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**Datasheet for the decision
of 7 April 2025**

Case Number: T 2497/22 - 3.3.07

Application Number: 17701936.1

Publication Number: 3402866

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Language of the proceedings: EN

Title of invention:

LAUNDRY DETERGENT COMPOSITIONS COMPRISING RENEWABLE COMPONENTS

Patent Proprietor:

The Procter & Gamble Company

Opponent:

Henkel AG & Co. KGaA

Headword:

Transparent or translucent liquid detergent/PROCTER

Relevant legal provisions:

EPC Art. 100(a), 56

Keyword:

Inventive step - (yes)



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 2497/22 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 7 April 2025

Appellant: Henkel AG & Co. KGaA
(Opponent) Henkelstrasse 67
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Representative: Henkel AG & Co. KGaA
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Respondent: The Procter & Gamble Company
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 26 September
2022 rejecting the opposition filed against
European patent No. 3402866 pursuant to Article
101(2) EPC**

Composition of the Board:

Chairman A. Uselli
Members: J. Molina de Alba
L. Basterreix

Summary of Facts and Submissions

I. The decision under appeal is the opposition division's decision rejecting the opposition filed against European patent No. 3 402 866.

II. The patent had been granted with five claims. Independent claims 1 and 5 read as follows:

"1. A transparent or translucent liquid laundry detergent composition, wherein the composition comprises from 1% to 20% by weight of alkyl ether sulfate of the formula $R^1-(OCH_2CH_2)_x-O-SO_3M$, wherein R^1 is a non-petroleum derived, linear or branched fatty alcohol consisting of even numbered carbon chain lengths of from C_8 to C_{20} , and wherein x is from 0.5 to 8, and wherein M is an alkali metal or ammonium cation; from 1% to 15% by weight of fatty alcohol ethoxylate of formula $R^2-(OCH_2CH_2)_y-OH$, wherein R^2 is a non-petroleum derived, linear or branched fatty alcohol consisting of even numbered carbon chain lengths of from C_{10} to C_{18} , and wherein y is from 0.5 to 15; from 0.1% to 5% by weight of amine oxide; from 0.1% to 5% of a cleaning polymer; from 1% to 15% by weight of a solvent comprising 1,2-propanediol; and water; wherein the transparent or translucent composition has 50% transmittance or greater of light using 1 cm cuvette at wavelength of 410-800 nanometers."

"5. A transparent bottle comprising the transparent or translucent liquid laundry detergent composition according to any of claims 1-4, wherein the transparent

bottle has light transmittance of greater than 25% at wavelength of 410-800 nm."

III. In its decision, the opposition division came to the following conclusions:

- the transparency or translucency feature in claim 1 as granted should not be disregarded when assessing inventive step
- D2 (WO 2011/060028 A1) was the closest prior art
- the appellant (then the opponent), having the burden of proof, had not provided any evidence that the compositions in the examples of D2 were transparent or translucent
- the composition of claim 1 differed from those in the examples of D2 in that it contained 0.1 to 5 wt.% of an amine oxide and in that it was transparent or translucent
- the objective technical problem was to provide a transparent or translucent liquid laundry detergent composition providing cleaning benefits
- the composition of claim 1 was a suitable solution, as shown for Composition F in Example 3 of the patent
- this solution was not obvious because the prior art did not suggest that an amine oxide in an amount of 0.1 to 5 wt.% would render the compositions of D2 transparent or translucent
- the same conclusion was drawn when starting from D1 (WO 2013/092049 A1) as the closest prior art.

IV. The opponent (appellant) filed an appeal against the opposition division's decision. In the statement of grounds of appeal, the appellant requested that the decision be set aside and the patent be revoked in its entirety.

- V. With its reply to the statement of grounds of appeal, the patent proprietor (respondent) requested that the appeal be dismissed. It also filed two sets of claims as auxiliary requests 1 and 2.
- VI. The board scheduled oral proceedings in line with the appellant's request. In a communication under Article 15(1) RPBA, the board gave its preliminary opinion that the subject-matter of claim 1 as granted involved an inventive step.
- VII. The appellant then withdrew its request for oral proceedings and advised the board that it would not be attending the scheduled oral proceedings.
- VIII. The board cancelled the scheduled oral proceedings and continued the proceedings in writing.
- IX. The appellant's arguments relevant to the present decision can be summarised as follows.

The subject-matter of claim 1 was not inventive. The transparent or translucent feature in claim 1 was merely aesthetic and, therefore, it should not be taken into account in the assessment of inventive step. Neither the patent nor the decision explained how transparency or translucency contributed to the technical character of the invention. Thus, starting from D2, the composition of claim 1 was an obvious solution to the objective technical problem of providing an alternative liquid laundry detergent composition.

- X. The respondent's arguments relevant to the present decision can be summarised as follows.

The transparency or translucency of the claimed composition was a technical feature. Therefore, it had to be taken into account in the assessment of inventive step. Even if considered to be non-technical, this feature contributed to the technical character of the invention: the transparency or translucency feature showed that the composition was stable and many users associated this feature with cleanliness.

