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**Datasheet for the decision
of 6 March 2023**

Case Number: T 1995/20 - 3.3.03

Application Number: 13700209.3

Publication Number: 2807201

IPC: C08G18/10, C08G18/48,
C08G18/76, C08L97/02, B27N3/00

Language of the proceedings: EN

Title of invention:
WOOD ADHESIVE FORMULATION

Patent Proprietor:
Huntsman International LLC

Opponent:
Akzo Nobel Coatings International B.V.

Relevant legal provisions:
EPC Art. 123(2)
RPBA 2020 Art. 12(4)

Keyword:
Amendments - Main request - allowable (no)
Admittance - Auxiliary requests 5 and 6 (no)



Beschwerdekammern

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Case Number: T 1995/20 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 6 March 2023

Appellant: Akzo Nobel Coatings International B.V.
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Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
4 November 2020 concerning maintenance of the
European Patent No. 2807201 in amended form.

Composition of the Board:

Chairman O. Dury
Members: D. Marquis
R. Cramer

Summary of Facts and Submissions

I. The appeal lies against the decision of the opposition division concerning maintenance of European patent No. 2 807 201 in amended form on the basis of the claims of auxiliary request 2 filed with letter of 9 July 2020 and an adapted description.

II. Claims 1 and 3 of the application as filed read:

"1. A formulation comprising:

- a first component which is formed from at least one isocyanate and at least one polyether, wherein said polyether comprises at least one ethylene oxide moiety and at least one isocyanate-reactive group selected from the group comprising hydroxyl, amino, epoxy, and thiol; and
- a second component comprising at least one amino resin, wherein said amino resin is the condensation product of an aldehyde with a compound selected from the group comprising urea, melamine, benzoguanamine, glycoluril, acetoguanamine and mixtures thereof."

"3. The formulation according to claim 1 or 2, wherein the formulation has an ethylene oxide content of at least 1 % by weight based on 100% by weight of the at least one isocyanate and the at least one polyether combined."

III. Claim 1 of auxiliary request 2 as allowed by the opposition division read as follows:

"1. A formulation comprising:

- a first component which is formed from at least one polyisocyanate and at least one polyether, wherein said

polyether contains at least 15 % by weight ethylene oxide groups and at least one isocyanate reactive group selected from the group comprising hydroxyl, amino, epoxy, and thiol, wherein said first component still contains reactive isocyanate groups; and
- a second component comprising at least one amino resin, wherein said amino resin is the condensation product of an aldehyde with a compound selected from the group comprising urea, melamine, benzoguanamine, glycoluril, acetoguanamine and mixtures thereof, wherein the formulation has an ethylene oxide content of at least 3 % by weight based on 100% by weight of the at least one polyisocyanate and the at least one polyether combined".

IV. The following documents were *inter alia* cited in opposition:

D4: English translation of JPS 58-157876

V. The opposition division found in the decision under appeal that claims 1 and 5 of the main request had a basis in the application as filed. Claims 1 of the main request and of auxiliary request 1 lacked novelty over D4. Claims 1 and 5 of auxiliary request 2 found a basis in the application as filed. Novelty of claim 1 of auxiliary request 2 was not disputed. Claim 1 of auxiliary request 2 was inventive over D4 as the document representing the closest prior art.

VI. The opponent (appellant) lodged an appeal against the decision of the opposition division.

VII. The patent proprietor (respondent) filed auxiliary requests 5 and 6 with their reply to the statement of

grounds of appeal.

- VIII. The parties were summoned to oral proceedings to be held on 10 March 2023 and a communication pursuant to Article 15(1) RPBA 2020 indicating specific issues to be discussed at the oral proceedings was sent to the parties.
- IX. The respondent announced by letter of 17 February 2023 that they would not attend the oral proceedings and by letter of 23 February 2023 that they withdrew their request for oral proceedings.
- X. The oral proceedings were subsequently cancelled as the Board was in a position to decide on the appeal without holding oral proceedings.
- XI. Requests
- (a) The appellant requested in writing that the decision under appeal be set aside and that the patent be revoked.
- (b) The respondent requested in writing that the appeal be dismissed (main request) or, alternatively, that the patent be maintained in amended form on the basis of one of auxiliary requests 5 or 6 filed with the reply to the statement setting out the grounds of appeal.

Claim 1 of auxiliary request 5 differed from claim 1 of the main request in that the polyether forming the first component of the formulation was "present in an amount ranging from 0.3 to 25 % by weight, based on 100 % by weight of the formulation".

