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**Datasheet for the decision  
of 9 April 2013**

**Case Number:** T 0518/10 - 3.3.01

**Application Number:** 02753988.1

**Publication Number:** 1417211

**IPC:** C07F 9/10, C07D 407/14,  
A23J 7/00, A61K 31/683,  
A61K 31/685, A61P 25/00,  
A61P 35/00, C11B 1/10

**Language of the proceedings:** EN

**Title of invention:**  
Natural phospholipids of marine origin containing flavonoids  
and polyunsaturated phospholipids and their uses

**Patent Proprietor:**  
Neptune Technologies & Bioressources Inc.

**Opponent:**  
Enzymotec Ltd.  
Aker Biomarine ASA

**Headword:**  
Lucenin-2 in krill oil extracts/NEPTUNE

**Relevant legal provisions:**  
EPC Art. 100(b), 100(c)  
RPBA Art. 15(2), 13  
EPC R. 106

**Keyword:**

"Oral proceedings - change of date (no)"

"Admissible of late filed documents (no) - not justified"

"Admission of late filed auxiliary request (yes)"

"Main request, first and second auxiliary requests: amendments supported by the application as filed (no)"

"Auxiliary request 3: sufficiency of disclosure (no) - neither isolation nor identification of flavonoid was shown"

**Decisions cited:**

G 0002/04, G 0004/88, R 0016/09, R 0010/09, R 0013/11,

R 0002/08, R 0012/12, R 0004/08, R 0004/11, R 0003/08,

R 0009/09, T 0023/10, T 0823/96, T 0792/00, T 1842/06

**Catchword:**

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Case Number: T 0518/10 - 3.3.01

**D E C I S I O N**  
**of the Technical Board of Appeal 3.3.01**  
**of 9 April 2013**

**Appellant:** Neptune Technologies & Bioressources Inc.  
(Patent Proprietor) 500, St-Martin Boulevard West,  
Suite 550  
Laval,  
Québec H7M 3Y2 (CA)

**Representative:** Wright, Robert Gordon McRae  
Elkington and Fife LLP  
Prospect House  
8 Pembroke Road  
Sevenoaks  
Kent TN13 1XR (GB)

**Respondent 1:** Enzymotec Ltd.  
(Opponent 1) P.O. Box 6  
IL-23106 Migdal Haemek (IL)

**Representative:** Hesselink, Dinah Elisabeth  
De Vries & Metman  
Overschiestraat 180  
NL-1062 XK Amsterdam (NL)

**Respondent 2:** Aker BioMarine ASA  
(Opponent 2) Fjordalléen 16  
P.O.Box 1423 Vika  
NO-0115 Oslo (NO)

**Representative:** Golding, Louise Ann  
Dehns  
St Bride's House  
10 Salisbury Square  
London EC4Y 8JD (GB)

**Decision under appeal:**

Decision of the Opposition Division of the European Patent Office posted 30 December 2009 revoking European patent No. 1417211 pursuant to Article 101(3) (b) EPC.

**Composition of the Board:**

**Chairman:** L. Bühler  
**Members:** G. Seufert  
L. Seymour

## Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division revoking the European patent 1 417 211.

II. In this decision the following numbering will be used to refer to the documents:

E26 Experimental report including sample analysis by Prof Ø. M. Andersen and Dr M. Jordheim filed by respondent 2 with the notice of opposition on 29 February 2008, 14 pages

E31 V. A. Bandyukova, V. A. Yugin, Chemistry of Natural Compounds, vol. 17, no. 1, 1981, 1-21

E33 T. Iwashina, J. Plant Res. 113, 2000, 287-299

E45 Analytical report entitled "Investigation of the presence of polyphenolic compounds in krill oil" signed by N. Guthrie, President/CEO of KGK Synergize, filed by the appellant with letter of 17 October 2008, 8 pages

E47 Experimental report entitled "Fresh frozen Krill extraction", filed by respondent 1 with letter of 12 November 2009, 2 pages

E48 Analytical report entitled "Analytical report 14-ENZ169, LC-MS analysis of lucenin-2" by I. Gozlan dated 23 October 2009, filed by respondent 1 with letter of 12 November 2009, 7 pages

E50 Analytical report entitled "Isolation and Identification of Lucenin-2 by High performance Liquid Chromatography (HPLC) with UV Detection and LC/Mass Spectrometry and Mass Spectrometry/Mass Spectrometry", filed by the appellant with letter of 13 November 2009, 6 pages

- E55 Declaration of Dr F. Sampalis dated 7 March 2013 with exhibit A, filed by the appellant with letter of 8 March 2013, 9 pages
- E56 Declaration of Dr F. K. Yeboah dated 7 March 2013 with exhibits A to C, filed by the appellant with letter of 8 March 2013, 26 pages
- E57 Declaration of Dr F. Sampalis dated 16 March 2012 with appendices A to C, filed by respondent 2 with letter of 3 April 2013, 32 pages
- E58 Press release by Aker BioMarine dated 24 May 2011, filed by the appellant with letter of 4 April 2013, 3 pages
- E59 Ø. M. Andersen, K. R. Markham, Flavonoids - Chemistry, Biochemistry and Applications, 2006, pages 1, 16-20, 37-39, 68-109, filed by the appellant with letter of 4 April 2013
- E60 "Report 2 - Further Isolation and Identification of Lucenin-2 by High performance Liquid Chromatography (HPLC) with UV Detection and LC/Mass Spectrometry and Mass Spectrometry/Mass Spectrometry" signed by Dr E. White, President/CEO of MDx BioAnalytical Laboratory Inc., dated 24 September 2012, filed by the appellant with letter of 27 September 2012, 8 pages

III. Notices of opposition were filed by opponents 1 and 2 (respondents 1 and 2) requesting revocation of the patent in its entirety on the grounds of lack of novelty and inventive step, insufficiency of disclosure and added matter (Articles 100(a), (b) and (c) EPC).

IV. The decision under appeal was based on the main request and first to second auxiliary requests, all filed with letter of 13 November 2009.

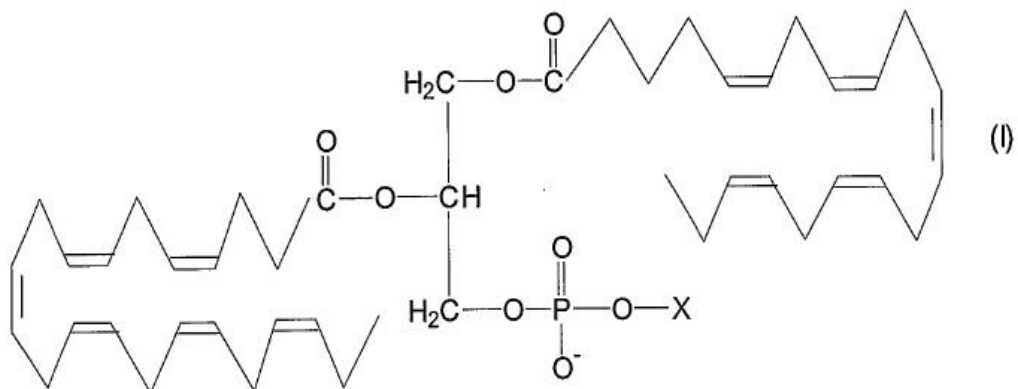
The opposition division held that the subject-matter of all requests complied with Articles 123(2) and (3) EPC, but was not sufficiently disclosed to be carried out by a person skilled in the art. Based on the experimental data provided by the opponents and the lack of adequate data on the part of the patent proprietor, the opposition division concluded that the claimed composition could not be obtained by the method referred to in the patent in suit. The invention could therefore not be reproduced.

V. In its statement of grounds of appeal the appellant resubmitted the main request on which the decision under appeal was based and filed new first and second auxiliary requests.

