

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen
(D) No distribution

**Datasheet for the decision
of 7 September 2012**

Case Number: T 0968/11 - 3.3.06
Application Number: 05801068.7
Publication Number: 1799799
IPC: C11D 3/00, C11D 3/02,
C11D 1/66, C11D 1/722
Language of the proceedings: EN

Title of invention:

Methods of protecting glassware surfaces from corrosion using detergent compositions containing polyvalent metal compounds and high levels of low foaming, nonionic surfactants

Patentee:

The Procter & Gamble Company

Opponents:

Henkel AG & Co. KGaA
Unilever N.V.

Headword:

Automatic dishwashing method comprising ≥ 8 wt% of a low foaming nonionic surfactant/P&G

Relevant legal provisions:

EPC Art. 83, 54, 56
RPBA Art. 12(2)

Keyword:

"Article 83 objection admissible - (yes)"
"Maintenance of the patent as granted"

Decisions cited:

-

Catchword:

-



Case Number: T 0968/11 - 3.3.06

D E C I S I O N
of the Technical Board of Appeal 3.3.06
of 7 September 2012

Appellant: The Procter & Gamble Company
(Patent Proprietor) One Procter & Gamble Plaza
Cincinnati, OH 45202 (US)

Representative: Clarke, Lionel Paul
Gill Jennings & Every LLP
The Broadgate Tower
20 Primrose Street
London EC2A 2ES (GB)

Respondent I: Henkel AG & Co. KGaA
(Opponent 1) Henkelstrasse 67
D-40589 Düsseldorf (DE)

Representative: Henkel AG & Co. KGaA
VTP Patente
D-40191 Düsseldorf (DE)

Respondent II: Unilever N.V.
(Opponent 2) Weena 455
NL-3013 AL Rotterdam (NL)

Representative: Boerma, Caroline
Unilever Patent Group
Olivier van Noortlaan 120
NL-3133 AT Vlaardingen (NL)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted 23 February 2011
revoking European patent No. 1799799 pursuant
to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman: P.-P. Bracke
Members: E. Bendl
J. Geschwind

Summary of Facts and Submissions

I. The appeal lies from the decision of the Opposition Division to revoke the European patent 1 799 799.

II. Claim 1 as granted reads:

"1. A method of protecting glassware and providing improved cleaning benefits in an automatic dishwashing appliance, said method comprises the steps of:

a) providing an ADW detergent composition comprising:

- (i) an effective amount of a water-insoluble polyvalent metal salt compound;
 - (ii) at least 8%, by weight, of a low-foaming nonionic surfactant with a cloud point of less than 32°C; and
 - (iii) optionally, at least one adjunct ingredient;
- wherein said composition has a pH in the range of from 7 to 12, as measured by a 1% aqueous solution and

b) contacting glassware in need of treatment with the ADW detergent composition in an automatic dishwashing appliance during at least some portion of the wash cycle."

Claims 2-18 are dependent on Claim 1.

III. In appeal procedure the Appellant/Proprietor maintained the set of claims as granted as the main request and additionally filed three auxiliary requests.

IV. The Respondents/Opponents inter alia raised objections as to the requirements of Articles 83, 54 and 56 EPC and cited documents

D8 = EP-A-0 383 482

D10 = WO-A-2004/046299

D11 = WO-A-03/006594

D12 = EP-A-0 925 342

V. The main arguments of the **Appellant** were as follows:

Admissibility of the Article 83 EPC objection

- The objection is not admissible since the arguments provided in appeal phase were only copied from the submission filed in opposition procedure. Therefore no reasons were given, as to why the Opposition Division was wrong in its decision.

Sufficiency of disclosure

- The skilled person knows how to determine the cloud point of a surfactant and how to re-work the present invention. Therefore, the invention is sufficiently disclosed.

Novelty

- Multiple selections have to be made in D11 and D8 to arrive at the present invention. Therefore, neither of these documents is novelty-destroying.

Inventive step

- D8 is the closest state of the art.

- There is no teaching in D8 to use an amount of non-ionic surfactant higher than 8 wt%. The present invention therefore provides a non-obvious alternative to the teaching of D8.

- Also the combination of D8 with either of D10, D11 or D12 does not lead to the present invention, as the skilled person would not combine these disclosures. Therefore, an inventive step is given.

The main arguments of the **Respondents** were as follows:

Admissibility of the Article 83 EPC objection

- The facts with regard to sufficiency of disclosure have not changed since the opposition procedure. The Opposition Division should have revoked the patent-in-suit on the basis of Article 83 EPC. Therefore, the grounds as presented in opposition proceedings have been re-submitted.

Sufficiency of disclosure

- Several methods for determining the cloud point are known; they all lead to different results. The skilled person does not know which one to use for the purpose of the present invention. Due to this lack of sufficient disclosure it is not possible to determine whether or not a given method falls within the scope of the claimed invention.

