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**Datasheet for the decision  
of 14 May 2007**

**Case Number:** T 0464/05 - 3.2.06

**Application Number:** 96910708.5

**Publication Number:** 0818980

**IPC:** A61F 13/15

**Language of the proceedings:** EN

**Title of invention:**  
Disposable pull-on pant

**Patentee:**  
THE PROCTER & GAMBLE COMPANY

**Opponents:**  
Kimberly-Clark Worldwide, Inc.  
SCA Hygiene Products AB

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 123(2), 83

**Keyword:**  
"Amendments - added subject-matter (yes) - main request"  
"Disclosure - sufficiency (no) - test method for measuring a  
parameter defined in the claim not sufficiently disclosed -  
auxiliary request"

**Decisions cited:**  
T 0466/05, T 0914/01, T 0256/87, T 0387/01, T 0611/02,  
T 0252/02

**Catchword:**  
-



Case Number: T 0464/05 - 3.2.06

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.06  
of 14 May 2007

**Appellant I:** Kimberly-Clark Corporation  
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**Respondent:** THE PROCTER & GAMBLE COMPANY  
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**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
8 February 2005 concerning maintenance of  
European patent No. 0818980 in amended form.

**Composition of the Board:**

**Chairman:** P. Alting Van Geusau  
**Members:** G. Pricolo  
K. Garnett

## Summary of Facts and Submissions

- I. The appeals stem from the interlocutory decision of the Opposition Division posted on 8 February 2005 maintaining European patent No. 0 818 980 in amended form in accordance with the patent proprietor's main request filed during the oral proceedings held on 20 January 2004.
- II. In the decision under appeal the Opposition Division considered that the patent disclosed the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, that the amendments made met the requirements of Article 123(2) and (3) EPC, and that the claimed subject-matter was novel and involved an inventive step. As regards sufficiency of disclosure, which was objected to in particular due to the presence in claim 1 of the feature according to which each said side panel of the claimed absorbent article had a weighted average mass vapor transmission rate of at least  $3500\text{g/m}^2/24\text{ hr}$ , the Opposition Division stated that: "*there is no evidence that the skilled person who genuinely wants to determine the weighted average mass vapor transmission rate can not obtain meaningful results on the basis of the information in the patent in suit and based on general common knowledge*".
- III. The opponents (opponent I and opponent II) lodged appeals against the decision of the Opposition Division. The notices of appeal were received at the EPO on 15 and 12 April 2005, respectively, and the appeal fees were paid on the same days. The statements setting out

the grounds of appeal were received at the EPO on 17 June 2005.

With its statement of grounds of appeal, opponent II filed additional documents, in particular:

D25 : Declaration of Karl Karlsson, dated 20 May 2005

- IV. In the communication dated 26 January 2006 accompanying the summons to oral proceedings pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal, the Board pointed out as regards sufficiency of disclosure that the crucial issue was whether the skilled person was capable of reliably carrying out the test procedure for measuring the weighted average mass vapour transmission rate (MVTR). The Board expressed the preliminary opinion that the patent in suit did not disclose all the parameters necessary for reliably carrying out the test procedure, in particular it did not disclose the distance between the desiccant ( $\text{CaCl}_2$ ) and the sample which, as shown by D25, had an impact on the measurement results. The Board further expressed doubts in respect of the amendments made in accordance with the main request allowed by the Opposition Division, as they would appear to constitute an inadmissible generalization of the subject-matter disclosed in the application as filed.
- V. With letter dated 13 April 2007 the respondent filed an amended main request in response to the above-mentioned communication of the Board.

Claim 1 according to this main request reads as follows:

"1. A unitary disposable absorbent article (20) which is a pull-on garment and which has a crotch region (30), a front waist region (26) and a back waist region (28), a waist opening (36), leg openings (34) and side seams (32) on each side of the garment, the absorbent article comprising: a main panel (56) comprising a liquid pervious topsheet (80), a liquid impervious-vapor pervious backsheet (40) joined with said topsheet, and an absorbent core (84) positioned between said topsheet and said backsheet; a pair of extensible leg cuffs, each extensible leg cuff comprising a leg flap panel joined to and extending laterally outwardly from said main panel, and an elastic member operatively joined with each said leg flap panel; a continuous belt (38) comprising at least a first belt layer (42) which is positioned in the front-waist region (26) and which extends continuously laterally across the front waist region (26) from one of the side seams (32) to the other, a second belt layer (44) which is positioned in the back waist region (28) and which extends continuously laterally across the back waist region (28) from one of the side seams (32) to the other and the side seams (32) by which the first and second belt layers (42, 44) are joined at each side to form the continuous belt (38), and wherein the first and second belt layers (42, 44) extend longitudinally to the crotch region (30) or into the crotch region (30) so as to leave a gap between them in the crotch region (30), and wherein the belt includes an elastic waist feature in the front waist region and an elastic waist feature in the back waist region (28) wherein the elastic waist feature in the front waist region (26) comprises a

