

**Internal distribution code:**

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

**Datasheet for the decision  
of 16 March 2015**

**Case Number:** T 2492/12 - 3.3.06

**Application Number:** 00986683.1

**Publication Number:** 1305383

**IPC:** C11D1/00

**Language of the proceedings:** EN

**Title of invention:**  
CLEANING COMPOSITION

**Patent Proprietor:**  
THE PROCTER & GAMBLE COMPANY

**Opponent:**  
Henkel AG & Co. KGaA

**Headword:**  
Hard surface cleaning composition/P&G

**Relevant legal provisions:**  
EPC R. 99(2)  
EPC Art. 56

**Keyword:**  
Admissibility of appeal -  
request defining subject of appeal and giving grounds (yes)  
Inventive step - main request (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern  
Boards of Appeal  
Chambres de recours**

European Patent Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89 2399-4465

Case Number: T 2492/12 - 3.3.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.06**  
**of 16 March 2015**

**Appellant:** Henkel AG & Co. KGaA  
(Opponent) Henkelstrasse 57  
40589 Düsseldorf (DE)

**Representative:** Henkel AG & Co. KGaA  
FJP / Patente  
40191 Düsseldorf (DE)

**Respondent:** 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)

**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 25 September  
2012 rejecting the opposition filed against  
European patent No. 1305383 pursuant to Article  
101(2) EPC.**

**Composition of the Board:**

**Chairman** L. Li Voti  
**Members:** E. Bendl  
G. Weiss

## Summary of Facts and Submissions

I. The appeal lies from the decision of the opposition division to reject the opposition against the European patent No. 1 305 383.

II. Claim 1 as granted reads as follows:

*"1. A hard surface cleaning composition for removing cooked-, baked- or burnt-on soils from cookware and tableware, the composition comprising an organoamine solvent and having a liquid surface tension of less than 25 mN/m and a pH as measured in a 10% solution in distilled water of at least 10.5."*

Claims 2 to 16 refer to preferred embodiments of claim 1.

III. In its statement setting out the grounds of appeal the opponent (thereafter referred to as the appellant) cited documents

D2 = US 5 929 007 A,

D4 = WO 99/24539 A1,

D5 = WO 99/53003 A1,

D6 = Experimental data submitted by the patent proprietor on 11 August 2006 during the examination stage

and held, that the opposition division erred in upholding the patent-in-suit as granted, because the claimed subject-matter did not involve, in its view, an inventive step when starting from document D5, disclosing compositions differing from the claimed ones only insofar as they had a greater liquid surface tension, as demonstrated in comparative tests D6. It

additionally stated, that also D2 or D4 could be used as a starting point for attacking inventive step in an analogous way.

- IV. In its letter dated 22 March 2013 in response to the notice of appeal and the statement setting out the grounds of appeal, the respondent (patent proprietor) considered the appeal inadmissible due to lack of substantiation, requested not to admit D2 and D4 into the appeal proceedings, as the attack based on these documents in the grounds of appeal was not sufficiently substantiated and regarded the claimed subject-matter to be inventive with regard to the closest state of the art, represented by document D5.

The claims as granted were maintained as the main request; in addition five sets of claims were submitted as auxiliary requests 1 to 5.

- V. Oral proceedings were held on 16 March 2015. The main issues discussed were the admissibility of the appeal as well as the issue of inventive step with regard to the main request starting from document D5. In this respect, the appellant admitted that the arguments against inventive step based on documents D2 and D4 were the same as those presented starting from document D5. Therefore, it refrained from discussing in detail documents D2 and D4.

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

The respondent requested that the appeal be dismissed or, in the alternative, that the patent be maintained in amended form on the basis of one of the auxiliary

requests 1 to 5 submitted with the letter dated 22 March 2013.

VII. The arguments of the appellant, which are of relevance for the present decision, were as follows:

Admissibility of the appeal

- In the statement setting out the grounds of appeal it was clearly indicated why the opposition division erred in its decision.
- The relevant facts and prior art documents supporting this view were also listed.
- Thus, the appeal was admissible.

As regards the admissibility of D2 and D4

- It was pointed out that they had been mentioned in the decision under appeal.
- Moreover it had been indicated in the statement of grounds that the reasoning based on these documents was analogous to the reasoning with regard to D5.

Inventive step

- D5 was the closest state of the art.
- As shown in the comparative tests D6, some of the examples of D5 (which contained a rather low amount of amine oxide surfactant), distinguished from the subject-matter of claim 1 only by having a higher surface tension.
- D5 disclosed a possible range of 20 to 90 wt% of surfactant.
- The skilled person knew that a high amount of surfactant leads to a reduced surface tension; similarly it knew that an increase of the amount of solvent would also reduce surface tension.

