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**Datasheet for the decision
of 12 May 2011**

Case Number: T 1941/08 - 3.3.10

Application Number: 99953296.3

Publication Number: 1082149

IPC: A61L 15/46

Language of the proceedings: EN

Title of invention:

Enhanced odor absorption by natural and synthetic polymers

Patentee:

KIMBERLY-CLARK WORLDWIDE, INC.

Opponent:

The Procter & Gamble Company

Headword:

Device for reduction of malodors/KIMBERLY-CLARK

Relevant legal provisions:

EPC Art. 56, 83

Relevant legal provisions (EPC 1973):

-

Keyword:

"Sufficiency of disclosure (yes) - functional feature
redundant"

"Inventive step (yes) - secondary document relates to a
different problem"

Decisions cited:

T 0270/90, T 0409/91, T 0435/91, T 0252/02, T 0075/06,
T 0020/07

Catchword:

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Case Number: T 1941/08 - 3.3.10

D E C I S I O N
of the Technical Board of Appeal 3.3.10
of 12 May 2011

Appellant: The Procter & Gamble Company
(Opponent) One Procter & Gamble Plaza
Cincinnati, OHIO 45202 (US)

Representative: L'Huillier, Florent Charles
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Respondent: KIMBERLY-CLARK WORLDWIDE, INC.
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Representative: Beacham, Annabel Rose
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
23 July 2008 concerning maintenance of the
European patent No. 1082149 in amended form.

Composition of the Board:

Chairman: P. Gryczka
Members: J. Mercey
D. S. Rogers

Summary of Facts and Submissions

I. The Appellant (Opponent) lodged an appeal against the interlocutory decision of the Opposition Division which found that European patent No. 1 082 149 according to auxiliary request 2 filed during the oral proceedings before the Opposition Division met the requirements of the EPC. Claim 1 of said request read as follows:

"Device for reduction of malodors comprising:

- a substrate in the form of a nonwoven web,
and
- a composition contained on or within the
substrate, said composition comprising an
alkylpolyglycoside, and

wherein the substrate is selected from the group consisting of chitosans and alginates, having odor reduction properties without said alkylpolyglycoside that are improved by combination with said alkylpolyglycoside."

II. Notice of Opposition had been filed by the Appellant requesting revocation of the patent as granted in its entirety on the grounds of lack of inventive step (Article 100(a) EPC), insufficient disclosure (Article 100(b) EPC), and of extending the subject-matter of the patent in suit beyond the content of the application as filed (Article 100(c) EPC). *Inter alia* the following documents were submitted in opposition proceedings:

- (1) WO-A-93/166 70 and
- (2) WO-A-98/096 62.

III. The Opposition Division held that the claims of the then pending auxiliary request 2 fulfilled the requirements of Article 123(2) and (3) EPC, that the invention was sufficiently disclosed, and that it involved an inventive step, document (1) being considered to represent the closest prior art.

IV. The Appellant argued that the invention was insufficiently disclosed, citing decisions T 252/02, T 75/06 and T 20/07 (not published in OJ EPO) in this respect. More particularly, the claims did not indicate which malodours were to be reduced. In addition, the claims referred to "odor reduction properties" in general, whereas according to the Examples in the patent in suit, only three malodours were in fact reduced.

The Appellant further argued that the device according to claim 1 was not inventive, starting from document (1) as closest prior art. This document disclosed a surface covering material for absorptive hygienic products comprising composite fibres of chitosan and cellulose, which were formed into a nonwoven fabric, that had anti-bacterial activity. The addition of an alkylpolyglycoside to such a material was obvious to the skilled person, since document (2) taught that it was beneficial to treat nonwoven substrates used in absorbent hygienic products with alkylpolyglycosides in order to provide improved fluid handling properties. Although document (2) did not address the subjective problem of improving odour reduction, this was irrelevant, since the skilled person would in any case have used alkylpolyglycosides to improve the fluid handling properties.

V. The Respondent (Proprietor of the patent) submitted that the invention was sufficiently disclosed, since there was no dispute that one could make the device, namely by simply combining the alkylpolyglycoside with the substrate selected from chitosans and alginates, all chitosans and alginates inherently having odour reduction properties without said alkylpolyglycoside, that were improved by combination with said alkylpolyglycoside, as required by claim 1. As such, the skilled person did not need to identify suitable chitosans or alginates, no evidence having been provided by the Appellant that any particular chitosans or alginates were not suitable for carrying out the invention. In any case, paragraph [0006] of the patent specification indicated which malodours were to be reduced and the gas-chromatographic methods for measuring the malodour were described in detail in paragraphs [0024] to [0032], such that the skilled person could readily check whether or not the device had the desired properties. The case law cited by the Appellant was thus irrelevant.

