Internal distribution code:

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

Datasheet for the decision of 13 September 2018

Case Number: T 2003/14 - 3.2.06

Application Number: 07849179.2

Publication Number: 2083779

IPC: A61F13/00

Language of the proceedings: EN

Title of invention:
METHOD AND APPARATUS FOR PRODUCING STABILIZED ABSORBENT STRUCTURE

Patent Proprietor:
The Procter & Gamble Company

Opponent:
Kimberly-Clark Worldwide, Inc.

Relevant legal provisions:
EPC Art. 56, 123(2)

Keyword:
Inventive step - (no)
Amendments - intermediate generalisation

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 2003/14 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 13 September 2018

Appellant: (Opponent)	Kimberly-Clark Worldwide, Inc. 2300 Winchester Road Neenah WI 54956 (US)
Representative:	Dehns St. Brides House 10 Salisbury Square London EC4Y 8JD (GB)
Respondent: (Patent Proprietor)	The Procter & Gamble Company One Procter & Gamble Plaza Cincinnati, OH 45202 (US)
Representative:	Chandrani, Vandita Procter & Gamble Service GmbH IP Department Sulzbacher Strasse 40 - 50 65824 Schwalbach am Taunus (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 28 July 2014 rejecting the opposition filed against European patent No. 2083779 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	M. Harrison
Members:	G. de Crignis
	E. Kossonakou

Summary of Facts and Submissions

I. The opposition division rejected the opposition against European patent EP-B-2 083 779. The opposition division held that the ground of opposition under Article 100(a) EPC was not prejudicial to maintenance of the patent since the subject-matter of claim 1 involved an inventive step in view of

D1 WO-A-2004/100847 and

D2 US-A-4 081 884.

II. The appellant (opponent) filed an appeal against this decision and paid the appeal fee. In its statement setting out the grounds of appeal, the appellant requested that the decision of the opposition division be set aside and the patent be revoked in its entirety.

III. The respondent (patent proprietor) replied to the appeal, requesting that the appeal be dismissed and filing amended claim requests as first to third auxiliary requests.

IV. The Board summoned the parties to oral proceedings.

V. With its communication sent prior to oral proceedings, the Board indicated that irrespective of whether D1 or D2 were considered as the closest prior art, the presence of an inventive step was questionable. As regards the first auxiliary request, the Board noted that a first matter for discussion might be whether the requirement of Article 123(2) EPC had been met.

VI. With letter of 15 June 2018, the appellant withdrew its request for oral proceedings but maintained its request for revocation of the patent.

VII. Oral proceedings were held on 13 September 2018. The appellant did not attend the oral proceedings as already announced. Thus its requests in writing were that the decision under appeal be set aside and the patent be revoked.

The respondent requested that the appeal be dismissed, alternatively that the patent be maintained on the basis of the first auxiliary request filed with the reply to the appeal.

VIII. Claim 1 as granted (main request) reads:
"A process for producing a stabilized product from a pledget, wherein said stabilized product is a tampon, comprising the steps of:

- providing a pledget (112) into a compression mold (102),
- compressing said pledget (112) in said compression mold (102) to form a compressed pledget (132);
- unloading said compressed pledget (132) from said compression mold (102) and loading said compressed pledget (132) into a stabilization mold (104) by a transfer member (110), whereby said transfer member (110) advances to a loading position;
- retracting said transfer member (110) to a stabilizing position;
- stabilizing said compressed pledget (132) in said stabilization mold (104) to form a stabilized product (20), wherein said transfer member (110) remains in said stabilizing position during at least a portion of the step of stabilizing said compressed pledget (132); and
- unloading said stabilized product (20) from said stabilization mold (104).

wherein said transfer member (110) engages a proximal end of said compressed pledget (132) and said transfer member (110) remains engaged with said proximal end in both said loading position and said stabilizing position."

IX. Claim 1 of the first auxiliary request reads:

"A process for producing a stabilized product from a pledget, wherein said stabilized product is a tampon, comprising the steps of:

- providing a pledget (112) into a compression mold (102),
- compressing said pledget (112) in said compression mold (102) to form a compressed pledget (132);
- unloading said compressed pledget (132) from said compression mold (102) and loading said compressed pledget (132) into a stabilization mold (104) through an inlet region (160) and then into an inner cavity (50) of the stabilization mold (104) through an open proximal end (152) of the inner cavity (150) by a transfer member (110), whereby said transfer member (110) advances to a loading position so that, upon completion of the loading stroke a head region (156) of the compressed pledget (132) fills a closed distal end of the inner cavity (150);
- retracting said transfer member (110) to a stabilizing position;
- stabilizing said compressed pledget (132) in said stabilization mold (104) to form a stabilized product (20), wherein said transfer member (110) remains in said stabilizing position during at least a portion of the step of stabilizing said compressed pledget (132); and
- unloading said stabilized product (20) from said stabilization mold (104).

wherein said transfer member (110) engages a proximal end of said compressed pledget (132) and said transfer member (110) remains engaged with said proximal end in both said loading position and said stabilizing position and wherein the head region (156) of the compressed pledget that is loaded into the distal end (154) of the inner cavity (150) is the insertion end of the product."

