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**Datasheet for the decision
of 23 May 2007**

Case Number: T 0572/05 - 3.3.01

Application Number: 00911075.0

Publication Number: 1171534

IPC: C09D 175/06

Language of the proceedings: EN

Title of invention:
Crosslinkable Coating compositions

Patentee:
DSM IP Assets B.V.

Opponents:
NUPLEX RESINS B.V.

Headword:
Crosslinkable coating composition/DSM

Relevant legal provisions:
EPC Art. 54, 84, 111(1), 102(3), 123(2)(3)

Keyword:
"Main request: clarity (no) - discrepancy between amended claim 1 and two dependent claims"
"First auxiliary request: novelty (yes) - remittal to first instance (yes) - inventive step not yet examined by the first instance"

Decisions cited:
T 0332/87, T 0279/89, T 0511/92, T 0585/92, T 0042/00,
T 0681/00, T 0131/03, T 0211/06

Catchword:
-



Case Number: T 057205-3.3.01

D E C I S I O N
of the Technical Board of Appeal 3.3.01
of 23 May 2007

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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 18 March 2005
revoking European Patent No. 1171534 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: A. Nuss
Members: P. Ranguis
J. Van Moer

Summary of Facts and Submissions

- I. The appeal lodged on 6 May 2005 lies from the decision of the Opposition Division posted on 18 March 2005 to revoke the European patent No. 1 171 534 (European patent application No. 00911075.0).
- II. Notice of opposition had been filed by Opponents 01 and 02 (now Respondents 01 and 02) requesting revocation of the patent as granted for lack of novelty or inventive step in view of documents
- (1) WO-A-00/24837, prior art under Article 54(3) and (4) EPC,
 - (2) EP-A-649 865
 - (3) Derwent Abstract of JP-A-929 6023, (1998), No. 046982 and
 - (4) US-A-5 348 997

The following documents were cited by the proprietor of the patent in the course of the opposition proceedings

- (5) Handbook Akzo Nobel Resins (February 2001), Setal 6306 SS-60 and Setal 6407 SQ-26,
- (6) Resins for automotive OEM coatings, Akzo Nobel (March 2003),
- (7) Resins for Plastic coatings, Akzo Nobel (March 2003).

At the oral proceedings before the Opposition Division, Opponent 01 provided two data sheets. For the purposes of this decision the following numbering will be used to refer to those further documents:

- (9) Product data sheet: NeoPac E-125 (December 1996),
- (10) Material safety data sheet: NeoPac E-125 (2002).

- III. The Opposition Division held that Claim 1 of the main request and the first auxiliary request, both submitted at the oral proceedings before this instance, lacked novelty over document (1). The Opposition Division held, in particular, that document (1) disclosed a coating composition comprising a dispersion of polyurethane resin with oxidatively drying groups falling under the definition of component (i) of Claim 1 and a second constituent, namely a polyurethane hybrid dispersion defined in Claim 4, falling under component (ii) of Claim 1. The decision was, therefore, silent on the remaining points raised in the opposition proceedings.

- IV. With the statement of grounds of appeal, the Appellant (Proprietor of the patent) had requested that the decision under appeal be set aside and the patent in suit be maintained with regard to document (1) and the case be remitted to the first instance to decide on the remaining points raised in the opposition proceedings.

- V. Oral proceedings before the Board of Appeal took place on 23 May 2007. In the communication accompanying the summons to oral proceedings the Board had informed the parties that for reasons of procedural economy, if necessary, novelty of each request would be examined in view of the prior art cited including documents (2), (3) and (4). Since the decision of the first instance was silent regarding the inventive step issue, it was the normal practice of the Boards of Appeal to remit the case to the first instance for further prosecution,

should the Board accept for one of the requests the Appellant's case under Article 54 EPC.

VI. Four weeks before the oral proceedings before the Board, the Appellant filed eight sets of claims as main request and first to seventh auxiliary request, no longer maintaining, therefore, the previous requests.

