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**Datasheet for the decision  
of 22 November 2012**

**Case Number:** T 2059/09 - 3.3.10

**Application Number:** 00926352.6

**Publication Number:** 1173231

**IPC:** A61L 15/34

**Language of the proceedings:** EN

**Title of invention:**

Absorbent article having a lotionized bodyside liner

**Patentee:**

KIMBERLEY-CLARK WORLDWIDE, INC.

**Opponent:**

The Procter & Gamble Company

**Headword:**

Lotion-coated absorbent article/KIMBERLEY-CLARK

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

"All requests: inventive step (no) - foreseeable improvement of lotion properties on absorbent article"

**Decisions cited:**

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**Catchword:**

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Case Number: T 2059/09 - 3.3.10

**DECISION**  
of the Technical Board of Appeal 3.3.10  
of 22 November 2012

**Appellant:** The Procter & Gamble Company  
(Opponent) One Procter & Gamble Plaza  
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**Representative:** Borbach, Markus  
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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  
7 August 2009 concerning maintenance of  
European patent No. 1173231 in amended form.

**Composition of the Board:**

**Chairman:** P. Gryczka  
**Members:** J. Mercey  
C. Schmidt

## Summary of Facts and Submissions

I. The Appellant (Opponent) lodged an appeal against the interlocutory decision of the Opposition Division that European patent No. 1 173 231 in the amended form based on the then pending auxiliary request 6 met the requirements of the EPC. Independent claim 1 of said request reads as follows:

"An absorbent article selected from the group consisting of a diaper, a feminine care pad, an incontinence garment and a training pant comprising:

a) an outer cover;

b) a liquid permeable bodyside liner which defines a bodyfacing surface and which is connected in superposed relation to said outer cover;

c) an absorbent body which is located between said bodyside liner and said outer cover; and

d) a solid lotion formulation on at least a portion of said bodyfacing surface of said bodyside liner which includes from about 5 to about 95 weight percent of an emollient, from about 5 to about 95 weight percent of a wax, and from about 0.1 to about 25 weight percent of a viscosity enhancer selected from the group consisting of polyolefin resins, polyolefin polymers, polyethylene, and mixtures thereof based on a total weight of said lotion formulation."

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 novelty and inventive step and insufficiency of disclosure (Article 100(a) and (b) EPC). *Inter alia* the following documents were submitted in opposition proceedings:

- (3) WO-A-96 166 82,
- (6) International Cosmetic Ingredient Dictionary and Handbook, Ninth Edition, 2002, Vol. 4, pages 2981 to 2984 and
- (8) DuPont™ Elvax® Grade Selection Guide, dated 9.9.2005.

III. The Opposition Division held that the claims of the then pending auxiliary request 6 satisfied the requirements of Article 123(2) EPC, that the invention according to this request was sufficiently disclosed, the subject-matter thereof was novel, and involved an inventive step in the light of document (3) as closest prior art.

IV. With letter dated 6 May 2010, the Respondent (Proprietor of the patent) submitted auxiliary requests 1 to 6.

Claim 1 of auxiliary request 1 differed from claim 1 of the present main request, i.e. auxiliary request 6 as upheld by the Opposition Division, in that the viscosity enhancer was defined as consisting of an ethylene vinyl acetate copolymer.

Claim 1 of auxiliary request 2 differed from claim 1 of the main request in that the lotion formulation defined a melting point of from about 30 to about 100°C.

Claim 1 of auxiliary request 3 differed from claim 1 of the main request in that the wax was selected from the group consisting of animal based waxes, vegetable based waxes, mineral based waxes, silicone based waxes and

mixtures thereof all of which may be natural or synthetic.

Claim 1 of auxiliary request 4 differed from claim 1 of the main request in that the emollient was selected from the group consisting of oils, esters, glycerol esters, ethers, alkoxyated carboxylic acids, alkoxyated alcohols, fatty alcohols and mixtures thereof or wherein said emollient was a petroleum based emollient.

Claim 1 of auxiliary request 5 differed from claim 1 of the auxiliary request 1 in that the emollient was defined as in auxiliary request 4 and the wax was defined as in auxiliary request 3.

