DECISION
of 22 May 2003

Case Number: T 0582/99 - 3.3.2
Application Number: 93907821.8
Publication Number: 0636002
IPC: A23L 1/237

Language of the proceedings: EN

Title of invention:
A salt product and method for the preparation thereof

Applicant:
Hitaveita Sudurnesja

Opponent:
Akzo Nobel N.V.

Headword:
Salt product/HITAVEITA SUDURNESJA

Relevant legal provisions:
EPC Art. 54, 111(1)
EPC R. 67

Keyword:
"Main request - novelty - no: homogeneity feature not distinguishable from the prior art"
"Auxiliary request - remittal to the first instance - shift of invention from the product to the process"
"Reimbursement of appeal fee - no: not equitable"

Decisions cited:
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Catchword:
-
Case Number: T 0582/99 - 3.3.2

DE C I S I O N
of the Technical Board of Appeal 3.3.2
of 22 May 2003

Appellant: Akzo Nobel N.V.
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Decision under appeal: Interlocutory decision of the Opposition Division of the European Patent Office posted 23 March 1999 concerning maintenance of European patent No. 0 636 002 in amended form.

Composition of the Board:
Chairman: U. Oswald
Members: J. Riolo
S. U. Hoffmann
Summary of Facts and Submissions

I. European patent No. 0 636 002 based on application No. 93 907 821.8 was granted on the basis of 15 claims.

Independent claims 1, 6 and 14 as granted read as follows:

"1. A salt product comprising NaCl, K/Mg-double salt and optionally KCl wherein the molar ratio of K to Mg is 1, characterised by the salt product comprising particles, in which NaCl, KCl, and K/Mg-double salt being homogeneously distributed throughout each particle and by no hygroscopic Mg-salt being present.

6. A method for the preparation of a salt product according to claim 1, characterised by providing an aqueous salt mixture of the desired proportion of salt ions, having a water content of 50 to 90% by weight and subjecting the aqueous salt mixture to a one-step, instant drying at a temperature of 70 to 200 °C for a period of 1 to 60 seconds to obtain a dry product.

14. The use of a salt product according to anyone of the claims 1 to 5 as salt in connection with the preparation of food, beverages or pharmaceutical products and/or as a preservative or water binding agent."

II. Notice of opposition was filed against the granted patent by the opponent.
The patent was opposed under Article 100(a) EPC for lack of novelty and lack of inventive step and under Article 100(b) for insufficiency of disclosure.

The following documents were *inter alia* cited during the proceedings:

(2) WO-A-9000522


III. The interlocutory decision of the Opposition Division established that the patent could be maintained in an amended form under Article 106(3) EPC on the basis of the set of claims of the auxiliary request filed during the oral proceedings on 4 March 1999.

Amended independent claim 6 of this set of claims read as follows:

"6. A method for the preparation of a salt product according to claim 1, characterised by providing an aqueous salt mixture of the desired proportion of salt ions, having a water content of 50 to 90% by weight and subjecting the aqueous salt mixture to a one-step, instant drying on a drum dryer with an outer surface temperature of 100 to 200°C for a period of time of from 10 to 60 seconds to obtain a dry product."

(Emphasis added).

The Opposition Division expressed the view that the amendment in claim 6 introducing the features of using a drum drier for carrying out the instant drying for a period of time of 10 to 60 seconds did not contravene the requirements of Article 123(2) because it was
disclosed in the application as originally filed on page 7, lines 10 to 17, which mentioned that "when using a drum drier, the instant drying is preferably carried out by using a total contact time for the aqueous salt mixture and the obtained dried layer with the outer surface of the drum drier... of from 1 to 60 seconds... most preferred 10 to 20 seconds..."

It also considered that the objections raised by the opponent with respect to the insufficiency of disclosure were not sufficient to establish that the disclosure of the whole application did not enable the skilled person to perform the claimed invention.

Concerning novelty, the Opposition Division considered that neither document (2) nor document (3) disclosed a salt with a homogeneous distribution of its constituents and with no hygroscopic Mg-salt as required by claim 1 of the patent in suit and a process according to its claim 6.