The set of claims according to the main request contains eleven claims. Claims 1, 6 and 7 read as follows:

"1. An aqueous crosslinkable coating composition comprising as aqueous dispersed components:
(i) at least one autoxidisably crosslinkable organic polymer containing unsaturated fatty acid residues, and
(ii) at least one vinyl polymer which is not autoxidisably crosslinkable and bears carbonyl functional groups formed by the free-radical addition polymerisation of at least one carbonyl-containing monoethylenically unsaturated monomer with at least one other olefinically unsaturated monomer not providing carbonyl functionality, and
wherein said composition has present therein carbonyl reactive amine and/or hydrazine functional groups which impart crosslinkability to component (ii);
wherein the functional amine or hydrazine groups are provided by polyamines or polyhydrazines which are not part of the autoxidisably crosslinkable organic polymer or of the vinyl polymer."

"6. A composition according to any one of the preceding claims wherein the autoxidisably crosslinkable polymer containing unsaturated fatty acid residues also bears

chain-pendant amine or hydrazine derivative functional groups."

"7. A composition according to any one of the preceding claims wherein the vinyl polymer also bears chain pendant amine or hydrazine derivative functional groups."

The set of claims according to the first auxiliary request contains twelve claims. Claims 1, 4, 7 and 8 read as follows:

"1. An aqueous crosslinkable coating composition comprising as aqueous dispersed components:
(i) at least one autoxidisably crosslinkable organic polymer containing unsaturated fatty acid residues, and
(ii) at least one vinyl polymer which is not autoxidisably crosslinkable and bears carbonyl functional groups formed by the free-radical addition polymerisation of at least one carbonyl-containing monoethylenically unsaturated monomer with at least one other olefinically unsaturated monomer not providing carbonyl functionality,
wherein the weight average molecular weight of the vinyl polymer is within the range 2,000 to 1,000,000;
and
wherein said composition has present therein carbonyl reactive amine and/or hydrazine functional groups which impart crosslinkability to component (ii)."

"4. A composition according to any one of the preceding claims wherein the functional amine or hydrazine groups are provided by polyamines or polyhydrazines which are

not part of the autoxidisably crosslinkable organic polymer or of the vinyl polymer."

"7. A composition according to any one of the preceding claims wherein the autoxidisably crosslinkable polymer containing unsaturated fatty acid residues also bears chain-pendant amine or hydrazine derivative functional groups."

"8. A composition according to any one of the preceding claims wherein the vinyl polymer also bears chain pendant amine or hydrazine derivative functional groups."

VII. The Appellant admitted that there existed an inconsistency between the claims of the main request. Claims 6 and 7 could indeed not be dependent from Claim 1 as the two dependent claims required what independent Claim 1 excluded.

Regarding Claim 1 of the first auxiliary request, the added technical feature, i.e. "wherein the weight average molecular weight of the vinyl polymer is within the range 2,000 to 1,000,000" was clear. Claim 1 did not exclude the vinyl polymer from being a hybrid polyurethane/vinyl polymer but that did not have any effect on the weight average molecular weight of the vinyl part which remained clearly defined.

The objection of the Respondents regarding the impossibility of measuring the weight average molecular weight of the vinyl part of an hybrid polyurethane/vinyl polymer did not concern Article 84 EPC. Furthermore, gel permeation chromatography (GPC)

was only one way to measure molecular weight among numerous other methods known by the skilled person to assess molecular weight.

Document (1) did not disclose the molecular weight of the acrylate polymer of the polyurethane/acrylate hybrid dispersion. The feature related to the molecular weight could not be, therefore, considered as a selection over document (1). The component (ii) of Claim 1 resulted from a multiple selection among the several alternatives offered in document (1). The acrylate polymer was not the inherent resulting product of the process of preparation disclosed in that document given the resulting product was not only dependent of the monomers involved but from the specific experimental conditions of the reaction. NeoPac E 125 did not present any carbonyl functionality on the vinyl polymer.

Document (2) did not disclose an aqueous crosslinkable polyurethane/vinyl dispersion comprising in addition an autoxidisably crosslinkable organic polymer containing unsaturated fatty acid residues. Alkyd resins cited in that document as polymers which could be added to the polyurethane/vinyl hybrid dispersions met a broad definition. The term "alkyd resins" was generic and referred to resins having saturated or unsaturated fatty chains. Not any alkyd resins were autoxidisably crosslinkable. This was confirmed by documents (1), (5), (6) and (7).