- Therefore it was obvious for the skilled person, starting from D5 and looking for alternative compositions, to increase the amount of surfactant and/or the amount of solvent in the course of a routine optimization of the compositions of D5 and to arrive at cleaning compositions as presently claimed, possessing the low surface tension at issue.

VIII. The arguments of the respondent, which are of relevance for the present decision, were as follows:

Admissibility of the appeal

- The appeal was not sufficiently substantiated, as it did not refer (sufficiently) to the impugned decision.
- Only D5 was briefly mentioned.
- No reasons were given with regard to D2 and D4.
- The appeal was a "copy and paste action" of the grounds for opposition.
- Therefore, the appeal was not admissible.

Admissibility of D2 and D4

- No reasoning was given in the grounds of appeal with regard to these two documents.
- Thus, they should not be admitted in the appeal proceedings.

Inventive step

- There was no teaching in D5 upon how to adjust the surface tension and the pH of the cleaning compositions in order to arrive at the claimed invention.
- The comparative data submitted with the letter of 22 March 2013 showed that a surface tension of

below 25 mN/m produced an improved effect on the removal of burnt-on soils.

- Such a teaching was not derivable from D5.
- Therefore, the claimed subject-matter involved an inventive step.

### **Reasons for the Decision**

1. Admissibility of the appeal - legal and factual reasons to be specified and grounds to be analysed

1.1 The respondent argued that, in contrast to the requirements of Rule 99(2) EPC, the appeal was not sufficiently substantiated, as the statement setting out the grounds of appeal did not set out why the impugned decision was incorrect and represented merely a "copy and paste" version of the notice of opposition.

It was therefore held that the appeal should be rejected as inadmissible.

1.2 The board does not share this view. In the grounds of appeal the appellant referred to the attacked decision (see the reference to the case number on the first page) and explained, why it considered the opposition's division decision to be incorrect (page 2, lines 5ff). It stated its requests (page 1, first paragraph), referred in detail at least to D5 and gave reasons as to why the claimed subject-matter was allegedly obvious (paragraph bridging pages 1 and 2).

1.3 Thus, the board concludes that the appellant has sufficiently indicated the reasons for setting aside the decision impugned and the facts and evidence on

which the appeal is based. The requirements of Rule 99(2) EPC are met.

1.4 Therefore, the appeal is admissible.

2. Admissibility of documents D2 and D4

2.1 The respondent requested not to admit these two documents into the appeal proceedings, as they were only briefly mentioned in the grounds of appeal, without giving a detailed reasoning.

The appellant rebutted this statement, as it was stated in the grounds of appeal that the line of argumentation for these two documents was analogous to that used for D5 (see point VII above).

2.2 The board remarks that the appellant (see point V above) admitted during oral proceedings that the arguments against inventive step based on documents D2 and D4 were the same as those presented starting from document D5 and refrained from discussing in detail documents D2 and D4.

It is thus undisputed that the possible consideration of documents D2 and D4 would not lead to a different conclusion than the evaluation of inventive step taking D5 as the closest prior art. D5 can thus be fairly considered to be representative also for these prior art documents and only this document will be discussed hereinafter by the board in the evaluation of inventive step.

Under these circumstances the board finds that it is unnecessary to decide whether, or not, documents D2 and D4 were admissible.



3. Inventive step

3.1 The invention

The present invention relates to a composition for the removal of cooked-, baked- and burnt-on soils from cookware and tableware (patent-in-suit, paragraph [0001]).

According to paragraph [0005] the composition according to the claimed composition, and in particular the organoamine solvent contained therein, exhibits at a low liquid surface tension and high pH an ability to act as an agent for swelling, hydrating or otherwise solvating cooked-, baked- or burnt-on soils without the need to apply external mechanical forces.

3.2 Closest prior art

The board considers D5 as a suitable starting point for the problem and solution approach, as this prior art disclosure (page 1, lines 5 to 8) relates to the same technical area as the patent-in-suit and deals with the same technical problem, i.e. the removal of oxidized, particularly denatured grease stains from the surface of cooking instruments in kitchens.

Both parties shared the board's view concerning the best springboard for the problem and solution approach. They also agreed that the disclosure of D5, in particular the examples 4, 5, 9 and 10, differed from the patent-in-suit only in that these cleaning compositions have a higher surface tension.

### 3.3 Technical problem

3.3.1 As the closest state of the art already refers to the removal of cooked-, baked- or burnt-on soils and the patent-in-suit aims at improving efficacy thereof (paragraph [0004]), the problem of the present invention vis-à-vis D5 has to be seen, in the respondent's view, as the provision of hard surface cleaning compositions having improved efficacy in the removal of this kind of soils.

