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**Datasheet for the decision
of 27 June 2013**

Case Number: T 1915/09 - 3.3.01
Application Number: 03251373.1
Publication Number: 1342756
IPC: C09D 5/16
Language of the proceedings: EN

Title of invention:

Antifouling coating composition, coating film therefrom,
underwater material covered with the coating film and
antifouling method

Patent Proprietor:

CHIGOKU MARINE PAINTS, LTD.

Headword:

Antifouling coating/CHUGOKU

Relevant legal provisions:

EPC Art. 100(a)
EPC R. 99(2)
RPBA Art. 12(4), 13(1)

Keyword:

"Admissibility of the appeal based on fresh documents (yes)"
"Admission of late-filed requests (yes) - response to an
argument based on a new fact"
"Admission of documents into the proceedings (partly yes)"
"Main request: inventive step (no) - positive effect not
likely to occur over the whole breadth of the claims - obvious
alternative"
"First auxiliary request: inventive step (yes)"

Decisions cited:

T 0389/95, T 1204/06, T 0270/90

Catchword:

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Case Number: T 1915/09 - 3.3.01

D E C I S I O N
of the Technical Board of Appeal 3.3.01
of 27 June 2013

Appellant: STRAWMAN LIMITED
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted
20 July 2009 concerning maintenance of European
patent No. 1342756 in amended form.**

Composition of the Board:

Chairman: A. K. Lindner
Members: C. M. Radke
D. S. Rogers

Summary of Facts and Submissions

- I. European patent no. 1 342 756 relates to coating compositions which, when applied to surfaces such as ship hulls and underwater constructions, prevent fouling, namely the adhesion of aquatic organisms to these surfaces.
- II. The opponent has appealed the interlocutory decision of the opposition division that this patent amended in accordance with auxiliary request 2 meets the requirements of the EPC.
- III. The claims of that auxiliary request 2 were filed with a letter dated 2 April 2008. Its claim 1 is identical to claim 1 as granted and reads as follows:

" 1. An antifouling coating composition comprising:
(A) a silyl ester copolymer containing constituent units derived from a polymerizable unsaturated carboxylic acid silyl ester,
(B) a carboxylic acid,
(C) a bivalent or trivalent metal compound, and
(D) a dehydrating agent,

wherein the bivalent or trivalent metal compound (C) is contained in an amount of 1.2 equivalents or more, in terms of the number equivalents of metal as a constituent of a bivalent or trivalent metal compound (C), per equivalent of carboxyl group of the carboxylic acid (B) and wherein a carboxylic acid excess-metal salt is prepared in advance by mixing (B) and (C), or (B), (C) and (D)."

IV. The opposition sought revocation of the patent in its entirety and was based on grounds under Article 100(a) (lack of novelty and of inventive step), (b) and (c) EPC.

The novelty objection was only directed against claim 2 as granted.

The objections based on grounds under Article 100(b) EPC were only directed against claim 2 as granted and against claims 3 to 21 as far as they were dependent from claim 2.

The objections based on grounds under Article 100(c) EPC only concerned claim 2 as granted and the amendments in page 69 of the application as filed (namely the replacement of "hydrogen" by "carbon" at page 69, lines 5+7; see page 21, lines 18+19 of the patent in suit).

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

- (D1) EP-A-1 016 681
- (D2) EP-A-0 802 243
- (D3) EP-A-0 526 441.

VI. The opposition division decided that

- the main request and the first auxiliary request were not allowable as claim 2 contravened the requirements of Article 100(c) EPC (the correction on page 21, lines 18+19 of the patent in suit (original page 69) was, however, accepted),
- no grounds under Article 100(b) and (c) EPC prejudiced the maintenance of the patent on the basis of the second auxiliary request. Novelty of

the subject-matter claimed was not put into question. Document (D1) was the closest prior art. The differing feature was the premixing of compounds (B) and (C) leading to the formation of a carboxylic acid salt. The problem to be solved was to provide an improved antifouling composition. The experimental data provided during examination and with the letter dated 2 April 2008 showed that this problem was solved. It was surprising that the premixing of (B) and (C) led to an improved storage stability of the composition. None of the documents (D1) to (D3) hinted at this effect or discussed that the water sensitivity could be overcome by premixing (B) and (C) and optionally (D).

