# BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

# BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

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# Datasheet for the decision of 10 November 2011

Case Number: T 1273/08 - 3.3.03

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Language of the proceedings: EN

#### Title of invention:

Curable composition, coating composition, paint, antifouling paint, cured product thereof and method of rendering base material antifouling

### Patentee:

CHUGOKU MARINE PAINTS, LTD. Shin-Etsu Chemical Co., Ltd.

### Opponent:

Akzo Nobel Coatings International N.V.

### Headword:

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# Relevant legal provisions:

EPC Art. 54, 123(2)

### Keyword:

"Added subject-matter - yes (main request, first, second, fourth-seventh auxiliary requests)"

"Novelty - no - (third auxiliary request)"

"Novelty - yes - (eight auxiliary request"

"Remittal for further prosecution"

### Decisions cited:

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### Catchword:

EPA Form 3030

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#### BESCHWERDEKAMMERN BOARDS OF APPEAL OF DES EUROPÄISCHEN **PATENTAMTS**

THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Case Number: T 1273/08 - 3.3.03

DECISION

of the Technical Board of Appeal 3.3.03 of 10 November 2011

Appellant I: CHUGOKU MARINE PAINTS, LTD.

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Decision of the Opposition Division of the Decision under appeal:

European Patent Office announced orally 5 March 2008 and posted 25 April 2008 revoking European

patent No. 1092758 pursuant to Article

101(3)(b) EPC.

Composition of the Board:

Chairman: B. ter Laan M. C. Gordon Members:

C. Vallet

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# Summary of Facts and Submissions

- I. The appeal by the patent proprietor lies against the decision of the opposition division announced 5 March 2008 and posted 25 April 2008 revoking European Patent no. 1 092 758 (application no. 00 309 035.4).
- II. In the application as originally filed claims 1-4 and 9 read as follows:
  - "1. A curable composition comprising:
    - (A) an organopolysiloxane having a functional group capable of condensation reaction at both molecular termini, and
    - (B-1) a hydrophobic silica and a hydrophilic silica.
  - 2. A curable composition comprising a product obtainable by thermally treating
    - (A) an organopolysiloxane having a functional group capable of condensation reaction at both molecular termini with
    - (B-2) a hydrophobic silica.
  - 3. A composition according to claim 2 further comprising a hydrophilic silica, a product obtainable by thermal treatment of an organopolysiloxane (A) with a hydrophilic silica or both a hydrophilic silica and a product obtainable by thermal treatment of an organopolysiloxane (A) with a hydrophilic silica.
  - 4. A curable composition comprising the product obtainable by thermally treating

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- (A) an organopolysiloxane having a functional group capable of condensation reaction at both molecular termini with
- (B-3) a hydrophilic silica and optionally further comprising
- (B-2) a hydrophobic silica.
- 9. A composition according to any preceding claim comprising one or both of a product obtainable by treating hydrophilic silica at 100°C or higher with organopolysiloxane (A), and a product obtainable by treating a hydrophobic silica at 100°C or higher with organopolysiloxane (A)."

Claims 1-3 and 8 of the patent as granted read as follows:

- "1. A curable composition comprising a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini, with at least one of hydrophobic silica (B-2) and hydrophilic silica (B-3).
  - 2. A composition according to claim 1, comprising a product obtainable by thermally treating an organopolysiloxane (A) with a hydrophobic silica (B-2).
  - 3. A composition according to claim 2 further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) with a hydrophilic silica (B-3).

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8. A composition according to any preceding claim comprising one or both of a product obtainable by treating hydrophilic silica (B-3) at 100°C or higher with organopolysiloxane (A), and a product obtainable by treating a hydrophobic silica (B-2) at 100°C or higher with organopolysiloxane (A)."

The application and patent as granted also contained claims directed to cured products and coating compositions comprising the curable composition, the use of the composition as a paint or an antifouling paint as well as various articles coated with the composition.