waistband panel (60) joined with an extending longitudinally outwardly from said main panel, said waistband panel being extensible in a direction having a vector component in the lateral direction; and a pair of side panels (64) joined with and extending laterally outwardly from at least a portion of said waistband panel, and wherein the elastic waist feature in the back waist region (28) comprises a waistband panel (60') joined with and extending longitudinally outwardly from said main panel, said waistband panel being extensible in a direction having a vector component in the lateral direction; and a pair of side panels (64') joined with and extending laterally outwardly from at least a portion of said waistband panel, and wherein each side panel comprises a coverstock layer and an elastomeric layer joined with the coverstock layer such that the side panel is extensible in a direction having a vector component in the lateral direction, each said side panel having a weighted average mass vapor transmission rate of at least 3500g/m<sup>2</sup>/24 hr, and wherein the coverstock layer of each of the side panels which form part of the elastic waist feature in the front waist region (28) is a portion of the continuous first belt layer and wherein the coverstock layer of each of the side panels which form part of the elastic waist feature in the back waist region (28) is a portion of the continuous first belt layer is a portion of the continuous second belt layer."

Further, the respondent filed the following document:

D29 : Declaration of Byron W. Jones, dated 12 April 2007.

VI. Oral proceedings, at the end of which the decision of the Board was announced, took place on 14 May 2007.

The appellants requested that the decision under appeal be set aside and that the European patent No. 0 818 980 be revoked.

The respondent requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request filed with letter dated 13 April 2007 alternatively on the basis of the first auxiliary request filed during the oral proceedings.

Claim 1 according to the first auxiliary request reads as follows:

"1. A unitary disposable absorbent article (20) which is a pull-on garment and which has a crotch region (30), a front waist region (26) and a back waist region (28), a waist opening (36), leg openings (34) and side seams (32) on each side of the garment, the absorbent article comprising: a main panel (56) comprising a liquid pervious topsheet (80), a liquid impervious-vapor pervious backsheet (40) joined with said topsheet, and an absorbent core (84) positioned between said topsheet and said backsheet; a pair of extensible leg cuffs, each extensible leg cuff comprising a leg flap panel joined to and extending laterally outwardly from said main panel, and an elastic member operatively joined with each said leg flap panel; a continuous belt (38) comprising at least a first belt layer (42) which is positioned in the front-waist region (26) and which extends continuously laterally across the front waist region (26) from one of the side seams (32) to the other, a second belt layer (44) which is positioned in the back waist region (28) and which extends

continuously laterally across the back waist region (28) from one of the side seams (32) to the other and the side seams (32) by which the first and second belt layers (42, 44) are joined at each side to form the continuous belt (38), and wherein the first and second belt layers (42, 44) extend longitudinally to the crotch region (30) or into the crotch region (30) so as to leave a gap between them in the crotch region (30), wherein the continuous belt (38) in the front waist region (26) comprises a central panel which comprises a waistband panel (60) and a medial panel (62), a side panel (64) on each side of the central panel, and a seam panel (66) at each side panel (64), and wherein the continuous belt (38) in the back waist region (28) comprises a central panel which comprises a waistband panel (60') and a medial panel (62'), a side panel (64') on each side of the central panel, and a seam panel (66') at each side panel (64') wherein, in both the front waist region (26) and the back waist region (28), the medial panel (62, 62') extends longitudinally outwardly from and along the lateral edge of the crotch region (30) and the waistband panel (60, 60') extends longitudinally outwardly and from and along the medial panel (62, 62') and wherein said medial panels (62, 62') are each not extensible and each covers at least a portion of said absorbent core and wherein the belt includes an elastic waist feature in the front waist region and an elastic waist feature in the back waist region (28) wherein the elastic waist feature in the front waist region (26) comprises the waistband panel (60) which is joined with an extending longitudinally outwardly from said main panel, said waistband panel being extensible in a direction having a vector component in the lateral direction; and the pair of