Claim 1 of auxiliary request 6 corresponded to claim 1 of auxiliary request 5 with the addition that "the at least one polyether comprises the reaction product obtained by the polymerization of ethylene oxide or the reaction product obtained by the copolymerisation of ethylene oxide with at least one other cyclic oxide, for example propylene oxide, in the presence of at least one polyfunctional initiator selected from the group comprising ethylene glycol, propylene glycol, diethylene glycol, dipropylene glycol, cyclohexane dimethanol, resorcinol, bisphenol A, glycerol, trimethylolopropane, 1,2,6-hexantriol, pentaerythritol and mixtures thereof".

XII. The appellant's arguments, in so far as they are pertinent for the present decision, were that claim 1 of the main request did not find a basis in the application as filed. Auxiliary requests 5 and 6 should not be admitted into the proceedings. Also, claims 1 of auxiliary requests 5 and 6 did not find a basis in the application as filed.

XIII. The respondent's arguments, in so far as they are pertinent for the present decision, were that claim 1 of the main request and of auxiliary requests 5 and 6 had a basis in the application as filed.

Reasons for the Decision

Main request (auxiliary request 2 as maintained in the decision under appeal)

1. Amendments

1.1 Claim 3 of the application as filed was cited as a basis by the respondent for claim 1 of the main request (section 2 of the reply to the statement of grounds of appeal). Compared with claim 3 of the application as filed, claim 1 of the main request was amended in three respects:

i) "isocyanate" was replaced by "polyisocyanate" in the definition of the first component but also in the definition of the ethylene oxide content of "at least 3 % by weight based on 100 % by weight of the at least one polyisocyanate and the at least one polyether combined",

ii) the addition of "wherein said first component still contains reactive isocyanate groups",

iii) "comprises at least one ethylene oxide moiety" was replaced by "contains at least 15 % by weight ethylene oxide groups".

1.2 The opposition division concluded in section 2.1.2 relating to the main request in the decision under appeal and in section 4.3.2 relating to auxiliary request 2, that the requirements of Article 123(2) EPC were met by claim 1 of auxiliary request 2 (now the main request in appeal). The appellant contested that conclusion.

1.3 Claim 3 as filed limits the ethylene oxide content in the formulation and contains the features of claim 1 as filed from which it depends, in particular the open wording of that claim "A formulation comprising" and the definition of the first and second components of the formulation. Starting from claim 3 as filed, the three amendments i)-iii) defined under 1.1 above have

nevertheless to be made to arrive at claim 1 of the main request. The question that had to be answered was whether these amendments as well as their combination with one another in claim 1 of the main request found a basis in the application as filed.

- 1.4 Amendment i) corresponds to the limitation of "isocyanate" in claims 1 and 3 as filed by "polyisocyanate" as disclosed on page 6 of the application as filed. The appellant raised an objection of lack of basis for that amendment in their statement of grounds of appeal (paragraphs 5 and 6, page 2) which was also dealt with in the preliminary opinion of the Board (section 7.5). The objection was not addressed by the respondent in appeal, in particular not in reaction to the indication in the Board's communication that that objection appeared relevant.
- 1.5 In particular, in claim 3 as filed "wherein the formulation has an ethylene oxide content of at least 1 % by weight based on 100% by weight of the at least one isocyanate and the at least one polyether combined" the ethylene oxide content was originally calculated by reference to any isocyanate that could be present in the formulation. The amendment of "isocyanate" in "polyisocyanate" in that sentence means that in claim 1 of the main request the ethylene oxide content of the formulation is to be determined by reference to polyisocyanates only, thereby excluding from the calculation any possible monoisocyanate encompassed by the open wording of operative claim 1 ("A formulation comprising"). That amendment does not find a basis in the claims as filed.
- 1.6 The ethylene oxide content of the formulations of the application as filed is defined in the description on

page 11, lines 9-19. That passage discloses several ranges of ethylene oxide content, the range of "at least 1% by weight" found in claim 3 as filed but also the range of "at least 3% by weight" that is part of claim 1 of the main request. These ranges however are unambiguously defined by reference to "100% by weight of the at least one isocyanate and the at least one polyether combined". There is no basis for the definition of the ethylene oxide content of the formulation by reference to "polyisocyanates" in the application as filed.