Novelty

- The combination of Claims 1, 6, 13, 16, 17 of D11 discloses the method as claimed in the patent-in-suit. The only selection which has to be made is the choice of the specific non-ionic tensid, which

is for instance disclosed on page 20, penultimate paragraph of D11. Therefore, D11 is novelty-destroying for Claim 1 as granted.

- The combination of Claims 1 and 2 of D8 discloses the method as claimed in the patent-in-suit. Only the pH value has not been explicitly described, but the pH-range 7-12 is implicit to any dishwashing detergent. Consequently, also D8 is novelty-destroying for Claim 1 of the patent-in-suit

Inventive step

- D8 is the closest state of the art. It describes the same problems as the invention.
- Starting from D8 it would have been obvious to increase the amount of detergent to improve cleaning ability of the detergent composition.
- At least D8 in combination with either of D10-D12 would have pointed towards the use of higher amounts of non-ionic surfactant. Therefore, the claimed invention does not involve an inventive step.

VI. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request or the first auxiliary request, both filed with the grounds of appeal, or on the basis of the second or third auxiliary request, filed with the letter of 06 August 2012.

The Respondents requested that the appeal be dismissed.

Reasons for the Decision

Main request

1. Admissibility of Respondent I's objection with regard to sufficiency of disclosure
 - 1.1 The Appellant objected, that the objection with regard to Article 83 EPC would not be admissible, because Respondent I's reply to the notice of appeal was allegedly only made by copying the arguments presented in the opposition procedure. Therefore it did not define, in contrast to the requirements of Article 12(2) RPBA, why the Opposition Division's decision should not be upheld as far as the Division's view with regard to the requirements of Article 83 EPC is concerned.
 - 1.2 The Appellant's opinion cannot be shared by the Board. Respondent I referred in the reply to the Appellant's grounds of appeal to the Opposition Division's decision and explained why the conclusions drawn with respect to Article 83 were allegedly wrong (see the Appellant I's letter of 04 November 2011, the paragraph bridging pages 2 and 3). The fact that the same arguments have been presented as in the opposition procedure does not change the Board's view.
 - 1.3 Thus, the requirement of Article 12(2) RPBA is met and the objection concerning the requirement of Article 83 EPC is admitted into the procedure.

2. Sufficiency of disclosure

2.1 Respondent I objected, that a number of different procedures to determine the cloud point were known to the person skilled in the art. Given the lack of assistance when choosing which method to use, the skilled person would be confronted with an insufficiency of disclosure.

2.2 The Board considers the requirement of Article 83 EPC to be met. Respondent I conceded that various suitable methods are available for determining the cloud point. Thus, the skilled person could select any of them to carry out the present invention, even if they might lead to different results. No proof has been submitted by the Respondents, that the invention cannot be reproduced once a suitable method has been chosen.

2.3 Possible doubts whether a given method lies within or outside the claimed invention, relate to clarity rather than sufficiency of disclosure.

2.4 Thus, the requirement of sufficiency of disclosure is met.

3. Novelty

3.1 Both Respondents cited D8 and D11 as novelty-destroying for the subject-matter of Claim 1 of the main request.

3.2 As conceded by the Respondents, the pH value of the detergent composition has not been disclosed in D8; a value between 7-12 was considered to be implicit.

- 3.3 The Board cannot share this view, as the available prior art also describes higher pH values for automatic dishwashing compositions. For instance D10 discloses pH values ranging up to 14 (D10, page 12, last paragraph).
- 3.4 Thus, D8 does not directly and unambiguously disclose a method according to Claim 1 of the main request.
- 3.5 According to the Respondents, the combination of Claims 1, 6, 13, 16 and 17 of D11 leads to the subject-matter as presently claimed. They argued that the only feature not disclosed in the claims were the low-foaming non-ionic surfactant, which would have to be selected from the list given in the description.
- 3.6 Also in this case the Board cannot see an unambiguous and direct disclosure of the subject-matter of Claim 1 of the patent-in-suit: Claim 1 of D11 teaches an amount of 5 to 30 wt% of a non-ionic surfactant. Although Claim 6 discloses a preferred range between 8 and 17,5 wt%, this is only one out of four options listed in this claim. Thus, not only a specific non-ionic surfactant, but also its amount has to be chosen from a list.
- 3.7 Since at least two selections have to be made, also D11 does not directly and unambiguously disclose a method according to Claim 1 of the main request.
- 3.8 Thus, the requirement for novelty is met by the subject-matter of Claim 1 of the patent-in-suit.

4. Inventive step

- 4.1 The aim of the patent-in-suit is to provide cleaning benefits and corrosion protection for glassware in an automated dishwashing method.

All parties based their considerations on D8 as the closest state of the art. The Board agrees to using this document as the starting point for considerations on inventive step.

D8 aims at cleaning glassware in a dishwashing process and protecting it from corrosion.