VIII. Regarding the first auxiliary request, the Respondents 01 and 02 submitted in essence the same arguments which may be summarized as follows:

Claim 1 was not clear since component (ii) might comprise a vinyl polymer grafted with a polyurethane as set out in the patent in suit. The weight average molecular weight of the vinyl polymer comprising the polyurethane moiety could not be determined by GPC. The set of claims was not clear insofar as Claims 7 and 8 referred to Claim 4.

Document (1) disclosed aqueous coating composition comprising:

5-95 wt.% of at least one polyurethane/acrylate hybrid dispersion and

95-5 wt.% of at least one dispersion of polyurethane resin with oxidatively drying groups.

The sole formal difference with the claimed subject-matter lay in the fact that the weight average molecular weight of the polyurethane/acrylate hybrid dispersion was not disclosed. The range defined in Claim 1 of the first auxiliary request was not a limiting feature and encompassed every molecular weight. It was not a selection within a broad range as required by the Jurisprudence of the Boards of Appeal (see T 279/89). Furthermore, document

(8) European coatings Handbook, page 64 (not dated)

showed that for acrylates, the most preferred vinyl in document (1), molecular weight could range from around 1000 and 3000 g/mol in the case of high solids resins and tens of thousands in the case of the generally higher molecular solid resins.

The example of preparation of the vinyl polymer NAVP 9 described in the patent in suit involved the same monomers as those disclosed in document (1) in similar conditions. Since both processes were similar, the polymer NAVP 9 obtained was anticipated by the disclosure of document (1).

The examples of document (1) disclosed a mixture of NeoPac E 125 and Neorez R 2001. The sole issue was to determine the composition of NeoPac E 125 that the proprietor of the patent kept secret. From the data sheet (9), (10) and the analytic results submitted in response to the statement of grounds of appeal, i.e. document

(11) analytical report,

it was clear that NeoPac E 125 comprised a polyurethane/acrylate hybrid dispersion with carbonyl functionality and a separate polyhydrazine (adipic dihydrazide) as the crosslinker. NeoPac E 125 met the requirement of component (ii) of Claim 1 of the first auxiliary request.

Under those circumstances, the burden of proof rested on the Appellant to produce evidence to the contrary.

Document (2) was also novelty-destroying. That document disclosed the same dispersion of polyurethane/vinyl hybrid polymer with carbonyl functionality which could comprise in addition alkyd resins. As set out in document (1) and the patent in suit that kind of resin was autoxidisably crosslinkable. This was all the more true since these compositions could be used as

printing-inks which implied drying capacity and thus the presence of unsaturated bonds.

- IX. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main or first to seventh auxiliary request filed with letter dated 27 April 2007.

Respondents 01 and 02 requested that the appeal be dismissed.

- X. At the end of the oral proceedings the decision of the Board was announced.

Reasons for the Decision

Main request

1. Article 84 EPC

- 1.1 Though Article 84 EPC may not be raised as ground for opposition in the sense of Article 100 EPC, Article 102(3) EPC stipulates that, taking into consideration the amendments made to the patent in suit during opposition (appeal) proceedings, the patent and the invention to which it relates meet the requirements of the European Patent Convention. Thus, according to established jurisprudence of the Boards of Appeal, the Board has the power to examine whether the patent satisfies all requirements under the EPC, as long as the objections arise out of the amendments made thereto. That examination requires considering whether or not those amendments introduce any contravention of any

requirement of the EPC, including Article 84 EPC (see T 681/00, not published in the OJ EPO, point 5).

- 1.2 Claim 1 as granted was amended to incorporate the feature of Claim 4 as granted, namely specifying that "the functional amine or hydrazine groups are provided by polyamines or polyhydrazines which are not part of the autoxidisably crosslinkable organic polymer or of the vinyl polymer". Due to this amendment, Claims 6 and 7 which necessarily depend on amended Claim 1 are inconsistent since they require that the autoxidisably crosslinkable polymer containing unsaturated fatty acid residues or the vinyl polymer or both also bear chain-pendant amine or hydrazine derivative functional groups (see point VI above). This was eventually admitted by the Appellant at the oral proceedings before the Board. This discrepancy arising out of the amendments made to Claim 1 gives rise to an objection under Article 84 EPC. For this reason, the present request is rejected.