As regards inventive step, the Opposition Division was of the opinion that the subject-matter of this request fulfilled the requirements of inventive step because neither document (2) nor document (3) or any other available prior art documents would have prompted the skilled person to prepare salt particles with a homogeneous distribution of its constituents in order to solve the problem of providing a better-tasting low-sodium salt product.

IV. The appellant (opponent) lodged an appeal against the said decision.
V. Oral proceedings were held before the Board on 22 May 2003. During the oral proceedings, the respondent filed a new set of 6 claims as auxiliary request.

Independent claim 1 of the set of claims reads:

"1. A method for the preparation of a salt product comprising NaCl, K/Mg-double salt and optionally KCl wherein the molar ratio of K to Mg is $1$, said salt product comprising particles, in which NaCl, KCl, and K/Mg-double salt are homogeneously distributed throughout each particle and in which no hygroscopic Mg-salt are present, characterised by providing an aqueous salt mixture of the desired proportion of salt ions, having a water content of 50 to 90% by weight and subjecting the aqueous salt mixture to a one-step, instant drying on a drum dryer with an outer surface temperature of 100 to 200°C for a period of time of from 10 to 60 seconds to obtain a dry product."

VI. The appellant first submitted that the decision of the Opposition Division contained reasons which were not discussed during the oral proceedings so that it had no opportunity to present comments on these grounds, which constituted an infringement of Article 113 EPC.

It further maintained that the subject-matter of claim 6 contravened the requirements of Article 123(2) EPC because it was the result of the unallowable combination of claims 6 and 11 as originally filed. In that respect it argued that claim 11 related to "contact time" whereas claim 6 related to "drying period" which, as was apparent from the application as originally filed, was not the same.
As to the sufficiency of disclosure, it considered that examples 1, 6 and 7 of the application as originally filed contained erroneous data so that they could not be reproduced. Moreover, as was apparent from the experiment carried out during the opposition procedure, the process according to claim 6 did not lead to a homogeneous product without hygroscopic Mg-salt according to claim 1.

Accordingly, it was of the opinion that the application as originally filed did not fulfil the requirements of Article 83 EPC.

Concerning novelty, the appellant filed a statement reporting a reworking of example 4 of document (2) to show that the product disclosed in this example anticipated the subject-matter of claim 1.

Finally, it submitted that the subject-matter of the contested patent lacked an inventive step over document (2) because this document, which dealt also with the problem of providing a better-tasting, low-salt product, would have prompted the skilled person to prepare salt particles with a homogeneous distribution of its ingredients in order to solve this problem since it mentioned the necessity of avoiding inhomogeneous products.

VII. The respondent submitted that the fact that the Opposition Division did not agree with the appellant did not imply that it would not be heard by the Opposition Division and added that it had clearly not the impression that the appellant had not been heard.
As to Article 123(2) it argued that claims 10, 11 and 12 as filed, as well as the description as originally filed (page 7, lines 3 to 17), disclosed the subject-matter of the amended process claim 6.

Concerning the objection of insufficiency of disclosure, it agreed that examples 1, 6 and 7 contained errors, but considered that the information contained in the application as filed remained sufficient to enable the preparation of the salt according to claim 1.

In addition, it submitted that the fact that the appellant did not obtain the product of claim 1 when performing the drum drier process did not demonstrate the insufficiency of disclosure of the patent in suit since it did not indicate all the conditions used in its experiment, such as the speed of rotation and the angular distance, so that no conclusion could be drawn from its result.

It was moreover of the opinion that example 4 of document (2) did not concern a homogeneous salt and that it did not therefore anticipate the subject-matter of the product claims.

Further, it shared the Opposition Division's conclusions that the claimed subject-matter fulfilled the requirements of inventive step because neither document (2) nor document (3) or any other available prior art documents would have prompted the skilled person to prepare salt particles with a homogeneous
distribution of its constituents in order to solve the problem of providing a better-tasting, low-sodium salt product.

VIII. The appellant requested that the decision under appeal be set aside and that patent No. 0 631 002 be revoked, and requested the refund of the appeal fee.

The respondent requested that the appeal be dismissed or, as an auxiliary request, that the patent be maintained on the basis of the auxiliary request filed during oral proceedings.

Reasons for the Decision

1. The appeal is admissible.

2. Main request

2.1 Articles 123 and 83 EPC

The set of claims of the main request corresponds to the set of claims maintained by the Opposition Division.

