

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**D E C I S I O N**  
**of 13 May 2006**

**Case Number:** T 0975/04 - 3.2.06

**Application Number:** 99962606.2

**Publication Number:** 1143902

**IPC:** A61F 13/45

**Language of the proceedings:** EN

**Title of invention:**

Absorbent product with arcuate longsides of end portion

**Applicant:**

SCA Hygiene Products AB

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 56, 68(2)

**Keyword:**

"Novelty (yes)"

"Inventive step (no)"

**Decisions cited:**

T 0857/91, T 0272/92

**Catchword:**

-



Case Number: T 0975/04 - 3.2.06

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.06  
of 13 May 2006

**Appellant:** SCA Hygiene Products AB  
S-405 03 Göteborg (SE)

**Representative:** Hyltner, Jan-Olof  
Albihns Stockholm AB  
Box 5581  
S-114 85 Stockholm (SE)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 16 February 2004  
refusing European application No. 99962606.2  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** P. Alting van Geusau  
**Members:** G. L. De Crignis  
R. Menapace

## Summary of Facts and Submissions

- I. European patent application No. 99962606.2 published as International application PCT WO 00/30585 was refused by decision of the Examining Division dated 16 February 2004.

Claim 1 on which the decision is based and which is also the claim underlying the present decision reads as follows:

"An absorbent product such as a sanitary towel, incontinence protection or protection for briefs, which product (1; 18) has an elongate shape with a longitudinal direction (8) and a transverse direction (9), an upper side (10) and a lower side (11), and has a first end portion (6) intended to face forwards on the wearer and a second end portion (7) intended to face backwards on the wearer, and wherein the width of the second end portion (7) of the product is 40 mm maximum, the long sides (2, 3) of this end portion (7) being arcuate and curved inwards towards the longitudinal centre line (8) of the product; characterized in that the angle ( $v$ ) between an end line (X), which runs in the transverse direction of the product and tangent to the edge (5) of its second end portion (7), and a side line (N), drawn between a first point (P), which forms the intersection between one long side (2) of the product and a straight line (B) running in the transverse direction of the product at a distance of 80 mm from said end line (X), and a second point (Q) at the point where the curvature of said long side (2) changes direction near said end edge (5) or with unchanged curvature direction intersects end edge

(5), lies between  $95^\circ$  and  $110^\circ$ , the width of the second end portion (7) being 20 - 40 mm."

II. The application was refused because the subject-matter of claim 1 was found to lack inventive step having regard to the disclosure of

D1 WO-A-97/39713 or

D3 DE-U-295 13 548

and the general knowledge of the skilled person.

In particular the figures in D1 were seen as representing a sanitary towel for a thong garment having arcuate long sides and an angle ( $v$ ) of a value between  $95^\circ$  and  $110^\circ$  as claimed. Furthermore, also Figure 2 of D3 was considered to show a product with the shape and angle ( $v$ ) as claimed.

III. On 15 April 2004 a notice of appeal against this decision was filed by the appellant (applicant) and the appeal fee was paid that same day, followed by the statement of grounds of appeal filed on 21 June 2004. The appellant requested that the decision of the Examining Division be set aside and a patent be granted on basis of the claims on file.

IV. In support of its request the appellant essentially relied upon the following submissions:

The refusal of the patent application was based on an incorrect interpretation of the cited prior art. D1 cited by the Examining Division as closest prior art disclosed in all embodiments lower end parts having substantially uniform width. No second end part having arcuate long sides as required by claim 1 of the

refused application was disclosed therein. Already for this reason D1 was not suitable as a starting point when determining inventive step. Furthermore, the Examining division based its conclusion on an unacceptable interpretation of the schematic drawing in D1.

In fact D3 represented the closest prior art. It disclosed a slip insert for thong garments and depicted in Figure 2 a posterior end portion with a slightly arcuate form and decreasing width thus disclosing all features of the preamble of claim 1. However, it was not clear why the Examining Division considered D3 pertinent for the subject-matter of claim 1 since it was accepted that an exact value of the angle ( $v$ ) could not be determined from D3. The statement that the values of the angle ( $v$ ) came within the claimed range could only be seen as being contradictory.