X. The appellant argued as follows:

Claim 1 lacked an inventive step in view of D1. D1 disclosed a similar process for producing stabilized tampons (see the title and Figures). Figure 19 of D1 described an arrangement in which a transfer member transferred the pledget for a sequence of process steps, including supplying the pledget to the compression mold and the stabilization mold. The transfer member remained in contact with the compressed tampon while it was subjected to stabilisation through the flow of gas in a stabilisation mould.

Starting from D1, the difference to the claimed subject-matter was the retraction step to a stabilizing position. When trying to solve the objective technical problem of improved dimensional stability for a tampon, the skilled person would consider the teaching of D2.

D2 was also concerned with a process of providing a more stable tampon. The skilled person was taught by D2 that by over-compression and relaxation, improved stabilisation could be obtained.

D2 disclosed a corresponding process using a piston member which engaged one end of a compressed pledget in a stabilisation mould and which should be retracted

from a first to a second position to enable the pledget to slightly relax longitudinally with some stabilisation of the pledget being carried out while the piston member remained engaged with the end of the pledget. The skilled person would consider this teaching to be advantageous in the context of D1 and would implement it in the D1 arrangement.
The difference between the disclosure of D2 and the claimed subject-matter to use the compression piston 46 (that then retracts (see Figure 3d of D2)) rather than the reciprocating pusher which introduced the pledget into the chamber 40 was merely an equivalent mechanical arrangement.

XI. The respondent argued:

Only D1 represented the closest prior art for starting the assessment of inventive step. D1 already disclosed a process for producing a stabilized tampon and the process was characterized by the tampon being moved by a transfer member through the system. For stabilization, a step applying heated gas in a stabilizing mold was provided.

Starting from D1, the difference to the claimed subject-matter was the retraction step to a stabilizing position. The objective technical problem to be solved was to provide better stabilized tampons.

Although D2 suggested a manufacturing process for the production of dimensionally stable tampons, the skilled person would not consider D2 in combination with D1. D1 disclosed the application of heated gas and thus related to a more advanced process for stabilization of the pledgets. The teaching of D2 went in a different direction. D2 described a process where the tampon

blank was heated and stabilized at the same time. Additionally, D2 did not suggest carrying out a compression/retraction step before the stabilization started. There was also no reason for the skilled person to single out from D2 the step of applying over-compression before the stabilization started. Additionally, D2 required two plungers for the process and no suggestion to use only one plunger was present. Moreover, D2 referred to a process for producing cylindrical tampons only.

Concerning the auxiliary request, the basis for the amendments was to be found in the application as filed on page 16 and in Figures 17 to 20A which described the compression and stabilization steps including the retraction of the transfer member. It was not necessary to include any further feature. In particular, it was not necessary to include the feature of the transfer member advancing to an adjustable and predetermined loading position or the feature of the loading of the transfer member having to be applied in a controlled manner, since these features were implicitly already present in claim 1.

Reasons for the Decision

1. *Inventive step - Main request*

1.1 D1 represents an appropriate starting point for the assessment of inventive step. This is not in dispute. It discloses (see e.g. Figs. 10 and 19 and Example 2) the manufacturing process for a shaped tampon. In the process of D1 the pledget is compressed radially in the compression mold (102) and subsequently moved by a

transfer member (110) into the stabilization mold (104) there being further compressed axially by the transfer member. Figure 19 of D1 shows the process step where the compressed tampon is subjected to stabilization via a heated gas flow and where the transfer member is aligned with the closed position of the stabilization mold. According to D1 (see e.g. page 11, fourth paragraph), pressures and temperatures suitable for compression of the pledgets are well-known and the molds may be pre-heated prior to insertion of the tampon pledget in addition to the gas being heated (see page 14, l. 10-18).