- III. A notice of opposition against the patent was filed on 30 January 2007 in which revocation of the patent on the grounds of Art. 100(a) EPC (lack of novelty, lack of inventive step) was requested.
- IV. The decision under appeal was based on the claims of the patent as granted (main request) and five sets of amended claims as auxiliary requests.

The decision relied on the following documents:

D1: US-A-5 504 147

D2: US-A-5 039 736

D3: US-A-5 087 684

D4: US-A-5 958 116

D5: JP-A-08-020722 (English translation).

According to the decision the claims of the main request and first, third, fourth and fifth auxiliary requests did not meet the requirements of Articles 54 EPC and the second auxiliary request did not comply with the requirements of Art. 84 EPC.

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- V. On 3 July 2008 the patent proprietor lodged an appeal against the decision, the prescribed fee being paid on the same day.
- VI. Together with the statement of grounds of appeal filed on 27 August 2008 the appellant maintained as the main request the claims according to the patent as granted. Additionally, three sets of claims forming a first, second and third auxiliary request were submitted.
- VII. The opponent, now the respondent, replied with a letter dated 15 December 2008 citing three further documents, inter alia:
  - D9: Jones, F.R. et al. "Fundamental and Applied Aspects of Chemically Modified Surfaces", Proceedings of the 7th International Symposium on Chemically Modified Surfaces, Northwestern University, Evanston, Illinois, USA, 24-28 June 1998 (Ed. Blitz, J.P. and Little, C.B), 1999 pages 173-182.
- VIII. On 4 April 2011 the Board issued a communication, noting inter alia that the requests of the appellant were ambiguous. In a letter dated 6 June 2011 the appellant clarified its requests. On 30 June 2011 the Board issued a summons to attend oral proceedings. In a communication dated 14 July 2011 the Board set out its provisional opinion.
- IX. Together with a letter dated 10 October 2011 the appellant submitted 10 new sets of claims forming a main and first to ninth auxiliary requests.

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### Main request:

"1. A curable composition comprising: a) a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini, with hydrophobic silica (B-2) and hydrophilic silica (B-3) wherein organopolysiloxane (A), hydrophobic silica (B-2) and hydrophilic silica (B-3) are all that are present in the thermal treating; or b) a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophilic silica (B-3)."

### First auxiliary request:

- "1. A curable composition comprising a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini, with only hydrophobic silica (B-2) and hydrophilic silica (B-3)."
- "2. A composition according to claim 1, comprising a product obtainable by thermally treating an organopolysiloxane (A) with only a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) with only a hydrophilic silica (B-3)."

### Second auxiliary request:

"1. A curable composition comprising: a) a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini, with hydrophobic silica (B-2) and hydrophilic silica (B-3) wherein organopolysiloxane (A), hydrophobic silica (B-2) and hydrophilic silica (B-3) are all that are present in the thermal treating; or b) a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with only a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with only a hydrophilic silica (B-3)."

### Third auxiliary request:

"1. A curable composition comprising a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophilic silica (B-3)."

Claim 6 corresponded to claim 8 of the patent as granted.

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Fourth auxiliary request:

"1. A curable composition comprising a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with only a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with only a hydrophilic silica (B-3)."

Fifth to ninth auxiliary requests:

Auxiliary requests 5-9 corresponded to the main request and first to fourth auxiliary requests respectively, however were formulated as "use claims", i.e. were directed to "Use as an antifouling paint of a [curable composition...].

Thus, claim 1 of the eighth auxiliary request read as follows:

"Use as an antifouling paint of a curable composition comprising a product obtainable by thermally treating an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophobic silica (B-2) and further comprising a product obtainable by thermal treatment of an organopolysiloxane (A) having functional groups capable of condensation reaction at both molecular termini with a hydrophilic silica (B-3)."

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Claims 2 to 12 of the eighth auxiliary request were dependent on claim 1.