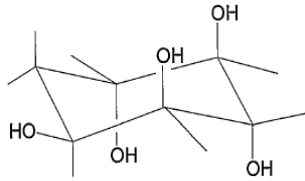
VI. The main request consists of 39 claims. Claim 1, which is the only claim relevant for the present decision, is identical to claim 1 as granted, apart from the addition of "+" signs at the ammonium groups in the X substituent. It reads as follows:

"1. A composition comprising:

(a) a phospholipid of the general formula (I),

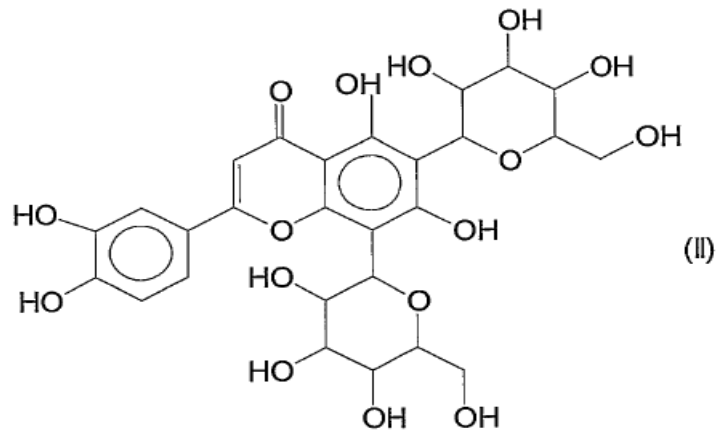


wherein X is  $-\text{CH}_2\text{CH}_2\text{N}^+\text{H}_3$ ,  $-\text{CH}_2\text{CH}_2\text{N}^+(\text{CH}_3)_3$  or



and

(b) a flavonoid of the general formula (II)



Claim 1 of the first and second auxiliary requests is identical to claim 1 as granted.

- VII. In their replies to the statement of grounds of appeal both respondents maintained their objections under Article 100(c) and (b) EPC.
- VIII. With letter dated 27 September 2012, the appellant filed further analytical evidence (document E60).
- IX. In a communication accompanying the summons to oral proceedings, the board expressed its preliminary opinion. In particular, the board indicated that it agreed with the respondents on the issue of added matter, contrary to the opposition division's



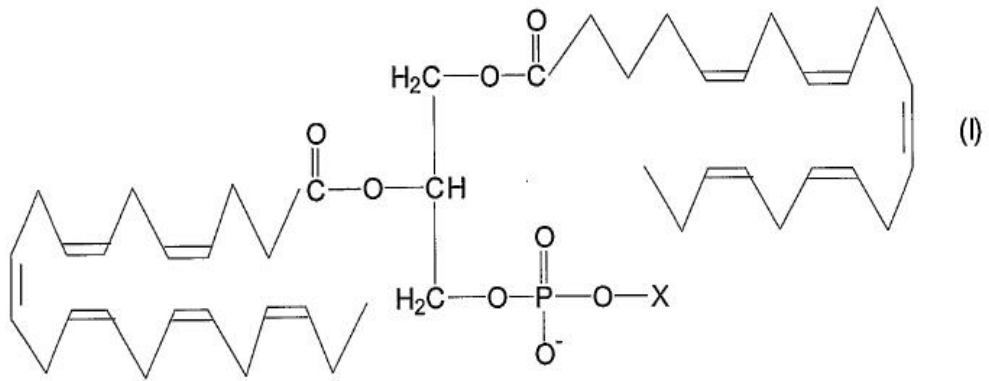
conclusion. Concerning sufficiency of disclosure, the board merely pointed out that the question to be answered was whether or not an extract comprising compounds a) and b) could be reliably reproduced from marine or aquatic biomass.

- X. With letter of 21 February 2013, the appellant requested postponement of the oral proceedings for at least two months. Both the respondents objected to such a postponement with their letters of 27 and 28 February 2013. With letter of 28 February 2013, the appellant provided further arguments in support for its request.
- XI. With a communication dated 6 March 2013, the board, setting out its reasons as to why it could not accede to the appellant's request, refused to change the date of oral proceedings.
- XII. Under cover of a letter dated 8 March 2013, the appellant filed auxiliary requests 3 and 4 and documents E55 and E56, whereby auxiliary request 4 was subsequently replaced and then withdrawn (see point XVI below).

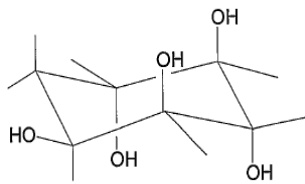
Claim 1 of auxiliary request 3 reads as follows:

"1. A phospholipid extract derived from a marine or aquatic biomass, comprising:

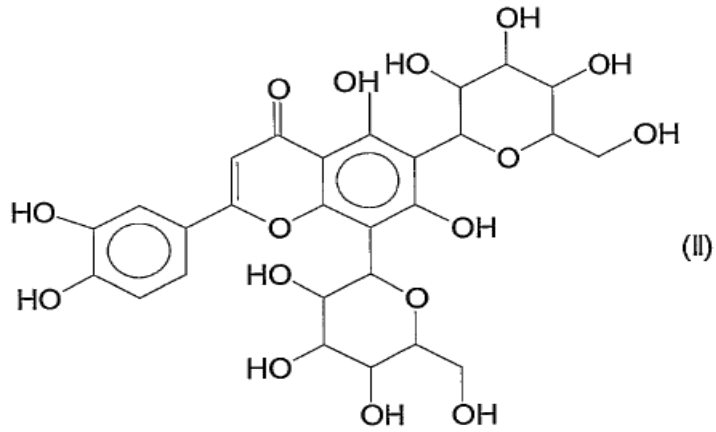
- (a) phospholipids, wherein at least one phospholipid is a phospholipid of the general formula (I),



wherein X is  $-\text{CH}_2\text{CH}_2\text{NH}_3$ ,  $-\text{CH}_2\text{CH}_2\text{N}(\text{CH}_3)_3$  or



(b) a flavonoid of the general formula (II)



XIII. With letter dated 3 April 2013, respondent 2 filed document E57.

XIV. With letter dated 4 April 2013, the appellant submitted documents E58 and E59.

XV. With letter of 8 April 2013, respondent 2 notified the board of the merger between Aker BioMarine ASA and Aker Seafoods Holding AS followed by a name change to Aker BioMarine AS.

XVI. Oral proceedings took place as scheduled on 9 April 2013. During the oral proceedings the appellant filed a new auxiliary request 4 replacing auxiliary request 4 previously on file. At the end of the oral proceedings, the appellant withdrew this request and raised an objection under Rule 106 EPC based on Article 112a(2)(c) EPC.

XVII. The arguments provided by the appellant, to the extent that they are relevant for the present decision, can be summarised as follows:

- Postponement of oral proceedings

Postponement of oral proceedings was requested, because the summons of the representative to oral proceedings on three consecutive days before three different boards and an explosion at the appellant's production plant seriously impaired an adequate preparation for the oral proceedings.

- Admission into the appeal proceedings of documents E55-E60 and auxiliary request 3

Documents E55, E56 and E58-E60 were relevant to the present issues and should therefore be admitted. Documents E55 and E56 were filed in direct response to the board's communication and in order to clarify certain misunderstandings on points which the

opposition division may have misunderstood, or which had become apparent during litigation procedures in other jurisdictions. It should also be taken into account that the appellant was only a small firm and that Dr Sampalis, the sole inventor and person responsible for dealing with patent matters, was still on maternity leave when the appeal was filed. Furthermore, despite the explosion in the appellant's factory, which seriously impaired the preparation for oral proceedings, documents E55 and E56 had been submitted one month in advance, which was the usual time limit set by the boards and gave the respondents sufficient time to consider them. Document E60 was already filed before the summons. Documents E58 and E59 were filed in support of issues that may arise "relating to common general knowledge of the person skilled in the field in which the invention relates or on which evidence has been presented".

Document E57 was not concerned with extracts containing flavonoids and was therefore not relevant.

The submission of auxiliary request 3 was a direct response to the board's communication, which deviated from the decision under appeal with respect to the issue of added matter. It was filed within the usual time limit set by the boards and could not have surprised the respondents. Furthermore, the subject-matter was limited and clearly supported by the application as filed.

- Added matter (Article 100(c) EPC)

The composition of claim 1 of the main request was supported by page 3, lines 4 to 7, claim 30, page 38, lines 6 to 8 and also page 31 of the application as filed. Furthermore, the compositions were at least implicitly disclosed on page 2 with the individual reference to two compounds. The skilled person would understand that these compounds could be brought together thus leading to a composition that was not limited to an extract.