First auxiliary request

2. Amendments

- 2.1 Claim 1 as granted was amended to indicate that the vinyl polymer (ii) is formed by the free-radical addition polymerisation of at least one carbonyl-containing monoethylenically unsaturated monomer with at least one other olefinically unsaturated monomer not providing carbonyl functionality. Such an amendment finds support in the application as filed (see page 7, lines 32 to 35).

Claim 1 as granted was also amended to indicate that the weight average molecular weight of the vinyl polymer is within the range 2,000 to 1,000,000. This amendment finds support in the application as filed (see page 9, lines 6 to 8).

2.2 Those amendments do not give rise to objection under Article 123(2) EPC and since they bring about a restriction of the scope of protection conferred by the patent in suit, they are also in conformity with the requirements of Article 123(3) EPC.

3. Clarity

3.1 The Respondents submitted that Claims 6 and 7 could not be dependent on Claim 4 since those claims were mutually exclusive. However, the disputed claims are identical to claims 4, 6 and 7 as granted. Article 84 EPC is no ground of opposition and thus can only be invoked with respect to amendments effected after grant of the patent in suit.

3.2 Regarding the alleged impossibility of measuring by GPC the weight average molecular weight of the vinyl part of an hybrid polyurethane/vinyl polymer, the Respondents did not submit any evidence in support thereof. The patent in suit in that respect states that "the weight average molecular weight **may** be measured by gel permeation chromatography (gpc)"(see page 6, line 15). This statement does not exclude other measurement methods. The Respondent's arguments are, therefore, not convincing.

4. Novelty

- 4.1 Document (1), which represents prior art under Article 54(3) and (4) EPC, discloses aqueous coating composition comprising:
5-95 wt.% of at least one polyurethane/acrylate hybrid dispersion and
95-5 wt.% of at least one dispersion of polyurethane resin with oxidatively drying groups (see page 1, lines 16 to 19).

In this document, the hybrid dispersion is defined as the mixture of a polyurethane resin and a vinyl polymer (see page 2, line 26 to page 3, line 22). The vinyl polymer is obtained by polymerisation of esters of acrylic acid and methacrylic acid and possibly other vinyl monomers (see page 12, line 23 to page 13, line 10).

Preferably the hybrid dispersion is cross-linkable due to the presence of hydrazine-(or hydrazone-) functional groups and carbonyl-functional groups. By a carbonyl functionality is meant the carbonyl functionality of a ketone or aldehyde group. The hydrazine-(or hydrazone-) functional groups and carbonyl-functional groups may be present as chain pendant groups in the polyurethane or the polyacrylate or both, or they may be present as separate compounds in the polyurethane/acrylate hybrid dispersion (see page 3, line 24 to page 4, line 5).

Examples of polyurethane/acrylate hybrid dispersion include NeOPac E 125.

Polyurethane dispersions with oxidatively drying groups may be prepared by introducing oxidative groups into a polyurethane resin by virtue of polyols comprising oxidative groups such as derivatives of (poly)unsaturated fatty acids (see page 14, line 24 to page 15, line 13).

Examples of polyurethane dispersions with oxidatively drying groups include Neorez R 2001.

All the examples in this document disclose compositions comprising NeoPac E125, namely polyurethane/acrylate hybrid dispersion and Neorez R2001, namely polyurethane dispersions with oxidatively drying groups.

4.1.1 The polyurethane dispersions with oxidatively drying groups disclosed in document (1) comprise oxidative groups such as derivatives of (poly)unsaturated fatty acids. Such dispersions are within the definition of the first component (i) of Claim 1 (see page 14, line 24 to page 15, line 13 of document (1)). Neorez R 2001 cited in document (1) is also used in the patent in suit (see page 15, line 16 and page 9, line 58 respectively).

4.1.2 Contrary to the Appellant's view, the chemical composition of component (ii) as defined in Claim 1 of this request (see point VI above) is not distinguished from the polyurethane/acrylate hybrid dispersion disclosed in document (1). First, component (ii) of Claim 1 also encompasses additional not autoxidizably crosslinkable polymers such as polyurethanes (see paragraph [0065] of the patent in suit). Furthermore, the definition of the vinyl polymer set out in Claim 1

comprises the possibility that carbonyl reactive amine and/or hydrazine functional groups be present on the vinyl polymer having carbonyl functional groups (see point VI above, the last feature of Claim 1 of the first auxiliary request,).