VII. The following documents were *inter alia* additionally cited during the appeal proceedings:

- (D6) WO-A-93/07 223
- (D7) WO-A-95/34 524
- (D8) EP-A-0 348 219
- (D9) US-A-4 247 709
- (D10) A. R. Katritzky et al., Comprehensive Organic Functional Group Transformations, vol. 4, Elsevier Science Ltd., Oxford/UK, 1995, 177
- (D11) WO-A-00/46 173
- (D12) US-A-3 929 703
- (D13) WO-A-93/08 246
- (D14) EP-A-1 458 821.

VIII. This decision is based on the following sets of claims:

- (a) Claims 1-20 of the main request (previously auxiliary request 2, filed with a letter dated 2 April 2008);

claims 1-20 of the first auxiliary request and claims 1-20 of the second auxiliary request, both submitted during the oral proceedings before the board.

- (b) The claims of the main request correspond to the granted claims, where the use claim 2 was deleted and the remaining claims renumbered.

Claim 1 of this request is cited under point III above.

- (c) The claims of the first auxiliary request are identical with the claims of the main request with the exception that claim 1 has been amended to read as follows (amendments in bold):

" 1. An antifouling coating composition comprising:

- (A) a silyl ester copolymer containing constituent units derived from a polymerizable unsaturated carboxylic acid silyl ester,
- (B) a carboxylic acid,
- (C) a bivalent or trivalent metal compound, and
- (D) a dehydrating agent,

wherein the bivalent or trivalent metal compound (C) is contained in an amount of 1.2 equivalents or more, in terms of the number equivalents of

metal as a constituent of a bivalent or trivalent metal compound (C), per equivalent of carboxyl group of the carboxylic acid (B) and wherein a carboxylic acid excess-metal salt is prepared in advance by mixing (B) and (C), or (B), (C) and (D), **and wherein the bivalent or trivalent metal compound (C) is an oxide, hydroxyde or carbonate of bivalent or trivalent metal.**"

- (d) The claims of the second auxiliary request are identical with the claims of the main request with the exception that in claim 1 the carboxylic acid (B) has been limited to one **having 3 to 50 carbon atoms.**

IX. During the oral proceedings the board asked how an acceptable storage stability of the coating composition could be achieved in case the metal compound (C) was a metal chloride, bromide, nitrate, sulfate or phosphate, so that the carboxylic acid (B) was not neutralised when the carboxylic acid excess-metal salt was formed.

X. The arguments of the appellant/opponent which are relevant for this decision may be summarised as follows:

- (a) The appeal was admissible as it relied inter alia on document (D1) which was filed during the opposition proceedings.
- (b) The auxiliary requests were submitted for the first time during the appeal proceedings only three weeks prior to the oral proceedings. Whether they were a proper reaction to a new argument based on the fact that document (D1) disclosed the

addition of basic copper acetate did not matter as this document had been in the opposition and appeal proceedings from the very start. These requests introduce features from the description into the claims at a very late stage. It was not evident that the original disclosure gave a basis for the combination of the additional feature of the first auxiliary request with the subject-matter of each of the claims of these requests. Hence, the auxiliary requests should not be admitted.

- (c) Documents (D6) to (D13) had been found in a search which was necessary as the opposition division had revised the objective technical problem. They were relevant and should be admitted into the proceedings.
- (d) The appellant has withdrawn its novelty objection and document (D14) on which it was based from the proceedings.
- (e) The appellant/opponent considered document (D1) as the closest prior art. It disclosed antifouling paint compositions containing 1.2 equivalents or more of zinc oxide per equivalent of carboxylic acid in the rosin. The salts (apart from the basic copper acetate) were understood by the person skilled in the art as completely neutralised. Basic copper acetate as such was a carboxylic acid excess-metal salt as defined in claim 1 of the main request.

