Datasheet for the decision
of 15 July 2008

Case Number: T 0815/07 - 3.2.06
Application Number: 98907145.1
Publication Number: 0969784
IPC: A61F 13/15
Language of the proceedings: EN
Title of invention: Absorbent articles comprising a material having high flux capabilities
Patentee: THE PROCTER & GAMBLE COMPANY
Opponent: SCA Hygiene Products AB
Headword: -
Relevant legal provisions: EPC Art. 83
Relevant legal provisions (EPC 1973): -
Keyword: "Disclosure - sufficiency - (no)"
Decisions cited: T 0583/05, T 0943/00, T 0960/98, T 0466/05
The purpose of a parameter contained in a claim is to define an essential technical feature of the invention. Its significance is that the presence of this technical feature contributes to the solution of the technical problem underlying the invention. The method specified for determining the parameter should therefore be such as to produce consistent values, so that the skilled person will know when he carries out the invention whether what he produces will solve the problem or not. See Reasons, point 5.
Case Number: T 0815/07 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 15 July 2008

Appellant: THE PROCTOR & GAMBLE COMPANY
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 9 March 2007 revoking European patent No. 0969784 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Alting Van Geusau
Members: G. de Crignis
K. Garnett
Summary of Facts and Submissions

I. European Patent Nr. 0 969 784, granted on application Nr. 98907145.1, was revoked by the decision of the opposition division posted on 9 March 2007. The revocation was based on the finding that the amended patent did 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).

II. The appellant (patent proprietor) filed a notice of appeal against this decision on 15 May 2007, and paid the appeal fee simultaneously. On 19 July 2007 the statement of grounds of appeal was filed, accompanied by new sets of claims in accordance with a main request, first and second auxiliary requests and by an Experimental Report concerning the Test method A relied upon for determining a claimed parameter in the patent in suit.

III. In a communication dated 16 January 2008, accompanying the summons to oral proceedings, the Board indicated that none of the new requests appeared to meet the requirements of Article 84 EPC as not all the necessary references to the methods for determining the parameters relied upon were included in the independent claims. It furthermore pointed out that the Experimental Report did not appear to relate to the claimed absorbent articles and also that Test Method A did not appear to have been applied in accordance with the patent in suit. Additionally, decision T 583/05, referred to by the appellant as being relevant in respect of Test Method A disclosed in the patent in suit.
suit, appeared to support the opposition division's conclusion.

IV. Oral proceedings were held on 15 July 2008. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the claims in accordance with the main request filed during the oral proceedings alternatively on the basis of the claims in accordance with first or second auxiliary requests filed with the grounds of appeal. The appellant further requested that in any event the case be remitted to the opposition division for consideration of novelty and inventive step. The respondent requested that the appeal be dismissed.

V. Claim 1 according to the appellant's main request reads as follows:

"An absorbent article (20) selected from diapers and training pants and comprising an absorbent core (28, 128, 228, 428) having a crotch region (56, 156), as defined herein, a front region (52; 152) and a rear region (54; 154) characterized in that (i) the crotch region (56, 156) has an absorbent capacity of not more than 40% of the absorbent core's (28, 128, 228, 428) total absorbent capacity determined by Test Method A herein and (ii) the crotch region (56, 156) comprises a material having an IF value as determined by Test Method D herein of at least about 0.5 g/cm²/min; and (iii) wherein the front and/or rear regions of the core comprise storage material having higher capillary suction than said material in the crotch region."
The subject-matter of claim 1 of auxiliary requests 1 and 2 differs from that of claim 1 of the main request by the deletion of "as defined herein, a front region (52; 152) and a rear region (54; 154)"; by the addition of the word "defined" between "Test Method A" and herein", by deletion of "as determined by Test Method D herein" and with respect to the feature (iii), which reads as follows:

in the first auxiliary request:
"(iii) wherein the front and/or rear regions of the core comprise a distinct storage material which is hydrogel-forming absorbent polymer."

in the second auxiliary request:
"(iii) wherein the front and/or rear regions comprise a distinct storage material which is hydrogel-forming absorbent polymer comprising from 50 to 95% neutralized, slightly network crosslinked polyacrylic acid."

For the purposes of this decision, only claim 1 of the respective requests needs to be considered.

VI. In support of its requests, the appellant argued with regard to sufficiency of disclosure as follows:

Test Method A, which is to be applied for the determination of the absorbent capacity of the crotch region of the article's absorbent core in relation to the total absorbent capacity of the absorbent core, results in reliable and reproducible values. This was demonstrated by the Experimental Report of Mr Gary Lavon annexed to the grounds of appeal.
The Experimental Report demonstrated that there was no effect on the values obtained using test method A which depended on the time between removal of the diaper and sectioning, e.g., after 1, 5 or 10 minutes. Accordingly, the conclusion arrived at in T 583/05, points 3.3 to 3.6, was not correct. The specific requirements for detection of leakage (inspection every 10 minutes) and determination of the absorbent capacity (sectioning within 15 minutes) ensured that in the fully loaded article no further wicking would occur and only such articles were to be considered.