- X. Oral proceedings were held before the Board on 10 November 2011.
- XI. The arguments of the appellant may be summarised as follows:
  - (a) Main request:

Claim 1 as granted had been directed towards a product obtainable by thermally treating an organopolysiloxane (A) with at least one of hydrophobic silica (B-2) and hydrophilic silica (B-3). Claims 2 and 3 had been directed to treatment of the organopolysiloxane with, respectively, hydrophobic silica (B-2) or hydrophilic silica (B-3).

In claim 1 of the main request the products were defined as alternatives. In the first alternative it was specified that the organopolysiloxane (A) was treated with both the hydrophobic silica (B-2) and hydrophilic silica (B-3) together. The claim had been further limited such that these components were the only components present during the thermal treatment. This amendment amounted to amending "comprising" to "consisting of". This limitation was derivable from claim 4 and paragraphs [0072] and [0103] of the application as filed which specified that the polysiloxane was treated with both silicas together and that thereafter further components were added. The language of these paragraphs was closed and did not permit the presence of any other components

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during the thermal treatment step. This interpretation was also supported by the examples of the patent. The possible presence of absorbed water on the silicas was immaterial since this was water which was already present, not deliberately added to the composition.

# (b) First auxiliary request:

Claim 1 was restricted to the components explicitly mentioned, and was in fact an alternative formulation to that of the main request, so that the support for it could also be found in claim 4 and paragraphs [0072] and [0103] of the application as filed. Similarly, this amendment, too, was considered to be analogous to the modification of "comprising" to "consisting of". The claim covered any possible combination of treatments, either with both silicas together, i.e. (A+B2+B3) or with each separately followed by mixing the two partial products (A+B2) and (A+B3). Regardless of how the reaction was carried out, all three components had to be involved.

# (c) Second auxiliary request: The arguments presented with respect to the

foregoing requests were invoked.

### (d) Third auxiliary request:

- (i) Art. 123(2) EPC: The subject-matter of claim 1 was based on the disclosure of originally filed claims 2 and 3.
- (ii) Art. 84 EPC: Claim 6 allowed that the thermal treatment (100°C) could be applied to either only one of the reactions or to

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both. However it was not required that both reactions be carried out at this temperature. This interpretation followed from the dependencies of claim 6 on claim 1, which independent claim had two distinct components and a specific process constellation.

- (iii) Art. 54 EPC: The composition of claim 1 had two components:
  - product of siloxane and hydrophobic silica,
     i.e. A+B2 and
  - product of siloxane and hydrophilic silica i.e. A+B3, which products were then combined. The wording of operative claim 1 "comprising.." and "further comprising.." clearly indicated the requirement for two distinct products.

In examples 5-8 of D1 there was a one pot reaction. All components were present and reacted to yield a single product which hence corresponded to only one of the components specified in operative claim 1. There was no addition of a further product. It was not disputed that during the reaction of D1 examples 5-8 both types of silica would be simultaneously present. However even if such reaction involving both these products did occur only a single product would arise, which was not what operative claim 1 required.

The appellant did not avail itself of the opportunity to comment on submissions of the opponent concerning D9 (see section XII.(d).(iii), below). It also stated that

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it had no objections to the opponent referring to D9.

# (e) Fourth auxiliary request:

The wording of claim 1 was supported by examples 1A-1D and 1-4 of the original application with reference to the sections denoted \*1 and \*4. These were specific examples of the production of the polysiloxane and there was no indication that other components were present. Thus the limitation to "only", i.e. to the named components, had a basis in the application as filed. Solvents, for example, were not permitted by the claim.

# (f) Fifth auxiliary request:

The basis for the wording "Use as an antifouling paint was to be found in paragraph [0012], line 42, paragraph [0136] and paragraph [0142] line 23 of the application as filed. The claim required that the paint be employed in a situation where it exhibited an antifouling effect.