In view of the statement in document (1) that "the hydrazine-(or hydrazone-) functional groups and carbonyl-functional groups may be present as chain pendant groups in the polyurethane **or the polyacrylate** (emphasis added by the Board) or both, or they may be present as separate compounds in the polyurethane/acrylate hybrid dispersion (see page 3, line 24 to page 4, line 5), it follows that one of the possibilities unambiguously offered to the skilled reader by the disclosure of document (1) is a polyurethane/vinyl hybrid dispersion, the vinyl moiety bearing carbonyl functional groups and hydrazine-(or hydrazone-) functional groups thereby matching, the definition of component (ii) with respect to the chemical composition.

The process feature relating to the fact that the vinyl polymer is formed by the free-radical addition polymerisation of at least one carbonyl-containing monoethylenically unsaturated monomer with at least one other olefinically unsaturated monomer not providing carbonyl functionality is also disclosed in document (1) (see page 12, line 23 to page 13, line 22). Component (ii) is furthermore disclosed as a dispersion (see patent in suit, paragraph [70]).

4.1.3 No explicit reference to the molecular weight of the polyacrylate is however set out in document (1). The

Respondents argued that the molecular weight range defined in Claim 1 of this request could not be seen as a new selection from a broad range. Decision T 279/89 (not published in the OJ EPO) was cited in that respect.

4.1.4 According to the jurisprudence of the Boards of Appeal a selection of a sub-range of numerical values from a broader range is new when each of the following criteria is satisfied:

- (a) the selected sub-range must be narrow;
- (b) the selected sub-range should be sufficiently far removed from the known range illustrated by means of examples;
- (c) the selected area should not provide an arbitrary specimen from the prior art

(see Case Law of the Boards of Appeal of the EPO, 5th edition 2006, I.C.4.2.1).

This jurisprudence however is not applicable in the present case since no range is disclosed in document (1). Without any defined range, it cannot be assessed, in particular, whether the range defined in Claim 1 meets criteria (b).

For this reason the argument of the Respondent is not convincing.

4.1.5 The Respondents argued that a polyacrylate having a molecular weight range within the range defined in Claim 1 was the inevitable product of the process disclosed in document (1) as shown by document (8).

4.1.6 Document (8) describes that the **number** average of the molecular weight of acrylic resins can range from around 1000 to 3000 g/mole in the case of high-solids resins to several tens of thousands of g/mol in the case of the generally higher molecular solids resins. The Respondent provided however no evidence establishing a direct relationship between the number-average molecular weight and the weight average molecular weight as defined in the patent in suit. Furthermore, this document only relates to acrylic resins obtained by polymerization of acrylic or methacrylic acids with non-acrylic monomers such as styrene or maleic anhydride. That type of polymer is, therefore, different from that obtained by polymerisation involving monomers bearing carbonyl functional groups such as aldehyde or ketone groups. Document (8) is thus not relevant for supporting the allegation that the polyacrylates bearing carbonyl functional groups such as aldehyde or ketone groups prepared according to document (1) have a weight average molecular weight overlapping with that of component (ii) of the patent in suit.

4.1.7 The Respondents also argued that the process disclosed in document (1) and the example of preparation of the polyurethane/vinyl polymer hybrid dispersion NAVP 9 described in the patent in suit (see pages 11, line 36 to page 12, line 15) were similar. It followed, so they argued, that the inevitable product of the process disclosed in document (1) was identical to the polyurethane/vinyl polymer hybrid dispersion NAVP 9. Since polyurethane/vinyl polymer hybrid dispersion NAVP 9 was within the definition of component (ii) of

Claim 1, it resulted that component (ii) encompassed the product obtained by the process of document (1).

This line of argumentation implies that the vinyl polymer part of NAVP 9 has a weight average molecular weight within the range now defined in Claim 1. Since this feature was not present in the claims as granted (see point 2.1 above), it cannot be presumed that NAVP 9 is still within the scope of Claim 1 of the first auxiliary request. For this reason, the argument of the Respondents is already not convincing.