Thus the invention claimed was disclosed in a manner sufficiently clear and complete for it to be carried out by the skilled person.

VII. The respondent argued essentially as follows:

The Experimental Report did not affect the findings of the opposition division or those in T 583/05 as it did not form a sufficient or proper basis for demonstrating that no relation between elapsed time and crotch absorbent capacity existed:

− The number of loads varied from 2 to 6 loads before leakage. Thus, the absorbent articles were not "fully loaded", in the sense that no further wicking would take place in the article. Accordingly, any further wicking was dependent upon the actual loading, which obviously had a significant influence on the result;

− The articles sectioned 1 minute after detection of leakage were on average less loaded than the articles
which were sectioned 5 or 10 minutes after detection of leakage;

- Leakage depended on the fit of the diaper (tightly or loosely fitted), on the design of the panty, on the visual control and detection time (variation of up to 10 minutes) and on the delay-time before sectioning (up to 15 minutes);

- None of the two reported articles ("Pampers Easy Ups" and "Product A") represented an example of the claimed absorbent article. Not only did they not have the claimed absorbent capacity but also neither the claimed wicking characteristics (IF$_{10}$ or IF$_{30}$ values) nor the suction requirements were specified.

Furthermore, the theoretical calculations provided with the letter of 3 December 2007 demonstrated that, for the material used, the liquid transport in the crotch region and thus into the capillary suction material of the front and/or back region during both the 5 and 10 minute periods could be considerable and would influence the capillary crotch capacity during the 15 minutes which might elapse between the leakage of the product and the cutting out of the crotch portion from the tested product.

Neither the patent in suit nor the Experimental Report disclosed a single example of an absorbent core or an absorbent article falling within the scope of claim 1.
Reasons for the Decision

1. The appeal is admissible.

2. Claim 1 of all requests

Claim 1 of all requests includes the feature (i):
"the crotch region (56, 156) has an absorbent capacity of not more than 40% of the absorbent core's (28, 128, 228, 428) total absorbent capacity determined by Test Method A herein".

3. Test Method A

In the decision under appeal the opposition division concluded that the structure of the article claimed would have an effect on the actual amount of liquid absorbed before leakage occurred (last full paragraph under point 2.2 of the decision under appeal). This amount would in particular depend on whether or not the article had barrier cuffs, elastics or a breathable backsheet. Therefore Test Method A did not give sufficiently reliable results such that the skilled person would know with the required certainty whether or not he was carrying out the claimed invention. This conclusion of the opposition division was consistent with that reached in T 583/05, which concerned the same feature.

4. Experimental Report

In an attempt to show that the opposition division's conclusion (and also that reached in T 583/05) was wrong, the Experimental Report was annexed to the
grounds of appeal. However, the results arrived at in this report are not convincing for the following reasons.

4.1 First, there is a lack of consistency as regards the selection of panellists between Test Method A as disclosed in the patent in suit and the test procedure as carried out in accordance with the Experimental Report.

Test Method A requires a group of 100 panellists to be recruited uniformly across the appropriate weight range. Following the recruiting step, 30 panellists are to be selected from the group at random (paragraph [0098] of the patent in suit).

In the Experimental Report neither the panellist selection procedure nor the number of panellists is in conformity with the procedure set out in the patent in suit.

For this reason alone the test results can have little relevance as regards the points to be proven.

4.2 Second, there is no adequate information about the tested articles as regards their structure, materials or regions.

Thus as regards "Product A" and "Pampers Easy Ups" which form the subject-matter of the Experimental Report no adequate information is given about the materials of the crotch/front/rear region and their wicking/suction characteristics. It is not stated whether the features (ii) and (iii) of the article defined in claim 1 are to be found in these articles. These features refer to the crotch region as comprising
a material having a specific $IF_{10}$ value and to the front and/or rear regions of the core comprising a storage material having higher capillary suction than the material in the crotch region.

With regard to the absorbent portion, "Product A" is referred to as comprising an acquisition layer, a distribution layer and a core comprising superabsorbent hydrogel polymer, nonwoven material and bio-soluble mineral micro-fibres. However, neither the actual design of these layers and materials, nor their wicking and suction characteristics, nor the degree to which they extend into the different regions is disclosed.

"Pampers Easy Ups" are referred to as commercially available products without any further specification of their absorbent or structural characteristics.

4.3 Third, there is no statistically relevant evaluation of the tests carried out in accordance with the Experimental Report.

In the appealed decision, as well as in T 583/05, the range of 15 minutes allowed for the elapsed time before sectioning according to Test Method A was considered to be particularly problematic. In reply, the Experimental Report discloses results obtained for intervals of 1, 5 and 10 minutes before sectioning and is said to show no appreciable differences between the values determined after the 1, 5 or 10 minute time intervals.