The Respondent argued that the device according to claim 1 was inventive. Starting also from document (1) as closest prior art, the objective technical problem underlying the patent in suit was the provision of a device for improving the reduction of malodours, said problem being solved by the presence of an alkylpolyglycoside on or within the substrate, as shown by Examples 5A and 6 of the patent in suit. Since document (2) addressed a different problem, the skilled person would not have combined its teaching with that of document (1) in order to solve the problem posed.

VI. The Appellant requested in writing that the decision under appeal be set aside and that the patent be revoked.

The Respondent requested that the appeal be dismissed.

VII. Oral proceedings were held on 12 May 2011 in the absence of the Appellant, who, after having been duly summoned, informed the Board with letter dated 10 March 2011 that it would not attend. At the end of the oral proceedings, the decision of the Board was announced.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments (Article 123(2) and (3) EPC)*

The Opposition Division found that the claims of the then pending auxiliary request 2, i.e. the present sole request, fulfilled the requirements of Article 123(2) and (3) EPC. The Appellant had no objections in this respect, nor does the Board see any reason to question the amendments made to the claims of its own motion.

3. *Sufficiency of Disclosure (Article 100(b) EPC)*
 - 3.1 Claim 1 relates to a device for reduction of malodours comprising a substrate which is selected from the group consisting of chitosans and alginates, said alginates and chitosans being further defined by a so-called functional feature, namely as those having odour

reduction properties without said alkylpolyglycoside that are improved by combination with said alkylpolyglycoside.

- 3.2 It is the established jurisprudence of the Boards of Appeal that the requirements of sufficiency of disclosure are met if the invention as defined in the independent claim can be performed by a person skilled in the art in the whole area claimed without undue burden, using common general knowledge and having regard to further information given in the patent in suit (see decisions T 409/91, OJ EPO 1994, 653, point 3.5 of the reasons; T 435/91, OJ EPO 1995, 188, point 2.2.1 of the reasons).
- 3.3 Claim 1 of the application as filed required that the substrate comprise a naturally occurring polymer or synthetic polymer having odour reduction properties without a triglyceride and/or alkylpolyglycoside that are improved by combination with a triglyceride and/or alkylpolyglycoside. However, claim 1 in suit has been restricted by specifying that the substrate is selected from the group consisting of chitosans and alginates only, and that the composition comprises an alkylpolyglycoside. The Respondent stated at the oral proceedings before the Board, as it had before the Opposition Division, that all chitosans and alginates inherently possessed odour reduction properties without an alkylpolyglycoside, that were improved by combination with an alkylpolyglycoside, such that this restriction to the narrow group of substrates and compositions rendered the functional feature "having odor reduction properties without said

alkylpolyglycoside that are improved by combination with said alkylpolyglycoside" redundant.

- 3.4 According to paragraph [0006] of the patent in suit (see page 2, lines 46 to 47), examples of devices according to the invention include those comprising chitosans treated with an alkylpolyglycoside, it not being specified that suitable chitosans or alginates have to be identified. Furthermore, no evidence has been provided by the Appellant, who carries the burden of proof for the facts it alleges (see e.g. decision T 270/90, OJ EPO 1993, 725, point 2.1 of the reasons), that any particular chitosans and alginates are not suitable for carrying out the invention. In these circumstances, it is concluded that all chitosans and alginates inherently possess odour reduction properties without an alkylpolyglycoside, that are improved by combination with an alkylpolyglycoside, such that a selection of suitable chitosans and alginates is not necessary. In addition, the patent in suit provides the skilled person with the information he needs in order to readily ascertain whether a particular device has the desired properties or not. More particularly, paragraph [0006] of the description of the patent in suit indicates which malodours are to be reduced and the gas-chromatographic methods for measuring the malodour are described in detail in paragraphs [0024] to [0032].

Therefore, there being no need to select a suitable chitosan or alginate, a test procedure being provided in the description to check whether or not the device has the desired properties, and there being no dispute as to whether the skilled person could physically make

the device, namely by treating a chitosan or an alginate with an alkylpolyglycoside, the Board holds that the invention is sufficiently disclosed.

- 3.5 In support of its objection of insufficiency of disclosure, the Appellant cited decisions T 252/02, T 75/06 and T 20/07, and argued that the claims, which referred to "odor reduction properties" in general, did not indicate which malodours were to be reduced, whereas according to the Examples in the patent in suit, only three malodours were in fact reduced.