- Sufficiency of disclosure (Article 100(b) EPC)

The invention was sufficiently disclosed, because the skilled person was provided with at least one way to carry out the invention by following the method of the patent. Although this method allowed a certain amount of leeway, it involved no undue burden for the skilled person. The presence of compound (II) was also not against the laws of physics as argued by the respondents, but was explained by the well-known fact that krill fed on algae and algae, as acknowledged in the patent, contained flavonoids. The burden of proof of the contrary therefore rested with the respondents. Their experiments could not be considered as adequate evidence to raise doubts as to the sufficiency of disclosure. They were not conducted according to the teaching of the patent and the analytical methods used were either unsuitable or unreliable for the detection of compound (II), in particular in view of the low concentrations in which this compound could be present. Furthermore, the respondents' failure in their first attempt was irrelevant, because a reasonable amount of

trial and error was permitted when it came to sufficiency of disclosure and they only had to change the extraction time as taught in the patent to succeed.

- Objection under Rule 106 EPC

The appellant was denied the right to be heard under Article 113 EPC. The following objection under Rule 106 EPC was therefore raised:

*"Objection in respect of a procedural defect*

*The refusal of the request of postponement of oral proceedings in view of the explosion in the proprietor's facility and the refusal to admit documents E55, E56 and E60 into the proceedings, although filed at least four weeks before the oral proceedings represent a fundamental violation of our right to be heard and constitutes a procedural defect."*

XVIII. The arguments provided by the respondents, to the extent that they are relevant for the present decision, can be summarised as follows:

- Postponement of oral proceedings

A postponement of oral proceedings was not justified. The appellant's representative was aware of the three consecutive hearings by mid-December 2012 and should have submitted its request immediately. Furthermore, despite the explosion in its production plant, the appellant had not been impaired in dealing with a large array of other patent matters. Its request for

postponement was merely an attempt to defer a negative outcome which could harm its global legal position.

- Admission into the appeal proceedings of documents E55-E60 and auxiliary request 3

Documents E55, E56 and E59 to E60 were late-filed and should not be admitted into the proceedings. The appellant had submitted documents E55 and E56 only one month before the oral proceedings in an attempt to address issues of which it had long been aware, namely ever since the opposition division had issued its decision. No adequate justification for their late-filing was provided. Furthermore, there was not enough time left for the respondents to rework the method described in document E55. Document E60 had been submitted more than two and a half years after the start of the appeal proceedings, although the appellant had declared that it had been available around the time at which the appeal had been filed. Furthermore, it suffered from the same deficiencies as documents E45 and E50 and as such was not more relevant than those documents. Document E59 was submitted only a few days before oral proceedings. It was lengthy and, in the absence of any reference to specific passages, its relevance was not apparent.

Document E57 was submitted as evidence that document E55 could have been filed at a much earlier stage and should be admitted if document E55 were to be admitted.

Auxiliary request 3 could easily have been filed with the statement of grounds of appeal, since the appellant

must have been aware that the objection of added matter would be maintained by the respondents.

- Added matter (Article 100(c) EPC)

There was no basis for the composition according to claim 1 of the main request in the application as filed, because the application as filed only contained a basis for extracts from marine and aquatic biomass comprising compounds (I) and (II). The term "composition" was much broader and, unlike the term "extract", did not place any requirement on the source from which it had been obtained.

- Sufficiency of disclosure (Article 100(b) EPC)

The patent in suit did not provide sufficient information to allow the skilled person to carry out the invention. With the provision of an extract comprising compound (II) from marine or aquatic biomass, in particular krill, the patent in suit went against the prevailing technical opinion that such compounds could only be found in fruit, vegetable or algae. It should therefore contain sufficient evidence, including analytical evidence, to establish that compound (II) was also to be found in the former. The patent itself failed to provide such evidence. The only preparative example neither mentioned the source for the extract nor detailed the extraction method, nor isolated and characterised compound (II). The only information in the patent with respect to compound (II) was provided in Figure 4, which did not allow any conclusion as to the identity of the sample, nor was there any information as to how this sample had been



obtained. Moreover, the respondents' reproductions showed that, by following the general extraction method taught in the patent in suit, an extract comprising compound (II) could not be obtained. The detection methods used to establish the presence of compound (II) were suitable and sensitive enough for that purpose. The method in document E48 had a detection limit of 50 ppm. The evidence submitted by the appellant was irrelevant to the issue of sufficiency, because it contained no information at all as to how the samples that had been analysed were in fact prepared.

- Objection under Rule 106 EPC

The objection under Rule 106 should be dismissed. The refusal to postpone the oral proceedings and to admit documents E55, E56 and E60 was entirely within the discretion of the board.

XIX. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request, or alternatively, on the basis of the first or second auxiliary requests, all filed with the statement of grounds of appeal, or on the basis of auxiliary request 3 filed with letter of 8 March 2013. The appellant further requested that the documents filed with letter of 27 September 2012, of 8 March 2013 and of 4 April 2013 (E55, E56, E58, E59, E60) be admitted into the appeal proceedings.

XX. Respondents 1 and 2 requested that the appeal be dismissed. They also requested that the auxiliary request 3 filed with letter of 8 March 2013 not be admitted into the proceedings. They further requested

that the documents filed with letters of 27 September 2012, of 8 March 2013 and of 4 April 2013 (E55, E56, E58, E59, E60) not be admitted into the appeal proceedings. In the alternative, respondent 2 requested that the declaration of Dr Sampalis dated 16 March 2012 (E57) be admitted into the appeal proceedings.

XXI. At the end of the oral proceedings the decision of board was announced.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Request for postponement of oral proceedings
  - 2.1 With letter of 21 February 2013, the appellant's representative requested postponement of oral proceedings scheduled for 9 April 2013 for the reasons that he was summoned to three oral proceedings before different boards on three consecutive days preventing him from adequately preparing each case. As a further and more serious reason, the representative referred to an explosion at the production plant of the appellant, which had restricted the contact with his client thereby making it almost impossible to adequately deal with the present case.
  - 2.2 Both respondents objected to a postponement arguing that the appellant's representative had already been aware of the three hearings on three consecutive days by mid-December 2012. Furthermore, they submitted that,

judging from the various activities of the appellant in other patent matters, the appellant was obviously not prevented by the explosion in dealing with those matters. The respondents believed that the appellant's request was a deliberate attempt to postpone a decision, "which could harm there global legal and public relation position".

2.3 According to Article 15(2) RPBA, the board has the discretion to exceptionally allow a change of date for oral proceedings. Examples for circumstances that can be taken into account in exercising this discretion are given in the notice of the Vice-President of Directorate-general 3 dated 16 July 2007 concerning oral proceedings (OJ EPO 1/2013, Supplement, pages 68 to 69, hereinafter "the Notice"). Furthermore, in addition to the appellant's interest, the board has also to take into account the internal organisational burden of the board and the interest of other parties concerned, such as the respondents in the present case or parties in other appeals, since any postponement of a hearing in a specific case may cause delay in other proceedings.

2.4 Article 15(2) RPBA and point 2 of the Notice state that the request to fix another date shall be filed as soon as possible after the grounds preventing the party concerned from attending oral proceedings have arisen. The board observes that the appellant's representative became aware of the fact that he was summoned to oral proceedings on three consecutive days in December (date of acknowledgement of receipt of the third summons in the appeal T 1902/09 is 20 December 2012). Accordingly, if he was of the opinion that this situation adversely

affected his professional duties to his clients, he could and should have filed a request for postponement immediately. No satisfactory reason was provided as to why the representative had waited two month to file the request. Furthermore, since the summons in T 1902/09 was received after the summons in the present case, a request for postponement should have been made for the former.

2.5 According to point 2.3 of the Notice, every request for fixing another date for oral proceedings should contain a statement why another representative cannot substitute for the representative prevented from attending (which was strictly speaking not the case here, since there was no actual clash of dates). The board notes that the appellant has signed a general authorisation to Elkington and Fife LLP, and the representative has not provided convincing reasons as to why no other representative of Elkington and Fife LLP could substitute for the representative.

2.6 The board also did not see sufficient reasons as to why the explosion in the appellant's firm impeded oral proceedings from taking place on the scheduled day. It was appreciated that patent matters might not be amongst the most pressing issues after such a tragic event. However, the explosion occurred at the beginning of November 2012 and, according to the representative's submission, on 3 December 2012, Mr Huart, the General Counsel of the appellant, was informed of the summons to oral proceedings for the beginning of April. If there had been concerns that this date would pose a problem for the appellant, a request for postponement of oral proceedings should have been filed immediately.

