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# Datasheet for the decision of 10 November 2009

**Case Number:** T 1796/08 - 3.2.06

**Application Number:** 98938129.8

**Publication Number:** 1043942

**IPC:** A41B 15/00

**Language of the proceedings:** EN

**Title of invention:**
Soft tissue achieved by applying a solid hydrophilic lotion

**Patentee:**
KIMBERLY-CLARK WORLDWIDE, INC.

**Opponent:**
SCA Hygiene Products AB

**Headword:**
-

**Relevant legal provisions:**
EPC Art. 54(3)

**Relevant legal provisions (EPC 1973):**
EPC Art. 56

**Keyword:**
"Novelty (yes)"
"Inventive step (yes - non-obvious combination of known features)"

**Decisions cited:**
-

**Catchword:**
-

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**Case Number:** T 1796/08 **-** 3.2.06

# D E C I S I O N
**of the Technical Board of Appeal 3.2.06**
**of 10 November 2009**

**Appellant**: (Opponent)
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**Decision under appeal:**
**Interlocutory decision of the Opposition Division of the European Patent Office posted 8 July 2008 concerning maintenance of European patent No. 1043942 in amended form.**

**Composition of the Board:**

**Chairman:** M. Harrison
**Members:** G. de Crignis
W. Sekretaruk

## Summary of Facts and Submissions

I. European Patent No. 1 043 942, granted on application No. 98 938 129.8, was found by the opposition division, in an amended form, in its interlocutory decision posted on 8 July 2008, to meet the requirements of the European Patent Convention (EPC).

Claim 1 in its amended form (according to the proprietor's first auxiliary request) reads as follows: "A soft tissue or towel product having two outer surfaces, wherein one or both outer surfaces of the product have solidified deposits of a composition comprising from 30 to 70 weight percent hydrophilic solvent, from 10 to 50 weight percent high molecular weight polyethylene glycol having a molecular weight of about 720 or greater, and from 5 to 40 weight percent of a $C_{14}$ to $C_{30}$ fatty alcohol, said composition having a melting point from 30°C to 70°C, and a penetration hardness of from 5 millimeters to 360 millimeters."

II. The opposition division held that the subject-matter of claim 1 of the main request did not meet the requirements of Article 123(2) EPC as no basis for an upper limit of 85 weight percent for the hydrophilic solvent was present in the application as originally filed. It further held that the subject-matter of claim 1 of the first auxiliary request, which was limited to an upper limit of 70% for the hydrophilic solvent, was novel (Article 54(3) EPC) over the disclosure in

D1 WO-A 97/46205.

Furthermore, the subject-matter of this claim 1 was also found to involve an inventive step (Article 56 EPC 1973) with regard to the disclosure of

D6 US-A-5 650 218,

when combined with the general knowledge available from

D8 K. Schrader, "Grundlagen und Rezepturen der Kosmetika", 2nd Edition 1989, Hüthig Buch Verlag Heidelberg, pages 234, 235, 411 and 412.

III. The appellant-opponent filed a notice of appeal against this decision on 17 September 2008, and paid the appeal fee on the same day. On 30 October 2008 the statement of grounds of appeal was filed. The objections concerning lack of novelty (Article 54(3) EPC) with regard to D1 were maintained, as well as the contention that the subject-matter of claim 1 did not involve an inventive step (Article 56 EPC 1973) when starting from D6 and taking into account in particular the disclosure of D8, in the alternative combined with the disclosure of any of

D2 DE-A-34 47 499,
D3 WO-A-96/08601,
D4 EP-A-0 159 168 or
D5 US-A-5 716 919.

IV. The appellant-patent proprietor filed a notice of appeal against this decision on 18 September 2008, and paid the appeal fee on the same day. On 11 November 2008 the statement of grounds of appeal was

filed together with a main request and first to fifth auxiliary requests.

V. In a communication dated 24 June 2009 accompanying the summons to oral proceedings, the board expressed its preliminary view that no basis in the originally filed application could be found for an upper limit of the hydrophilic solvent of 85 weight percent and that the subject-matter of claim 1 of the first auxiliary request appeared to be novel over the disclosure of D1 (Article 54(3) EPC).

VI. With letter of 9 October 2009 *inter alia* a new main request was filed.

VII. Oral proceedings were held on 10 November 2009.

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

The patent proprietor withdrew (during the oral proceedings) its main request submitted with letter of 9 October and maintained only the former first auxiliary request as its new main request, i.e. the request which had already been allowed by the opposition division. All further auxiliary requests were withdrawn. Accordingly, the proprietor no longer had the status of an appellant. Its sole request thereby became the dismissal of the opponent's appeal.

VIII. In support of its requests, the appellant argued essentially as follows:

D1 disclosed all the features of claims 1, 14 and 16. In particular, in item B of the composition disclosed therein a range of 5 to 25 % of a hydrophilic solvent was specified including polyethylene glycols ranging in molecular weight from 200 to 900. In item E reference was made to 1 - 50% of non-ionic surfactants which were also specified as being hydrophilic surfactants and accordingly anticipated the presence of 30 to 70% hydrophilic solvent as claimed.

