

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 15 September 2020**

Case Number: T 0358/16 - 3.3.09

Application Number: 06713923.8

Publication Number: 1848758

IPC: C08J3/12, A61L15/60, B01J20/26,
C08J3/24, B01J20/28, B01J20/30

Language of the proceedings: EN

Title of invention:

WATER ABSORBING AGENT, WATER ABSORBING ARTICLE AND METHOD FOR
PRODUCTION OF WATER ABSORBING AGENT

Patent Proprietor:

NIPPON SHOKUBAI CO., LTD.

Opponents:

Kimberly-Clark Worldwide, Inc.
Evonik Operations GmbH

Headword:

Water absorbing agent/NIPPON SHOKUBAI

Relevant legal provisions:

EPC Art. 100 (a), 100 (b), 54, 56, 123 (2)

Keyword:

Inventive step - main request (no) - auxiliary request 1 (no)
auxiliary request 2 - allowable (yes)

Decisions cited:

T 0019/90, T 0182/89

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0358/16 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 15 September 2020

Appellant: Evonik Operations GmbH
(Opponent 2) 45116 Essen (DE)

Respondent: NIPPON SHOKUBAI CO., LTD.
(Patent Proprietor) 1-1, Koraibashi 4-chome
Chuo-ku
Osaka-shi, Osaka 541-0043 (JP)

Representative: Glawe, Delfs, Moll
Partnerschaft mbB von
Patent- und Rechtsanwälten
Postfach 13 03 91
20103 Hamburg (DE)

Party as of right: Kimberly-Clark Worldwide, Inc.
(Opponent 1) 2300 Winchester Road
Neenah WI 54956 (US)

Representative: Dehns
St. Bride's House
10 Salisbury Square
London EC4Y 8JD (GB)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
15 December 2015 concerning maintenance of the
European Patent No. 1848758 in amended form.**

Composition of the Board:

Chairman A. Haderlein
Members: M. Ansorge
 D. Rogers

Summary of Facts and Submissions

I. The appeal was filed by opponent 2 (appellant) against the interlocutory decision of the opposition division finding that, on the basis of auxiliary request 1 filed during the oral proceedings before the opposition division, the patent in suit (hereinafter "the patent") met the requirements of the EPC.

II. Oppositions had been filed by opponents 1 and 2. With their notices of opposition, both opponents had requested revocation of the patent in its entirety on the grounds for opposition under Article 100(a) EPC (lack of novelty and lack of inventive step) and Article 100(b) EPC. Opponent 2, furthermore, had invoked Article 100(c) EPC as a ground for opposition.

III. In the present decision, reference is made to the following documents:

D1: EP 1 426 402 A2
D3: US 5,229,488
D8: WO 2004/099265 A1
D12: EP 0 441 975 A1

IV. Independent claim 1 as held allowable by the opposition division (i.e. claim 1 of auxiliary request 1 filed during the oral proceedings before the opposition division) reads as follows:

"A particulate water absorbing agent comprising a water absorbent resin as a principal component, wherein the absorbent resin has a cross-linked structure including a constitutional unit derived from an unsaturated carboxylic acid and/or a salt thereof and is obtained

by a surface crosslinking treatment around the surface thereof with a surface crosslinking agent, said water absorbing agent comprising particles having a particle size of 300 to 850 μm and particles having a particle size of smaller than 300 μm , wherein the amount of residual monomer is not lower than 0 but not higher than 500 ppm, and residual monomer index (RMI) calculated by the following formula (1):

$$\text{RMI} = \left| \text{RM}_1 - \text{RM}_2 \right| / \text{RM}_A$$

wherein, RM_1 represents the amount of residual monomer of the water absorbing agent having a particle size of smaller than 300 μm among the particles constituting the water absorbing agent; RM_2 represents the amount of residual monomer of the water absorbing agent having a particle size of 300 to 850 μm among the particles constituting the water absorbing agent; and RM_A represents the amount of residual monomer of the water absorbing agent, is not greater than 0.30."