Furthermore, the representative had apparently established contact with his client on 20 February 2013, and no clear and convincing reasons were provided as to why adequate preparation for the oral proceedings as scheduled would not be possible with still six weeks to go, in particular since the board's communication sent with the summons had not changed the relevant legal and technical framework and it could therefore be legitimately expected that the appellant had previously made its complete case as required by Article 12(2) RPBA.

2.7 For the aforementioned reasons, the board was not satisfied that the appellant's interest for a postponement should, exceptionally, outweigh the interests of other parties and the public. Accordingly, the request for postponement was refused and the date of the oral proceedings maintained.

### 3. Transfer of opponent status

3.1 According to established case law the status of an opponent cannot be freely transferred (G 2/04, OJ EPO 2005, 549, point 2.1 of the reasons). However, it passes to the universal successor in law in the case of universal succession, e.g. in the case of a merger of legal persons (G 4/88, OJ EPO 1989, 468, point 4 of the reasons).

3.2 In the present case respondent 2/opponent 2 has filed a copy of an extract from the Norwegian Companies register from which it is clear that opponent 2, i.e. Aker Biomarine ASA, merged with Aker Seafoods Holding AS. The merger was registered as completed

on 15 January 2013. On the same date Aker Biomarine ASA was struck off the register. Aker Seafood Holding AS subsequently changed its name to Aker BioMarine AS.

3.3 The board considered this evidence as sufficient to demonstrate that Aker BioMarine AS is the universal successor of Aker Biomarine ASA. Accordingly, the board acknowledged that Aker BioMarine AS had effectively acquired the status of opponent 2 and respondent 2. No objection was raised by the other parties in this respect.

4. Admission of documents E55-E60 into the appeal proceedings

4.1 Documents E55, E56, E58, E59 and E60 were filed by the appellant with letters of 27 September 2012, of 8 March 2013 and of 4 April 2013. According to the appellant they should be admitted into the appeal proceedings due to their relevance and bearing on the present issues. Furthermore, it was argued that the patentee should always be given the benefit of doubt, particularly in view of the fact that it was a relatively small company.

Both respondents objected to the admission of these documents on the grounds that there was no justification for their late-filing and insufficient time for an adequate response.

4.2 According to the Rules of Procedure of the Boards of Appeals, appeal proceedings shall be based on the statement of grounds of appeal and, in *inter partes* proceedings, any written reply of the other party or

parties (Article 12(1) RPBA). Article 12(2) RPBA stipulates that the statement and the reply shall contain a party's complete case. They should set out clearly and concisely why it is requested that the decision under appeal be reversed, amended or upheld and should specify expressly all facts, arguments and evidence relied on. New submissions (requests, facts or evidence) are not entirely precluded, their admission, however, is at the discretion of the boards (Article 114(2) EPC and Article 13(1) RPBA) and hinges on the procedural stage at which the submissions are made (T 23/10, point 2.2 of the reasons of the decision and case law cited therein). This discretion has to be exercised appropriately requiring the boards of appeal to consider carefully all relevant factors taking into account the specific circumstances of the case. Examples of criteria to be taken into consideration by the boards when exercising their discretion are *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy (R 16/09, point 2.2.4 of the reasons of the decision). These criteria are not exhaustive, and the boards have also considered aspects such as the reasons for the new submission or the extent of the amendments. As observed by the Enlarged Board of Appeal (R 16/09, points 2.2.11 and 2.2.12 of the reasons of the decision), it belongs to the discretion of the boards of appeal to decide which criteria are to have precedence according to the circumstance of the case.

Amendments sought to be made after oral proceedings have been arranged shall not be admitted, if they raise issues which the board or the other party or parties cannot reasonably be expected to deal with without

adjournment of the oral proceedings (Article 13(3) RPBA).

It follows from the above that the appellant, seeking to amend its case after its statement of grounds of appeal by filing documents E55, E56 and E58-E60, cannot rely on the fact that these amendments will be taken into account as a matter of right, but has to make a convincing case as to why such amendments should be admitted by the board. This obligation is the same for all parties. The appellant's opinion that the board should practice greater tolerance towards the patent proprietor has no basis in the EPC or in the RPBA and is irreconcilable with the boards' duty of impartiality.

- 4.3 Document E55, a declaration by Dr Sampalis, was submitted by the appellant only one month before the oral proceedings in an attempt to address the issue of the missing extraction method in its analytical reports E45, E50 (filed during the opposition proceedings) and E60 (filed almost two and a half years after the filing of the statement of grounds of appeal; see point 4.5 below). However, the missing extraction method in documents E45 and E50 was already a relevant issue during the opposition proceedings and decisive for the opposition division in revoking the patent. In other words, at the time of filing of its appeal, the appellant was well aware of potential deficiencies in its documents E45 and E50. Moreover, in their replies to the statement of grounds of appeal the respondents maintained their objection under Article 100(b) EPC and contested the relevance of documents E45 and E50. Thus, already on the basis of the decision under appeal, or



at the very least after the reply to the statement of grounds, the appellant could have submitted evidence to overcome the alleged deficiencies and would have even been expected to do so under the circumstances. The board also concurs with the respondents that the evidence provided in document E55 was not the kind of evidence that was difficult to obtain. According to the appellant, Dr Sampalis, who is named as the sole inventor of the patent in suit, was the scientist responsible for the preparation of the samples in the studies, that is, the samples used in document E45 and E50. There was no reason apparent to the board as to why she could not have provided the required evidence at a much earlier state in the proceedings. Finally, the very late filing of document E55 deprived the respondents of the possibility to reproduce the method described therein and verify the results. As a consequence, admission of document E55 into the proceedings would have made adjournment of the oral proceedings necessary.

- 4.4 Document E56, a declaration by Dr Yeboah concerning the evaluation of the mass spectrometry data provided in document E45 and E60, was also filed only one month before the oral proceedings without being justified by the course of the appeal proceedings. Document E45 was already part of the opposition proceedings and the issue, namely, whether or not the patent contained sufficient information to reproduce the claimed invention, had not changed since. Additional evidence supplementing the evidence in the document E45, if considered necessary, could and should have been filed with the statement of grounds of appeal, or, in the case of the already late-filed document E60, together

with this document. Furthermore, document E56 was not concerned with the preparation method of the samples used in document E45 and E60 and was therefore not considered to be highly relevant in the assessment of whether or not the general extraction method as disclosed in the patent in suit led to extracts comprising compounds (I) and (II).

- 4.5 Document E60 was provided by the appellant with letter of 27 September 2012, that is, almost two and a half years after having filed its statement of grounds of appeal, as a **preliminary** report. It was directed to further isolation and identification studies for lucenin-2, i.e. compound (II), by MDx BioAnalytical Laboratory on a "sample X" received from the appellant. The report neither provides any information with respect to the source of sample X nor indicates the precise experimental conditions under which it was obtained. In other words, it is not apparent from document E60 that the analysed sample was an extract from marine or aquatic biomass, in particular krill, and that it had been obtained according to the general method described in the patent in suit. Similar deficiencies, in particular the absence of information regarding the extraction method used, were already observed in the decision under appeal for documents E45 and E50 (see page 11, point 3.3.3.2). Document E60 could not rectify these deficiencies and was therefore not more relevant than the documents already in the proceedings. Furthermore, during the oral proceedings before the board, the appellant explicitly acknowledged that the data in document E60 had already been available in May 2010, that is, around the time that the appeal had been filed. Despite this fact, it was

not filed until September 2012, and only as a preliminary report with the prospect of further detailed submissions. Such an approach is at variance with the appellant's obligation to provide all relevant facts, evidence, arguments and requests as early and as completely as possible, in order to ensure a fair treatment of the respondents, who should be informed as early as possible in what form the appellant intended to defend its patent and on which basis.

4.6 Consequently, since in the present case the late filing of documents E55, E56 and E60 could not be considered as an appropriate reaction to a change in the factual circumstances of the appeal proceedings, the board decided not to admit these documents into the appeal proceedings (Article 114(2) EPC and Article 13 RPBA).