### 3.4 Solution

As the solution to the posed problem the respondent has proposed the hard surface cleaning composition according to claim 1, which, in particular, comprises an organoamine solvent and which possesses a surface tension of less than 25 mN/m and a pH, measured in a 10% solution in distilled water, of at least 10.5.

### 3.5 Success of the solution

No evidence has been submitted by the respondent, that the removal of cooked-, baked- or burnt-on soils was improved by means of the claimed compositions compared to those of document D5. In fact, also the comparative data of the respondent's letter of 22 March 2013, pages 4/5, do not concern compositions as exemplified in D5.

For the sake of argument the board accepts the appellant's view that the technical problem underlying the invention has to be re-defined in a less ambitious way as the provision of **alternative** hard surface cleaning compositions suitable for removing cooked-, baked- or burnt-on soils, i.e. the same technical

problem identified in the decision under appeal (page 4, fourth full paragraph).

The board has no reason to doubt that the claimed compositions are capable of removing cooked-, baked- or burnt-on soils from cookware and therefore meet this less ambitious goal. This was also not disputed by the appellant.

### 3.6 Obviousness

- 3.6.1 It remains to be decided whether the proposed solution was obvious to the skilled person when starting from the closest state of the art.

The appellant held that the compositions according to D5 might contain up to 90 wt% of surfactant (see claim 2) and that the skilled person knew that a high amount of surfactant would lead to a reduction of the surface tension. As examples 4, 5 (and 9, 10) of D5 only distinguished from the claimed subject-matter in the higher surface tension values, it was, according to the appellant, obvious for the skilled person to arrive at the claimed subject-matter by routine optimization of these known compositions simply by increasing the amount of surfactant and thereby reducing the surface tension.

- 3.6.2 The board cannot follow this logic.

Claim 1 of the patent in suit requires that the cleaning composition must possess a specific surface tension **in combination** with a pH of at least 10.5, when measured at the specified conditions. Neither of these features, nor their combination, is discussed in D5.

- 3.6.3 Although the content of surfactant of the compositions according to D5 may range up to 90 wt%, none of the compositions of the examples possesses a surface tension of below 25 mN/m, as presently claimed. This has been demonstrated by the respondent in the experimental data D6 (see the table bridging pages 1 and 2). The surface tensions of the cited examples according to D5 range between 26.2 and 27.0 mN/m.
- 3.6.4 According to page 4, lines 14 to 16 of D5, the compositions described in this anticipation are already effective in removing oxidised grease stain or persistent denatured grease stain. Consequently, the skilled person would not have an incentive to further improve the products or to decrease the surface tension of the specific examples mentioned *supra*.
- 3.6.5 However, even if, for the sake of argument in favour of the appellant, such an attempt was made, the addition of (further) surfactant to a composition of D5, respectively the replacement of one or more components of such compositions with an additional surfactant, would, as discussed by the parties in the oral proceedings, possibly necessitate also the adjustment of the rest of the composition, for example the addition of further solvents. However, even if it is certainly known that a greater amount of surfactants reduces the liquid surface tension, all the necessary modifications of the composition would in any case inevitably have an impact on the overall surface tension and, possibly, on the pH of the final product.
- 3.7 In the oral proceedings before the board it was explicitly admitted by the appellant, that the skilled person **cannot in fact predict** the surface tension of a cleaning composition after its composition has changed.

- 3.7.1 Thus, even if the skilled person interpreted D5 to suggest an increase in the amount of surfactant contained in the cleaning compositions, there was no teaching in D5 that the surface tension of the final cleaning composition had to be adjusted to values as required in claim 1 at issue and there is no evidence that a liquid surface tension as required in claim 1 at issue would be achieved at all by just increasing the surfactant content. Equally there was no teaching and evidence that the required pH of at least 10.5 would be maintained.
- 3.7.2 Similar arguments apply if the skilled person would consider to increase the amount of organic solvents in the compositions exemplified in D5.
- 3.7.3 Thus, the board sees no hint in D5 towards using a combination of high pH and low surface tension in order to provide alternative hard surface cleaning compositions suitable for removing cooked-, baked- or burnt-on soils.
- 3.7.4 Therefore, the claimed subject-matter cannot be considered to be derivable in an obvious way from the closest state of the art.
- 3.7.5 The subject-matter of claim 1 according to the main request, and consequently also that of its dependent claims, involves an inventive step (Articles 52(1) and 56 EPC).

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



D. Magliano

L. Li Voti

Decision electronically authenticated