side panels (64) joined with and extending laterally outwardly from at least a portion of said waistband panel (60) and from said medial panel (62), and wherein the elastic waist feature in the back waist region (28) comprises the waistband panel (60') joined with and extending longitudinally outwardly from said main panel, said waistband panel being extensible in a direction having a vector component in the lateral direction; and the pair of side panels (64') joined with and extending laterally outwardly from at least a portion of said waistband panel (60') and from said medial panel (62), and wherein each side panel comprises a coverstock layer and an elastomeric layer joined with the coverstock layer such that the side panel is extensible in a direction having a vector component in the lateral direction, each said side panel having a weighted average mass vapor transmission rate of at least  $3500\text{g/m}^2/24\text{ hr}$ , and wherein the coverstock layer of each of the side panels which form part of the elastic waist feature in the front waist region (28) is a portion of the continuous first belt layer and wherein the coverstock layer of each of the side panels which form part of the elastic waist feature in the back waist region (28) is a portion of the continuous second belt layer is a portion of the continuous second belt layer."

- VII. During the oral proceedings, the Board observed in respect of the amendment of claim 1 according to the main request, consisting of the introduction from the description of the feature relating to the presence of a continuous belt, that the application as filed (page 13) only disclosed a belt comprising various panels, inter alia medial panels and seam panels which

were not recited in claim 1. Accordingly, claim 1 of the main request did not appear to meet the requirements of Article 123(2) EPC. The respondent did not comment on this and requested a decision on the main request.

VIII. As regards the auxiliary request, the arguments of the parties which are of relevance for this decision can be summarized as follows:

The appellants submitted that the measurement of the moisture vapor transmission rate (MVTR) as described in the patent in suit was dependent on several factors which were not specified. In particular, the patent in suit did not specify what air gap should be provided between the tested sample and the bed of calcium chloride below. The test results of D25 with 10 mm and 25 mm air gaps showed clearly that strongly differing results were obtained depending on the particular air gap selected. Further it could be deduced from D25 that different values would be obtained if the air gap was selected to be somewhere between 10 and 25 mm or well below 10 mm. In fact, it was not plausible that the measurement results would not vary from those obtained with an air gap of 10 mm if the air gap was selected to be smaller. Since the skilled person faced arbitrary choices in carrying out the MVTR test procedure and these arbitrary choices led to differing results, the person skilled in the art was not able to carry out the invention as claimed.

The respondent replied that the MVTR was a well known parameter in the art and the fact that the measured values depended on the particular measurement

conditions chosen was related to the question of determining the scope of protection (Article 84 EPC) rather than to sufficiency of disclosure (Article 83 EPC). In any event, the information given in the patent about the test was, in combination with the general expertise of a skilled person, entirely sufficient to give a consistent and reproducible measurement of the MVTR value required in claim 1. Although the precise distance between the desiccant and the sample was not specified in the patent, the skilled person would be well aware of the need to generally keep the air gap to a low level. This meant, in practice, to select an air gap of about 6 to 10 mm. The MVTR measurement did not vary significantly if the air gap was maintained below 10 mm. For the materials under consideration it would not be sensible to consider measuring the MVTR using an air gap of 25 mm, as in D25.

## **Reasons for the Decision**

1. The appeals are admissible.
2. *Main request*

Claim 1 is amended with respect to claim 1 as granted in particular by introducing the feature concerning the presence of a continuous belt, which is taken from the description of the application as filed. There it is disclosed (see page 13, first paragraph) that: "*the belt 38, in both the front region 26 and the back region 28 respectively, comprises a central panel comprising a waistband panel 60 and 60' and a medial panel 62 and 62', a side panel 64 and 64' on each side*

of the central panel, and a seam panel 66 and 66' at each side panel 64 and 64'". During oral proceedings, the Board expressed the opinion that, since claim 1 omitted from the combination of features of the belt, as disclosed in the application as filed, the medial and seam panels, the amendments made introduced additional subject-matter and therefore infringed Article 123(2) EPC. The respondent did not reply to this opinion but requested a decision on the main request. The Board, seeing no reason to change its opinion, is therefore justified in basing its decision on the opinion expressed during the oral proceedings. Accordingly, the main request cannot be allowed because it does not comply with the requirements of Article 123(2) EPC.

3. *Auxiliary request*

3.1 During the oral proceedings, the appellants raised objections under Article 84 and Article 123(2) EPC to the amendments made in accordance with the auxiliary request. The Board accepts that the amendments made to the claims do not violate the provisions of Articles 84 and 123(2) and (3) EPC. No detailed reasons need be given in this respect because the respondent's auxiliary request fails for lack of compliance with the requirements of Article 83 EPC, as set out below.