1.2 Hence, D1 discloses the process of claim 1 with the exception of the step of retracting the transfer member to a stabilizing position before starting the stabilization step. This retraction step causes an improvement in stabilization (see the patent in suit, paragraphs 65 to 67 and 69 which refer to enhanced uniformity of radial expansion along the length of the tampon due to the retraction step). Since D1 is already directed to producing a stabilized tampon (*inter alia* by passing the pledget through a stabilization mold), the objective technical problem to be solved when starting from D1 can be regarded as being to provide a process resulting in improved stabilized tampons.

1.3 Starting from D1, and trying to solve the problem of providing a process resulting in improved stabilised tampons, the skilled person would consider the disclosure in D2, as explained below.

1.4 D2 discloses a process for providing dimensionally stable tampons (see e.g. title and col. 1, l. 43/44). The process of D2 includes the provision of a pledget

via a compression mold and transferring this pledget into a heated chamber for stabilization (abstract; col. 1, l. 57-60; col. 5, l. 3-28). One piston (44) (transfer member) is provided for insertion of the radially compressed pledget into the chamber (and ejection from this chamber) and another piston (46) on the other end of the pledget is provided for correct placement of the pledget (15) enabling initially over-compression (Figure 3c) and subsequently part relaxation of the over-compressed state of the pledget (Figure 3d). The piston (44) representing the transfer member remains in the same position during the steps of over-compression and release thereof which represent the steps of stabilizing said compressed pledget (Figures 3c/3d). The piston (46) providing the retraction from over-compression is moved after the pledget has attained its over-compressed state to the retraction position (Figure 3d) and holds the pledget in the heated chamber in this position while still maintaining a force resistant to further expansion (col. 5, lines 23-28).

1.5 D2 includes in particular the information that, in such a method, it is the step of (longitudinal) over-compression of the pledget (Figure 3c) and subsequent relaxation (Figure 3d) in a heated mold which leads to the desired increased stabilization of the tampon (col. 2, l. 1-18).

1.6 Hence, in D2 there is not only a single set of linked and inseparable method steps disclosed for obtaining better stability of the tampon but also the disclosure to a skilled person of a retraction step following a compression step (see 1.5 above) and thus, the skilled person would also readily extract the teaching of using

a retraction step from D2 when starting from D1 and attempting to solve the stated problem.

1.7 The respondent argued that D2 discloses that it is not the transfer member (reciprocating pusher 44) but the compression piston 46, which retracts to remove the over-compression.

1.8 The compression piston 46 indeed acts as a complementary piston to the transfer member on the other end of the pledget in the pledget canal. Yet, retracting the reciprocating pusher 44 instead of piston 46 would be understood by the skilled person as being an obvious mechanical alternative and basic mechanical consideration, not least when considering this alternative in the knowledge of other processes (such as D1) where only one reciprocating member is used to transfer a pledget into a stabilization mold and to hold it during stabilization. Accordingly, this difference is a step which a skilled person would take without exercising inventive skill when considering the objective problem and starting from D1 which itself already uses a single transfer member for movement in and out of the mould.

1.9 The respondent's further arguments put forward in the context of the problem/solution-approach as set out above as to why the skilled person would not consider a combination of the disclosures of D1 and D2 are not convincing either.

1.9.1 The process in D1 does not refer to stabilization via heated gas only. The temperature of the stabilizing mold is disclosed in D1 (page 14, lines 14 to 19; page 22, lines 5-11) as being preferably at an elevated level and thus the disclosure of D2 is consistent with

this because D2 refers to preheating of the stabilization mold as being advantageous (see col. 4, l. 30-37, where it is indicated that whilst it is not essential, it greatly advances the objective of compressing the blank).

1.9.2 D1 as well as D2 describe a process wherein the tampon blank is heated and stabilized at the same time. A relation to a 'more advanced process' as argued by the respondent during the oral proceedings before the Board for stabilization of the pledgets may apply for the step of the additional use of heated gas in D1 - however this aspect is not directly related to the step of retraction from over-compression which is highlighted in D2 as being beneficial for stabilization. Accordingly, the respondent's argument does not alter the conclusion that the skilled person would single out this process aspect from D2 and apply it in the process of D1.

1.9.3 In the process of D2, the steps of over-compression and retraction from over-compression are carried out in the stabilization mold. The retraction step takes place during the stabilization step, and there is no suggestion of operating a retraction step before the start of the stabilization. However, the stabilization step continues - in that the pledget is held in the heated chamber in the retracted position (col. 5, l. 23 - 28) to thus stabilise in the same way as defined in claim 1. Thus, again, the technical effect achieved by the retraction step when considering D2 does not alter the conclusion reached above by the Board as to why the teaching of D2 would be utilized in D1. In particular, no evidence of the influence of the exact timing of the retraction step in D2 has been submitted, nor can any be seen, to suggest that the timing and exact sequence

of the individual steps together is of importance in a way that would prevent a separation of over-compression and relaxation steps from the entire set of the process steps in D2 in order to provide the benefit in stability stated there. To summarise, the skilled person still receives the teaching that the over-compression and expansion steps are those which provide the required stabilisation.