Claim 1 of auxiliary request 6 essentially differed from claim 1 of the auxiliary request 1 in that the emollient was petrolatum and the wax was defined as in auxiliary request 3.

- V. The Appellant argued that the absorbent article of claim 1 of all requests was not inventive starting from document (3) as closest prior art, which disclosed a lotioned diaper, wherein the lotion was semi-solid or solid at room temperature, said lotion comprising 10 to 95% of an emollient and 5 to 90% of an immobilising agent, which might be a wax. The Appellant argued that the objective problem to be solved was merely the provision of an absorbent article coated with an alternative lotion. The advantage alleged by the Respondent, namely improved migration prevention of the lotion, had not been demonstrated over the whole scope of the claims, the burden of proof for showing this

effect lying with the Respondent, since it was the party alleging this fact. The solution proposed by claim 1, namely a solid lotion formulation characterised in that it included a viscosity enhancer selected from polyolefin resins, polyolefin polymers, polyethylene and mixtures thereof, was obvious, since polyethylene, polyethylene terephthalate and ethylene/acrylic acid/VA copolymer were well known viscosity enhancers (known for example, from document (6)) and it was thus obvious to supplement the lotion of document (3) therewith, since document (3) generally taught that the lotions therein may comprise other components such as a viscosity modifier.

The Appellant further argued that claim 1 of at least the main request extended beyond the content of the application as filed and that the invention was not sufficiently disclosed.

- VI. The Respondent argued that the subject-matter of claim 1 of all requests was inventive starting from document (3) as closest prior art. The lotions comprising the particular viscosity enhancers defined in the claims of these requests had improved migration prevention compared to a lotion according to document (3). None of the cited prior art taught the use of these particular viscosity enhancers for use in a lotion to be applied to an absorbent article, ethylene vinyl acetate copolymer not even having been known as a viscosity enhancer at the filing date of the patent in suit. The Respondent submitted that the amendments made to claim 1 of each of auxiliary requests 2 to 6 were essentially in response to the objections under

Article 83 EPC, their purpose not being to contribute towards establishment of inventive step.

The Respondent submitted that the subject-matter of claim 1 of the main request was disclosed in the application as filed and that the invention was sufficiently disclosed.

VII. The Appellant requested that the decision under appeal be set aside and that the patent be revoked.

The Respondent requested that the appeal be dismissed, or, alternatively, that the decision under appeal be set aside and the patent be maintained on the basis of any of the auxiliary requests 1 to 6 filed with letter dated 6 May 2010.

VIII. At the end of the oral proceedings held on 22 November 2012 the decision of the Board was announced.

## **Reasons for the Decision**

1. The appeal is admissible.

### *Main request*

2. *Inventive step*

2.1 The patent in suit is directed to a lotion-coated absorbent article. A similar lotion-coated absorbent article already belongs to the state of the art in that document (3) describes absorbent articles such as diapers, training pants and adult incontinence devices

having a lotion coating on the outer surface of the topsheet (see page 1, lines 11 to 14). More particularly, claim 1 of document (3) discloses a disposable diaper comprising a liquid impervious backsheet, a liquid pervious topsheet joined to said backsheet, said topsheet having an inner surface oriented toward the interior of said absorbent article and an outer surface oriented toward the skin of the wearer when said absorbent article is being worn, wherein at least a portion of said topsheet outer surface comprises an effective amount of a lotion coating which is semi-solid or solid at 20°C and an absorbent core positioned between said topsheet and said backsheet, said lotion comprising 10 to 95% of an emollient and 5 to 90% of an immobilising agent, which may be a wax (see page 25, line 31 to page 26, line 5) and may optionally comprise other components such as a viscosity modifier (see page 29, lines 9 to 11).

2.1.1 The Board considers, in agreement with the Opposition Division, the Appellant and the Respondent that the lotion-coated diaper of document (3) represents the closest state of the art and, hence, takes it as the starting point when assessing inventive step.

2.2 In view of this state of the art, the Respondent submitted that the problem underlying the patent in suit was the provision of a lotion coated absorbent article with improved migration prevention of the lotion.

2.3 As the solution to this problem, claim 1 of the main request proposes an absorbent article comprising a solid lotion formulation characterised in that it



includes a viscosity enhancer selected from polyolefin resins, polyolefin polymers, polyethylene and mixtures thereof.

