DE C I S I O N
of 4 February 2003

Case Number: T 0501/00 - 3.3.5
Application Number: 93308419.6
Publication Number: 0649823
IPC: C04B 24/26

Language of the proceedings: EN

Title of invention:
Bonding liquid dispersions

Patentee:
National Starch and Chemical Investment Holding Corporation

Opponent:
Clariant GmbH

Headword: 
-

Relevant legal provisions:
EPC Art. 83, 84

Keyword:
Amended claims: "clarity (yes): compromise between requirement for conciseness and clarity"
"sufficiency of disclosure (yes) - no undue burden"

Decisions cited: 
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Catchword: 
-
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DECISION
of the Technical Board of Appeal 3.3.5
of 4 February 2003

Appellant: Clariant GmbH
(Opponent) Patente, Marken, Lizenzen
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Representative: Ackermann, Joachim, Dr.
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Respondent: National Starch and Chemical Investment
(Proprietor of the patent) Holding Corporation
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Representative: Hagemann, Heinrich, Dr.rer.nat., Dipl.-Chem.
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Composition of the Board:
Chairman: R. K. Spangenberg
Members: A. T. Liu
J. H. Van Moer
Summary of Facts and Submissions

I. An opposition had been filed against European Patent No. 649 823 on the grounds of Articles 100(a), (b) and (c) EPC. The following documents, inter alia, were submitted during the opposition proceedings:

D11: British Standard 4071 (1966)


II. The present appeal was lodged against the interlocutory decision of the Opposition Division to maintain the patent with a set of amended claims 1 to 7.

III. Experimental data were filed by the appellant, inter alia by letter of 20 December 2002.

IV. A new set of amended claims 1 to 5 was filed by the respondent at the oral proceedings on 4 February 2003.

Claim 1 read as follows:

"A liquid dispersion for use as an adhesive to bond plaster, cement and wood, comprising

a) polyvinyl acetate which is prepared by polymerising vinyl acetate in the presence of mixed stabilizers, wherein the mixed stabilisers include a cellulose ether such as hydroxyethyl cellulose; a mixture of polyvinyl alcohol and a cellulose ether; or a mixture of a surfactant, polyvinyl alcohol and a cellulose ether,

b) polyvinyl alcohol,"
c) oxitol acetate as coalescing agent, and

d) silica,

wherein components b), c) and d) are added after polymerisation of the vinyl acetate is substantially complete, provided that the dispersion complies with British Standard 5270, that is, meets the requirements with regard to the solid content, the saponification value, the acid value, the ash value, the low-temperature film formation capability, and the bond strength as specified in this British Standard, and with British Standard 4071, that is, meets the requirements with regard to the resistance to freezing and thawing, the freedom from staining, the strength, the resistance to sustained loading, and storage as specified in this British Standard."

V. The appellant's arguments may be summarised as follows:

- Compliance with British Standards was an essential feature of the claimed composition. The experimental data showed, however, that not even the best mode of the patent in suit, represented by Dispersion D in the examples, met these Standards. The claimed invention was therefore not sufficiently disclosed.

- No further objections were raised under Article 100(a) and (c) EPC.

VI. The respondent's submissions were essentially:

- The incorporation into the claims of the criteria for fulfilling the British Standards were
sufficient for meeting the clarity objections.

- A product corresponding to a composition according to the patent in suit enjoyed a commercial success. This was an indication that the composition as claimed must satisfy all the stipulated criteria according to the indicated British Standards.

- The experimental data in the patent in suit and provided by the appellant were proof that the invention as claimed was sufficiently disclosed for it to be carried out by the skilled person.

VII. At the end of the oral proceedings, the requests were as follows:

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the decision under appeal be set aside and that the patent be maintained on the basis the set of claims submitted during the oral proceedings.

Reasons for the Decision

1. Amendments

The Board is satisfied that the amended claims do not contravene the requirements of Articles 123(2) and (3) EPC. Since the appellant has waived his objection based on Article 100(c) EPC, there is no need to deal specifically with this point.
2. **Clarity**

2.1 Claims 1 and 2 have been amended to incorporate the criteria which are specified in the British Standards D11 and D15. As is expressly acknowledged by the appellant, these amendments contribute to make the subject-matter of claim 1 clearer as to the requirements which are to be met by the claimed dispersion.