The Board agrees with the findings of the Opposition Division as to the objections regarding Article 123(2) and sufficiency of the disclosure (Opposition Division's decision page 9, point 3; page 10, point 4, and page 11, line 1).
Moreover, having regard to the Board's conclusions in the assessment of novelty (see below, point 2.2) and the fact that the appellant did not adduce any new arguments in these respects, there would appear to be no need to develop these aspects further.

2.2 Novelty

2.2.1 Document (2) describes in example 4 a sodium-reduced salt product comprising NaCl, K/Mg-double salt and KCl wherein the molar ratio of K to Mg is $1$ and wherein no hygroscopic Mg-salt is present as the magnesium is present as kainite in the final product according to the X-ray test (see page 10, last sentence in brackets).

However, example 4 does not expressly mention whether the salt product comprises particles in which NaCl, KCl, and K/Mg-double salt are homogeneously distributed throughout each particle.

It must therefore be decided whether the skilled person would nevertheless consider this feature to be implicitly present in the product of example 4 in the light of the disclosure of the whole document.

In that respect, document (2), when referring to the prior-art sodium-reduced salt products, specifically recites that they suffer from unsuitable taste sensations because of their inhomogeneity and that the aim of the invention is to provide a sodium-reduced salt which will prove more satisfactory than the previously known sodium-reduced salt mixtures (page 1, line 31, to page 2, line 4; page 3, lines 2 to 4; page 3, lines 13 to 16).
Moreover, the document discloses that when a particularly preferred crystallisation method for the preparation of the salt is used, i.e. the method according to example 4, a "substantially homogeneous conglomerate" is obtained and, further, that the composition of the salt obtained by crystallisation is "virtually the same throughout" (page 7, lines 21 to 31; page 5, lines 11 to 18).

The Board observes that the patent in suit is silent about any particular definition of the term "particle" used in claim 1. The Board notes also that, according to the disclosure in column 7, lines 32 to 35, of the contested patent, the feature "homogeneously distributed" in claim 1 means merely that "even the smallest particle...has approximately the same composition as the entire salt product."

Under these circumstances, it is not possible to distinguish the salt obtained in example 4, which, as it appears from the description (see above), is also a homogeneous product, from the claimed salt on the basis of its technical feature requiring that "the salt product [comprises] particles, in which NaCl, KCl, and K/Mg-double salt [are] homogeneously distributed throughout each particle".

Accordingly, the subject-matter of claim 1 of the main request is anticipated by the disclosure in document (2).

2.2.2 The respondent mainly argued that the product according to the patent in suit was, above all, a better tasting salt than the salt according to document (2) which, in its opinion should have a metallic-bitter aftertaste in
the light of its physical structure, that, "although each particle [in (2)] with its core double salt coated with mechanical adhering NaCl and NaCl may have the same composition as the total product, the particles were not throughout homogeneous" (respondent's letter of 10 January 2000, page 17, paragraph 8.4) and that the amount of magnesium given in the product of example 4 as kainite was too low so that it could not be excluded that hygroscopic magnesium was also present in the salt of example 4.

As to the taste of the claimed sodium-reduced salt, the Board observes that the taste is not a functional feature of the claimed product so that it cannot be taken into account for the assessment of novelty of the claims of the contested patent over the prior art.

Concerning the respondent's argument with respect to the inhomogeneity of the salt due to its physical structure, the Board notes that, as discussed under 2.2.1, claim 1 of the patent in suit does not refer to any particular physical or chemical structure in relation to homogeneity. In fact, the only requirement for homogeneity according to the contested patent is that each particle of salt must have the same composition as the total product. This appears also to be the case for the product of example 4 of document (2) as discussed above.

Finally, the Board agrees that the value of 1.1% Mg given for the final product of example 4 is obviously too low. Indeed since 236 g MgSO₄, 7H₂O were used to prepare the product together with 167 g NaCl and 217 g KCl and as Mg could not disappear during the process, the Board accepts the respondent's calculations...
provided with its letter of 10 January implying that an amount of about 4% Mg should be present in the final product rather than about 1%.

However, the Board does not share the respondent's conclusions that this difference with respect to the amount of Mg mentioned would imply that hygroscopic salt could also be present in the final product.