Independent claim 12 as held allowable by the opposition division (i.e. claim 12 of auxiliary request 1 filed during the oral proceedings before the opposition division) reads as follows:

"A method for the production of a water absorbing agent which comprises:

a first step of obtaining a hydrogel polymer by polymerizing an aqueous solution of a monomer including an unsaturated carboxylic acid and/or a salt thereof in the presence of a crosslinking agent;

a second step of obtaining a water absorbent resin precursor which is in powder form and includes particles having a particle size of 300 to 850 μm and particles having a particle size of smaller than 300 μm as main components by drying said hydrogel polymer followed by pulverization and classification to adjust the particle size distribution,

a third step of obtaining a water absorbent resin by heating a mixture of said water absorbent resin precursor and a surface crosslinking agent, which can form an ester bond around the surface of said water absorbent resin precursor,

a fourth step of adding by spraying an aqueous solution that includes a sulfur-containing reducing agent to said water absorbent resin, and

a fifth step of subjecting the mixture of the water absorbent resin and said aqueous solution to a heat treatment under an airflow of not lower than 40°C but not higher than 120°C such that the moisture content, which is specified by dividing the weight loss after drying yielded through heating at 180°C for 3 hrs by the weight before the drying, is not lower than 1 % by weight but not higher than 15 % by weight."

- V. The opposition division decided, *inter alia*, that the subject-matter claimed in auxiliary request 1 filed during the oral proceedings before the opposition division was sufficiently disclosed to be carried out by a skilled person and was novel in view of D8 and D12. In addition, it held that the subject-matter of claim 1 involved an inventive step in view of D1 or D8 as the closest prior art, and the subject-matter of

claim 12 involved an inventive step in view of D3 (a family member of D12) as the closest prior art.

- VI. In its statement setting out the grounds of appeal, the appellant requested that the decision be set aside and the patent be revoked in its entirety.
- VII. With its reply to the statement setting out the grounds of appeal, the patent proprietor (respondent) requested that the appeal be dismissed (main request) or, alternatively, that the patent be maintained on the basis of one of auxiliary requests 1 to 15, all filed with this reply.
- VIII. In preparation for the oral proceedings, the board issued a communication indicating its preliminary opinion.
- IX. In a response to the board's communication, both opponent 1 and the appellant announced that they would not attend the oral proceedings.
- X. On 15 September 2020 oral proceedings took place before the board in the presence of the representative of the respondent.
- XI. The content of the respondent's claim requests, in so far as relevant for the present decision, is as follows.

The claims of the main request are identical to the claims held allowable by the opposition division. For the wording of independent claims 1 and 12 of the main request, see point IV above.

Claim 1 of auxiliary request 1 is identical to claim 1 of the main request. Claim 12 of auxiliary request 1 differs from claim 12 of the main request in that in the feature "such that the moisture content, which is specified by dividing the weight loss after drying yielded through heating at 180°C for 3 hrs by the weight before the drying, is not lower than 1 % by weight but not higher than 15 % by weight", the moisture content is restricted to not lower than **2** % by weight but not higher than **12** % by weight (emphasis added).

Claim 1 of auxiliary request 2 is identical to claim 1 of the main request. Claim 12 of auxiliary request 2 differs from claim 12 of auxiliary request 1 in that the feature "such that the moisture content, which is specified by dividing the weight loss after drying yielded through heating at 180°C for 3 hrs by the weight before the drying, is not lower than 2 % by weight but not higher than 12 % by weight" is deleted, and the feature "wherein the content of the particles of smaller than 150 µm is controlled to be 0 to 5 % by weight" is added at the end of the second step.

XII. The appellant's arguments can be summarised as follows:

- The invention is not disclosed in a manner sufficiently clear and complete for it to be carried out by a skilled person.
- The subject-matter of claim 1 of the main request lacks novelty in view of D8 and D12, and the subject-matter of claim 12 of the main request lacks novelty in view of D12.

- The subject-matter of claims 1 and 12 of the main request does not involve an inventive step in view of D12 as the closest prior art.