3.2 Claim 1 of the request under consideration recites the feature, also present in claim 1 as granted, according to which each side panel has a weighted average mass vapor transmission rate (MVTR) of at least  $3500\text{g/m}^2/24\text{ hr}$ . As already pointed out by the Board in its communication, having regard to the undisputed fact

that the patent in suit does not describe in detail a test method for measuring the MVTR, the crucial issue in respect of sufficiency of disclosure is whether the skilled person is capable of reliably measuring this parameter.

3.3 The respondent submitted that the mass vapour transmission rate was a parameter well known in the art and that standard test procedures for its measurement were known, such as the ASTM E96. The fact that different measurement values might be obtained depending on the specific procedure adopted had nothing to do with the requirements of Article 83 EPC but was rather related to the scope of protection of the claims, which was dealt with by Article 84 EPC.

3.3.1 If, for a given sample, the MVTR values depend on the particular measurement method adopted and/or the conditions under which the measurement method is carried out, then one consequence is that the boundaries of the claimed-subject-matter are not well-defined. The Board concurs with the respondent that this aspect pertains to Article 84 EPC. The admissibility of an objection under Article 84 EPC in respect of a feature already present in the granted claim would be questionable since the objection would not arise from the amendments made and lack of compliance with the requirements of Article 84 EPC is not a ground for opposition.

3.3.2 However, the question at stake in the present case is not the question of the boundaries of the claimed subject-matter, but whether the lack of indications in the patent in suit in respect of how to measure the

mass vapour transmission rate amounts to an undue burden for the skilled person trying to reproduce the invention (see in this respect decision T 466/05, point 4.22, and T 914/01, points 16 and 17, dealing with similar cases).

- 3.3.3 The patent in suit discloses (see paragraph [0091]) that the technical effect of the essential feature according to which the side panel has a weighted average mass vapor transmission rate (MVTR) of at least  $3500\text{g/m}^2/24\text{ hr}$  is that humidity and heat buildup within the absorbent article are reduced. For reproducing the claimed invention it is therefore crucial that the skilled person is able to determine, with a level of uncertainty corresponding to no more than the experimental error, whether the weighted average MVTR of a given sample is above or below the threshold value of  $3500\text{g/m}^2/24\text{ hr}$ . This presupposes that the skilled person uses either the same method as the patent in suit or a method which provides comparable results in the sense that the difference between the results of the two methods lies within a range corresponding to the experimental error expected by a skilled person.
- 3.3.4 On the contrary, if on the basis of the information available from the patent in suit and common general knowledge the skilled person may use indifferently one of a plurality of test methods that provide substantially different results (the difference between the results of the methods being outside the experimental error, i.e. being of technical significance), then the skilled person is faced with a situation in which, at least for some samples, he is not be able to determine whether these samples

constitute embodiments of the invention or not. This in particular occurs when a given sample has a MVTR above the threshold value of  $3500\text{g/m}^2/24\text{ hr}$  with a first test method and a MVTR below said threshold value with a second test method. In such case the invention cannot be reproduced over the whole area claimed and therefore the patent in suit does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC).

3.3.5 This finding essentially corresponds to the requirement that, in the present case, the skilled person has to know "*when he is working within the forbidden area of the claims*" (see e.g. decisions T 256/87, point 17; and decisions T 387/01, T 611/02 and T 252/02 of Board 3.2.06). In the Board's view, although this requirement in its broad reading is certainly related to Article 84 EPC (see e.g. decision T 943/00, point 10.5.1), it is in fact related to Article 83 EPC in its restricted reading, implying that the skilled person must be able to determine whether a particular object falls within the forbidden area of the claims intended as the area including those embodiments that effectively solve the technical problem underlying the patent in suit.

3.4 As regards the test method for measuring the MVTR, the patent in suit does not refer to any particular standard test method (such as ASTM E96) but discloses (see par. [0100]) that "*a known amount of  $\text{CaCl}_2$  is put into a flanged cup. A sample is placed on the top of the cup and held securely by a retaining ring and gasket. The assembly is then weighed and recorded as the initial weight. The assembly is placed in a*

*constant temperature (40°C) and humidity (75%RH) chamber for 5 hours. The assembly is then removed from the chamber and allowed to equilibrate for at least 30 minutes at the temperature of the room where the balance is located. The mass vapour transmission rate (MVTR) is calculated and expressed in g/m<sup>2</sup>/24 hr using the following formula ...". The patent in suit does not specify the distance (air gap) between the sample and the CaCl<sub>2</sub> (desiccant) in the cup.*