Furthermore, in the absence of any supporting experimental evidence, a proper comparison would require that both disclosures, namely the process of document (1) and the example of preparation of NAVP 9, were identical and not merely similar. This is not the case here. The preparation of the vinyl part of NAVP 9 involves particular monomers in specific quantities with specific reaction conditions (see page 12, lines 1 to 15). The specific choice of monomers along with the reaction conditions are not disclosed in document (1). In view of the generic character of the process disclosed in document (1), that disclosure cannot anticipate the specific example described in the patent in suit. For this reason also the argument of the Respondents is not convincing.

- 4.1.8 As for NeoPac E 125 used in the examples of document (1) as polyurethane/acrylate hybrid dispersion (see point 4.1 above), the Respondents argued relying upon the decision T 585/92 (OJ EPO 1996, 129, point 3.2) and T 131/03 (not published in the OJ EPO, point 2.7) that in view of the decision of the first instance (see point

III above) the burden of proof had been shifted to the Appellant to demonstrate that NeoPac E 125 did not match the definition of component (ii).

4.1.9 This argument is not convincing in view of the decision of the first instance. Indeed, the decision is silent regarding the chemical composition of NeoPac E 125. Furthermore, the minutes show that the Opposition Division did not consider the evidence submitted by the Respondents to be decisive (see page 2, second paragraph of the minutes). Therefore, the burden of proof for making credible that the vinyl polymer part of NAVP 9 has a weight average molecular weight within the range now claimed rests with the Respondents.

4.1.10 According to the Respondents the analytical results set out in document (11) in combination with documents (9) and (10) established a strong presumption that NeoPac E 125 was a polyurethane/acrylate hybrid dispersion within the definition of component (ii) of Claim 1, whereas the Appellant denied that any carbonyl functionality was present in the vinyl polymer.

4.1.11 The Raman spectrum of the dried film of NeoPac E 125 set out in document (11) shows the presence of carbonyl groups ($C=O$ at 1729 cm^{-1}). However, this does not demonstrate unambiguously that the vinyl polymer itself rather the polyurethane carries the carbonyl functionality. The Board concurs with the Respondents that when examining novelty the technical teaching of examples may in general be combined with that disclosed in the description (see T 332/87, of 23 November 1990, not published in the OJ EPO, point 2.2). However even in referring to the description the ambiguity is not

removed in the present case since the description of document (1) does not necessarily require that the vinyl polymer carries carbonyl functionality, namely aldehyde or ketone functionality (see page 3, lines 24 to 28 "The hydrazine-(or hydrazone-) functional groups and carbonyl-functional groups may be present as chain pendant groups in the polyurethane **or** the polyacrylate or both").

Since the Respondents failed to establish a strong presumption that NeoPac E 125 was within the definition of component (ii) of Claim 1, they have not discharged the onus of proof which rested upon them and their arguments are therefore to be rejected.

- 4.2 In view of the above, document (1) does not disclose unambiguously the subject-matter of Claim 1 which is, therefore, novel over that document.

- 4.3 Document (2) discloses an aqueous self-crosslinking binder comprising polyhydrazide and polyurethane-vinyl hybrid polymers containing carbonyl groups (see page 3, lines 1 to 9). Other binders such as alkyd resins can be added to the mixture for preparing printing-inks (see page 10, lines 53-54).

- 4.3.1 According to the established jurisprudence of the Boards of Appeal, a prior art disclosure is novelty destroying if it discloses directly and unambiguously the subject-matter in question when also taking account of everything which would be considered by a skilled person as part of common general knowledge in connection with the disclosed subject-matter at the publication date of the cited document in the case of

prior art cited under Article 54(2) EPC (see T 42/00, point 2.2.1 and T 511/92, point 2.2, both unpublished in OJ EPO).

- 4.3.2 Document (2) does not state that the alkyd resins are autoxidisably crosslinkable. Only if from a proper understanding of this document by a skilled person, it turned out that the alkyd resins were **necessarily** autoxidisably crosslinkable, could the Board be convinced that this feature is implicit to this disclosure. The Respondents however submitted no evidence demonstrating that alkyd resins added for preparing printing inks implied necessarily that they were autoxidisably crosslinkable.
- 4.3.3 The Respondents also argued that the alkyd resins satisfied the definition of component (i) of Claim 1 of this request relying upon document (1) and the patent in suit as evidence of this.
- 4.3.4 According to the jurisprudence of the Boards of Appeal, textbooks and general technical literature form part of common general knowledge. Patent specifications and scientific publications cannot form part of common general knowledge except for some particular cases not relevant in the present situation (see Case Law of the Boards of Appeal 5th Ed. 2006, II.A.2.(a)). Therefore, document (1) cannot form part of common general knowledge. Furthermore, the alkyd resin used in document (1) is a particular resin which does not reflect the general definition of the alkyd resins (see page 15, lines 20 to 31).