XIII. The respondent's arguments can be summarised as follows:

- The invention is disclosed in a manner sufficiently clear and complete for it to be carried out by a skilled person.
- The subject-matter of claims 1 and 12 of the main request is novel in view of D8 and D12, and the subject-matter of claims 1 and 12 of the main request involves an inventive step in view of D12 as the closest prior art.
- The subject-matter claimed in auxiliary requests 1 and 2 is novel and inventive in view of the novelty and inventive-step objections submitted by the appellant.

XIV. Requests

The appellant and the respondent maintained their initial requests (see points VI and VII above).

Reasons for the Decision

MAIN REQUEST

1. Sufficiency of disclosure

1.1 The appellant contested that the product according to claim 1 and the method according to claim 12 of the main request can be carried out by a skilled person. In

particular, it argued that the patent does not contain sufficient guidance concerning those measures necessary to achieve a particulate water absorbing agent having a residual monomer index (RMI) of not greater than 0.30 as required by claim 1. In the appellant's view it is an undue burden to produce absorbing particles fulfilling the RMI requirement of claim 1. It submitted that using sodium hydrogen sulfite as the reducing agent, adding the aqueous solution by spraying and a uniform distribution of the reducing agent on the surface of the particles, as applied in examples 1 to 6 of the patent, are essential measures to achieve the RMI; however, these were absent from the independent claims. Regarding claim 12, the appellant argued that it is mandatory to use sodium hydrogen sulfite as the sulfur-containing reducing agent, and it alleged that other appropriate sulfur-containing reducing agents leading to a reduction of the residual monomer content could only be found by trial and error experiments.

1.2 A successful objection of lack of sufficiency of disclosure presupposes that there are serious doubts, substantiated by verifiable facts (see e.g. T 19/90, Reasons 3.3). In order to establish insufficiency of disclosure in *inter partes* proceedings, the burden of proof is upon the opponent to establish, on the balance of probabilities, that a skilled person reading the patent, using his common general knowledge, would be unable to carry out the invention (see T 182/89, Reasons 2).

1.3 In the present case, no verifiable facts were submitted by the appellant to support serious doubts that a skilled person could produce the claimed particulate water absorbing agent having the required RMI. The appellant even implicitly acknowledged that examples 1

to 6 show how to obtain absorbing particles having the required RMI. Furthermore, none of the appellant's evidence supported that there might be a problem when trying to generalise these examples of the patent.

- 1.4 In addition, it is noted that the general part of the patent provides guidance concerning measures which are necessary to achieve the required RMI parameter. As can be taken from paragraph [0111] of the patent, for regulating the residual monomer index of the present invention to fall within the particular range, it is important to strictly control the particle size distribution, i.e. weight ratio of particles having a particle size of 300 to 850 μm to particles having a particle size of smaller than 300 μm , and the amount of fine particles having a particle size of smaller than 150 μm .

A skilled person learns from the latter passage of the patent that among other things controlling the weight ratio of particles having a particle size of 300 to 850 μm to particles having a particle size of smaller than 300 μm and the amount of fine particles having a particle size of smaller than 150 μm is crucial to obtain the required RMI. However, as can be derived from, for instance, a comparison of example 1 with comparative example 1 of the patent, strictly controlling the particle size distribution - without adding a reducing agent as in comparative example 1 - is not sufficient to lead to the required RMI. To achieve the required RMI, the addition of an aqueous solution containing the reducing agent by spraying seems to be furthermore necessary. Exactly this is not only realised in example 1, but also in examples 2 to 6 of the patent, all of which clearly illustrate ways to produce particles having the required RMI.

In view of the above, the patent provides sufficient guidance concerning measures which are necessary to take in order to produce particles having the required RMI.

- 1.5 With respect to the question of sufficiency of disclosure of method claim 12, it is noted that the RMI parameter is not a feature of this claim. Thus, achieving this parameter is not an essential criterion in order to enable a skilled person to carry out the claimed method.