Object of the present application was a favourable shape of the string brief expressed by the claimed radius of curvature of the long sides. The angle ( $v$ ) in claim 1 was a way to define suitable arc shapes and, the long sides of the product had to follow as closely as possible the edges of the briefs. Neither D1 nor D3 suggested anything similar.

## Reasons for the Decision

1. The appeal is admissible.

2. Amendments

Claim 1 is based on the originally filed claims 1, 2 and 4. The present application documents do not give rise to objections based on either Article 123(2) EPC or Article 84 EPC.

3. Prior art and novelty

3.1 D1 discloses an absorbent pad for use with a thong garment (title) and illustrates a configuration of the pad being generally V-shaped and tapering longitudinally to an elongated lower posterior end portion which terminates in a second end, remote from said first end, said elongated lower posterior end portion having a substantially uniform width (Figures 4A, 4B, 4C). The contour of the absorbent pad is concave along longitudinally extending peripheral curvilinear edges from the first end toward the second end and terminating in a rounded vertex (page 5, lines 24 to 26). The second end portion is preferably of "substantially" uniform width (page 5, line 30,31). A preferred range of at least about 10 mm of uniform extension is disclosed (page 9, line 14).

3.2 D3, considered to represent the closest prior art by the appellant, also discloses an absorbent article suitable for use with a string undergarment. Figure 2 shows an elongate V-shape with first and second end portions whose end edges are rounded. The long sides

are slightly arcuate and at the posterior end portion curved inwards towards the longitudinal centre line of the product. No numerical values are disclosed for length, width or the range of curvature.

3.3 D1 and D3 disclose the general teaching of how to render the absorbent articles consistent with string or thong-shaped undergarment. In so far both D1 and D3 describe and show napkin contours with longitudinally extending peripheral curvilinear edges of concave shape running from the first end toward the second end and terminating in a rounded vertex (D1: page 5, lines 25 to 27; D3: Figure 2).

3.4 The appellant argued that the further feature of claim 1 referring to the second end portion (7) being arcuate was not known from D1. However, as can be seen for example from the description of the term "arcuate" given on page 3, lines 15 to 23 of the patent application, the absorbent product according to the invention has "at least in part, arcuate long sides which follow the shape of the briefs in the crutch area" and "The long sides of the product do not need to have a smooth arc shape but it is sufficient that the long sides be essentially arcuate". In the following paragraph, bridging pages 3 and 4 of the application, it is further explained that the favourable arc shape on the long sides can be expressed by the radius of curvature of an imagined circle or ellipse. Taking into account this interpretation of an "arcuate" long side and regarding Figures 4A - 4C of D1, the interpretation of "arcuate" applies also to the article shown in Figures 4A to 4C and the respective description of D1. Hence, this feature could not be considered as a

distinguishing feature. Accordingly, both documents D1 and D3 are of equal relevance when considering which document represents the closest prior art when investigating inventive step.

3.5 The subject-matter of claim 1 differs from the disclosure of D3 as well as from the disclosure of D1 by specifying in the characterising portion the values of a range of an angle ( $\nu$ ) together with its determination method on the napkin and by specifying the width of the second end portion. At least these values are not disclosed in D1 or D3, the subject-matter of claim 1 is therefore considered to be novel.

4. Inventive step

4.1 The article according to claim 1 differs from the articles disclosed in D1 and D3 in that "the angle ( $\nu$ ) between an end line (X), which runs in the transverse direction of the product and tangent to the edge (5) of its second end portion (7), and a side line (N), drawn between a first point (P), which forms the intersection between one long side (2) of the product and a straight line (B) running in the transverse direction of the product at a distance of 80 mm from said end line (X), and a second point (Q) at the point where the curvature of said long side (2) changes direction near said end edge (5) or with unchanged curvature direction intersects end edge (5), lies between  $95^\circ$  and  $110^\circ$ , the width of the second end portion (7) being 20 - 40 mm."

4.2 The Examining Division stated the problem to be solved by the claimed subject-matter as being to provide an absorbent pad which will be discreet even when used



with string briefs. This problem is already solved by the arrangements known from D1 and D3. The problem to be solved by the present patent application may be seen in improving the consistency of the second end portion of an absorbent article with an undergarment in the form of string (thong) briefs and thus to provide sufficient feminine protection whilst avoiding protruding parts.