2.4 Since document (3) (see page 16, lines 11 to 13) teaches that increasing the viscosity of the lotion formulations disclosed therein prevents the lotion from flowing into the interior of the diaper, in view of the presence of a viscosity enhancer in the lotion according to the patent in suit, the Board is of the opinion that it is credible that the technical problem as defined above in point 2.2 is solved by the claimed article.

2.4.1 The Appellant argued that the objective problem to be solved by the patent in suit was merely the provision of an absorbent article coated with an alternative lotion, since the comparative examples referred to in this respect by the Respondent, for example, Example 1 and Comparative Example 4 of the patent in suit, were not fair, as said examples did not differ from each other only by virtue of the presence of a viscosity enhancer.

However, regardless of whether said comparative examples are fair or not, as indicated in point 2.4 above, it is credible that migration of the lotion is reduced, since it is clear that the addition of a viscosity enhancer to a lotion increases the viscosity of said lotion. The Appellant did not contest that a lotion with higher viscosity would have less tendency to migrate into the absorbent body of the article.

2.5 Finally, it remains to be decided whether or not the proposed solution to the problem underlying the patent in suit involves an inventive step in view of the state of the art.

2.5.1 Document (3) itself teaches that in order to prevent the lotion from flowing into the interior of the diaper, the viscosity of the lotion formulations should be "as high as possible" (see page 16, lines 11 to 13), viscosity modifiers being described as optional components for the lotions therein (see page 29, lines 9 to 11). It was thus a matter of course that the person skilled in the art, seeking to improve the migration properties of the lotions disclosed in document (3), would add a viscosity enhancer thereto. Polyethylene, polyethylene terephthalate and ethylene/acrylic acid/VA copolymer are viscosity increasing agents described in the International Cosmetic Ingredient Dictionary and Handbook (6) as being "commonly employed for thickening or gelling oily materials". The skilled person, thus acting routinely, would choose compounds described in document (6) as viscosity enhancers to add to the lotions according to document (3) in order to solve the problem underlying the invention, namely of improving the migration properties. Although the Handbook (6), which reflects the common general knowledge in the field of cosmetic ingredients, was itself published after the filing date of the patent in suit, the Respondent did not contest that its content, at least as far as it relates to the compounds polyethylene and polyethylene terephthalate being described therein as viscosity enhancers, was already common general knowledge at the priority date of the patent in suit.

2.6 The Respondent argued, however, that document (3) did not specifically teach the addition of viscosity enhancers, let alone the specific classes of viscosity enhancer defined in claim 1 of the patent in suit, to prevent lotion migration, but rather used differing amounts of an immobilising agent. It was not to be expected that one could achieve suitable lotions by the addition of a third component which was not disclosed in document (3).

However, document (3) does indeed teach that the lotions therein may "comprise other optional components" such as viscosity modifiers (see page 29, lines 9 to 11). Since this document explicitly teaches that the viscosity of the lotion formulations should be "as high as possible to keep the lotion from flowing into the interior of the diaper" (see page 16, lines 11 to 13), the skilled person would have considered the addition of viscosity enhancers into the lotions of this document, the Respondent having provided no reasons as to why the skilled person would have considered that the specific classes of viscosity enhancer claimed would be incompatible therewith.

2.7 As a result the Respondent's main request is not allowable for lack of inventive step pursuant to Article 56 EPC.

*Auxiliary request 1*

3. *Inventive step*

3.1 Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that the viscosity enhancer is defined as consisting of an ethylene vinyl acetate copolymer.

3.2 Document (6), however, already teaches that ethylene/acrylic acid/VA copolymer, which is an ethylene vinyl acetate copolymer, is commonly employed as a viscosity increasing agent in the field of cosmetics. Thus this amendment cannot contribute to inventiveness of the subject-matter of claim 1 of auxiliary request 1 *vis-à-vis* this document.

3.3 The Respondent argued that the compound ethylene/acrylic acid/VA copolymer disclosed in document (6) was not necessarily an ethylene vinyl acetate copolymer, since the abbreviation "VA" was not defined in said document, and could also denote vinyl alcohol. Thus ethylene vinyl acetate copolymers were not known as viscosity enhancers at the date of filing of the patent in suit, such that the addition of such a compound to a lotion according to document (3) in order to prevent its migration was not obvious.