4.7 The appellant's arguments put forward as justification for the late filing of documents E55, E56 and E60 (see point XVII above) were not considered convincing for the following reasons:

4.7.1 In its communication accompanying the summons to oral proceedings, the board merely summarised the issues to be discussed following from the decision under appeal, the statement of grounds and the replies (see point IX above) and gave its preliminary opinion. No new issues were raised. The fact that the board indicated in its preliminary opinion that it agreed with the respondents on the issues of added matter is not a new fact, but one possible outcome with which the appellant should have reckoned. Hence, in the present case, the board's communication cannot serve as a justification for the submission of documents E55 and E56, which the

appellant could and should have filed earlier in the proceedings, but chose not to do so.

4.7.2 According to the appellant, Dr Sampalis was still on maternity leave, which lasted until September 2010, when the appeal and the statement of grounds were filed. However, this can not justify the filing of submissions by Dr Sampalis almost three years after the filing of the appeal on an issue which was decisive for the decision under appeal and which was again addressed in the respondents' replies to the statement of grounds of appeal, dated 27 September 2010.

4.7.3 The explosion in the appellant's factory occurred in November 2012. The issue of insufficiency of disclosure was the decisive issue in the decision under appeal and thus well known to the appellant long before the explosion occurred. The legal and factual framework had not changed in the two and a half years between the filing of the appeal and the accident. Therefore, the appellant had ample opportunities to file pertinent evidence at a much earlier stage and should have done so, if it had considered it to be necessary. Under these circumstances, the board fails to see how the explosion could justify the late filing of documents E55 and E56.

4.7.4 Concerning the issue of clarification, the board notes that any misunderstanding of the appellant's arguments by the opposition division or any errors in the decision under appeal could and should have been addressed in the statement of grounds of appeal (Article 12(2) RPBA). Furthermore, the appellant did not provide any information as to what these allegedly

unclear points or errors on the part of the opposition division were and the board was unable to establish any deficiencies. The appellant also vaguely indicated the need for clarification based on procedures under other jurisdictions without, however, providing any details in this respect.

4.7.5 The appellant's argument that the respondents would have had enough time to consider and review the Dr Sampalis' submission (document E55), were they to have accepted the postponement of the oral proceedings, is inconsistent with the facts. This document was submitted after the appellant's request for postponement and after the board's communication maintaining the date of oral proceedings (see points X to XII above).

4.7.6 The board also does not share the appellant's opinion that documents E55 and E56 should have been accepted, because they were filed one month before the oral proceedings, which was the usual time limit set by the boards for filing new submission. There is no legal basis for the appellant's assumption. In the board's opinion, such an approach would be inconsistent with Article 13 RPBA according to which the admission of late filed documents is left to the discretion of the boards, which is to be exercised according to the circumstances of the case (cf. point 4.2 above). Furthermore, as observed by the Enlarged Board of Appeal, the mere fact that a time limit for the filing of new submissions has been observed does not mean that such submissions become for that reason alone admissible (R 10/09, point 2.2 of the reasons).

4.8 Document E58 and E59 were filed by the appellant in support of issues that may arise "relating to common general knowledge of the person skilled in the field in which the invention relates or on which evidence has been presented". No further explanation as to their relevance or justification for the late filing was given in the appellant's accompanying letter.

4.8.1 Document E58 is a document of considerable length (51 pages), submitted by the appellant only a few days before the oral proceedings without reference to particular passages or any indication as to the particular aspect of common general knowledge that it wished to prove or to contest. The respondents could, therefore, only have speculated as to the appellant's arguments with respect to this document, and were thus placed at a substantial disadvantage vis-à-vis the appellant. Additionally, the board notes that document E58 was published in 2006, long after the priority date of the patent in suit (27 July 2001). Accordingly, it would have been necessary to establish whether any passage relied on by the appellant was in fact common general knowledge at the priority date of the patent in suit. This would have considerably complicated oral proceedings and, in case of dispute, might have made adjournment of the oral proceedings necessary.

4.8.2 Document E59 is a **press release** by Aker BioMarine that the New Dietary Ingredient Notification for their product, Superba™ Krill Oil, had been accepted by the FDA on **24 May 2011**. Such a document, which must have been released on or after this date, cannot be considered as suitable evidence of what was common general knowledge of the skilled person at the priority

date of the patent in suit. Notwithstanding the publication date, the relevance of this document is also not apparent. The fact that it showed what other parties (i.e. Aker) were using as extraction solvent, as argued by the appellant during oral proceedings, had no bearing on the issue of sufficiency of disclosure, that is, whether or not there is sufficient information for the skilled person in the patent in suit to be able to reliably reproduce an extract comprising compounds (I) and (II).

4.8.3 Hence, the board decided not to admit documents E58 or E59 into the appeal proceedings (Article 114(2) EPÜ and Article 13 RPBA).

4.9 Since the board had decided not to admit documents E55, E56 and E58-E59, there was no reason for the board to consider document E57.

*Main, first and second auxiliary requests*

5. Amendments (Article 100(c) EPC)

5.1 Claim 1 of the main request is identical in substance to claim 1 as granted (see point VI above). It is directed to a composition comprising a phospholipid of general formula (I) and a flavonoid of general formula (II).

5.2 According to the appellant, the claimed composition found its basis in the application as originally filed, namely, on page 3, lines 4 to 7 of the description and in claim 30 through its reference back to claims 29, 27 and ultimately to claim 4, which itself referred to the

compounds of claims 1 to 3. Further support for the claimed composition was to be found on page 38, lines 6 to 8, and on page 31, lines 13 to 14. In particular, the appellant argued that the skilled person reading the application as originally filed would not consider the phospholipid compositions mentioned on page 31 to be limited to extracts, but rather to refer more generally to the compositions *per se*. Furthermore, in view of the reference to the individual compounds on page 2, the skilled person would have no difficulty in understanding that these compounds could be brought together in a composition that was not limited to an extract. Thus, the claimed composition was at least implicitly disclosed.

- 5.3 The arguments of the appellant are not considered convincing for the following reasons:
- 5.4 None of the passages cited by the appellant provides a basis for a **composition** comprising compounds (I) and (II). The passage on page 3, lines 4 to 7 refers to "a phospholipid **extract** comprising the above noted phospholipids and flavonoid compound derived from marine or aquatic biomass. The extracts and the components are useful in the prevention....". The same is true for claim 30 as originally filed, which is directed to "A phospholipid **extract** as defined in claim 29....". Claim 30 is ultimately dependent on claim 4, which is directed to "A phospholipid **extract** derived from a marine or aquatic biomass....". The passage on page 31 reads "The **extraction** of the phospholipid composition from biomass...". Although the word "composition" is mentioned, it still requires the composition to be the result of an extraction from



biomass. This passage does not therefore support a composition independent of its provenance by way of extraction (see also point 5.5 below). The passage on page 38 refers to the flavonoid (II) and mentions its usefulness in pharmaceutical, nutraceutical and cosmetic compositions. This passage does not refer to a composition comprising phospholipids of formula (I) and a flavonoid of formula (II). Furthermore, the compositions mentioned on page 38, unlike those of claim 1 of the main request, are limited to compositions which must be suitable for a specific use. Page 2 of the application as filed merely refers to compounds (I) and (II) as two different aspects of the present invention with no indication as to a composition comprising both compounds. This page cannot therefore serve as a basis for the composition according to claim 1 of the main request. The board also notes that implicit disclosure in the context of Article 100(c) EPC means a clear and unambiguous consequence of what is explicitly disclosed (T 823/96, point 4.5 of the reasons), not what may be rendered obvious by that disclosure.

- 5.5 Furthermore, the terms "extract" and "composition" are not identical in meaning. By definition, the former must be the product of an extraction from a particular source, in the present case aquatic or marine biomass, and it is therefore to be construed as being equivalent to a "product-by-process" feature. In contrast, no such limitation is imposed by the term "composition", which only requires the components specifically defined to be present. The term "composition" is therefore much broader than the term "extract".

- 5.6 In view of the different meanings of the terms "composition" and "extract" and in view of the fact that there is no clear und unambiguous disclosure of a composition *per se*, the board comes to the conclusion that the subject-matter of claim 1 of the main request extends beyond the content of application as originally filed contrary to the requirement of Article 100(c) EPC.
- 5.7 Since claim 1 of the first and second auxiliary request is identical in substance to claim 1 of the main request (see point VI above), the same considerations and conclusion as in points 5.1 to 5.6 apply. Consequently, theses requests must also be refused for contravening Article 100(c) EPC.