In this context, it is further noted that, in its attack against claim 12, the appellant implicitly acknowledged that using sodium hydrogen sulfite as the reducing agent leads to a desired reduction of the residual monomer content. The allegation that a skilled person could only find other appropriate reducing agents by trial-and-error experimentation is not supplemented by any verifiable facts and is therefore unsubstantiated.

Thus, the invention is disclosed in a manner sufficiently clear and complete for it to be carried out by a skilled person. This conclusion does not only apply to the product of claim 1 and the method of claim 12 of the main request, but equally to the independent product claim and independent method claim of auxiliary requests 1 and 2.

2. Novelty

2.1 Product claim

The appellant contested the novelty of the subject-matter of claim 1 of the main request in view of D8 and D12.

- 2.1.1 There was agreement among the parties that D8 discloses a particulate water absorbing agent comprising a water absorbent resin as a principal component, wherein the absorbent resin has a cross-linked structure including a constitutional unit derived from an unsaturated carboxylic acid and/or a salt thereof and is obtained by a surface crosslinking treatment around the surface thereof with a surface crosslinking agent, said water absorbing agent comprising particles having a particle size of 300 to 850 μm and particles having a particle size of smaller than 300 μm , wherein the amount of residual monomer is not lower than 0 but not higher than 500 ppm. The only contentious point was whether the parametric feature of claim 1, "RMI ... is not greater than 0.30", is implicitly fulfilled in D8 or not.

According to the appellant, D8 disclosed an RM_A value of 0 which, according to paragraph [0013] of the patent, led to an RMI of 0 and thus fulfilled the parametric feature mentioned above.

However, D8 does not disclose a specific example in which the residual monomer content of the particles was measured. In a text passage belonging to the examples (see page 34, line 28 to page 35, line 3 of D8), it is merely indicated that the residual monomer content of the particles is not higher than 400 ppm. Neither the

general part nor the examples of D8 disclose any particular step of reducing the residual monomer content. Under these circumstances, it cannot be acknowledged that the disclosure of the ranges for the residual monomer content of 0 to 1000 ppm, preferably 0 to 500 ppm and more preferably 0 to 400 ppm, on page 31, lines 8 to 11 of D8, unambiguously discloses the lower limit of 0 ppm. Instead, the board shares the respondent's view that reaching exactly the lower limit of 0 ppm is technically not possible, since traces of residual monomer are always present. Put differently, D8 does not contain an enabling disclosure for an RM_A value of 0 which, according to paragraph [0013] of the patent, would amount to an RMI falling within the claimed range. Moreover, D8 is completely silent with respect to the amount of residual monomer in different particle size fractions, so D8 does not unambiguously disclose an RMI of not greater than 0.30.

Thus, the particulate water absorbing agent of claim 1 is novel in view of D8. The same applies to the dependent claims 2 to 10 and the absorbing article of claim 11, comprising the water absorbing agent of any one of claims 1 to 10.

- 2.1.2 Although the examples of D12, e.g. example 5, disclose an absorbent resin powder having a particle size of below 850 μm which was mixed with an aqueous liquid containing sodium hydrogen sulfite to reduce the residual monomer content, there is no evidence on file that an RMI of not greater than 0.30 is implicitly disclosed for the particles of these examples.

The appellant's opinion that in the examples of D12 the same method as in the patent is applied, thus implicitly leading to an RMI of not greater than 0.30,

cannot be accepted. Firstly, no addition of the aqueous solution by spraying is applied in the examples of D12. Secondly, there is no control of the particle size distribution as done in the examples of the patent, including the reduction of the amount of fine particles having a particle size of smaller than 150 μm . D12 is completely silent with respect to the residual monomer content in different particle size fractions. Accordingly, it cannot be acknowledged that the examples of D12 implicitly disclose the required RMI.

Thus, the particulate water absorbing agent of claim 1 of the main request is novel in view of D12. The same applies to the dependent claims 2 to 10 and the absorbing article of claim 11, comprising the water absorbing agent of any one of claims 1 to 10.