4.3 The aspect related to the width of the article concerns the selection of an appropriate width in view of the intended use and is not functionally related to the angle ( $v$ ). In fact the width of the article is dictated by the size of the thong garment combined with the anatomy of the user. In so far the range claimed (20 to 40 mm width) is one which the skilled person would expect for feminine users. No arguments were submitted or are conceivable in favour of different sizes i.e. non-obviousness of the claimed range.

4.4 Furthermore, both D1 or D3 already teach that the contours of the undergarment have to be followed (D1: page 4, lines 3 to 10; D3: claims) because the contours of the article are designed in conformity with the contours of the respective undergarment and the corresponding body shape of the feminine user in this area (D1: page 4, lines 23 to 27 and Figure 7; D3: Figure 2). According to D1, the definition of a thong fashion "from the rear is a relatively difficult task; although well known to the eye of the beholder" (page 4, lines 3/4). However, when focussing on the longitudinal side edge contour of the second end portion, this "relatively difficult task" becomes simple because of the obvious requirements relating to

protection and avoidance of protruding napkin parts when used in a thong garment. In the Board's view nothing more is defined by the range of the angle ( $v$ ) to arrive at the most obvious values to achieve this object.

4.5 Moreover, considering the determination method for the angle ( $v$ ), **neither claim 1 nor the description** of the application require an arcuate end portion and therefore this method is not limited to articles having arcuate long sides. In this respect it is to be noted that the appellant is of the opinion that only the definition of the angle ( $v$ ) determined if the radii of curvature of the arc shaped end portions had a suitable curvature (letter of 23 November 2005, page 3, lines 1/2). However, the determination of the angle ( $v$ ) depends only on the lines X and N and the points P and Q as defined in claim 1 and does not define the arc shape itself. Therefore, only the angle ( $v$ ) falling in the claimed range has to be met in order to satisfy the criterion of an "essentially" arcuate shape of the absorbent article.

4.6 The Board is convinced that applying the determination method of angle ( $v$ ) to thong undergarment/string briefs in general will lead to the values falling into the claimed range for the angle ( $v$ ) ( $95^\circ$  to  $110^\circ$ ) because of simple considerations based on the shape of such briefs predicted by basic requirements of wearing comfort and thus only this range could have been specified for the article to be in consistency with the undergarment by the skilled person.

In so far, applying the claimed determination method for angle ( $v$ ) to the article disclosed in D1 will lead to a value of the claimed range for the angle ( $v$ ) ( $95^\circ$  to  $110^\circ$ ) in all cases where the straight end portion is not longer than what is needed for normal use. D1 refers to a preferred range of uniform width at the posterior end portion of at least 10 mm. The distance chosen in claim 1 of the application for the determination of the value of the angle ( $v$ ) is 80 mm. Therefore, only if no curvature starts within the specified distance of 80 mm, the value of the angle will be  $90^\circ$  and thus fall outside of the scope of claim 1. Otherwise, the application of the claimed method leads necessarily to a value falling into the claimed range. It is not necessary that exact dimensions are specified for the article disclosed in D3 or to deduct such dimensions from its Figure 2 since these dimensions are given by the undergarment which follows feminine anatomic reality and the napkins simply have to follow these contours.

- 4.7 The appellant referred also to decisions T 857/91 and T 272/92 in order to demonstrate that it was not permissible to deduce the angle ( $v$ ) and its range from a schematic drawing. The present case is different in that the decision is mainly based on considerations relating to the intended use of the napkin. In particular, in the present case, the design of Figure 2 in D3 as well as the design of Figures 4A to 4C in D1 represents a schematic drawing which allows the skilled person to recognize immediately the general requirements concerning basic wearing comfort without any further knowledge or investigation being required.

4.8 For the above reasons the Board concludes that the subject-matter of claim 1 is obvious to the skilled person when starting from a napkin in accordance with D1 or D3. Consequently the invention claimed lacks inventive step in accordance with Article 56 EPC which leads to rejection of the application.

## **Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

M. Patin

P. Alting van Geusau