The problem to be solved was to improve the storage stability of the paints disclosed in document (D1). Neither the examples in the patent in suit nor any comparative data provided by the respondent showed any unexpected advantageous effect caused by premixing components (B) and (C). It was obvious to try to add the zinc oxide in one go in the premixing step in order to avoid extra processing operations. It was also obvious to prevent hydrolysis of the silyl esters due to the water formed in the reaction of zinc oxide with the rosin by preparing the carboxylic acid excess metal salt in advance. The examples of the patent showed that it did not make a difference whether the excess of metal was present in the premix or if some of the metal was added later. The selection of "1.2 equivalents or more" was arbitrary. The data provided by the respondent were not relevant as they made no comparison with the closest prior art.

The appellant argued that document (D6) taught that the stability of the coating composition could be improved by reacting the rosin with a metal containing base. Comparative example A and a comparison between examples 1 and 2 of said document showed that an acid number of zero was preferred, i.e. that an excess of metal base should be used. The use of a dehydrating agent was obvious from documents (D9) and (D10). Hence, the subject-matter was obvious starting from document (D1) as the closest prior art alone or in view of document (D6).

XI. The respondent/patentee argued as follows:

- (a) Instead of stating why the decision was wrong, the appellant had based its appeal on newly filed documents. The appeal thus was inadmissible for lack of substantiation.
- (b) The auxiliary requests were filed in response to the appellant's new argument based on the fact that document (D1) disclosed the addition of basic copper acetate. Furthermore, the first auxiliary request was an appropriate reaction to the question of the board summarised under point IX above.
- (c) Documents (D6) to (D13) were first filed with the grounds of appeal and lack prima facie relevance. An argument based on document (D3) was raised in the appeal phase not before the oral proceedings before the board. All these documents should not be admitted into the proceedings.
- (d) Document (D1) represented the closest prior art. The problem solved in view of document (D1) was to provide a composition which could be formed into an antifouling paint having improved properties, in particular improved stationary antifouling performance, an improved condition of the coating, wherein the amount of solvent in the composition could be reduced due to its low viscosity, and where the composition had an excellent storage stability.

(e) None of the cited documents contained a pointer towards the preparation of the carboxylic excess-metal salt in advance. Moreover, none of the documents (D6)-(D13) disclosed silylester copolymers. Therefore, the claimed subject-matter was based on an inventive step.

XII. The appellant requested that the decision under appeal be set aside and the European patent No. 1 342 756 be revoked. Further the appellant requested that the first and second auxiliary requests not be admitted into the proceedings.

The respondent requested that the appeal be rejected as inadmissible, or that it be dismissed or, alternatively that the patent be maintained on the basis of either the first or second auxiliary requests both submitted during the oral proceedings before the board on 27 June 2013. Further the respondent requested that documents (D3) and (D6) to (D13) not be admitted into the proceedings.

During the oral proceedings before the board, the respondent withdrew its request to remit the case to the first instance and to apportion the respondent's costs to the appellant if documents (D6) to (D13) were admitted into the proceedings.

XIII. The chairman announced the decision of the board at the end of the oral proceedings.

Reasons for the Decision

1. Admissibility of the appeal
 - 1.1 An appeal shall be rejected as inadmissible if it does not comply with Articles 106 to 108, Rule 97 or Rule 99 (1) and (2) EPC and if any of such deficiencies has not been remedied within the relevant time periods specified in Rule 101 EPC.
 - 1.2 The respondent considered the statement setting out the grounds for appeal to be insufficient (see point XI(a) above). Hence, it claims that the appeal does not comply with Rule 99(2) EPC which requires that the statement setting out the grounds for appeal "shall indicate the reasons for setting aside the decision impugned, or the extent to which it is to be amended, and the facts and evidence on which the appeal is based".
 - 1.3 The statement setting out the grounds for appeal indicates in detail why the appellant considered that the subject-matter of the claims intended to be maintained by the opposition division lacked an inventive step in view of document (D1) alone or its combination with, inter alia, document (D6) (see point 4 on pages 4 to 11 of the letter dated 20 November 2009). Thereby, said statement gave detailed reasons why the decision under appeal should be set aside and indicated the facts and evidence in support of the respective arguments.

Rule 99(2) EPC does not exclude that such evidence is submitted for the first time in appeal proceedings nor

does it require that this evidence is admitted into the proceedings (see T 389/95 of 15 October 1997, points 1 and 3 of the reasons).