(g) Sixth and seventh auxiliary requests: The same arguments applied as for the fifth, first and second auxiliary requests.

### (h) Eighth auxiliary request:

With regard to novelty, D1 and D2 related to silicone compositions for moulds and concerned for example release properties and durability. Neither of these documents disclosed the use of the compositions as antifouling paints.

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XII. The arguments of the respondent can be summarised as follows:

# (a) Main request:

Water was always present in hydrophilic silica. As a consequence the meaning of the wording "all that is present" was not unequivocal. Further there was no basis for this language in the application as filed.

# (b) First auxiliary request:

There was no basis for the restriction to "only" the specified components. The claim could also be interpreted in different ways since the term "only" appeared to apply to hydrophobic silica, i.e. to be a restriction, however inconsistently with this hydrophilic silica could also be present. Hence the claim was not clear (Art. 84 EPC).

### (c) Second auxiliary request:

The respondent relied on its remarks in respect of the foregoing requests.

# (d) Third auxiliary request:

- (i) Art. 123(2) EPC: Objections were not raised.
- (ii) Art. 84 EPC: The language of claim 6 conflicted with that of claim 1 since, due to the use of "or", it only required that a single component be present in the composition. Claim 1 however mandatorily required the presence of two components. The interpretation of the appellant that the wording "one or both" in claim 6 applied to the process conditions (temperature) but not

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to the components present found no support in the description, reference being made in particular to paragraph [0103].

(iii) Art. 54 EPC: Claim 1 had to be interpreted in the broadest possible sense as was done by the opposition division (sections 6.2 and 6.3 of the decision), however not in the narrow scope as petitioned by the appellant. Claim 1 did not require that the reactions be carried out in separate vessels. Thus a reaction system in which hydrophobic silica and hydrophilic silica were simultaneously reacting, i.e. undergoing thermal treatment with polyorganosiloxane fell within the scope of the claim.

Such a reaction took place in examples 5-8 of D1. Here polyorganosiloxane, hydrophilic silica and silazane were all treated together. During the reaction hydrophobic silica was generated in situ by reaction of the hydrophilic silica with silazane, as confirmed by D9. Thus there was at least one period where both types of silica were present and undergoing reaction with the polysiloxane. At this point in the reaction the system of the examples of D1 fell within the scope of claim 1.

The appellant was reading into present claim 1 restrictions that were not present. The claim did not require a two pot reaction and did not refer to mixing.

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- (e) Fourth auxiliary request: Generalisation of the examples could not provide a basis for the subject matter of this request.
- (f) Fifth, sixth and seventh auxiliary requests: The respondent made no further submissions with respect to these requests.
- (g) Eighth auxiliary request: Novelty was conceded.
- XIII. The appellant/patent proprietor requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or on the basis of auxiliary requests 1 to 9 filed on 10 October 2011 and alternatively that the novelty of any one of the requests on file be recognised and that the case be remitted to the first instance for further prosecution.
- XIV. The respondent/opponent requested that the appeal be dismissed.

# Reasons for the Decision

1. The appeal is admissible.

Main request

2. Article 123(2) EPC

Claim 1 of the main request relates to two different curable compositions. The first curable composition is defined by two aspects or sets of features:

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- a product obtainable by thermally treating a
   polyorganosiloxane with hydrophobic silica and
   hydrophilic silica
- whereby these components are all that are present during the thermal treatment.
- Claim 1 of the patent as granted defined a composition obtainable by thermally treating an polyorganosiloxane (A) with at least one of hydrophobic silica (B-2) and hydrophilic silica (B-3) (emphasis of the Board).

Compared to this claim the subject matter of the first aspect of operative claim 1 has been restricted by eliminating the embodiment whereby only a single one of the silicas was employed, i.e. requiring that the polysiloxane be thermally treated with both silica compounds being present.