- 4.3.5 Regarding the patent in suit itself, the Respondents relied upon the statement set out therein that "the autoxidizably crosslinkable organic polymer containing unsaturated fatty acid residues is a polyurethane polymer. Other suitable polymers include alkyds which may be self-emulsifiable, water-based or emulsified alkyds". However, the information contained in the patent in suit itself is not comprised in the state of the art for the purpose of Article 54 EPC (see T 211/06, not published in OJ EPO, point 3.3). For this reason, this argument is also rejected.
- 4.4 In conclusion, document (2) does not disclose unambiguously a composition comprising an autoxidizably crosslinkable alkyd resin which would match the definition of component (i) of Claim 1 of the first auxiliary request. For this reason, Claim 1 is novel over document (2).
- 4.5 Document (3) had been cited against the novelty of the patent in suit in the opposition proceedings. The resin composition disclosed in Document (3) is a reaction product comprising both autoxidizably crosslinkable functionality and carbonyl functionality. Claim 1 requires something different, namely that two individualized components, i.e. (i) and (ii), be present. The Board is, therefore, satisfied that the subject-matter of the first auxiliary request is novel over document (3).
- 4.6 Document (4) was also cited by the Opponents in the course of the opposition proceedings. This document discloses a crosslinking aqueous pigment dispersion comprising a mixture of carbonyl containing copolymer

resins (A) and (C) prepared by emulsion polymerization; and (D) a hydrazine derivative having at least two hydrazino groups per molecule (see col. 1, lines 41 to 62; col. 2, lines 20 to 35 and col. 5, lines 30-31). Besides those obtained by emulsion polymerization, useful as component (A) are polyurethane resin emulsions, alkyd resins emulsions, and bisphenol type epoxy resin emulsions (see col. 2, lines 52 to 55). This document does not disclose that the alkyd resin emulsions are autoxidizably crosslinkable. In the opposition proceedings, Opponent 01 contended that the non-drying alkyds were not sold as emulsions and were not used in ambient curing aqueous paints (see letter dated 20 December 2004) which a *contrario* meant that the skilled reader would read "alkyd emulsions" as emulsions of a standard oxidatively drying paint alkyd. This argument is not convincing for lack of substantiation. It follows that for the same reasons as set out with respect to document (2) the claimed subject-matter according to this request is novel over document (4) (see point 4.4 above).

4.7 Documents (5), (6) and (7) were cited by the Appellant in support of his case regarding the novelty of the claimed subject-matter vis-à-vis document (2). In view of the above, it is not necessary to examine those documents.

4.8 Consequently, Claim 1 according to the first auxiliary request meets the requirements of Article 54 EPC. That finding applies to dependent Claims 2 to 10. Claims 11 and 12 relating respectively to a coated substrate having a coating obtainable from an aqueous crosslinkable coating composition as claimed in any one

of Claims 1 to 10 and to the use of an aqueous crosslinkable coating composition as claimed in any one of claims 1 to 10 for coating a substrate are also novel for the same reasons.

5. Remittal to the first instance - Article 111(1) EPC

5.1 The Board has come to the conclusion that the subject-matter of the claims of the first auxiliary request met the requirement of Article 54 EPC overcoming, therefore, the sole reason supporting the revocation of the patent in suit by the first instance (see point III above).

5.2 Having regard to the fact that the function of the Boards of Appeal is primarily to give a judicial decision upon the correctness of the earlier decision taken by the first instance, the Board exercises its discretion under Article 111(1) EPC to remit the case to the first instance for further prosecution.

Second to seventh auxiliary requests

6. Since by the preceding first auxiliary request the reasons for revoking the patent in suit are removed as set out above, there is no need for the Board to decide on these requests.

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 for further prosecution on the basis of Claims 1 to 12 of the first auxiliary request.

The Registrar

The Chairman

N. Maslin

A. Nuss