The objective technical problem was to provide a transparent or translucent liquid laundry detergent composition having an increased concentration of renewable components but a performance comparable to that of traditional detergents. The solution proposed in claim 1 was not suggested in the cited prior art.

- XI. The parties' requests made during the written proceedings and relevant to the present decision are the following:

- The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety.
- The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. *Cancellation of the scheduled oral proceedings - right to be heard (Article 113(1) EPC)*

The present decision is issued in written proceedings in accordance with Article 12(8) RPBA and Articles 113 and 116 EPC.

In response to the board's preliminary opinion, the appellant withdrew its request for oral proceedings and advised the board that it would not be attending the scheduled oral proceedings. The board then cancelled the oral proceedings.

The board holds that the case can be decided on the basis of the parties' written submissions and other documents on file. The facts and evidence on which the present decision is based were known to the appellant from the written proceedings and it had sufficient opportunity to present its comments. With regard to the respondent, the latter had not requested oral proceedings and the present decision fulfils its main request for the appeal to be dismissed. Therefore, neither party had its right to be heard (Article 113(1) EPC) prejudiced by the cancellation of the oral proceedings.

2. *Inventive step (Articles 100(a) and 56 EPC)*

- 2.1 The patent is concerned with the provision of liquid laundry detergent compositions that comprise renewable

components and exhibit a performance comparable to that of traditional detergents (paragraphs [0001], [0002] and [0005]).

2.2 The parties did not dispute the view that D2 is the closest prior art. D2 is concerned with the preparation of liquid detergent compositions comprising only biodegradable and eco-friendly ingredients and exhibiting exceptional performance compared with traditional detergent formulations (page 1, first paragraph). The laundry detergent composition of D2 comprises (claim 1):

- 1 to 20 wt.% of an alkyl ether sulphate of formula $R-(OCH_2CH_2)_x-O-SO_3M$, wherein R is a non-petroleum derived fatty alcohol having an even number of carbon atoms and a chain length of from C_8 to C_{20} , wherein x is from 0.5 to 8, and wherein M is an alkali metal or ammonium cation
- an enzyme stabilisation system selected from the group consisting of: calcium formate, sodium formate, propane 1,2 diol, glycerol, sorbitol or any combination thereof
- optionally, from 1 to 10 wt.% of a fatty alcohol ethoxylate of formula $R-(OCH_2CH_2)_x-OH$, wherein R is a non-petroleum derived fatty alcohol having an even number of carbon atoms and a chain length of from C_{10} to C_{18} , and wherein x is from 0.5 to 9
- optionally from 0.1 to 5 wt.% of a natural essence
- optionally an enzyme.

Examples 1 and 2 of D2 illustrate such compositions.

2.3 It was undisputed that the composition of claim 1 as granted differs from those of D2 in that it contains

0.1 to 5 wt.% of an amine oxide and in that it is transparent or translucent.

2.4 As to the technical effect brought about by these differences having regard to the closest prior art, the appellant did not contest the view that the comparative tests in Examples 2 to 4 of the patent show that the composition of claim 1 performs better than two known eco-friendly laundry detergents and similarly to a traditional laundry detergent. The main point in dispute between the parties was whether the transparent or translucent feature in claim 1 was technical or, at least, whether it contributed to the technical character of the invention. Ultimately, the question arose as to whether the transparent or translucent feature could be taken into account in the assessment of inventive step.

2.4.1 According to the appellant, the transparent or translucent feature was merely aesthetic and the patent did not explain how transparency or translucency contributed to the technical character of the invention. Therefore, the feature could not be taken into account in the assessment of inventive step.

2.4.2 The board disagrees. Claim 1 defines a liquid laundry detergent composition characterised by the result to be achieved, namely that the composition is to have at least 50% transmittance of light using a 1 cm cuvette at a wavelength of 410 to 800 nm. This result implies that the composition is transparent or translucent. Thus, transparency or translucency is not only a technical feature that physically characterises the claimed composition. It is, in fact, also a technical effect resulting from the combination of ingredients defined in claim 1. Contrary to the appellant's view,

neither transparency nor translucency has to produce additional technical effects in order to be taken into account in the assessment of inventive step. They themselves make a technical contribution to the invention. Moreover, as noted by the respondent, being transparent or translucent is a desirable feature since it shows that the composition is stable and it is a feature associated with cleanliness by many users.

2.5 Thus, in line with the respondent's proposal, the objective technical problem solved by the composition of claim 1 can be defined as providing a transparent or translucent liquid laundry detergent composition based on renewable components that has a cleaning performance comparable to that of traditional detergents.

2.6 The appellant did not cite any prior-art document suggesting that the addition to the compositions of D2 of an amine oxide in the amounts defined in claim 1 could solve this objective technical problem. Therefore, the subject-matter of claim 1 is not obvious.

The same conclusion applies to the transparent bottle of independent claim 5, which comprises the composition of claim 1.

2.7 The appellant did not contest the point in the decision under appeal (page 7, fifth and sixth paragraphs) that the claimed subject-matter is also inventive starting from D1 as the closest prior art.

2.8 Therefore, the subject-matter claimed by the patent as granted involves an inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



A. Vottner

A. Uselli

Decision electronically authenticated