2.2 The Board has not overlooked the fact that D11 and D15 also specify limiting values, at least for some of the indicated criteria. The respondent has, however, submitted that the incorporation of all these values into the claim would make it unduly lengthy and possibly render it less clear. Indeed, it is undisputed that the quantification of the criteria is made under defined conditions, without the specification of which the indicated values would not have a validation. Under these circumstances, the Board exceptionally accepts the present wording of claim 1 and 2 as a compromise between the requirement of clarity and that of conciseness as laid down in Article 84 EPC, and to leave further details of the specifications of the British Standards in the description.

3. **Sufficiency of disclosure**

It is common ground that the subject-matter of claim 1 contains all the essential features of the best mode according to the patent in suit, namely that of dispersion D of Example 2.

3.1 By letter of 20 December 2002, the appellant has filed results of experiments which were to reproduce
dispersion D. He has thereby remarked that the patent in suit did not give details of the vinyl acetate polymerisation process and that a stable dispersion could only be obtained by slightly modifying one the parameters as disclosed in the patent in suit, namely by using 0.77% instead of 0.50% of the surfactant Perlankrol FN65™ (compare Experiment 2b, page 2 of the Experimental report "Versuchsbericht" dated 20 December 2002, with Experiment 1, corresponding to the formulation of dispersion D, Table III of the patent in suit).

The Board notes that the dispersions in question were obtained following standard polymerisation procedures. Furthermore, the appellant has submitted that slight variations within a given procedure are part of the routine for a skilled person (see letter dated 20 December 2002, page 3, paragraph B)). In summary, the appellant has been able to obtain a stable dispersion by following the teaching of the patent in suit and using general common knowledge. Even if a slight modification was necessary, the appellant has not argued that, in this case, an undue burden was required from the skilled person to put the claimed invention successfully into practice.

3.2 The appellant has expressed doubt that even dispersion D actually meets all the criteria required by the British Standards as stipulated in claim 1. The Board notes that, according to the experimental report, the claimed compositions meet the criteria which are put to test, namely that of ash residue and resistance to freezing and thawing according to D15 and D11, respectively. This was also confirmed by the appellant during the oral proceedings. The appellant has not
queried the test data obtained with dispersion D as disclosed in the patent in suit. Furthermore, the appellant has not refuted the respondent's argument that a product corresponding to the dispersion of claim 1 is on the market and therefore logically must comply with the stipulated British Standards. In view of these indications, the Board holds that the onus must be on the appellant to provide proof to the contrary, i.e. that the claimed dispersion does not meet one or more of the requirements. In the absence of test data to that effect, the Board properly has to conclude that the dispersion of claim 1 complies with the British Standards as stipulated.

3.3 As a corollary to the above, the Board finds that the objection of lack of disclosure is not substantiated.

4. Patentability

As was established at the oral proceedings, the appellant did not uphold the objection that the subject-matter of claim 1 lacks an inventive step. The Board does not see any reason to query this finding. Claim 2 is directed to a process for preparing a liquid dispersion corresponding to that of claim 1 and claims 3 to 5 are each directed to a method in which a dispersion of claim 1 is applied. By the same token, the subject-matter of these claims is also accepted as novel and involving an inventive step. The patent can thus be maintained with the present claims, after the necessary adaptation of the description.

As indicated in point 2.2 above, the specifications of the British Standards 5270 and 4071 have been introduced into the claims for reasons of clarity but
also with the requirement of conciseness in mind. As part of the adaptation of the description, the Board therefore holds that it should contain a more detailed reference to D11 and D15. It is left to the first instance to assess the content of these documents and to consider their relevance and appropriateness for incorporation into the description, so as to allow the reader to have a clear understanding of the exact specifications contained therein.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent with the following documents:

   - claims 1 to 5 submitted during the oral proceedings;
   - description and drawings to be adapted.

The Registrar:  
The Chairman:

U. Bultmann  
R. Spangenberg