2.2 Method claim

The appellant contested the novelty of the subject-matter of claim 12 in view of D12 and argued that this process is already known from page 8, lines 8 to 55, in combination with page 9, Table 1, i.e. the examples of D12. In addition, it argued that starting from an example such as example 5 of D12, only a single selection of a feature, i.e. spraying disclosed on page 7 of D12, is necessary to arrive at the claimed process.

In the board's view, the examples of D12 alone cannot be novelty-destroying for the subject-matter of claim 12, since no step of adding by spraying an aqueous solution including a sulfur-containing reducing agent to the water absorbing resin is disclosed in these examples. A step of spraying droplets of the aqueous liquid onto the falling resin powder is

disclosed on page 7, lines 17 to 20 of D12. However, combining the disclosure of a specific example of D12, such as example 5, with the disclosure of a general part of the description on page 7 is not admissible in the assessment of novelty. For this reason, the claimed process is novel in view of D12.

In this context, the respondent also argued that D12 does not disclose the features relating to the particle size of the water absorbent resin precursor according to the second step in claim 12.

For the following reasons, the board does not share this view.

In the examples of D12 a 20-mesh metallic gauze (corresponding to a mesh size of 841 μm) is used in a sieving step (see page 8, lines 14 and 15, 26, 38 and 49), which implicitly leads to a water absorbent resin powder including particles having a particle size of 300 to 850 μm and particles having a particle size of smaller than 300 μm as main components. Thus, the particle size requirement of the second step in claim 12 is also fulfilled, for example in example 5 of D12. The respondent did not argue that there might be further differences between the claimed process and the process disclosed in D12.

Thus, the subject-matter of claim 12 of the main request is novel in view of D12. The same applies to the dependent claims 13 and 14.

3. Inventive step

3.1 Product claim

3.1.1 An inventive-step objection was raised by the appellant against independent claim 1 of the main request in view of D12, taken alone. Additionally, the appellant mentioned that D1 or D8 (used as the closest prior art in the proceedings before the opposition division) might also be a promising starting point in the inventive-step discussion, however without providing any line of argument in this respect. The appellant did not give any reason explaining why the opposition division could have incorrectly assessed the question of inventive step in view of D1 or D8. Thus, only the inventive-step attack starting from D12 as the closest prior art, taken alone, is assessed hereinafter.

3.1.2 D12 discloses an absorbent resin obtained by adding, to 100 parts by weight of an absorbent resin powder, an aqueous liquid containing 7 to 100 parts by weight of water and a reducing substance in the presence of 0.01 to 5 parts by weight of at least one additive selected from the group consisting of water-insoluble fine powders and surfactants (see claim 1 of D12). As can be taken from examples 1 to 13 of D12, particles having a residual monomer content in the claimed range are obtained.

3.1.3 As explained under point 2.1.2 above, the subject-matter of claim 1 of the main request differs from D12 in that the RMI is not greater than 0.30.

3.1.4 In the patent no improvement (improved odour or sanitary aspects) which would result from this difference in view of D12 was shown. In this context,

the respondent argued that the claimed product achieves a low variance in the amount of residual monomer in different particle size fractions and the reduction of RMI being a technical improvement in itself. In the board's view, this low variance is nothing other than what the RMI of not greater than 0.30 reflects. However, no effect beyond the low variance in the residual monomer content of different particle size fractions (which represents the difference in view of D12) was shown. Thus, the objective technical problem to be solved is seen in the provision of an alternative particulate water absorbing agent.

3.1.5 In this context, the appellant mentioned - without any explanation - that the requirement of the RMI parameter being not greater than 0.30 cannot render the claimed product inventive. It referred to the RMI parameter as arbitrary and as an "invented parameter", but failed to give any plausible explanation as to how a skilled person starting from D12 might come to the claimed product in an obvious manner.

3.1.6 As correctly pointed out by the respondent, D12 does not suggest anything relating to the variance of the amount of residual monomer among ranges of particle size distribution of the water absorbing agent.