*Auxiliary request 3*

6. Admission into the appeal proceedings
- 6.1 Auxiliary request 3 was filed by the appellant one month before oral proceedings in an attempt to address an objection under Article 100(c) EPC. This objection was already an issue during the opposition proceedings and was renewed by the respondents in their reply to the statement of grounds of appeal. Under these circumstances, the board concurs with the respondents that this request could and should have been filed earlier in the proceedings. However, the amendments carried out by the appellant, namely the limitation to extracts, were such that they could have been expected by the respondents. Indeed, the respondents did not argue that they were surprised by these amendments or that these amendments altered the case to such an

extent as to prevent them from responding adequately. Their only argument was that the request was filed late.

Under these circumstances, the board decided to exercise its discretion pursuant to Article 13 RPBA to the effect that it admitted auxiliary request 3 into the proceedings.

7. Sufficiency of disclosure (Article 100(b) EPC)

7.1 It is established jurisprudence of the boards of appeal that an invention is sufficiently disclosed if it can be performed by a person skilled in the art without undue burden in the whole area claimed, using common general knowledge and taking into account further information given in the description of the patent or patent application.

7.2 The patent in suit is concerned with the provision of a phospholipid extract from marine or aquatic biomass comprising a phospholipid of formula (I) and a flavonoid of formula (II). According to section 3 of the patent in suit, entitled "Preparation of extracts" preferred sources are crustaceans, in particular zooplankton. Particular preferred zooplankton is krill (paragraph [0073]). The patent in suit, however, also clearly states that flavonoids have never before been isolated from anything other than a plant, vegetable, fruit or algae (see paragraph [0072]). This fact was not disputed. Under these circumstances, it is essential for sufficiency of disclosure that the patent in suit contains sufficient information on the isolation of compound (II) from the aforementioned

sources and its identification to enable the skilled person to put the claimed invention into practice.

- 7.3 The patent in suit does not contain a single example demonstrating the presence of compound (II) in an extract obtained from krill.

Example 1, the only working example relating to the extract *per se*, illustrates the isolation and molecular characterisation of the phospholipids from an extract without providing any details as to the precise extraction method or the extract source. The only information available is provided in paragraph [0104] of the patent, namely, that the extraction of the phospholipids for example 1 was "**as described above for krill extraction**". The board notes that in the parts of the patent preceding paragraph [0104] no "krill extraction" is described. A general extraction method is described in paragraphs [0087] to [0090] of the patent. Here reference is made to marine and aquatic animal material and crustaceans. Example 1 is entirely silent on the isolation or identification of a compound of formula (II).

The only information concerning compound (II) is to be found in paragraph [0102] of the patent in suit, which states that "Fig. 4 is a mass spectrograph [*sic*] for characterising the novel flavonoid compound (II)". No details as to any extraction method or source, isolation or measurement conditions are provided in this context. Figure 4 shows two mass spectrograms with different fragmentation patterns. One spectrogram is apparently the reference spectrogram for compound (II), which is a known compound, and the other the sample

spectrogram. The significant differences in the fragmentation patterns do not allow the conclusion that sample and reference compound are identical. In other words, there is not only a lack of information as to how and from which source the sample of Figure 4 was obtained, but also no conclusive information as to its identity.

The board cannot accept the appellant's argument that the skilled person would readily deduce from Figure 4 that the two mass spectrograms were measured under different conditions and therefore cannot be compared. The board notes that no information as to the measurement conditions for either mass spectrogram is available in the patent in suit. Furthermore, using a reference spectrogram that cannot be compared with the sample spectrogram makes no sense for the skilled person, since no conclusion as to the identity of the sample can possibly be drawn from such a comparison.

- 7.4 As mentioned in point 7.3 above, the patent in suit contains a general description of the extraction method (paragraphs [0087] to [0090]). In its broadest aspect, it is carried out by successive ketone and alcohol treatments. Various preferred features are also mentioned in this context. However, none of them are indicated as being critical.

Both respondents attempted a reproduction of the general extraction method using krill as extraction source. Respondent 1 carried out a second extraction with krill from a different supplier. The resulting extracts were examined for the presence of compound (II) (documents E26 and E47/E48).

7.5 The board is satisfied that the extraction methods used in the respondents' reproductions are well within the limits of the extraction method described in paragraphs [0087] to [0090] of the patent in suit:

- Krill of the species *Euphasia Superba* (4.5 kg or 200g) was ground to a particle size of less than 5 mm and 1 mm, respectively, and the ground samples were extracted with acetone (27 L or 1.2 L) under an inert atmosphere for 2 hours at 4°C under agitation (stirring propeller at 300 rpm or swirling at least 20 min)  
(cf. page 16, line 50-54 of the patent).
- Separation from solids by filtration, washing with cold acetone and removal of acetone by evaporation under reduced pressure provided "Extract 1" or "Fraction #1"  
(cf. page 16, lines 55 to 57 of the patent)
- Second extraction of the solids with a 95/5 ethyl acetate/ethanol mixture (2 volumes or 400 mL) at 4°C for 30 minutes (stirring at 30 rpm in document E47), filtration (followed by washing with additional 200 mL of 95/5 ethyl acetate/ethanol at 4°C in document E47) and evaporation of the solvents under reduced pressure (at 4°C in document E26) provided "Extract 2" and Fraction #2"  
(cf. page 17, lines 1 to 4 of the patent).

7.6 Analysis of the extracts 1 and 2 obtained in document E26 was carried out using UV/Vis spectroscopy,

relying on the uncontested fact that the class of flavonoids to which compound (II) belongs shows characteristic absorption bands of similar strength at around 280 nm and 350 nm (document E26, Figures 10a - 10c showing flavonoids with different sugar units but the same aglycon). Methanolysis of a sample of extracts 1 and 2 was also performed to break down lipids, flavonoids or other compounds, which were initially present in esterified form. The water/methanol and hexane phases resulting from the methanolysis were analysed using the same UV detection method. No signals in accordance with the type of flavonoid claimed were detected in either extract 1, extract 2 or in the hexane or water/methanol phases resulting from methanolysis (Figures 1, 2, 4, 5, 7 and 8). The detection limit was 3.8 µg/mg krill sample.

Fractions #1 and #2 in each of the two reproductions in document E47 were combined and analysed by HPLC-UV/MS technique using authentic compound (II) (i.e. lucenin-2) as reference material (document E48). According to Figures 5 and 6 none of the expected signals (cf. Figures 3 and 4 for the reference material) were detected. In order to ensure that the analytical technique used was suitable for the identification of compound (II) in the samples, a sample from one of the reproductions was compared with a sample that had additionally been spiked with authentic lucenin-2 (Figure 7).

Thus, neither respondent 1 nor respondent 2 by following the extraction method disclosed in the patent were able to obtain an extract that comprised compound (II).

7.7 According to the appellant, the respondents' reproductions were not carried out according to the method disclosed in the patent in suit and their detection methods were either unsuitable or unreliable. In detail, the following objections were raised in this respect.

7.7.1 In the patent, the solid residue of the initial extraction was suspended and extracted with 95/5 ethyl acetate/ethanol. In the appellant's opinion it was not clear whether the suspension step had been carried out in the reproduction described in document E26. Furthermore, the separation of water from the lipid extract after the first extraction step was missing in the experiments of both the respondents.

7.7.2 With respect to the analytical method used by respondent 2 in document E26, the appellant argued that the extract samples were diluted with hexane. Since compound (II), due to the presence of two sugar units, was hydrophilic, it would not dissolve in hexane and as a result could not be detected. Furthermore, the methanolysis carried out in document E26 would destroy compound (II) with the same consequence that it would not be detectable. Finally, the appellant argued that the UV/Vis spectroscopy in said document was not a very sensitive method. The detection limit was at 3800 ppm, while the flavonoid in the patent was present in amounts as low as 70 ppm (paragraph [0084]). According to the appellant, a more suitable detection method would have been an HPLC/MS technique. Accordingly, document E26 could not be relied upon, and the balance



of probability should be applied in favour of the appellant.