Concerning inventive step, the closest prior art was represented by D6. The problem to be solved was the provision of a soft tissue product carrying a lotion capable of incorporating hydrophilic substances. The subject-matter of claim 1 did not involve an inventive step when starting from D6 and combining this with the teaching of D8. The further documents D2 to D5 were more remote. The oily and the waxy components of D6 had to be replaced completely by the low and high molecular weight polyethylene glycols specifically referred to in D8 as being suitable for water soluble formulations, for reducing the irritation potential and as solubilizers for active agents. The claimed ranges were so broad that in order to obtain a stable composition, the skilled person would end up within the claimed ranges when arriving at the required consistency. The same arguments applied to claims 14 and 16.

IX. In support of its requests the respondent (patent proprietor) argued essentially as follows:

The subject-matter of claims 1, 14 and 16 was novel. D1 disclosed various lists and in order to arrive at the

composition of e.g. claim 1 a selection from at least two lists would be necessary.

For the assessment of inventive step, D6 represented the closest prior art although it was based upon hydrophobic formulations. The knowledge concerning such prior art was reflected in the introductory paragraphs of the patent in suit. When starting from such a formulation the complete change to a hydrophilic formulation could only be arrived at with hindsight. D8 represented basic knowledge concerning polyethylene glycols but no relation to a particular formulation could be construed therefrom. D2 to D5 were concerned with different problems and solutions. Accordingly, the subject-matter of claims 1, 14 and 16 involved an inventive step. The appeal should therefore be dismissed.

## Reasons for the Decision

1. The appeal is admissible.

2. *Novelty over D1*

2.1 D1 which is prior art with regard to Article 54(3) EPC discloses (see e.g. claim 1) a tissue paper having applied to at least one surface thereof a lotion composition which is semi-solid or solid at 20°C and which comprises *inter alia*:

B) 5 to 25% of a hydrophilic solvent including glycerine, propylene glycol, hexylene glycol and polyethylene glycols ranging in molecular weight from 200 to 900;

D) 5 to 50% of an immobilizing agent including $C_{12}$ - $C_{22}$ fatty alcohols, and

E) 1 - 50% of a non-ionic surfactant.

2.2 The hydrophilic solvents specified in item B) of D1 can be compared with the hydrophilic solvents defined in claim 1 of the patent in suit. Some of the disclosed materials are consistent (glycerine, polypropylene glycol, low molecular weight polyethylene glycols) but the disclosed ranges are different (D1: 5 to 25% versus 30 to 70% defined in claim 1 of the patent in suit).

In view of the low molecular weight polyethylene glycols being defined as ranging up to a molecular weight of 900D, the appellant was of the opinion that this compound of D1 could be considered as being equivalent to the polyethylene glycols having a molecular weight > 720D as defined in claim 1 and thus specified as being in the range of from 10 to 50%. However, in such case the skilled person would have to choose twice from this list; firstly making the choice of polyethylene glycol and secondly choosing a molecular weight > 720D.

2.3 With regard to item E) of D1, this refers to non-ionic surfactants in an amount of 1 to 50%. The question as to whether the skilled person would identify unambiguously the hydrophilic surfactants of D1 as being hydrophilic solvents can be left open, since in order to arrive at the subject matter of claim 1, the skilled person would have to take the selections made from item B) (see above) and further select an amount of hydrophilic solvent to lie above 30 wt%, because claims 1, 14 and 16 each define a range of from 30 to

70 wt% of hydrophilic solvent in addition to 10 to 50 wt% of high molecular weight polyethylene glycol having a molecular weight of about 720D or greater. No clear and unambiguous disclosure of this combination is present in D1. Accordingly, the subject-matter of claim 1 is novel over the disclosure in D1.

3. *Inventive Step (Article 56 EPC 1973)*

3.1 Both parties considered D6 as representing the closest prior art. No other document was cited in this respect. Therefore, the Board has accepted that no other document is more appropriate as a starting point for the assessment of inventive step.

3.2 D6 discloses a soft tissue product having one or more plies, wherein one or both outer surfaces of the product have uniformly distributed solidified deposits of a hydrophobic composition comprising

a) 30 to 90 wt% of oil,

b) 10 to 40 wt% of wax,

whereby the composition has a melting point of 30 - 70°C (see e.g. claim 1). Additionally 5 to 40 wt% of fatty alcohol can be present selected from $C_{14}$ - $C_{30}$ fatty alcohols (claims 3 and 4). Moreover, additional agents with regard to enhancement of consumer benefits can be included such as for example dimethicone for skin protection or lanolin derivatives (col. 2, l. 49 - 60) for skin moisturization. The disclosed additives are mainly hydrophobic in nature. D6 starts from the need for a formulation that can be applied to a tissue and which will remain readily available for transfer to the user's skin to reduce skin irritation and redness in an efficient cost-

effective manner (col. 1, l. 28 - 31). This effect is achieved via the disclosed combination of oily and waxy components which enables the oil component to remain at or near the surface of the tissue (col. 9, l. 36 - 44). Accordingly, the desired and obtained effect according to D6 is only possible for such a hydrophobic formulation.