- 3.4.1 As shown by D25, which relates to tests made by appellant II for measuring the MVTR in accordance with the instructions in the patent in suit, the results are very different depending on whether an air gap of 10 mm or of 25 mm is selected. These results, which show that the difference is substantially greater than the experimental error, since the mean MVTR with a 10 mm air gap is 4122 g/m<sup>2</sup>/24 hr while it is 2552 g/m<sup>2</sup>/24 hr with a 25 mm air gap, are not contested by the respondent. According to these results, the sample tested in D25 is in accordance with the claimed invention if an air gap of 10 mm is chosen whilst it is not in accordance with the claimed invention if an air gap of 25 mm is chosen. In the absence of information in the patent in suit as to what air gap should be adopted, it thus might be said that it is not possible to say whether the sample of D25 is in accordance with the claimed invention. The respondent contested this conclusion and submitted that the skilled person would not consider using an air gap of 25 mm, but of 10 mm or less. In this range there were no substantial variation of the measured values. Nor had the appellants furnished evidence in this respect.



3.4.2 In its declaration D29, Mr Jones states that the skilled person knows that, when measuring the MVTR with a method such as that described in the patent in suit, the air gap should be minimized such that the vapour transmission resistance of the air layer does not mask the measurement of the water vapour transmission resistance of the test specimen. During the oral proceedings, the inventor himself stated that minimizing the air gap meant, in practice, the selection of an air gap of about 6 to 10 mm.

The Board accepts that the skilled person would understand that the air gap has an influence on the measurement results and that he would select a small air gap. However, if an air gap of 10 mm can be regarded as small, as submitted by the respondent, so can an air gap of 15 or even 20 mm be generally regarded as small having regard to the experimental nature of the test method and the lack of a specific size of the cup. In the Board's view, there is no satisfactory evidence that the skilled person would only consider an air gap of 6 to 10 mm, and not, for instance, an air gap of 15, 20 or 25 mm. In fact, in its declaration D25 Mr Karlsson states (see 4<sup>th</sup> paragraph) that he has experience in testing vapour permeability of breathable materials and that he sees no obvious choice for the air gap. The Board notes that in the present circumstances, in which success of the invention depends on carrying out a test method which has not been disclosed in all its details, such as e.g. by reference to a standard test method, and in which the appellant has undisputedly shown that the measurements are substantially dependent on an unspecified parameter, namely the air gap, it is up to

the respondent to prove that the average skilled person would only select an air gap being in a specific range such that consistent measurements are obtained. The declaration D29 neither specifies that the skilled person would select such a specific range nor that the average skilled person would not consider using a "small gap" of e.g. 15, 20 or 25 mm. In the absence of further corroborating evidence, the inventor's declaration at the oral proceedings according to which it was usual practice to select an air gap of about 6 to 10 mm and that in this range consistent measurements are obtained, does not constitute convincing evidence that such an air gap would in fact be the only choice for the average skilled person. It follows that the Board sees no basis to conclude that the skilled person would disregard "small" air gaps above 10 mm, such as 15, 20 or 25 mm.

As shown by D25, selecting an air gap of 25 mm instead of an air gap of 10 mm leads to very different results (see above point 3.4.1). As submitted by the respondent itself during oral proceedings, the MVTR test method essentially has a linear characteristic (weight gain of the desiccant vs. time) and as stated in D29 the air gap itself has as a water vapour transmission resistance. Taking these factors into account, and in the absence of any evidence to the contrary (note, in particular, that D29 does not constitute evidence that an air gap of 15 or 20 mm would lead to same MVTR values as an air gap of about 6 to 10 mm), the Board is justified in coming to the conclusion that the results which would be obtained with an air gap of 15 or 20 mm would differ substantially from those with an air gap

of 10 mm, namely by more than the level of experimental error.

3.4.3 It follows that the situation in the present case corresponds to that set out in paragraph 3.3.4 above: since on the basis of the information available from the patent in suit and common general knowledge the skilled person may indifferently use different air gaps that provide substantially different results (the difference between the measurements with different air gaps being outside the experimental error, i.e. being of technical significance), the skilled person is faced with a situation in which, at least for some samples, he is not be able to determine whether these samples are in accordance with the claimed invention or not. Therefore, the invention cannot be reproduced over the whole area claimed.

3.5 It must thus be concluded that the patent in suit does not disclose the invention in accordance with claim 1 of the auxiliary request in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC).

**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:

M. Patin

P. Alting van Geusau