7.7.3 Concerning the analytical method used by respondent 1 (LC-MS technique), the appellant admitted that it was suited to purpose. It pointed out, however, that only the mass peak and not the complete fragmentation pattern had been provided by respondent 1. The latter was, however, also essential for the identification of compound (II). Furthermore, the appellant observed that the scale in the mass spectrograms of the reference and the sample materials was not the same and therefore concluded that the spectrograms were not measured under equivalent conditions and could not be compared. In particular, it was noted that the peak in Figure 4 was three times more intense than in Figure 7. Finally, the appellant pointed to page 7 of document E48, where it was indicated that the stability of the MS running conditions was only 40%. With regard to these shortcomings in the methodology, respondent 1 had probably not been able to detect compound (II).

7.7.4 In addition, the appellant pointed out that both the respondents had chosen an extraction time for the first extraction with acetone of only two hours. Such a short extraction time could have an influence on the amount of compound (II) that was extracted and could have resulted in a concentration so low that it was below the detection limit of both the analytical methods. Carrying out the extraction overnight as indicated in the patent would have resulted in the claimed extract.

7.7.5 Finally, the appellant pointed out that its own analytical methods used in document E50 were

considerably more accurate and sensitive than the methods in E26 and E47/E48. In particular, the fragmentation pattern and the molecular peak shown in Figure 5 proved the presence of compound (II) to a high degree of certainty.

7.8 The board is not convinced by the appellant's arguments.

7.8.1 Concerning the allegedly missing suspension of the solid residue from the initial extraction, the board notes that E26 states in step 6 that the remaining solid residue was extracted with 2 volumes of a 95/5 ethyl acetate/ethanol mixture and in step 7 that the mixture was filtered to remove solids. It is therefore clear that the solid residue was suspended in and extracted with the solvent mixture as disclosed in the patent in suit. The omission of the water separation step is not considered to be relevant in the present context. On the contrary, since the patent in suit does not provide any information as to how compound (II) had been isolated and identified, using the whole extract in the detection methods, as the respondents have done, ensures that compound (II), if at all present in the extract, is not inadvertently, partly or completely, discarded.

7.8.2 With regard to the use of hexane as solvent for the UV analysis, it is to be noted that document E26 states that "Extract 2 was dissolved". There is no indication that the extract is not completely soluble. The appellant also provided no evidence showing that compound (II) is entirely insoluble in hexane, in particular taking into account the fact that the amount present in the extract may be rather low, as asserted

by the appellant. Equally unsubstantiated is the appellant's allegation that methanolysis would destroy compound (II). The appellant provided no evidence or reasonable arguments for this assertion. In the absence of such evidence, the board has no reason to suspect the destruction of compound (II). In this context, the board notes that, even if hexane would not be suitable as a solvent for the detection of compound (II) in extract 1 or 2, methanol and water, which have been used according to Figures 4 and 5 of E26, are suitable solvents for this compound. Nevertheless, the required absorption bands were not present. With regard to the argument that UV spectroscopy is not a suitable method, the board notes that the UV spectrograms are apparently rather characteristic for the class of flavonoids to which compound (II) belongs. This was not contested. Moreover, UV spectroscopy was also used by the appellant in document E50 to identify the HPLC fraction of its sample, which contained compound (II). With regard to the unsuitable detection limit, the board notes that, if this information is vital for the skilled person to be able to perform the invention, it is certainly missing in the patent in suit.

- 7.8.3 With regard to the analytical data in E48, the board notes that respondent 1 has provided the HPLC-UV/MS chromatograms for authentic lucenin-2, that is compound (II), as reference material in two different amounts (E48, Figures 3 and 4). The total ion chromatogram of this material shows mainly a single peak (retention time  $R_f$  9.6 min), which corresponds to a signal in the UV spectrogram (UV 365 nm) and a mass peak at 611. The same type of spectrograms have been provided for the extracts of respondent 1's two

reproductions, and at the respective retention times of 9.6 min, no UV signal and no mass peak can be observed. Under these circumstances, the board sees no reason why a complete fragmentation pattern is necessary. The spiking experiment further shows that the analytical methods used by respondent 1 are suitable and, with a detection limit of 50 ppm, sensitive enough for the detection of rather low amounts of compound (II). The board also cannot follow the appellant's arguments with respect to the allegedly "different scales" in the mass spectrograms. As can be seen by comparing Figures 3 and 4 of document E48, the peak intensity in the EIC spectrogram, which is shown on the y-axis, depends of the amount of the substance. In Figure 3 where the amount of lucenin-2 is less than in Figure 4, the peak maximum is around  $5 \times 10^5$ , i.e. 500000. In Figure 4 the intensity is around  $0.9 \times 10^6$ , i.e. 900000 or  $9 \times 10^5$ . The scales in both figures are not in fact different, but the scale in Figure 4 is compressed compared to Figure 3. If exactly the same representation on the y-axis had been used in Figure 4 as in Figure 3 (i.e. segments of  $1 \times 10^5$ ,  $2 \times 10^5$ , etc. to  $7 \times 10^5$ ), the top of the peak with an intensity of around  $9 \times 10^5$  would have been off scale. On the other hand a low intensity peak, for example 20000 ( $2 \times 10^4$ ), would practically not be visible on a scale showing segments from  $1 \times 10^5$  (100000) to  $7 \times 10^5$  (700000) (Figure 3) or from  $0.1 \times 10^6$  (100000) to  $0.9 \times 10^6$  (900000) (Figure 4). Thus, the scale used in the sample spectrum in Figure 5 (segments of  $1 \times 10^4$ ,  $2 \times 10^4$ , etc. to  $7 \times 10^4$ ) is not an indication of different measuring conditions, but a representation which would also have shown peaks with a rather low intensity. In other words, the representation on the y-axis in Figure 5 provides for

better visibility of weak signals. Nevertheless, no signal is apparent in the mass spectrogram, which is confirmed by the simultaneous absence of the expected UV signal. With regard to the difference between Figures 4 and 7, the board is of the opinion that this is not of importance. Figure 7 was provided in order to demonstrate that the selected analysis method was capable of identifying compound (II), if it had been present. For this purpose, Figure 7 provides a sample spectrogram and a spiked sample spectrogram on the same scale. The spiked sample clearly shows a peak at the retention time for compound (II), which is absent in the sample spectrum. The board can therefore see no flaw in respondent 1's analytical data.

7.8.4 Concerning the extraction time, the board notes that it is not indicated as a critical parameter in the patent in suit. There is, moreover, no experimental evidence which could support the appellant's assertion that an extraction overnight would have been successful. In other words there is no objectively verifiable description of an extraction process with the analytical data of the extracts obtained, for example an excerpt of a laboratory journal, which links a particular extraction example to the corresponding analytical data, or a reproduction of the respondents' experiments with an overnight extraction. Documents E50 and E45 are not conclusive as they do not contain any information as to how the analysed samples were produced.

7.8.5 With respect to the argument that the appellant used a more accurate and more sensitive analytical method, the board notes that no information as to the detection

limit is provided in document E50. Furthermore, according to the appellant's own admission the analytical method used by respondent 1 in document E48 was consistent with that which the skilled person would have used, when trying to detect compound (II). Moreover, in the board's opinion, a detection limit of 50 ppm is sufficient in order to be able to establish the presence of a compound, which according to the appellant is present in an amount of more than 70 ppm. If further information, such as specific analytical methods or specific measuring conditions, is needed, this information certainly cannot be found in the patent in suit.

- 7.9 The appellant also argued that the burden of proof that an extract comprising compound (II) could be obtained from aquatic or marine biomass, in particular krill, had not shifted to the appellant. The patent in suit provided at least one way as to how such an extract could be obtained. Furthermore, the extraction of compound (II) from krill was not against the law of physics as argued by the respondents. On the contrary, there was an entirely reasonable explanation for the presence of compound (II). It was known in the art that flavonoids were present in algae. This was acknowledged in the patent and confirmed in documents E31 and E33. It was also known before the priority date of the patent in suit that krill fed on algae. Thus, compound (II) resulted from the krill's feed. This possibility was even mentioned by respondent 2 in its notice of opposition. Furthermore, a reasonable amount of trial and error was permissible when it came to sufficiency of disclosure. The respondents' failure to rework the invention at first attempt was therefore not

important. According to the appellant, they should have tried different modifications, such as collecting krill "after it had its lunch" or amending their methods.