2.2 Regarding the second restriction, i.e. that the named components be the only ones present during the thermal treatment, the appellant referred to claim 4, and paragraphs [0072] and [0103] of the application as filed. In original claim 4 however an open wording is employed with two instances of the term "comprising". Further following from the wording of claim 4 it is not unambiguously disclosed or required that the polyorganosiloxane is thermally treated with the hydrophobic silica since the wording "and optionally further comprising" in original claim 4 permits that the hydrophobic silica be added to the product of thermal treatment of the organosiloxane and the hydrophilic silica, but not necessarily and mandatorily that this be present during and thus be involved in the thermal treatment. Also, the open wording of claim 4

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does not impose any requirement that the named components are the only ones present during the thermal treatment step.

- Paragraph [0072] is part of the published application, not as filed. Its counterpart in the original application can be found on page 24, line 20 to page 25, line 6. That passage states that at least the hydrophilic silica should be subjected to thermal treatment and further that preferably both silicas be treated together with (part or all of) the organopolysiloxane. Thus, similarly to claim 4, this presents treatment with both silicas as an explicitly named preferred embodiment. However there is no disclosure in this passage that the named components are all that are present during the thermal treatment.
- 2.4 The original counterpart of paragraph [0103] of the published application (page 39, line 17 to page 40, line 15) contains a similar disclosure as concerns the silicas to be used but further specifies the temperature at which the reaction is to be carried out. Hence not only does this passage not disclose either the specific combination of reactants specified in operative claim 1 or the requirement that these be the only ones present, it contains further restrictions which are not present in claim 1.
- 2.5 Accordingly there is no explicit disclosure in the application as originally filed of the requirement that the named components are all that are present during the thermal treatment.

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- 2.6 The appellant had argued that the requirement that the named components are the only ones present is to be seen as a (further) limitation of the disclosed subject matter, analogous to modifying "comprising" to "consisting of" which normally would be allowable. However, the consequence of this in the present case is that two restrictions have been made compared to the disclosure of the application as filed, namely:
  - a first selection involving eliminating the possibility that only one or other of the silicas be present during the thermal treatment step,
  - a second selection eliminating the possibility that other materials than those explicitly named be present during the thermal treatment step.

The effect of this "double selection" is to give rise to a constellation of subject matter which was not disclosed in the application as filed, contrary to the requirements of Art. 123(2) EPC.

2.7 The main request is therefore refused.

First auxiliary request

3. Art. 123(2) EPC

Claim 1 of the first auxiliary request corresponds in essence to the first part of claim 1 of the main request but specifies that thermal treatment is carried out with "only" hydrophobic silica and hydrophilic silica.

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For the same reasons as indicated for the main request, this subject matter constitutes a two-fold selection from the disclosure of the application as originally filed. Consequently the resulting subject matter does not meet the requirements of Art. 123(2) EPC.

The first auxiliary request is refused.

Second auxiliary request

# 4. Art. 123(2) EPC

The first part of claim 1 of the second auxiliary request is identical to the first part of claim 1 of the main request. Hence, for the reasons indicated in section 2 above, this subject matter does not meet the requirements of Art. 123(2) EPC.

The second auxiliary request is refused.

Third auxiliary request

### 5. Art. 123(2) EPC

The subject matter of claim 1 of the third auxiliary request corresponds to the subject matter of the second embodiment of original claim 3, which was dependent on claim 2. Accordingly the requirements of Art. 123(2) EPC are satisfied.

### 6. Art. 84 EPC

6.1 The wording of claim 1 of the third auxiliary request is in two parts:

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- A product obtainable by thermally treating a organopolysiloxane (A) with a hydrophobic silica (B-2) and
- further comprising a product obtainable by thermally treating an organopolysiloxane (A) with a hydrophilic silica (B-3).

Both these parts specify the materials that are mandatorily present during the thermal treatment step. However there is no wording in the claim which imposes a requirement that the materials indicated in the respective parts of the claim be the only materials present during the step of thermally treating, i.e. the presence during the thermal treatment of other materials than those explicitly named is permitted.