Therefore, the fact that the appellant relied inter alia on documents (D6) to (D13) in its statement setting out the grounds for appeal does not contravene the requirements of Rule 99(2) EPC.

- 1.4 The respondent did not claim that the appeal suffered from any other deficiency under Rule 101 EPC nor is the board aware of such a deficiency.

Hence, the appeal is admissible.

2. Admission of the first and second auxiliary requests

- 2.1 According to Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA)

"Any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy".

According to Article 13(3) RPBA

"Amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the Board or the other party or parties

- cannot reasonably be expected to deal with without adjournment of the oral proceedings" (see the Supplement to OJ EPO 1/2013, 39).
- 2.2 The claims of the first and second auxiliary requests were first submitted as the second and first auxiliary requests, respectively, with the letter dated 6 June 2013, i.e. after the reply of the respondent to the grounds of appeal, after the summons to oral proceedings dated 5 April 2013, and three weeks prior to the oral proceedings before the board.
- 2.3 It was not disputed that the appellant had raised an argument based on the fact that document (D1) disclosed the addition of basic copper acetate. This argument was raised for the first time in its letter dated 13 May 2013 (see paragraphs 3.8, 3.9, 3.18 and 3.27 of said letter).
- 2.4 Document (D1) contains 91 pages; basic copper acetate is disclosed therein only in paragraph [0218] on page 20 as a mere example of a copper compound (B-1), not as a preferred compound. Thus the basic copper acetate disclosed in document (D1) can be considered as a somewhat obscure disclosure that, in the absence of the appellant's argument, would not have had a large claim to the respondent's attention.
- 2.5 In its auxiliary requests, the respondent excluded basic copper acetate as a carboxylic acid excess-metal salt by
- either requiring that the metal compound (C) is an oxide, hydroxide or carbonate (see the second

auxiliary request filed on 6 June 2013, which is now the first auxiliary request)

- or by requiring the carboxylic acid (B) to have from 3 to 50 carbon atoms (which excludes acetic acid; see the first auxiliary request filed on 6 June 2013, which is now the second auxiliary request).

2.6 For these reasons, the filing of the first and second auxiliary requests was an appropriate and timely reaction to an argument of the appellant which was based on a newly presented fact. Not to amend its claims by introducing features from the description would have made it difficult for the respondent to defend its case in view of this new fact. As is evident from point 2.5 above, the amendments are not complex and do not raise issues which would require an adjournment of the oral proceedings.

2.7 For these reason, the board exercised its discretion under Rule 13 RPBA by admitting the first and second auxiliary requests into the proceedings.

3. Admission of documents

3.1 Document (D3)

This document was merely mentioned in the list of documents in the statement setting out the grounds for appeal, but no argument based thereon was raised in the appeal phase prior to the oral proceedings before the board.

In the oral proceedings the appellant sought to show by means of this document that the additional feature introduced from the description into claim 1 of the first auxiliary request was known. In order to give the appellant the chance to argue against claim 1 thus amended, the board exercised its discretion under Rule 13 RPBA by admitting document (D3) into the proceedings.

3.2 Documents (D6) to (D13)

3.2.1 In addition to its discretion under Rule 13 RPBA (see point 2.1 above), the board has the power "to hold inadmissible facts, evidence ... which could have been presented ... in the first instance proceedings" (Rule 12(4) RPBA).

3.2.2 The patent in suit concerns antifouling coating compositions. None of the documents (D7) to (D13) relate to antifouling coatings nor did the board find any aspect within the disclosure of any of these documents which could be relevant when assessing inventive step.

3.2.3 Document (D6), however, is directed to antifouling coating compositions and addresses one of the objects of the patent in suit, namely the storage stability of these compositions.

3.2.4 For these reasons, the board exercised its discretion under Article 12(4) RPBA by admitting document (D6) and by not admitting documents (D7) to (D13) into the proceedings.

4. Article 123(2) EPC / First Auxiliary Request

The appellant argued that it was not evident that the original disclosure gave a basis for the combination of the additional feature of the first auxiliary request with the subject-matter of each of the claims of this request (see point X(b) above).