In fact, as is clearly stated in example 4, the obtained salt has been subjected to an X-ray crystallographic test which "shows that magnesium is present as kainite [ie a non-hygroscopic Mg-sat] in the final product" (page 10, lines 34 to 36).

Therefore, it can a priori only be concluded that the value of Mg in example 4 should read 4% instead, as, in the absence of any further elements, this discrepancy appears to be merely the result of a typing error.

In conclusion, the subject-matter of claim 1 of the main request lacks novelty under Article 54 EPC.

Under these circumstances there is no need to consider the remaining claims.

3. Auxiliary request

3.1 Admissibility of the request

This request was submitted during the appeal proceedings.
In that respect, the Board notes that the respondent could not be surprised by the restricted subject-matter of the amended set of claims of this request as the limitation results specifically from the deletion of the product claims, which it attacked during the appeal proceedings as lacking novelty and inventive step.

The request has therefore been admitted to the procedure.

3.2 Remittal to the department of first instance

During the oral proceedings, the respondent expressed its wish to have the file remitted to the first instance. The appellant itself had no objection that the matter be referred back to the Opposition Division.

Although the EPC does not guarantee the parties an absolute right to have all the issues in the case considered by two instances, it is well-recognised that any party may be given an opportunity for two readings of the important elements of a case.

In the present case, the set of claims of the auxiliary request are now directed to a specific process for preparing a salt product.

During the opposition proceedings, the Opposition Division considered that the claimed salt product was both novel and inventive. Accordingly, it could dispense with the examination of the process claims which were automatically also deemed to be allowable by the mere fact that they aimed at the production of a new and inventive product.
The decision of the Opposition Division is therefore silent about the possible merit of the process claims \textit{per se}, independently of the merit of the product to be prepared.

Thus, by deleting the product claims, as a consequence of the lack of novelty of the claimed product, a new situation is created with respect to the remaining process claims which should now be examined for their own merit independently of the patentability of the product to be produced. This makes it necessary to remit the case to the Opposition Division for further prosecution (Article 111(1) EPC).

4. \textit{Reimbursement of the appeal fee}

According to the appellant, the Opposition Division did not give it the opportunity to present comments on the following two points referred to in its decision:

(1) "the fact that one-step instant drying is carried out on a drum dryer, implies that the contact time is equal to the drying time."

(2) "The experimental results filed with the letter dated 18.02.99 relate to a single trial, which is not sufficient evidence to prove that the salt product of claim 1 cannot be obtained by carrying out the method disclosed in claim 6 of the contested patent."
The Board first notes that, apart from the appellant's statement made in its grounds of appeal, there is no other element showing that these points were indeed not discussed during the oral proceedings before the Opposition Division.

To the contrary, in its letter dated 10 January 2000 (page 8, end of the first paragraph), the respondent mentioned that its was clearly not its impression that the appellant had not been heard by the Opposition Division and that the Opposition Division simply did not agree with him.

Secondly, neither in its written arguments nor during the oral proceedings in the appeal proceedings did the appellant present any comment or submission in relation to the two points it is complaining about.

Moreover, in reply to a question of the Board during the oral proceedings, the appellant declared that, even if it had known the position of the Opposition Division with respect to its insufficient experimental results during the opposition procedure, it would not have carried out further experiments.

Finally, the Board observes that the ground for deciding that amended claim 6 of the auxiliary request fulfilled the requirements of Article 123(2) EPC was above all that a basis was provided for its wording in the application as originally filed, so that the aspect raised by the appellant was not decisive for the Opposition Division's decision in that respect.
Similarly, the ground for deciding that the application as originally filled fulfilled the requirement of Article 83 EPC was above all that it contained sufficient technical information to enable the skilled person to carry out the claimed process, so that it again appears that the point raised by the appellant was not a decisive one.

Under these circumstances it does not therefore appear to be equitable to reimburse the appeal fee (Rule 67 EPC).

Order

For these Reasons it is decided that:

1. The decision under appeal is set aside.

2. The request for reimbursement of the appeal fee is refused.

3. The case is remitted to the first instance for further prosecution.

The Registrar: The Chairman:

A. Townend U. Oswald