6.2 Claim 6, which is dependent on claim 1, defines the composition in terms of comprising the product of "one or both" of two reactions, each defined by the temperature. Thus claim 6 relates, consistently with claim 1, to two different products, i.e. reaction of either hydrophilic silica with organopolysiloxane, or hydrophobic silica with organopolysiloxane, each reaction under defined conditions.

The effect of this claim is to restrict the subject matter of claim 1 to the extent that either, or both of the components thereof are obtainable by subjecting the reactants to a reaction under defined conditions. Thus the effect of claim 6 is to restrict the conditions under which one or both of the components of claim 1 is obtained and hence is a restriction within the scope of claim 1. The subject matter of claim 6 is therefore consistent with the subject matter of claim 1.

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- 6.3 Claim 6 permits the presence of two products. However, its wording does not impose a requirement that during the thermal treatment no other materials than those explicitly named can be present.
- 6.4 There is consequently no contradiction or inconsistency between claims 1 and 6. The requirements of Art. 84 EPC are therefore satisfied.
- 7. Art. 54 EPC
- 7.1 D1 discloses in examples 5 to 8 the preparation of a composition by reacting a dimethylpolysiloxane having terminal hydroxydimethylsilyl groups (i.e. groups capable of condensation reaction) and dimethyl polysiloxanes with trimethylsilyl groups with hydrophilic silica (Aerosil 200) together with hexamethyldisilazane and water. The components are stirred for one hour at an unspecified temperature. Thereafter the temperature is increased to 150°C and mixing continued for two further hours.

The effect of treating a hydrophilic silica with disilazane is to render the hydrophilic silica hydrophobic, as explained in paragraph [0085] of the patent in suit. Thus in the process of D1 initially a hydrophilic silica is treated with a hydrophobizing agent, together with other materials (water, organopolysiloxane).

The question that is to be answered is whether the composition according to D1 falls under the wording of present claim 1 or in other words to what extent the

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silazane reacts with the hydrophilic silica prior to the step of increasing the temperature.

- 7.2 D1 itself provides no elucidation of this aspect. D9
  was submitted by the respondent with the rejoinder to
  the statement of grounds to appeal in order to clarify
  the reaction according to D1. The appellant did not
  object to the citation of this document or the
  reference made thereto at the oral proceedings.
  Accordingly, in view of its relevance, the Board can
  identify no obstacle to admitting this document to the
  proceedings.
- 7.3 D9 relates to a study aimed at maximizing the extent of hexadimethyldisilazane reaction with (hydrophilic) silica. In the examples various temperatures are employed. Also examples with and without catalysts are reported.

According to the respondent and not disputed by the appellant, the experiment of D9 which comes closest to the process of examples 5-8 of D1 is the second entry in table 3 on page 180 of D9. In this example there is water present on the silica and in the solvent as is explained in section 2.1 and denoted by the entry in the third column of the table on page 180 of D9. The extent of treatment of the silica by the silazane ("TMS Loading"; D9 page 176 first section) given in µmol/m² of this example is the lowest of all those reported in Table 3 of D9.

Based on these data, it appears - and has not been disputed by the appellant - that when carrying out the treatment under the conditions specified in D1 examples

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5-8, only partial conversion of the hydrophilic silica to hydrophobic silica will occur.

- 7.4 The conclusion is therefore that as a consequence of the only partial conversion of hydrophilic to hydrophobic silica in the subsequent thermal treatment step of D1, i.e. raising the temperature to 150°C, both types of silica hydrophilic and hydrophobic will be present, even if the exact proportion thereof is not known.
- Onsequently in the thermal treatment step disclosed in D1 the polysiloxane will be undergoing simultaneously treatment with both types of silica. Therefore, D1 discloses preparation of a composition by reaction (thermal treatment) of a polyorganosiloxane with both types of silica simultaneously, which results in a composition falling within the scope of claim 1 of the third auxiliary request. The subject matter of this claim is therefore not novel, contrary to the requirements of Art. 54 EPC.
- 7.6 The third auxiliary request is refused.