3.1.7 Turning now to the patent, it can be taken from paragraph [0111] that for regulating the RMI to fall within the claimed range, it is important to strictly control the particle size distribution, i.e. weight ratio of particles having a particle size of 300 to 850 μm to particles having a particle size of smaller than 300 μm , and the amount of fine particles having a particle size of smaller than 150 μm . Moreover, it can be learned from a comparison of example 1 with

comparative example 1 of the patent that merely strictly controlling the particle size distribution is not sufficient to lead to the required RMI, but the addition of an aqueous solution containing a sulfur-containing reducing agent by spraying seems to be necessary to achieve the required RMI as well.

Although claim 1 of the main request defines neither a specific particle size distribution nor a feature directed to the addition of an aqueous solution containing a sulfur-containing reducing agent by spraying, the RMI parameter itself implies certain restrictions on the claimed product. As can be taken from examples 1 to 6 of the patent, the RMI of not greater than 0.30 is achieved by controlling the weight ratio of particles having a particle size of 300 to 850 μm to particles having a particle size of smaller than 300 μm , and the amount of fine particles having a particle size of smaller than 150 μm , and by adding an aqueous solution containing the sulfur-containing reducing agent by spraying.

Turning again to D12, there is no teaching in this document corresponding to the aforementioned teaching contained in the patent, i.e. that strictly controlling the weight ratio of different particle size fractions and the amount of fine particles might be envisaged. The appellant did not argue that this measure might be obvious in view of one of the cited documents or common general knowledge. In addition, no plausible explanation was given by the appellant concerning those measures which achieve the required RMI.

In light of the above, the board concludes that the particulate water absorbing agent of claim 1 involves an inventive step in view of D12. The same applies to

the dependent claims 2 to 10 as well as the absorbing article according to claim 11, comprising the water absorbing agent of any one of claims 1 to 10.

3.2 Method claim

3.2.1 The appellant argued that the subject-matter of claim 12 does not involve an inventive step in view of D12. D12 relates to the same technical field as the patent and mentions a similar technical problem. Thus, the board considers D12 as the appropriate closest prior art for assessing inventive step of the main process claim. This was not contested by the respondent. More specifically, example 5 of D12 (as used by the appellant in its novelty attack against claim 12) is considered as disclosing the closest prior art.

3.2.2 For the reasons as outlined under point 2.2 above, the method according to claim 12 differs from the method according to example 5 of D12 in that in the fourth step the aqueous solution is added by spraying, whereas in example 5 of D12 the aqueous liquid was mixed with the absorbent resin powder.

3.2.3 The respondent alleged that the technical effect resulting from this difference is a reduced RMI, which represents a lower variance in the amount of residual monomer in different particle size fractions of the water absorbing agent. In this context, reference was made to paragraphs [0083] and [0087] of the patent as support.

3.2.4 In the absence of a comparative test, the board is unable to see that simply spraying, instead of mixing, leads to a reduced RMI over the whole scope of the main

method claim. Neither paragraphs [0083] and [0087] of the patent nor the examples of the patent support the respondent's line of argument in this respect. As outlined under section 3.1.7, above, the examples of the patent elucidate that for achieving an RMI of not greater than 0.30 not only adding by spraying is crucial, but additionally the strict control of the particle size distribution, which, however, is not specifically limited in claim 12.

In view of the above, no technical effect resulting from the sole difference in view of D12, i.e. spraying instead of simply mixing, can be acknowledged. Thus, the objective technical problem is the provision of an alternative method for producing a water absorbing agent.

- 3.2.5 As can be taken from page 7, lines 17 to 20 of D12, spraying droplets of the aqueous liquid onto the falling resin powder is also possible in D12, instead of mixing the absorbent resin powder with an aqueous solution of the reducing agent as, for instance, applied in the examples, such as example 5. As a consequence, D12 itself teaches the distinguishing feature as an alternative to the step of mixing both components together. A skilled person having knowledge of D12 would contemplate the addition of an aqueous solution including a reducing agent to the water absorbing resin by spraying as a suitable measure to solve the objective technical problem.