1.9.4 The further reference of the respondent to D2 disclosing a process only for producing "cylindrical" tampons is not related to the features defined in claim 1, as these do not define any particular shape of tampon, and thus may be disregarded when considering whether the subject-matter of claim 1 involves an inventive step.

1.10 This also applies to the arguments of the respondent concerning the aim to obtain a smooth surface of the tampons in D2 (col. 2. l. 18 - 21), as well as to the issue of the terminology concerning "stabilization" allegedly being changed in the course of the years in view of D2 being filed in 1977.

1.11 Hence, the skilled person starting from D1 as the closest prior art would immediately recognize that in D2 it is the retraction step from over-compression which provides the benefit to stabilization and that this step is that which is available to be singled out and implemented in the process of D1. Therefore, the skilled person would include the retraction step into the process of D1 and thus arrive at the subject-matter of claim 1 without the exercise of inventive skill. Consequently, the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC) and the main request is not allowable.

2. *Auxiliary request 1*

2.1 Claim 1 was amended to include additionally the following steps - set out below in italics in the context of the features concerned:

- "unloading said compressed pledget (132) from said compression mold (102) and loading said compressed pledget (132) into a stabilization mold (104) *through an inlet region (160) and then into an inner cavity (50) of the stabilization mold (104) through an open proximal end (152) of the inner cavity (150)* by a transfer member (110), whereby said transfer member (110) advances to a loading position *so that, upon completion of the loading stroke a head region (156) of the compressed pledget (132) fills a closed distal end of the inner cavity (150);*"
- .... "and wherein said transfer member (110) engages a proximal end of said compressed pledget (132) and said transfer member (110) remains engaged with said proximal end in both said loading position and said stabilizing position *and wherein the head region (156) of the compressed pledget that is loaded into the distal end (154) of the inner cavity (150) is the insertion end of the product*."

The amendments concern the orientation of the pledget in the process, such as shown in Figures 17 to 20, in particular Figure 19. The wording of the first cited amendment is partly to be found in the second paragraph of page 16 and the wording of the second cited amendment can be found in claim 2 as filed. It is the

subject-matter introduced by the first cited amendment which is considered below.

2.2 An unambiguous disclosure of the subject-matter resulting from the combination of only those features now encompassed by claim 1, cannot be derived.

2.3 The respondent referred to page 16, lines 10 to 26 of the application as filed as a basis. The wording in this paragraph concerns the embodiment shown in Figure 19 and reference is made to the controlled loading stroke of the transfer member which may load the compressed pledget into an inner cavity of the stabilization mold and to Figure 19A. In particular, it is stated in this section that during the loading stroke the transfer member advances to an adjustable and predetermined loading position.

2.4 The respondent considered the requirement of the loading position having to be adjustable and predetermined by a controlled loading stroke as being implicit in the claimed subject-matter.

2.5 However, only the control of the loading position can lead to the determination of whether a desired density is or can be achieved and whether upon completion of the loading stroke and prior to the controlled retraction of the transfer member the conditions for a desired stabilization of the pledget are given. Accordingly, the desired degree of stabilisation is only obtained when the loading stroke is adjustable and predetermined. Moreover, in the description related to the embodiment shown in Figures 19, 19A and 20 on page 16, l. 10 to 25, such disclosure is explicitly given. A disclosure wherein a predetermined and adjustable loading position is omitted is however covered by

claim 1 and is also technically feasible, for example a position based on measured force rather than a predetermined position, such that an implicit disclosure is not present in the features already in claim 1, contrary to the respondent's argument.

2.6 Further, it may be added that these features are also functionally and structurally linked to the process and result described (see 2.5 above). Their omission thus cannot be found to be derivable directly and unambiguously for this reason either.

2.7 Thus the omission of (at least) the feature "advances to an adjustable and predetermined loading position" represents subject-matter which is an undisclosed intermediate generalisation of the content of the application as filed.

2.8 Accordingly, an unambiguous disclosure for the subject-matter as now encompassed by the subject-matter of claim 1, cannot be found. Hence, the requirement of Article 123(2) EPC is not fulfilled. For this reason, auxiliary request 1 is not allowable.

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. H. A. Patin M. Harrison

Decision electronically authenticated