- 1.7 It follows that even after limitation of the numerical range of ethylene oxide content to "at least 3% by weight", the definition of that content by reference to "polyisocyanate" instead of "isocyanate" results in an extension of subject matter in claim 3 as filed for which there is no basis in the whole of the application as filed. On that basis only the Board comes to the conclusion that claim 1 of the main request does not meet the requirements of Article 123(2) EPC.
- 1.8 Claim 1 of the main request also results from the combination of two further selections, amendment ii) adding "wherein said first component still contains reactive isocyanate groups" and amendment iii) the selection within the amount of ethylene oxide on the polyether of "at least 15% by weight" which find individual basis in the application as filed (amendment ii) on page 11, lines 20-24 and amendment iii) on page 9, lines 22-23).
- 1.8.1 The first selection (amendment ii)) concerns the presence of reactive isocyanate groups on the first component when the isocyanate (in the case of claim 1 of the main request, the polyisocyanate) is used in an

excess molar ratio compared to the isocyanate-reactive groups on the polyether (page 11, lines 20-24 of the application as filed). The sentence on page 11, line 21 indicates that the isocyanate is "generally" used in an excess molar ratio, resulting in reactive isocyanate groups on the first component, but the wording chosen does not exclude situations in which the isocyanate is not used in an excess ratio. It follows that amendment ii) is a selection that has to be made within the application as filed.

1.8.2 The second selection (amendment iii)) concerns the limitation of the amount in ethylene oxide on the polyether to "at least 15% by weight ethylene oxide groups" which is a choice, albeit preferred, that the skilled person can make in the disclosure of page 9, lines 21-25. That amendment iii) is also a separate selection that has to be performed in the application as filed in order to arrive at claim 1 of the main request.

1.8.3 There is however nothing in the application as filed that leads the skilled reader to the specific combination of features i), ii) and iii) present in claim 1 of the main request. The example section and in particular example 3 of the application as filed was cited as a basis for the amendments made. The examples of the application as filed however constitute a very limited and specific disclosure compared to the subject matter defined in claim 1 as originally filed. They as such cannot form the basis for the generalisation made in claim 1 of the main request. The combination of these features is therefore not directly and unambiguously derivable from the application as filed.

- 1.8.4 That conclusion had also been made in the communication containing the preliminary opinion of the Board on the case (sections 7.5-7.7). The respondent did not provide counter arguments in reply to that conclusion. The Board therefore does not see a reason to depart from its preliminary opinion on that point.
- 1.8.5 The Board therefore concludes that there is no direct and unambiguous basis in the application as filed for amendment i) alone, nor for the combination of amendments i), ii) and iii). Claim 1 of the main request therefore does not meet the requirements of Article 123(2) EPC.

Auxiliary requests

2. Admittance

- 2.1 The claims of auxiliary request 5 were not part of the claims submitted before the opposition division. Auxiliary request 5 is therefore not in keeping with the requirements of Article 12(2) RPBA 2020 and according to Article 12(4) RPBA 2020, auxiliary request 5 has to be seen as an amendment to the respondent's case which may be admitted only at the discretion of the Board. The discretion of the Board is among other factors based on the suitability of the amendment to address the issues raised by the appellant (Article 12(4) RPBA 2020, second paragraph). There is however in the reply to the statement setting out the grounds of appeal no reason provided for submitting auxiliary request 5 for the first time in the appeal proceedings, and also no justification/substantiation as to the suitability of the amendments made to overcome any of the objections contained in the statement of grounds of

appeal.

- 2.2 The amendments made in claim 1 of auxiliary request 5 do not concern the definition of the ethylene oxide content by reference to polyisocyanate (amendment i) addressed in respect of the main request) nor do they seem to address the lack of basis for the combination of amendments i) to iii) in the application as filed. Under these circumstances, the conclusion with regard to the lack of basis for claim 1 of the main request also applies to claim 1 of auxiliary request 5 which therefore does not meet the requirements of Article 123(2) EPC, as was put forward by the appellant (letter of 10 January 2023, pages 2 and 3).
- 2.3 In the absence of any argument showing how the amendments made in auxiliary request 5 would be relevant to the question of inventive step - which was also objected to by the appellant in their statement of grounds of appeal - and the amendments made not being self-explanatory, the submissions of the respondent (i.e. the filing of the amended claim request itself) do not suffice to place the board or the other party in a position to understand the rationale behind auxiliary request 5. Under these circumstances, the Board finds it appropriate to exercise its discretion under Article 12(4) RPBA 2020 by not admitting auxiliary request 5 into the proceedings.
- 2.4 Claim 1 of auxiliary request 6 corresponds to claim 1 of auxiliary request 5 further modified in that the polyether of the first component is defined by its preparation process. As for auxiliary request 5, the respondent did not provide a justification or substantiation for the filing of auxiliary request 6 with their reply to the statement of grounds of appeal.

The Board therefore, for the same reasons as for auxiliary request 5, finds it appropriate to exercise its discretion under Article 12(4) RPBA 2020 by not admitting auxiliary request 6 into the proceedings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



D. Hampe

O. Dury

Decision electronically authenticated