7.10 The appellant's arguments are not convincing for the following reasons:

7.10.1 The burden of proof is determined by the legal cases which the respective parties are trying to make. Whether it is discharged or not, is assessed by the board based on all the relevant evidence put before it. The burden of proof of insufficiency is as a general rule on the opponents, who should prove that despite making all reasonable efforts they were unable to put the invention into practice. If the patentee is claiming a result, which the prevailing technical opinion suggests is not achievable, and if the opponents are not able to repeat the method in the patent, they cannot be expected to do more than the patentee. Then, the burden of proof is on the patentee to show that the extraction method in the patent works as stated so that at least one way of putting the invention into practice has been given to the skilled person (T 792/00, points 9 to 11 of the reasons; T 1842/06, points 3.3 and 3.4). In the present case, the appellant asserts that, against the prevailing technical opinion, by using the extraction method described in the patent in suit the skilled person is able to obtain from marine and aquatic animal material, in particular crustaceans, such as krill, an extract comprising compound (II). The respondents denied this and have provided evidence that compound (II) could not be obtained when working according to the general method described in the patent. Under these

circumstances the burden of proof is on the appellant to show that the method in the patent works as alleged. The mere assumption that compound (II) could theoretically be present in an extract due to the krill's diet on algae is not evidence that could disprove the respondents experimental reports or discharge the burden of proof resting on the appellant.

The board also does not share the appellant's opinion that it was for the respondents, after having failed to obtain the claimed extract by following the teaching of the patent, to embark on a research program in an attempt to find a compound, which, according to the prevailing technical opinion (flavonoids had never been isolated from animal biomass), was not expected to be found in the first place, and for the presence of which not even the patent in suit provided conclusive evidence.

- 7.11 By their experimental reports E26 and E47/E48, the respondents have conclusively shown that, by following the extraction method described in the patent in suit, it was not possible for the skilled person to obtain the claimed extract comprising compound (II). Since this fact was neither disproved by documents E45 and E60 nor refuted by the appellant's counter-arguments, the board concludes that the patent in suit, contrary to the requirement of Article 100(b) EPC, does not contain sufficient information for the skilled person to be able to carry out the invention. Auxiliary request 3 must therefore be refused.



8. Objection under Rule 106 and Article 112a(2)c) EPC

8.1 At the end of the oral proceedings, the appellant raised an objection under Rule 106 EPC alleging that its right to be heard under Article 113(1) EPC had been violated. It argued that, by refusing its request for postponement of the oral proceedings and not admitting documents E55, E56 and E60 into the appeal proceedings, the board had denied the appellant an adequate opportunity to prepare oral proceedings and to properly present its case.

8.2 The board notes at the outset that the objection pursuant to Rule 106 EPC was raised by the appellant towards the end of oral proceedings after the board had informed the parties of its negative opinion regarding sufficiency of disclosure of the subject-matter claimed in claim 1 of auxiliary request 3. The objection, however, pertained to alleged procedural defects that had arisen in the proceedings several hours (the refusal to admit documents E55, E56 and E60 into the appeal proceedings) and even several weeks before (the maintenance of the date of oral proceedings by communication of 6 March 2013). The board is aware that Rule 106 EPC lays down an admissibility requirement for a petition of review the examination of which is within the jurisdiction of the Enlarged Board of Appeal. Nevertheless, the point in time at which an objection is raised affects the alternatives of responses available to the board concerned. As the Enlarged Board has consistently held, the requirement pursuant to Rule 106 EPC to raise an objection should enable the board confronted with the objection to react immediately and appropriately by either removing the

cause of the objection or, as provided in Rule 106 EPC, by dismissing it (R 4/08, point 2.1 of the reasons; R 14/11, points 2.5 and 2.6 with further references). With respect to the issue of postponement of oral proceedings, the board had no other option than to dismiss the objection, since at the end of a full day of oral proceedings the board was unable to revert to its communication of 6 March 2013 to maintain the date of the oral proceedings. The appellant should have raised any objection against this communication immediately after notification of said communication (see R 3/08, point 1.4; R 9/09 point 1.5). As regards the refusal to admit documents E55, E56 and E60 into the appeal proceedings, the board informed the parties before lunch of its conclusion on this issue. At that point in time, the appellant should have been aware of any possible impairment of its capability to fully argue its case for auxiliary request 3 with regard to the issue of sufficiency of disclosure. By adopting a wait-and-see attitude, the appellant constrained the board's possibilities to react to the objection raised subsequently under Rule 106 EPC. However, these preliminary considerations were not decisive for dismissing the objection. The board's reasons are as follows:

- 8.3 The decision to change the date of oral proceedings is within the authority and discretion of the board (Article 15(2) RPBA). It may or may not be exercised in the favour of the party requesting it, based on the circumstances of the case and the reasons provided by said party. In the present case, the board, in view of the arguments that were submitted by the parties, was not satisfied that a change of date was justified and,

informing the parties of its reasons by fax and post on 6 March 2013, refused the appellant's request (see point XI above). In particular, the board noted that the explosion at the appellant's factory had already occurred one month before it had received the summons and that no satisfactory reasons had been provided as to why the request was filed only one and a half month before oral proceedings were scheduled to take place. The board moreover observed that the appellant's representative had failed to provide clear reasons as to why the remaining time was not sufficient to prepare for the oral proceedings.

The appellant in its subsequent letter dated 8 March 2013 did not contest the board's refusal of the request for postponement of the oral proceedings and made no attempt to sustain or supplement its request for postponement by filing additional arguments or documents. Neither in the appellant's letter of 8 March 2013 nor during oral proceedings did it raise, much less substantiate, objections that the board had exercised its discretion according to the wrong principles, or without taking into account the right principles or in an unreasonable way. Furthermore, the appellant was aware of the issues under dispute since the beginning of the appeal procedure. It had ample opportunity to provide all the necessary facts, evidence and arguments at a much earlier stage of the proceedings, but decided not to do so. The board is therefore of the opinion that its discretionary decision not to change the date of the oral proceedings, did not violate the appellant's right to be heard under Article 113(1) EPC. For the sake of completeness, the board notes that the appellant had an

adequate opportunity to submit arguments regarding the issue of postponement. There was thus also no denial of the right to be heard in arriving at the decision.

- 8.4 Concerning documents E55, E56 and E60, the board notes that the question of their admission was discussed at the oral proceedings. During this discussion, the appellant was not limited in its pleadings and was able to fully present all its arguments as to why it considered their admission into the appeal proceedings justified. This was not contested by the appellant. Its objection was rather directed to the fact that the board did not exercise its discretion in the appellant's favour.

The board notes that, in *inter partes* proceedings, each party has an obligation to take an active part in the proceedings and to provide facts, evidence and arguments to support its case as early and as completely as possible (R 13/11, point 18 of the reasons; R 2/08, point 9.10 of the reason; R 12/12, point 6 of the reasons). As set out in point 4.2 above, any amendment to a party's case after it has filed its grounds of appeal or reply is not a matter of right, but lies within the discretionary power of the boards of appeal, which is exercised with due considerations of the relevant circumstances of the case (Article 13(1) RPBA).

In the board's opinion, Article 13 RPBA is not in contradiction with a party's right to be heard according to Article 113(1) EPC, even when amendments to a party's case are not taken into consideration. It is at the discretion of the boards, in the interest of

a fair and reliable conduct of the proceedings as well as procedural economy, not to take into account submissions of a party, which has failed in its obligation to properly advance the proceedings, provided that the party concerned has been given adequate opportunity to present its case, yet for reasons for which it alone is responsible, has not made adequate use of this opportunity. Furthermore, the admission of a late-filed submission of a party should not lead to the opposing party being at a disadvantage in exercising its right to present its case in the time available.

In the present case the appellant was aware of possible deficiencies in its case right from the beginning of the appeal proceedings. It had reasons and adequate opportunity to present the necessary evidence at a much earlier stage of the proceedings, but decided not to do so, to the disadvantage of the respondents, who were confronted very late in the proceedings for the first time with an attempt to overcome an issue, which was already decisive for the decision under appeal and which was again addressed in the respondents' replies. Furthermore, the board notes that an objection that the board had exercised its discretion arbitrarily has not been advanced, let alone substantiated by the appellant.

Since the appellant had adequate opportunity to comment on all relevant points related to the question of admission of documents E55, E56 or E60 before the board decided on their admission into the appeal proceedings, the board is of the opinion that the appellant's right to be heard had not been violated.

8.5 The objection under Rule 106 EPC was therefore dismissed.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

M. Schalow

L. Bühler