However, considering the results in more detail it can be seen from for example "Product A" (which comes closer to the claimed absorbent capacity of the crotch
region and thus is more relevant than the other product) that the resultant individually determined values lie between **12.0% and 68.8%**. This enormous spreading of the values highlights a significant variance of the individual crotch capacity percentages reported in the Experimental Report.

Calculating a mean value obtained by averaging data with such a high variance, in particular when they are based upon a small number of articles (7 to 9 per section time group), are further divided between male and female users and relate to substantially differently loaded articles (2 to 6 loads) obviously cannot lead to reliable results.

Accordingly, the calculated mean values (45% crotch region capacity after 1 and 5 minutes and 41% of crotch region capacity after 10 minutes) cannot have any statistical relevance and consequently these test results do not demonstrate the independence of the calculated crotch region capacity with respect to the time of cutting the crotch region out of the loaded article.

In T 583/05, it was stated (see grounds, points 3.3 to 3.6) that the high wicking materials (*inter alia* HIPE - foams) of the article influenced the reliability of the results of Test Method A, in particular within the time window. This point has also not been taken into account in the Experimental Report as - see point 4.2 above - no information is given with regard to the materials present in the defined regions for either "Product A" or "Pampers Easy Ups".
The theoretical calculations provided with the letter of 3 December 2007 by the respondent support the finding in T 583/05 that the liquid transport in the crotch region and thus into the capillary suction material in the front and/or back region during both the 5 and 10 minute time intervals can be considerable in an article which is not fully loaded in the true sense of a "fully loaded" article. Clearly articles which are only partially loaded have a totally different capillary action to fully loaded ones in the period between the time of leakage of the product and the time when the crotch portion is cut out from the test product.

As was correctly stated by the Opposition Division the structure of the diaper also influences the absorbent capacity calculated in accordance with Test Method A. Clearly leakage occurring after only 2 or 6 insults cannot in both cases lead to fully loaded articles.

4.4 Thus, the Experimental Report does not overcome the objection under Article 83 EPC raised in the appealed decision with respect to Test Method A for determining the crotch portion's absorbent capacity.

5. Accordingly the conclusion remains that Test Method A results in totally arbitrary values for the crotch region's absorbent capacity.

The reference to Test Method A in the main request arises out of an amendment to the granted claims. The requirements of Article 101(3) EPC 2000 mean that this amendment can only be allowed if the disclosure of the invention as now claimed is sufficiently clear and
complete for it to be carried out by a person skilled in the art in accordance with Article 83 EPC. Here the relevant question is whether the patent in suit provides sufficient information which enables the skilled person, taking account of common general knowledge, to reproduce the invention without undue burden (T 943/00, point 10.4; T 960/98, point 3.2.1).

For this purpose, it is obviously first necessary to identify the claimed invention. It is to be found in the claims. The claims are required to define the subject-matter for which protection is sought (ie the invention) in terms of the essential technical features of the invention: Article 84 EPC, Rule 43(1) EPC, and T 32/82 (OJ EPO 1984, 354, point 15). The logical consequence is that unless these technical features are present in the relevant subject matter the technical problem underlying the invention (which itself is to be found in the description: Rule 42 EPC) will not be solved. See T 466/05, point 4.4.

In a claim which defines the subject matter of the invention by reference to a parameter, it therefore follows that the parameter defines an essential technical feature of the invention. Taking the case of an article defined by reference to a parameter specifying a particular quality or quantity, the significance of the parameter is that the particular quality or quantity when exhibited by the article contributes to the solution of the technical problem underlying the invention. An article which does not exhibit the specified quality or quantity will not solve the problem.
Further, Article 83 EPC requires that the skilled person trying to solve the problem underlying the patent should be in a position to obtain an article which does indeed solve that problem. Where, as in the present case, a claimed article is defined by reference to a parameter range to be measured by a specified method, and where the specified method is such that in relation to any particular article it produces values which sometimes fall within the claimed range and sometimes fall significantly outside it, the skilled person has no means of knowing whether the article in question will solve the problem or not. It places upon him an undue, if not insuperable burden when trying to reproduce the invention. That is the position in the present case.

Furthermore, since no arguments were provided by the appellant as to why the conclusions of the opposition division were for any other reason wrong, the decisive considerations on the features influencing the results according to Test Method A already set out in this decision and also T 583/05 still apply.

Moreover in the appealed decision it was pointed out that no example of the claimed product was disclosed or presented. The appellant did not react to this point and the Experimental Report drawn up by one of the inventors does not exemplify such a product.

6. Thus, the skilled person is not in a position to establish with sufficient certainty, and for any given absorbent article, whether the article lies within the ambit of the claim, and therefore, the disclosure of
the patent in suit is to be regarded as insufficient within the meaning of Article 83 EPC.

7. Auxiliary requests

Claim 1 of auxiliary requests 1 and 2 also includes feature (i) of the main request. Since the subject-matter of claim 1 of the main request is not allowable because of the presence of this feature and auxiliary requests 1 and 2 do not add anything that overcomes the objection of sufficiency based on this feature, these requests are also not allowable under Article 83 EPC for the same reasons given above in respect to the main request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau