(c) EPC

- The feature "*semi-refined marine oil composition*" in claim 1 found basis in the application as filed, namely in claim 42, on page 6, line 12, and page 52, lines 1 to 3, and in the majority of the examples.

- The feature "*p-Anisidine value (AnV) of the composition of from 25 to 10*" found basis in claims 62 and 63 of the application as filed, as well as in several passages of the description, in particularly on page 24, line 24 and page 26, line 31 to page 27, line 4.

Objection under Article 100(b) EPC:

- The product as defined in claim 1 was obtained by an adsorption step, also well known as "bleaching" step. Such a known and simple process step needed not be extensively described in a patent.

- Claim 1 was directed to an intermediate product as apparent from the term "*semi-refined*" and from the AnV lying between 25 and 10.

- The examples in the patent showed that a composition having reduced cholesterol levels and reduced AnV could be prepared by applying the process steps defined in claim 1.

- The person skilled in the art would immediately

recognise that the oil compositions obtained in the examples referred to in Table 4 of the patent in suit had an AnV below 10 only because the starting oil had the relatively low AnV of about 20. However, starting oils having a much higher AnV up to 60 were common, and known to the person skilled in the art, as confirmed by D12. The person skilled in the art would immediately understand that an intermediate product with a higher AnV (and low sterol content) could be obtained by starting from an oil having a high enough AnV.

- The results presented in Table 4 showed trends giving clear guidance to the person skilled in the art on how to arrive at a product falling within the ambit of claim 1. In particular, the results showed that AnV was reduced by a factor of 3 to 5 but not more. Crude marine oil generally had a cholesterol level between 4 and 7 mg/g. Identifying starting oils having an initial AnV which could be lowered, by means of the adsorption step, to a value within the range defined in claim 1, did not amount to an undue burden.

XI. The Respondent essentially counter-argued as follows.

Objection under Article 100(c) EPC:

- In the application as filed, the term "*semi-refined*" was only mentioned with reference to the starting oil, as one possibility that could be selected from a list without any preference.

- The term "*marine*" qualifying the claimed oil composition, resulted from a selection from a list as well.

- The AnV range from 25 to 10 also represented an arbitrary selection from an extremely long list of possible ranges without any preference.

- There was no basis in the application as filed for using the term "*semi-refined*" to designate the claimed product as obtained by the process steps listed in claim 1. In the application as filed, this term was only used to define the starting oil.

Objection under Article 100(b) EPC:

- None of the examples of the patent disclosed a product falling within the ambit of claim 1, i.e. a composition comprising "*less than 2*" mg/g sterol and an "*AnV of from 25 to 10*".

- The experimental results presented in the contested patent did not show any trends allowing a person skilled in the art to determine the factors causing a lowering of both sterol concentration and AnV.

- The degree of the lowering of the sterol content and the AnV depended at least on the nature of starting oil, the reaction time and the reaction temperature. The patent in suit did not, however, contain any guidance on how to vary/set such conditions in order to obtain a composition as claimed.

- The type and amount of adsorbent used also considerably affected the final cholesterol level. Again, no guidance was given on how to set appropriate conditions.

- Moreover, the adsorbents used in the examples could not be unambiguously identified.
  The mentioned "*Trisyl*" trademark corresponded to a

number of different products, as apparent from D14. It was thus obscure which product was used in the examples.
The other adsorbent employed in the examples was said to be "*clay*". This term was, however, a too general term, covering a vast number of different materials. Again, it was obscure which specific product had been used according to the examples. None of the examples of the patent could thus be reproduced. Moreover, it was not credible that the claimed product was obtainable using any adsorbent falling under the trademark "*Trisyl*" or qualifying as "*clay*".

- The contested patent did not contain any information as regards the method used for measuring the sterol level. Since at least three different measurement methods existed as apparent from D9 and D10, leading to different results, a further insufficiency issue arose.

- The examples only referred to measured "*cholesterol*" levels, whereas claim 1 generally mentioned "*sterol*". However, marine oils also contained phytosterols and other bound sterols. The patent in suit did not contain information as to if, and to what extent, the concentration of such other sterols was also lowered in the course of the process steps listed in claim 1. This also amounted to an insufficiency of disclosure.

- The term "*semi-refined*" in claim 1 was so unclear that a person skilled in the art could not put the invention into practice.

In summary, the contested patent did not contain any technical teaching allowing the person skilled in the

art to arrive with certainty at a product as claimed, but merely an invitation to perform a research program.

Reasons for the Decision

Reading of claim 1

1. At the oral proceedings before the Board, it was ultimately common ground between the parties that the term "*semi-refined*" implied that fully refined oils were excluded, particularly oils which are fully deodorised.

1.1 The Board is also convinced that the person skilled in the art reading the claim in the context of the description and against the background of common general knowledge would understand the term "*semi-*refined" in that manner. The Board holds that the (starting) "*marine oil*" subjected to step (a) as referred to in claim 1 can thus not designate a fully refined oil.

1.2 This reading of claim 1 is also in accordance with the requirements that the AnV of the claimed product has to be in the range of from of 25 to 10, which, as confirmed by both parties at the oral proceedings, is typical for an oil that has not been fully refined yet.

1.3 Moreover, for the Board, in the context of claim 1 at issue, the wording "*composition prepared by steps (a) to (c)*" is to be understood in the sense

- that the claimed product must be obtainable by steps (a) to (c), even without other intercalated or appended steps, starting from a crude or only partially refined marine oil, and

- that products prepared in a different manner, but having the properties required according to claim 1, are also encompassed.

Objection under Article 100(c) EPC

2. The Respondent argued that although the wording of granted claim 1 found some literal basis in claim 25 of the application as filed, the subject-matter resulting from the incorporation, into said claim, of the three additional features requiring the composition

(i) to be "*semi-refined*",

(ii) to be a "*marine oil*" composition, and

(iii) to have "*an [AnV] of from 25 to 10*",

was not directly and unambiguously disclosed in the application as filed.

2.1 Each of these added features was selected from a respective list of alternatives, without there being any indication in the application as filed of a preference for the combination as defined in granted claim 1:

(i) The option "*semi-refined*" (oil composition) was selected from a list of four alternatives ("*crude oil*", "*semi-refined oil*", "*refined oil*" or "re-esterified oil") specified in claim 42 of the application as filed, as well as on page 6, lines 2 to 5 of the application as filed.

(ii) The restriction to a "*marine oil*" composition resulted from another selection, as apparent from page 2, line 23 (see "... *such as marine oils*"), page 5,

lines 22 and 23, and page 5, line 33, to page 6, line 1, of the application as filed.

(iii) The specified AnV range of from 25 to 10 was also selected from an extremely long list of different possible ranges, disclosed in the passage extending from page 23, line 5, to page 25, line 26, of the application as filed.

According to the Respondent, already this combination of three features, each selected from a list of alternatives, generated subject-matter not directly and unambiguously disclosed in the application as filed.

2.2 Moreover, the Respondent argued there was no basis in the application as filed for characterizing the claimed oil compositions as "*semi-refined*". In the application as filed, the term "*semi-refined*" was only used to designate the "*starting oil*", but not the final "*oil composition*" actually claimed.

3. The Board does not find these objections convincing for the following reasons.

3.1 Granted claim 1 (wording under II, *supra*) stems from claim 25 of the application as filed, reading as follows (emphasis added by the Board):

"*25. A **composition** prepared by a method, comprising*

*(a) contacting a **marine oil** with an adsorbent to provide a mixture;*
(b) heating the mixture to from about 100 to about 210°C; and
(c) removing the adsorbent from the mixture, to provide the composition, wherein the composition comprises

less than about 2 milligrams of sterol per gram of the composition".

3.2 Since the composition of original claim 25 is prepared taking "*marine oil*" as the "*starting oil*" in step "*(a)*", the Board holds that it is also an implicit feature of said claim 25 that the composition prepared by steps "*(a)*" to "*(c)*" is *de facto a* "***marine oil*** *composition*" within the broadest sense of this expression. Expressly stating this in claim 1 as granted does not imply any selection.

3.3 Dependent claim 62 of the application as filed refers back to said claim 25 and specifies an AnV range of "*less than or equal to about 25*". Claim 63 of the application as filed refers back to both claims 25 and 62 and specifies an AnV range of "*less than or equal to 10*". The range of "*from 25 to 10*" in claim 1 at issue is thus a combination of a general and a preferred upper limit disclosed in the application as filed. Moreover, the range of "*from about 25 to about 10*" is mentioned *verbatim* in the application as filed (page 24, line 24) as a possible range of p-anisidine values of compositions according to the invention (see page 26, line 31, to page 27, line 4, of the application as filed).

3.4 The qualification of the claimed composition by the term "*semi-refined*" finds basis on page 6, lines 11 to 14, of the application as filed, where it is disclosed that the compositions according to the invention may be "*semi-refined oils ... that have been treated according to the disclosed methods, which comprise reduced levels of compounds such as sterols as compared to the starting oil*". Such "*disclosed methods*" comprise steps (a) to (c) as defined in original claim 25 and on page

26, lines 26 to 28 of the application as filed. These steps do thus not lead to a fully refined composition. This is further confirmed by a number of examples (see particularly Tables 4 to 8 and 10 to 13), in which crude marine oils are subjected to steps (a) to (c) only, leading to "*semi-refined compositions*" within the meaning of granted claim 1 (see 1.1, *supra*). Moreover, it is also expressly mentioned in the application as filed (page 52, lines 2 and 3) that the "*disclosed procedures can be used before steam deodorization*", in other words that they lead to a "*semi-refined composition*", i.e. to a composition which can be further refined.

Hence, for the Board, taking claim 25 of the application as filed as the basic disclosure, expressly qualifying the oil compositions prepared by steps (a) to (c) as "*semi-refined*" does not imply any kind of selection.

3.5 The Board thus concludes that the amendments made to claim 25 during substantive examination of the application are not the result of a plurality of selections made within the whole content of the application as filed, and thus do not generate subject-matter extending beyond the content of the application as filed.

3.6 Therefore, the ground for opposition of Article 100(c) EPC does not prejudice the maintenance of the patent as granted.

Objection under Article 100(b) EPC

4. As regards the alleged insufficiency of the disclosure, the Respondent essentially submitted that the contested patent did not contain sufficient guidance enabling the

person skilled to prepare reliably compositions as defined in claim 1.

4.1 More particularly, it pointed out that the patent did not contain a single example of compositions falling within the ambit of claim 1, i.e. a semi-refined marine oil having - at the same time - a sterol level of less than 2 mg/g and an AnV in the range of from 25 to 10.

4.1.1 The only results showing both parameter values in combination were those reported in Table 4. Here however, though the obtained cholesterol level was less than 2 mg/g in accordance with claim 1, the AnV was consistently less than 10, i.e. outside the claimed range.

4.1.2 The other results reported in Tables 5, 7 to 10, 12 and 13 only mentioned the cholesterol value. The AnV was not indicated, so that it was not possible to determine whether or not the claimed value was in fact achieved according to those examples.

4.1.3 Moreover, no trends could be derived from the reported results.

4.1.4 The Respondent also pointed to the fact that even for one and the same tested oil (see the data for "3929 Oil"), the patent in suit mentioned different starting cholesterol levels, as indicated in Tables 4, 7, 8, 10 and 12, ranging from 6.34 to 6.55 mg/g).

4.1.5 Tables 4 and 7 of the patent showed different trends of the final cholesterol level as a function of the temperature. While Table 4 showed a reduction of the cholesterol level with increasing temperature with a same relative amount of adsorbent of 6% (see e.g. 7th, 10th and 11th entries), Table 7 (see page 24, 3th and

4th entries from the bottom) showed that with 5% adsorbent the cholesterol concentration hardly changed with increased temperature. No universal correlation relating both cholesterol concentration and AnV to treatment conditions (temperature, contact time, adsorbent amount) could thus be derived from the reported results.

4.1.6 Instead, the results further indicated that at least the nature of the starting oil, the contact time, the temperature, the nature of the adsorbent and its relative amount all had an influence on the final cholesterol concentration and the AnV in a non predictable way. The person skilled in the art did thus not find in the contested patent any guidance on how to select appropriate conditions in order to arrive at a composition according to granted claim 1.

4.2 Further sufficiency issues arose from the fact that insufficiently specified adsorbents had been used according to the examples of the patent. The trademark "*Trisyl*" did not correspond to a single product but rather to a range of different products as confirmed by D14. The person skilled in the art was not able to identify which specific product was used in the examples. Also the other adsorbent employed in the examples was merely identified by the term "*clay*". This term was, however, extremely general and corresponded to a number of different materials. Also in this case, the person skilled in the art was at a loss as to which specific adsorbent had actually been used. As a consequence of these deficiencies, none of the examples of the patent in suit could be reproduced.

4.3 Furthermore, the patent in suit did not contain information as regards the method employed to measure

the sterol content. At least three methods existed, producing different results, as apparent from D9 and D10. This lack of information also amounted to an insufficiency of the disclosure.

4.4 The Respondent also put forward that while granted claim 1 referred to the "*sterol*" level of the claimed composition, the examples only reported the amount of "*cholesterol*". However, compositions derived from marine oils also contained other sterols, namely phytosterols and bound sterols. The patent in suit neither showed that a composition having an overall sterol concentration below 2 mg/g could be obtained, nor how such total sterol concentration may be measured.

4.5 Finally, the term "*semi-refined*" in claim 1 was unclear since according to the patent in suit, page 4, line 24, the oil as used in step (a) could already be "*semi-refined*". It was thus unclear how the same oil could then still be semi-refined after the bleaching step (b). Due to this lack of clarity, the person skilled in the art was not able to reproduce the claimed product.

5. In the appealed decision, the Opposition Division followed to some extent the arguments of the Respondent and concluded that the invention as defined in granted claim 1 was not sufficiently disclosed. The Opposition Division considered that "*the skilled person would face multiple choice of parameters, in particular the temperature, the time, the starting oil material, without knowing which direction to take in order to influence every single parameter, and the AnV together with the sterol values*". It further noted that "*the skilled person would need to carry out a research in order to comply with both conditions set in claim 1*",

and that this amounted to an undue burden (cf. point 3 of the decision under appeal).

6. However, for the following reasons, the Board does not find the various arguments of the Respondent as to the alleged insufficiency of the disclosure convincing.

6.1 The invention as defined in granted claim 1 (wording under II *supra)* is directed to a composition characterised *inter alia* by two numerical parameters, i.e.

- a sterol content of less than 2 mg per gram of the composition and

- an AnV of from 25 to 10.

The claimed composition is additionally defined in a product-by-process form, in terms of the sequence of process steps (a) to (c) by which it is obtainable.

6.2 For the invention to be considered as being sufficiently disclosed, the person skilled in the art, taking into account the whole disclosure of the patent and common general knowledge, must be able to reliably obtain a composition meeting said parametric requirements, in particular by carrying out said sequence of process steps (a) to (c) and ascertaining the properties of the product obtained.

6.2.1 Step (a) foresees to first provide a ("starting") "*marine oil*".

According to the Appellant, crude marine oils typically have a sterol content of between 4 and 7 mg/g (see paragraph [0133] of the patent). This was not disputed by the Respondent. These values are in line with those reported for crude marine oils (see paragraph [0122] of

the contested patent) in the examples of the contested patent (cholesterol concentrations of the "*crude oils*" as referred to in Tables 4, 5, 7 to 10, 12 and 13 range from to 4.25 to 7.15 mg/g).

It is also undisputed that crude marine oils generally have an AnV in the range from 4 to 60. In this connection, reference can be made to D12, Table 1 on page 475, representing relevant common general knowledge invoked by both parties.

The Board thus concludes that the skilled person could provide a starting "*marine oil*" without any difficulty.

6.2.2 Reduction of the sterol level

The examples of the patent show that in a vast number of cases (see the results as reported in Tables 4, 5, 7 to 10, 12 and 13), applying steps (a) to (c) to a crude marine oil results in a composition with a cholesterol level lowered to less than 2 mg/g as required by claim 1 at issue. More particularly, the patent contains information as to suitable operating conditions in terms of starting oil, temperature, reaction time and adsorbent type permitting to achieve the intended reduction in cholesterol content.

The Respondent emphasised that the results reported in Table 7 of the patent in suit showed, for an adsorbent amount of 5%, an almost constant cholesterol level at increasing temperatures. For the Board, these results, rather then generating issues of sufficiency, actually prove that under the tested conditions, a composition having a residual cholesterol level below 2 mg/g may indeed be obtained.

The Board thus holds that identifying suitable conditions for bringing down the cholesterol content of a given starting marine oil by subjecting it to steps (b) and (c) under appropriate conditions, so that the treated oil composition meets the sterol content requirement of claim 1, does not impose an undue experimental burden on the person skilled in the art.

6.2.3 As correctly pointed out by the Respondent, the patent in suit reports different initial cholesterol contents for one and the same starting oil ("Crude Oil 3929").

However, the reported values only differ by at most 3% (6.34 mg/g in Table 7 vs. 6.55 mg/g in Table 4). The Respondent did not convincingly show that this small degree of variation may be an obstacle for a person skilled in the art seeking to provide a composition with the required sterol level.

6.3 Reduction of the AnV

6.3.1 The results reported in Table 4 of the patent clearly show that steps (a) to (c) lead to a lowering of the AnV of the crude oil by about 60 to 80%.

The Board is thus convinced that the fact that the AnV values of the treated oils are always lower than 10 in these examples is due to the fact that the starting oil used had a relatively low AnV of about 20/20.46 (see paragraph [0126] of the patent in suit).

The AnV represents the level of oxidized fatty acids and aldehydes present in the oil, only the volatile part thereof being removed by the adsorption treatment (see paragraph [0053] of the patent in suit). The AnV of the oil can thus not be reduced down to zero by

performing an adsorption treatment only. This was confirmed by both parties during the oral proceedings.

For the Board, it is, therefore, plausible that starting with a crude oil having a significantly higher AnV (e.g. in the range from 40 to 60; see 6.2.1, *supra*), the results in terms of AnV reduction would be similar to those reported in Table 4. A composition characterised not only by a sterol level below 2 mg/g but also by an AnV in the range of from 25 to 10 would thus be obtained by applying steps (a) to (c). The Board is thus convinced that only a few trials (no undue burden) would be necessary for the person skilled in the art to identify conditions leading to a composition according to claim 1.

6.3.2 The Respondent argued that no prediction could be made as regards the results to be obtained when subjecting a crude marine oil with a substantially higher AnV (as described in D12) to an adsorption treatment.

However, as already mentioned above, the AnV is representative of oxidized species in the oil. These are present only at the level of "impurities" in crude marine oils, see e.g. D12, Table 1, first entry.

For the Board, it is not apparent why a higher AnV of the starting oil would affect the adsorption of said oxidized species contained in the oil to such an extent that the claimed AnV could not be expected and obtained.

6.4 The adsorbent to be used

6.4.1 As regards adsorbents suitable for being used in step (a), the contested patent gives, in paragraphs [0061] to [0064], clear indications as regards both its nature

(silica, clay, carbon and mixtures thereof are mentioned as examples) and useful relative amounts, (≤20 wt.% based on the weight of the oil, for example from 3 to 7 wt.%, see page 14, lines 10 to 12, 31 and 32). The examples of the patent are also consistent with these indications.

6.4.2 The objection raised by the Respondent that in the examples, unclear/vague terms as "*Trisyl*" and "*clay*" were used to define the adsorbent, cannot be followed. "*Trisyl*" is acknowledged in paragraph [0061] as corresponding to "*silica*". "*Clay*" is a broad, but well known term also used, for example, in D1 (cf. page 144, paragraph 7.2.4 line 21) and D15 (cf. page 7, li. 6-9) to designate material typically used to bleach oil.

6.4.3 In the present case, the fact that these terms cover a range of different materials is not relevant as regards sufficiency of the disclosure. Adsorbent types suitable for refining oils are generally known in the art, and the person skilled in the art can gather from the contested patent examples of such adsorbent materials which are particularly suitable for being used in the context of the invention (oil refining).

6.5 Measuring "*sterol*" levels

6.5.1 Also the fact that the sterol level in a composition may be measured by different known methods, possibly leading to somewhat different results, does not necessarily amount to an insufficiency of the disclosure. As long as these methods are readily available to the person skilled in the art and their application does not pose any technical difficulty, the person skilled in the art is free to select any of them.

6.5.2 More particularly, the Respondent did not show that the differences in the measuring methods would be such as to render impossible to obtain a composition falling within the ambit of claim 1 at issue.

If in the present case different results were obtained depending on which measuring method is selected, an issue of clarity (Article 84 EPC) could possibly arise as regards the precise delimitation of the ambit of claim 1. However, it was not shown that the resulting ambiguity (if any) would be so severe that it would not only be significant at the edges but permeate the whole claim, thereby depriving the person skilled in the art of the promise of the invention (see e.g. decision T 608/07, Reasons 2.5.1 and 2.5.2).

Hence, in the present case, the existence of different measuring methods does not, as such, mean that the claimed invention is insufficiently disclosed.

6.5.3 The Respondent also emphasised that while "*sterol*" is mentioned in claim 1, the examples reported in the contested patent only showed a reduction in the "*cholesterol*" level.

The Board observes, however, that no evidence was provided by the Respondent showing

- that other sterols, e.g. phytosterols, may actually be present in marine oils in significant amounts, and

- let alone that such sterols could not be removed by a method with steps (a) to (c) as defined in claim 1.

In the absence of such an evidence, the Board sees no

reason for calling into question that such other sterols, if present at all, will also be removed, together with the cholesterol, by the method steps (a) to (c) referred to in claim 1.

6.7 The term "*semi-refined*"

Finally, the term "*semi-refined*" as used in claim 1 as granted, does not, by itself, pose any problem for a person skilled in the art seeking to carry out the invention. As already said, this term merely expresses the exclusion of fully refined oil compositions (see 1.1, *supra*).

7. Generally speaking, the Respondent apparently made no attempt to show that in practice the invention could not be carried out. In other words, the Respondent made no experimental attempt to show that it was not possible, e.g. starting from marine oil with a high AnV and carrying out steps (a) to (c), to obtain an oil composition meeting all the criteria defined in claim 1 at issue, and to ascertain by measurements that it meets the parametric criteria of claim 1 as well.

Instead, the Respondent merely based its objections on arguments. For the reasons given above, these arguments did not, however, convince the Board that the claimed invention is insufficiently disclosed.

8. In the Board's judgement, maintenance of the patent as granted is not prejudiced by the ground for opposition of Article 100(b) EPC either.

Remittal

9. The patent was revoked on the ground under Article 100(b) EPC. It remains to be assessed whether one of

the other grounds for opposition invoked (lack of novelty, lack of inventive step) prejudices the maintenance of the patent.

Since the main purpose of opposition appeal proceedings is to review the decision taken by the Opposition Division, the Board finds it appropriate to make use of its discretion under Article 111(1) EPC and to remit the case to the Opposition Division for further prosecution, in accordance with the Respondent's request to this end.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

The case is remitted to the Opposition Division for further prosecution.

The Registrar: The Chairman:

D. Magliano B. Czech

Decision electronically authenticated