It was not disputed that the oxides, hydroxides and carbonates of bivalent or trivalent metals were explicitly mentioned as examples of the metal compound (C) in the application as filed (see page 63, lines 3-5; see page 68, lines 12-14).

The appellant referred neither to any specific claims of the first auxiliary request, nor to any evidence in support of this argument, such as to the application as originally filed. Therefore, this argument is not considered convincing by the board.

The metal compound (C) is only further specified in claims 2 and 3 of the first auxiliary request. In these claims, the respective metals are limited to those disclosed in the paragraph from page 62, line 20, to page 63, line 2 of the application as filed. The next paragraph in the application as filed (page 63, lines 3-5) forms the basis of the amendment in claim 1. The following paragraph (page 63, lines 6-8) cites specific examples of metal oxides, hydroxides and carbonates according to the two previous paragraphs. Thus the application as filed discloses that the limitation to the oxides, hydroxides and carbonates in claim 1 may be combined with the limitations in claims 2 and 3.

Other objections under Article 123(2) EPC were not raised by the parties, nor does the board have a reason to do so.

Hence, the claims of the first auxiliary request are deemed to meet the requirements of Article 123(2) EPC.

5. Novelty

It was not disputed by the appellant that the subject-matter of the claims of all requests is novel. The board is also satisfied that these claims are novel.

6. Inventive step

6.1 The patent in suit concerns coating compositions which, when applied to surfaces such as ship hulls and underwater constructions, prevent fouling, namely the adhesion of aquatic organisms to these surfaces.

6.2 Closest prior art

In the decision under appeal, the opposition division considered document (D1) as the closest prior art. This was not disputed by the parties and the board sees no reason to deviate from the opposition division's findings.

Document (D1) discloses in claims 5 to 8 an antifouling paint composition containing

- (1) a silyl methacrylate copolymer,
- (2) optionally an antifouling agent,
- (3) optionally zinc oxide, and
- (4) optionally an inorganic dehydrating agent.

The compositions according to the examples F26-F27, P26-P29, Q24-Q52, R12, R13, and R15-R18 contain a silyl methacrylate copolymer (1), cuprous oxide (2), zinc oxide (3), anhydrous gypsum (4), and copper naphthenate or a rosin. In this context it is to be mentioned that copper naphthenate is a salt of a carboxylic acid and that a rosin contains carboxylic acids. If said naphthenate or said rosin reacts with the zinc oxide (3) present in the compositions according to these examples, a carboxylic acid excess-zinc salt may be formed.

However, the subject-matter of claim 1 of each of the requests presently on file differs from the disclosure of document (D1) in that said document does not disclose the combination of

- (1) a silyl methacrylate copolymer and
- (4) an inorganic dehydrating agent with a carboxylic excess-metal salt **prepared in advance** from a carboxylic acid and a bivalent or trivalent metal compound.

6.3 The problem to be solved

6.3.1 Whereas the respondent argued that the claimed invention provided various improvements over the coatings disclosed in document (D1) (see under point XI(d) above), the appellant considered that there was no evidence on file showing that any of these improvements were indeed achieved. Therefore, it has to be assessed whether or not any evidence on file, such as comparative tests, shows an improvement of the

claimed subject-matter with respect to the coating compositions disclosed in document (D1).

6.3.2 The patent in suit contains several comparative examples (see Table 7 on page 42). According to page 32, lines 45-50, of the patent in suit, these comparative tests "were prepared in the same manner as in Example 1, except that the formulations thereof were changed as specified in Tables ... 7". In other words, only the types and amounts of the components were varied. Therefore, also in these comparative examples the carboxylic acid excess-metal salt was prepared in advance. Consequently these comparative tests do not differ from those according to the claimed invention by the combination of features distinguishing the claimed invention from the closest prior art (D1) (see the last paragraph under point 6.2 above). Hence, these examples are not suitable to show an effect over the closest prior art.