Thus, the method of claim 12 of the main request does not involve an inventive step in view of D12.

AUXILIARY REQUEST 1

4. Claim 1 of auxiliary request 1 corresponds to claim 1 of the main request. Claim 12 of auxiliary request 1 differs from claim 12 of the main request in that the moisture content in the fifth step is restricted to 2 to 12 % by weight.

5. Inventive step

For the reasons as outlined above for claim 12 of the main request, the subject-matter of claim 12 of auxiliary request 1 does not involve an inventive step in view of D12. The respondent did not argue that reducing the range of the moisture content to 2 to 12 % by weight in claim 12 of auxiliary request 1 instead of the slightly broader range of 1 to 15 % by weight as defined in claim 12 of the main request might lead to a different assessment of inventive step in view of D12.

In this context, it is noted that D12 discloses on page 4, lines 44 and 45, a water content of the absorbent resin powder of not more than 15 % by weight which overlaps with the range claimed in claim 12. It is obvious for a skilled person to contemplate, from D12 alone, the slightly narrower range of 2 to 12 % by weight.

Thus, the method of claim 12 of auxiliary request 1 does not involve an inventive step in view of D12 either.

AUXILIARY REQUEST 2

6. Claim 1 of auxiliary request 2 corresponds to claim 1 of the main request. Claim 12 of auxiliary request 2

differs from claim 12 of auxiliary request 1 in that the feature "such that the moisture content, which is specified by dividing the weight loss after drying yielded through heating at 180°C for 3 hrs by the weight before the drying, is not lower than 2 % by weight but not higher than 12 % by weight" is deleted, and the feature "wherein the content of the particles of smaller than 150 µm is controlled to be 0 to 5 % by weight" is added at the end of the second step.

7. Article 123(2) EPC

The subject-matter of claim 12 of auxiliary request 2 meets the requirement of Article 123(2) EPC. Claim 12 is based on claim 13 and page 24, lines 2 to 6 of the application as filed.

8. Novelty

For the same reasons as given for claims 1 to 11 of the main request, the subject-matter of claims 1 to 11 of auxiliary request 2 is novel in view of D8 and D12.

Novelty of the subject-matter of claims 12, 13 and 14 of auxiliary request 2 was not contested by the appellant. Moreover, the subject-matter of these claims is already novel for the same reasons as given for claim 12 of the main request. In addition, D12 does not unambiguously disclose the feature "wherein the content of the particles of smaller than 150 µm is controlled to be 0 to 5 % by weight" added to claim 12 of auxiliary request 2.

9. Inventive step

9.1 The subject-matter of claims 1 to 11 of auxiliary request 2 is considered to involve an inventive step for the same reasons as given for claims 1 to 11 of the main request.

9.2 The appellant did not raise an inventive-step objection against claim 12 of auxiliary request 2 and deliberately decided not to attend the oral proceedings. As a rule in *inter partes* proceedings, a decision shall be taken on the basis of the issues in dispute. Since inventive step of the independent method claim 12 was not in dispute and this claim is restricted further (see items 6 to 8 above), the board sees no reason to examine the question of inventive step of this claim on its own motion.

In the absence of any inventive-step attack against the independent method claim of auxiliary request 2, the board concludes that the subject-matter of claim 12 of auxiliary request 2 complies with the requirement of inventive step. The same applies to the dependent claims 13 and 14.

10. Thus, auxiliary request 2 is considered to be allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:

Description:

Pages 2, 3, 5, 6, 8 to 15 and 17 to 34 of the patent specification;

Pages 4 and 16 of the patent specification as amended and filed at the oral proceedings before the opposition division on 20 October 2015;

Page 7 of the patent specification as amended and filed before the Board of Appeal at the oral proceedings on 15 September 2020.

Claims:

Nos. 1 to 14 of Auxiliary Request 2, filed under cover of the reply to the appeal dated 9 September 2016.

The Registrar:

The Chairman:



A. Nielsen-Hannerup

A. Haderlein

Decision electronically authenticated