- 4.2 Since D8 describes the same problems as the patent-in-suit, the objective problem of the latter has to be defined as the provision of an alternative dishwashing method achieving both aims.

- 4.3 The method according to Claim 1 of the patent-in-suit has been proposed as the solution to this problem.

Claim 1 differs from the teaching of D8 in the mention of the pH value of the composition and overlaps with regard to the content of non-ionic surfactant only in one specific value.

- 4.4 The Respondents did not dispute that the problem of providing an alternative method has been solved over the entire range claimed. The Board does also not see any reason to doubt this.

- 4.5 The remaining question to be clarified is, whether, when starting from the closest prior art, the claimed subject-matter involves an inventive step.
- 4.5.1 The patent-in-suit teaches to use **at least** 8 wt% of a low-foaming non-ionic surfactant, whereas D8 recommends to use **0.1 to 8.0 wt%** of a surfactant, which is preferably a low-foaming bleach-stable non-ionic surfactant.
- 4.5.2 Given the fact that the preferred amounts of surfactant in D8 are described to range between 0.5 and 5.0 wt%, the skilled person is given the hint to work in the lower part of the range rather than in the overlap with the range defined in Claim 1 of the patent-in-suit. This teaching in D8 is supported by the examples, which at most contain 2.6 wt% of non-ionic surfactant.
- 4.5.3 The Appellants furthermore argued, that it would be obvious to improve cleaning properties of an automatic dishwashing composition by incorporating an increased amount of detergent.
- 4.5.4 Given the poor solubility of low-foaming non-ionic surfactants the Board does not share this opinion.
- 4.5.5 The patent-in-suit discloses in paragraph [0004], that the level of non-ionic surfactants used in the prior art was limited due its low solubility. The same teaching can also be found in D8: "The compositions of the invention contain from about 0.1% to about 8.0%, more preferably from about 0.5 to about 5.0% of preferably low-foaming bleach-stable surfactant.
Nonionic surfactants are preferred. [...] Preferred

- surfactant compositions with relatively low solubility** can be incorporated in compositions containing..." (D8, page 4, lines 38-42; emphasis added).
- 4.5.6 Due to fact that the skilled person was aware of the problem of low solubility from D8 and that preferably low amounts of low-foaming non-ionic surfactant were used in this document, the subject-matter as presently claimed cannot be considered to be derivable from this prior art disclosure.
- 4.5.7 In an alternative approach of attacking the inventive step the Respondents combined the teaching of D8 with any of documents D10, D11 or D12 in order to arrive at the present invention.
- 4.5.8 D10 refers to a method for cleaning and protecting glassware. "Surfactants may be present at any level. In some embodiments, the surfactant is present at from about 0% to about 50% by weight, or from about 0.5% to about 10% by weight, or from about 1% to about 5% by weight of the composition. [...] The surfactant may comprise anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, ampholytic surfactants, zwitterionic surfactants, and mixtures thereof." (D10, page 16, lines 1-7).
- 4.5.9 Thus, there is no teaching that non-ionic surfactants are preferred and in particular not that low-foaming non-ionic surfactants should be used in amounts of at least 8 wt%. The more specific (preferred) ranges of surfactants point again towards low amounts of surfactant, whereas the pH of the compositions

according to D10 may be outside the limits given in present Claim 1, i.e. it may amount up to 14.

Thus, D10 does not hint towards the combination of features of Claim 1 of the patent-in-suit.

4.5.10 Furthermore, since the aim of inhibiting glassware corrosion is described in D8 as being achieved (D8, page 8, lines 52/53) and the purpose of "cleaning" is considered to be implicitly met by a dishwashing composition, as conceded by Respondent I in the oral proceedings, the skilled person would not even have had an incentive to combine the teaching of this disclosure with the one of D10.

4.5.11 D11 aims at providing a fluid or gel-like automatic dishwashing product, which does not necessitate the addition of a separate rinsing aid. Given the different purposes, the person skilled in the art would not have had any incentive to combine both teachings either.

4.5.12 Finally, D12 describes automatic dishwashing compositions which provide superior cleaning performance. A low-foaming non-ionic surfactant may be contained in amounts of 0.1 to 10%, with the range of 0.25 to 4 wt% being preferred. In the examples amounts of at most 2 wt% are used. Thus, also in this case the anticipation teaches to use low amounts rather than amounts in the range overlapping with the patent-in-suit.

4.5.13 In addition, also for this approach no reason can be seen by the Board why the teaching of D8 should be combined with the one of D12.

- 4.6 Consequently, as neither D8 alone, nor D8 in combination with any of the cited documents renders the present invention obvious, the claimed subject-matter is considered to involve an inventive step.
5. Due to the fact that the main request meets the requirements of the EPC, there is no need to discuss further objection raised by the parties against the auxiliary requests.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained as granted.

The Registrar

The Chairman

D. Magliano

P.-P. Bracke