As Annexes A and B to its letter dated 4 June 2010, the respondent submitted additional comparative tests. The only examples comparing the preparation of the carboxylic acid excess-metal salt prior to the addition of the other components, with the preparation whereby all of the reactants are added in one go are the tests R12-Comp. and R12-Invention in Annex A. Whereas in R12-Comp. all the ingredients were mixed together at the same time, in R12-Invention a premix of the rosin (containing the carboxylic acid (B) according to present claim 1), the zinc oxide (i.e. the metal compound (C)) and anhydrous gypsum (i.e. the dehydrating agent (D)) was prepared (see the table in

Annex A and the second and third paragraphs on page 8 of the letter dated 4 June 2010).

The composition according to the invention (R12-Invention) had a slightly lower viscosity (initial KU 86 vs. 90) at a lower xylene content (14.5 parts vs. 16.5 parts) than that of the comparative example (R12-Comp.) and the respective coatings made from R12-Invention exhibited a higher stationary antifouling performance (5 vs. 3, where 5 means no adherence in the test described in paragraphs [0254]-[0256] of the patent in suit) and a higher consumption rate (26 μm vs. 21 μm within two months). Both coating compositions exhibited an excellent storage stability and the condition of the coatings made from both compositions was excellent (see paragraphs [249]-[251] and [257]-[259] of the patent in suit as to the tests and the ratings).

As to the consumption of the coating, the respondent argued that a certain degree of consumption was necessary in order to ensure that the coating is self-polishing (see paragraph [0031] of the patent in suit). It was undisputed that the higher consumption rate observed for the coating R12-Invention could neither be regarded as an advantage nor as a disadvantage as the desired consumption rate depended on the field of application.

Hence, the two remaining effects - the slightly lower viscosity and the better stationary antifouling performance - can be considered as improvements which can be taken into account when formulating the problem to be solved.

6.3.3 The problem to be solved may thus be defined as the provision of an antifouling coating composition, wherein the amount of solvent can be reduced due to low viscosity, and which yield coatings showing an improved stationary antifouling performance, while maintaining a good storage stability of the composition and a good condition of the coating.

6.4 Solution of the problem / main request

When assessing whether or not this problem was solved over the whole breadth of the claims, it has to be determined what embodiments are covered by the definitions given in these claims.

6.4.1 Definition of the bivalent or trivalent metal compound and of the carboxylic excess-metal salt

According to claim 1 of the main request said salt is the reaction product of the carboxylic acid (B) with an excess of "a bivalent or trivalent metal compound".

The definition of the bivalent or trivalent metal compound (C) is only limited by the requirement that it must be able to form a carboxylic acid excess metal salt in the presence of the carboxylic acid (B).

According to paragraph [0119] of the patent in suit,

"The carboxylic acid excess-metal salt refers to a salt from a ... metal ... and a carboxylic acid, ... , wherein the metal is contained in more than the equivalent of carboxyl group".

6.4.2 This definition includes salts prepared by mixing the carboxylic acid with an excess of a neutral bivalent or trivalent metal salt, such as any of the metal chlorides, bromides, nitrates or sulfates mentioned in paragraph [0148] of the patent in suit. It is evident that in such salts the acidity of the carboxylic acid is not neutralised.

6.4.3 According to the patent in suit a large amount of unneutralised carboxylic acid present in the carboxylic acid metal salt causes deterioration of storage stability and antifouling properties (see page 20, lines 34-36).

6.4.4 Hence, the problem defined under point 6.3.3 above is not solved if the carboxylic acid excess-metal salt is as described under point 6.4.2 above. That means that this problem is not solved over the whole breadth of claim 1 of the main request.

6.4.5 Therefore, the problem that is solved is a less ambitious one, namely the provision of alternative antifouling coating compositions. In view of the examples of the patent in suit there is no doubt that this problem was solved.

6.4.6 Document (D1) mentions that when preparing the antifouling paint compositions (P), (Q) and (R) the components "are added at the same time or in any arbitrary order" (see page 23, lines 31-32, 43 and 56). As no unexpected effect was shown over the whole breadth of the claims (see point 6.3.4 above), any arbitrary order of addition of the components is equally well suited as a solution to the problem posed

and thus is obvious to the person skilled in the art. This includes the embodiment where first the rosin or the copper naphthenate is blended with the zinc oxide. Hence it was obvious to the person skilled in the art looking for alternative antifouling paint compositions to modify any of the examples P26-P29, Q24-Q52, R12, R13, and R15-R18 by blending first the rosin or the copper naphthenate with the zinc oxide. When doing so, the person skilled in the art would have prepared a composition according to claim 1 of the main request.