However, these decisions relate to cases wherein the methods for measuring a parameter were insufficiently disclosed (T 252/02 and T 20/07), and wherein insufficiency of disclosure was caused by unclarity of a technical term (T 75/06). The conclusions drawn in these decisions do not apply to the present case, since it is not disputed that the method for measuring malodour reduction is sufficiently disclosed, nor is it disputed that the technical terms used in the claim are clear. In addition, it is not required by the claimed invention that all malodours are reduced, but only that the substrate is selected from the group consisting of chitosans and alginates "having odor reduction properties without said alkylpolyglycoside that are improved by combination with said alkylpolyglycoside", said functional feature being always fulfilled (see point 3.4 above).

4. *Inventive step (Article 56 EPC)*

- 4.1 Claim 1 is directed to a device for reduction of malodours comprising a substrate selected from the

group of chitosans and alginates in the form of a nonwoven web. A similar device already belongs to the state of the art in that document (1) (see claims 1 and 4) discloses a surface covering material for absorptive hygienic products comprising composite fibres of chitosan and cellulose, which are formed into a nonwoven fabric, that have anti-bacterial activity, a portion of the body-facing surface being used as an odour-free zone. Thus, the Board considers, in agreement with both parties and the Opposition Division, that the device of document (1) represents the closest state of the art and, hence, takes it as the starting point when assessing inventive step.

4.2 In view of this state of the art, the problem underlying the patent in suit, as submitted by the Respondent during the oral proceedings before the Board, was the provision of a device for improving the reduction of malodours.

4.3 As the solution to this problem, the patent in suit proposes the device according to claim 1 characterised by the presence of an alkylpolyglycoside on or within the substrate.

4.4 Example 5 of the patent in suit shows how treatment with an alkylpolyglycoside increases the ability of a chitosan film to absorb isovaleric acid, dimethyldisulfide and dimethyltrisulfide, Example 6 additionally showing an increase in the absorption of triethylamine, indole and skatole, *vis-à-vis* the untreated chitosan film of Comparative Example 5, increased absorption corresponding to a greater reduction of malodour. Although the technical effect in

these Examples is shown for a chitosan film, the Board has no reasons to doubt, and the Appellant has not contested, that this effect would also be achieved when the substrate were in the form of a nonwoven web. With regard to alginates, Comparative Example 7 of the patent in suit shows that alginates, like chitosans, also inherently reduce malodours. Since chitosans and alginates are both complex polysaccharides, it is plausible to the Board that they behave similarly and thus that treatment of an alginate with an alkylpolyglycoside would also result in improvement of its odour reducing properties, this assumption also having not been challenged by the Appellant. The Board is thus convinced that the technical problem defined above has effectively been solved by the presence of an alkylpolyglycoside contained on or within the substrate as defined in claim 1.

4.5 Finally, it remains to be decided whether or not the proposed solution to the problem underlying the disputed patent is obvious in view of the cited prior art.

4.5.1 Document (1) itself does not mention alkylpolyglycosides and is concerned with the problem of preventing diaper rash (see page 4, lines 25 to 26). Therefore this document alone cannot suggest the use of an alkylpolyglycoside to improve malodour reduction. Document (2) teaches that it is beneficial to treat nonwoven substrates used in absorbent hygienic products with alkylpolyglycosides (see page 3, lines 26 to 29). However, document (2) addresses a different problem, namely to provide improved fluid handling properties (see page 2, line 34 to page 3, line 4), there being no

mention whatsoever therein of malodours, let alone the reduction thereof, nor of chitosans or alginates. Hence, the skilled person, when seeking a solution to the problem of providing a device for improving the reduction of malodours, would not have looked to document (2) at all, the Appellant not having established any link between fluid handling and odour reducing properties. Therefore, the Appellant's argument that since document (2) already taught that it was beneficial to treat nonwoven substrates used in absorbent hygienic products with alkylpolyglycosides in order to provide improved fluid handling properties, it would have been obvious for the skilled person, starting from the nonwoven material of document (1), to treat it with an alkylpolyglycoside is not convincing.

- 4.6 For these reasons, the Board concludes that the device according to claim 1 of auxiliary request 2 filed during oral proceedings before the opposition decision, together with the subject-matter of dependent claim 2, involves an inventive step within the meaning of Articles 52(1) and 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

L. Fernández Gómez

P. Gryczka