3.3 The composition of claims 1, 14 and 16 differs from the composition disclosed in D6 in that a hydrophilic solvent is defined instead of the oil component and a high molecular weight polyethylene glycol is defined instead of the wax component.

3.4 The difference is the change of the formulation from being hydrophobic to being hydrophilic in nature. Therefore, the objective problem to be solved can only be related to this difference and thus the Board finds that the objective problem to be solved is the provision of an alternative to the basically hydrophobic formulation of D6.

3.5 The appellant was of the view that the reasons for such a change could be assigned to the hydrophilicity of additional ingredients as set out in paragraph [0001] of the patent in suit ("*since these formulations are lipophilic it is sometimes difficult to incorporate hydrophilic or water soluble surfactants, cosmetic materials or active ingredients*"). However, as stated *supra*, D6 already discloses (see col. 2, l 49 to 60) the inclusion of various additional ingredients such as cosmetic materials or active ingredients, and the subject-matter of claims 1, 14 or 16 is not specifically directed to any additional agents.

Accordingly, the objective problem to be solved cannot be based upon this problem - even though it may be an additional advantage that when having changed to a completely hydrophilic system, hydrophilic components may be more easily included.

3.6 Specifically, the solution according to claim 1 of the patent in suit refers to a composition including an amount of from 30 to 70 wt% of hydrophilic solvent combined with polyethylene glycols having a molecular weight of higher than 720 in an amount of from 10 to 50 wt%.

3.7 As set out under point 3.2 above, the percentages of oily and waxy component in D6 are referred to with regard to maintaining the ability of the oil component to remain at or near the surface of the tissue (col. 9, l. 37 - 44). This reason is no longer applicable when changing to a hydrophilic system. Therefore, the percentages related to the oily and waxy component would no longer be mandatory or even relevant in such a case. Accordingly, there is no reason why the skilled person would be required to maintain such a combination or corresponding percentages. Thus the appellant's view that a skilled person should necessarily exchange the waxy and oily components of D6 by corresponding amounts of the low and high weight polyethylene glycols from D8 cannot be shared since such an approach is based on hindsight.

3.8 D8 represents the general knowledge of a skilled person in that it relates to a cosmetic handbook and demonstrates that it was known to use polyethylene glycols when making basically hydrophilic formulations.

Further properties of polyethylene glycols such as reduced irritation potential and facilitated dissolution of active agents are also specified in D8.

3.9 D8 additionally lists the polyethylene glycols according to their molecular weights which are commonly used in cosmetics. It differentiates viscous polyethylene glycols (the listed variants have molecular weights of 200, 300, 400 and 600D) from waxy polyethylene glycols (the listed variants have molecular weights of between 1000 and 20000D). Hence, when desiring to provide a basically hydrophilic composition, the skilled person may seemingly use any one or more of these polyethylene glycols according to the possible desired consistency. However, neither a range for the amount of polyethylene glycols of any particular molecular weight can be derived from D8 nor whether both viscous and waxy variants should be used in combination or merely one of these variants used in combination with a further unspecified hydrophilic solvent for example. D8 is also entirely silent about replacing any particular hydrophobic components with any particular hydrophilic components, let alone any advantages to be achieved by such a replacement.

3.10 When desiring a particular consistency of the final formulation, it would seemingly be sufficient to choose one variant from D8 which has the desired viscosity and melting point. Neither D6 nor D8 discloses any advantage regarding the use of either of the two different kinds of polyethylene glycols or the use of a further hydrophilic solvent in addition to any polyethylene glycol having a certain molecular weight. It is only with hindsight that such an attempt would be

considered. Therefore, the combination of the claimed range for a hydrophilic solvent with the claimed range for polyethylene glycol of high molecular weight represents an alternative solution which, in light of the arguments and evidence put forward by the appellant, is not obvious even when acknowledging the basic view that polyethylene glycol could serve as part of a hydrophilic formulation.

3.11 Moreover, the polyethylene glycols disclosed in D8 cannot be considered as the only hydrophilic components which were known to the skilled person. Different hydrophilic components in different weight percentages might be considered as well, either in combination with further compounds or as alternatives to any hydrophobic compounds.

3.12 Therefore, when starting from D6 and considering the general knowledge available from D8, the skilled person is not taught to use any specific combination or components even when considering hydrophilic systems, and would not arrive in an obvious manner at the specific composition claimed in claims 1, 14 and 16 under consideration. The other documents, D2 to D5, cited in the written proceedings, were considered by both parties as being less relevant and were thus not discussed further.

4. Consequently the subject-matter of claims 1, 14 and 16 involves an inventive step (Article 56 EPC 1973) in respect of the prior art cited by the appellant.

## Order

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

The appeal is dismissed.

The Registrar The Chairman

M. Patin M. Harrison