6.4.7 For these reasons, the subject-matter of claim 1 of the main request does not involve an inventive step. As the board can only decide on a request as a whole, the main request is refused.

6.5 Solution of the problem / first auxiliary request

6.5.1 Claim 1 of the first auxiliary request restricts the metal compound (C) to "an oxide, hydroxyde or carbonate of bivalent or trivalent metal" (see point VIII(c) above).

6.5.2 Metal oxides, hydroxides and carbonates may neutralise the carboxylic acid (see document (D3), page 3, lines 48-55). The appellant argued that oxides of certain noble metals, such as Au_2O_3 , do not neutralise the acid. Whether or not this is true is not relevant for the present case. According to the constant jurisprudence of the boards of appeal, the claims are directed to the person skilled in the art who will rule out interpretations which are illogical or do not make technical sense (see, e.g. T 1204/06 of 8 April 2008, point 3.4 of the reasons and the decisions cited there).

It makes no technical sense to the person skilled in the art to use a considerable amount of a rather exotic and expensive material, such as a gold oxide, if the solution of the problem posed does not require him to do so. In the present case, it is evident to the person skilled in the art that a gold oxide is neither necessary nor advantageous when solving the problem posed. When reading claim 1 of the first auxiliary request, he would thus not consider the use of a gold oxide as making technical sense when carrying out the subject-matter of this claim. Hence, the board does not share the appellant's view. Furthermore, it concludes that claim 1 of the first auxiliary request teaches the person skilled in the art that the formation of the carboxylic acid excess-metal salt involves the neutralisation of said acid.

6.5.3 For these reasons, the board considers that the problem defined under point 6.3.3 above has been solved over the whole breadth of the claims of the first auxiliary request.

6.5.4 Hence, it has to be assessed whether the person skilled in the art would, in the light of the prior art and his own common general knowledge, have derived the subject-matter of claim 1.

6.5.5 Although document (D1) does disclose that the components of the coating compositions may be added in any arbitrary order (see under point 6.4.6 above), it gives no indication that a certain order of addition of the components might be advantageous. Nor does this document give any hint that the use of basic copper acetate could give rise to an unexpected advantageous

effect. Nor does document (D6) give the person skilled in the art any reason to react the acid and the metal oxide, hydroxide or carbonate to form a carboxylic acid excess-metal salt before adding the remaining components. Hence, neither document (D1) as such nor its combination with document (D6) can render the subject-matter of claim 1 obvious.

- 6.5.6 The appellant argued that the amount of metal compound (C) of "1.2 equivalents or more" per equivalent of carboxylic acid was arbitrary and thus could not contribute to the presence of an inventive step.

According to the constant jurisprudence of the boards of appeal, each party in inter partes proceedings bears the burden of proof for the facts it alleges (see, e.g., T 270/90, OJ EPO 1993, 725, point 2.1 of the reasons).

The appellant did not provide evidence of the above statement. This statement also cannot be considered to fall into the category of self-evident truths that are generally known and require no further evidence to support them.

Therefore, this argument of the appellant is not found convincing by the board.

- 6.5.7 For these reasons, the subject-matter of claim 1 of the first auxiliary request is based on an inventive step. The same applies to the subject-matter of dependent claims 2 to 17, of claim 18 directed to the film formed from the coating compositions, of claim 19 directed to a substrate coated therewith, and of claim 20, directed

to a method of rendering these substrates antifouling by means of these coating compositions. Hence, the subject-matter of the claims of the first auxiliary request is based on an inventive step.

7. As the claims of the first auxiliary request meet the requirements of the EPC, there is no need to discuss the second auxiliary request.

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 claims and a description to be adapted:
claims 1 to 20 of the first auxiliary request filed at the oral proceedings before the board on 27 June 2013.

The Registrar:

The Chairman:

M. Schalow

A. K. Lindner