Fourth auxiliary request

8. Art. 123(2) EPC

Claim 1 of the fourth auxiliary request is directed to a curable composition comprising two reaction products:

a product obtainable by thermal treatment of an organopolysiloxane with only a hydrophobic silica and

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- a product obtainable by thermal treatment of an organopolysiloxane with only a hydrophilic silica (emphasis in both cases is the Board's).

According to the appellant the basis for this formulation, in particular the restriction imposed by "only" was provided by the examples.

- 8.1 The examples however represent specific embodiments and contain restrictions e.g. since specific defined components and conditions are used whereby it is not clear that these can be seen separately from the other features described in the examples. As these restrictions are absent from the claims those examples cannot be relied upon to provide a basis for this subject matter.
- 8.2 Nor can the general disclosure of the claims as originally filed provide support for this subject matter for the following reasons:

The subject matter of claim 1 of the fourth auxiliary request corresponds to that of the third auxiliary request with the additional restriction imposed by the dual presence of "only".

Since the subject matter of claim 1 of the third auxiliary request was itself a selection from the original claims, i.e. the subject matter of claim 2 with one embodiment of claim 3 as originally filed (see section 5, above), the additional restriction constitutes a second selection.

Accordingly the subject matter of claim 1 of the fourth auxiliary request constitutes a two-fold selection from

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the disclosure of the application as originally filed, resulting in a constellation of subject matter that was not directly and unambiguously disclosed therein.

The subject matter of claim 1 of the fourth auxiliary request therefore extends beyond the content of the application as filed contrary to Art. 123(2) EPC.

8.3 The fourth auxiliary request is refused.

Fifth, sixth and seventh auxiliary requests

9. The compositions used as an antifouling paint according to the claims 1 of the fifth, sixth and seventh auxiliary requests are identical to those defined in the claims 1 of the main, the first auxiliary and the second auxiliary requests, respectively. For the same reasons as set out in sections 2, 3 and 4 above, this subject-matter does not meet the requirements of Art. 123(2) EPC.

The fifth, sixth and seventh auxiliary requests are therefore refused.

Eighth auxiliary request.

- 10. Art. 123(2) EPC
- 10.1 The composition used as an antifouling paint according to claims 1 of the eighth auxiliary request is identical to that defined in claim 1 of the third auxiliary request. As indicated in section 5 above, the subject-matter of the third auxiliary request, and

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hence the composition used in present claim 1, meets the requirements of Art. 123(2) EPC.

- 10.2 On page 9, lines 7 to 13, of the original description the use of the curable composition as an antifouling paint is disclosed. The same disclosure is to be found on page 53, line 18 to page 54, line 17, as well as on page 56, line 23 to page 57, line 21. This subjectmatter is also disclosed in original claim 17, which was directed to the use of the composition of original claim 15 as an antifouling paint. Original claim 15 was directed to a coating composition containing a curable composition according to any of original claims 1-13.
- 10.3 Accordingly claim 1 of the eighth auxiliary request meets the requirements of Art. 123(2) EPC.
- 10.4 The subject matter of claims 2-8 is derived from original claims 5-11 with consequential amendments to take account of the change of category of the claim.

The subject matter of claims 9 and 10 is based on the disclosure of page 31, lines 1 to 11, and page 32, line 3, to page 33, line 8, respectively, of the original description.

Claims 11 and 12 correspond to original claims 12 and 13 again with corresponding adaptations to take account of the formulation of claim 1 as a "use" claim.

10.5 Consequently the requirements of Art. 123(2) EPC are satisfied.

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### 11. Art. 54 EPC

Claim 1 is directed to the use of the composition as an antifouling paint.