However, the patent in suit (page 8, lines 14 to 16) describes an ethylene vinyl acetate copolymer commercially available from E. I. Dupont De Nemours under the trade designation ELVAX as being a particularly well suited viscosity enhancer for use according to the invention. Document (8), which relates

to properties of such ELVAX<sup>®</sup> resins, uses the abbreviation "VA" for vinyl acetate in the context of such resins (see page 2). Although document (8) was published in 2005, namely after the filing date (20 April 2000) of the patent in suit, this document is an indication that the abbreviation "VA" when used in the context of ethylene copolymers means vinyl acetate, the Board having no reason to assume that the abbreviation "VA" in this context had changed over time, the Respondent not having provided any evidence to the contrary.

3.4 Therefore, the considerations having regard to the assessment of inventive step given in points 2.1 to 2.6 above and the conclusion drawn in point 2.7 above with respect to claim 1 of the main request apply also to claim 1 of auxiliary request 1.

3.5 Thus, auxiliary request 1 is also not allowable for lack of inventive step pursuant to Article 56 EPC.

*Auxiliary requests 2 to 6*

4. *Inventive step*

4.1 The Respondent submitted that the amendments made to claim 1 of each of auxiliary requests 2 to 6 were in response to the objections under Article 83 EPC and not in order to establish inventive step. Since the closest prior art document (3) already discloses those features of claim 1 of each of these requests which are over and above those already defined in claim 1 of the main request or auxiliary request 1, namely a melting point of the lotion, particular waxes and particular

- emollients, these amendments cannot contribute to inventiveness of the subject-matter of claim 1 of any of these requests *vis-à-vis* this document.
- 4.2 More particularly, with regard to claim 1 of auxiliary request 2, which differs from claim 1 of the main request in that the lotion formulation defines a melting point of from about 30 to about 100°C, document (3) (see page 15, lines 9 to 12) already discloses that the lotion compositions preferably have a melting point of greater than 45°C.
- 4.3 With regard to claim 1 of auxiliary request 3, which differs from claim 1 of the main request in that the wax is selected from the group consisting of animal based waxes, vegetable based waxes, mineral based waxes, silicone based waxes and mixtures thereof all of which may be natural or synthetic, document (3) (see page 26, lines 1 to 5) already discloses that the wax may be *inter alia* carnauba, beeswax, candelilla, paraffin and ceresin wax.
- 4.4 With regard to claim 1 of auxiliary request 4, which differs from claim 1 of the main request in that the emollient is selected from the group consisting of oils, esters, glycerol esters, ethers, alkoxyated carboxylic acids, alkoxyated alcohols, fatty alcohols and mixtures thereof or wherein said emollient is a petroleum based emollient, document (3) (see page 17, lines 5 to 17) already discloses that the emollient can be *inter alia* petroleum-based such as petrolatum, fatty acid ester type, alkyl ethoxylate type, fatty acid ester ethoxylates, fatty alcohol type, or mixtures thereof.

4.5 With regard to claim 1 of each of auxiliary requests 5 and 6, which differ from claim 1 of auxiliary request 1 in that the emollient is defined either as in claim 1 of auxiliary request 4 or as petrolatum based, respectively, and the wax is defined as in claim 1 of auxiliary request 3, these features are already disclosed in document (3) (see points 4.3 and 4.4 above), the Respondent not having argued that these particular combinations of emollients, waxes and viscosity enhancer lead to any unexpected effect.

4.6 Thus, the subject-matter of claim 1 of each of auxiliary requests 2 to 6 is not inventive for the same reasons as those given above (see points 2 and 3) for claim 1 of the main request or auxiliary request 1.

5. *Other issues*

The Respondent also submitted that the invention was insufficiently disclosed and that the subject-matter of at least the main request extended beyond the content of the application as filed.

In view of the negative conclusion in respect of inventive step for the subject-matter of all requests as set out in points 2 to 4 above, a decision of the Board on these issues is unnecessary.

**Order**

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

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

C. Rodríguez Rodríguez

P. Gryczka