The respondent conceded novelty of this subject matter. The Board is also satisfied that none of the documents cited in the opposition procedure disclose this subject matter:

- 11.1 D1, which document was found to anticipate the subject matter of claim 1 of the main request, i.e. the composition as such, discloses the use of that composition for forming moulds (see D1 column 1 line 45ff- column 2 line 14). There is no disclosure in D1 of the use of the composition as a coating of any kind, let alone an antifouling paint.
- 11.2 D2 is likewise directed to the use of the silicone composition to form a mould (see abstract, section "Background of the Invention"). There is no disclosure in this document of the use of the composition as an antifouling paint.
- 11.3 D3 is directed to polysiloxane coatings for use inter alia as antifouling/antisoiling coatings (abstract).

  According to column 9, lines 4ff, the proposed fields of use are as an antiadherent coating in contact with foodstuffs, coating for metal vessels employed in food preparation and as an antiadhesive and non-toxic coating for materials in contact with the human body, i.e. in the very broadest sense "antifouling" coatings.

However the compositions of D3 are, according to claim 1 and the examples, prepared by blending

(homogenizing) a hydrophobic silica with an organopolysiloxane and optionally other materials, after which the compositions are filled into moisture tight cartridges. There is no disclosure of any heat treatment step, nor is a hydrophilic silica present. Consequently the composition as used according to claim 1 of the eighth auxiliary request is distinguished from the compositions of D3 due to the fact that it is comprises the two products - one obtainable by thermally treating an organopolysiloxane with hydrophobic silica and one obtainable by thermal treatment of an organopolysiloxane with hydrophilic silica.

- 11.4 D4 discloses a non-toxic anti-fouling coating composition which is based on two types of polyorganosiloxane, a silicone oil and hydrophobic silica. According to the examples the compositions are prepared by blending in a mixer. Neither hydrophilic silica, nor a thermal treatment step are disclosed. Accordingly the subject matter of claim 1 of the eighth auxiliary request is distinguished from the disclosure of D4 by the feature that the composition used contains two reaction products as set out in the foregoing section i.e. (polysiloxane + hydrophobic silica) and (polysiloxane + hydrophilic silica).
- D5 relates to a process for preparing a dispersion of polyorganosiloxane and *inter alia* hydrophobic silica. According to the examples the components are combined by mixing on a three roll mill. In a subsequent step, following addition of hydroxy terminated methylvinyl polysiloxane and a silane the mixture is heated to 150°C and stirred at this temperature for two hours,

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which corresponds to the heat treatment step as set out in the patent in suit. However only a single type of silica - hydrophobic - is involved in the reaction. Further among the uses disclosed for the composition of D5 in paragraphs [0001] and [0023] (references to the English language translation) are release agent, and coating agent. There is no disclosure of the use as an antifouling paint. Consequently due to the different constitution of the product and the absence of any disclosure of the specified use, the subject matter of claim 1 of the eighth auxiliary request is novel with respect to the disclosure of D5.

- 11.6 As none of the cited documents discloses the subject matter of claim 1 of the eighth auxiliary request novelty can be recognised. The remaining claims are dependent on claim 1. Consequently this conclusion applies also to those claims.
- 11.7 The eighth auxiliary request consequently meets the requirements of Art. 54 EPC.

The further procedure.

12. The decision of the opposition division considered only the requirements pursuant to Art. 54 and/or 84 EPC Neither in the decision, nor in the communication accompanying its summons to oral proceedings did the opposition division provide even an indication of its position on inventive step, let alone a fully reasoned analysis.

Accordingly the Board considers that the appropriate course of action, in line with the request of the

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appellant, is to remit the case to the first instance so that the matter of inventive step can be dealt with.

# 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 the 8th auxiliary request as filed on 10 October 2011.

Registrar Chairman

E. Goergmaier B. ter Laan