PATENTAMTS

BESCHWERDEKAMMERN BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

Internal distribution code:

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

Datasheet for the decision of 17 May 2019

Case Number: T 1592/15 - 3.2.06

Application Number: 05712448.9

Publication Number: 1740135

IPC: A61F13/15

Language of the proceedings: ΕN

Title of invention:

ABSORBENT GARMENT CHARACTERISTICS FOR DROOP ELIMINATION

Patent Proprietor:

KIMBERLY-CLARK WORLDWIDE, INC.

Opponents:

Procter & Gamble, Inc. Uni-Charm Corporation

Headword:

Relevant legal provisions:

RPBA Art. 13(1)

EPC Art. 123(2), 84, 83, 56, 111(1)

Keyword:

Late-filed request - admitted (yes)
Sufficiency of disclosure - undue burden (no)
Inventive step - (yes)

Decisions cited:

Catchword:



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 1592/15 - 3.2.06

DECISION
of Technical Board of Appeal 3.2.06
of 17 May 2019

Appellant: KIMBERLY-CLARK WORLDWIDE, INC.

(Patent Proprietor) 401 North Lake Street

Neenah, WI 54956 (US)

Representative: Dehns

St. Brides House 10 Salisbury Square London EC4Y 8JD (GB)

Appellant: Procter & Gamble, Inc.
(Opponent 1) One Procter & Gamble Plaza

Cincinnati, OH 45202 (US)

Representative: Elkington and Fife LLP

Prospect House 8 Pembroke Road

Sevenoaks, Kent TN13 1XR (GB)

Party as of right: Uni-Charm Corporation

(Opponent 2) 182 Shimobun

Kinsei-cho Shikokuchuo-City

Ehime (JP)

Representative: Maiwald Patent- und Rechtsanwaltsgesellschaft

mbH

Elisenhof Elisenstraße 3 80335 München (DE)

Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on

29 May 2015 concerning maintenance of the European Patent No. 1740135 in amended form.

Composition of the Board:

Chairman M. Harrison
Members: P. Cipriano

E. Kossonakou

- 1 - T 1592/15

Summary of Facts and Submissions

I. Appeals were filed by opponent 1 and the patent proprietor against the interlocutory decision of the opposition division in which it found that European patent No. 1 740 135 in an amended form met the requirements of the EPC.

As both parties are appellants (and thus also respectively respondents), they will be referred to in the following as (patent) proprietor and opponent.

- II. The opponent requested with its grounds of appeal that the interlocutory decision be set aside and the patent be revoked.
- III. The patent proprietor requested in its grounds of appeal that the patent be maintained on the basis of the claims of the main request, auxiliarily that the patent be maintained in an amended form according to one of auxiliary requests 1 to 5 or that the opponent's appeal be dismissed. These requests were maintained with the reply to the appeal of the opponent.
- IV. The following documents, referred to by the opponent in its grounds of appeal, are relevant to the present decision:

D9 WO 01/13852 A1 D10 US 2002/0177829 A1

V. The Board issued a summons to oral proceedings including a communication containing its provisional opinion, in which it indicated *inter alia* that the combination of features of claim 1 of the main request

- 2 - T 1592/15

was not originally directly and unambiguously disclosed.

VI. Oral proceedings were held before the Board on 17 May 201, during which all the previous requests were withdrawn and a new main request was filed. At the end of the oral proceedings the requests were:

The proprietor requested that the decision under appeal be set aside and the patent be maintained on the basis of the claims 1 to 6 of the main request filed during the oral proceedings.

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

- VII. The text of claim 1 of the main request is annexed at the end of the decision.
- VIII. The arguments of the opponent may be summarised as follows:

Admittance of the main request

The main request should not be admitted since it was prima facie not clearly allowable.

The subject-matter of claim 1 extended beyond the content of the application as originally filed and was not clear. The feature "retraction force" added from paragraph [0014] of the published application was inextricably linked to the feature "single-point fastening system" of paragraph [0012], the latter not having been included in the claim. Paragraph [0052] also confirmed this, since it disclosed a single-point fastening system.

- 3 - T 1592/15

In addition, it was not clear from the wording of paragraph [0014] that the back waist region included fastening components, as was now expressly defined in the claim. The introduction of the feature of paragraph [0014] in the claim together with the feature "back waist region including fastening components" thus rendered claim 1 not only unclear but also extended its subject-matter beyond the content of the application as originally filed.

Sufficiency of disclosure

The full disclosure did not allow the skilled person to measure the expanded width of the chassis.

The skilled person had to make arbitrary choices when measuring the expanded width of a diaper. Paragraph [0037] only gave specific information on how to perform the measurement with the specific diaper embodiment shown in the drawings of the patent. The skilled person was not able to recognize where the distal edges of the tabs were in other well-known types of diapers such as diapers with additional fastening strips, i.e. it was not clear if such fastening strips also formed part of the tabs.

Further, the skilled person did not know which parts of the test for the longitudinal length (defined in paragraphs [0063] to [0066]) applied to the measurement of the expanded width defined in paragraph [0037]. Since a weight was being applied, it was not clear whether and which elastics needed to be disabled in the expanded width test.

- 4 - T 1592/15

The skilled person did not know how to disable the elastics for the measurement of the expanded width. Contrary to the length measurement, to sever elastics in the width direction the outer cover and body side liner also had to be severed. Since the width measurement line coincided with the elastics' length axes, severing the outer cover and the body side liner covering these elastics influenced the resistance of the material being pulled during measurement and altered the results.

Paragraph [0055] also disclosed that the outer cover may be elastic and stretchable. The skilled person did not know whether such an elastic outer cover should also be severed or not in order to carry out the expanded width measurement test.

Paragraph [0038] stated that the purpose of the parameter "expanded width" was to give a general garment size indicator, but the total lateral width including the overhanging fasteners would be more suitable as a parameter.

Regarding the retraction force test, the skilled person could not carry out the test for absorbent garments with more than one tab on each side. Further, the skilled person was not be able to carry out the retraction force test, since they did not know where to clamp the diaper without undue burden, i.e. the skilled person did not know whether the clamping position should be at the extremities of the diaper or of the elastics, when the elastics were much shorter than the back waist width.

Further, the skilled person did not know where the exact clamping position of the fasteners should be. The

- 5 - T 1592/15

retraction force differed according to the exact position chosen.

Garments with waist elastic components that could not reach 50% extension twice were not covered by the claim.

Inventive step

The subject-matter of claim 1 did not involve an inventive step when starting from D10 and in combination with the teaching of D9 or with the general knowledge of the skilled person.

D10 was the most promising starting point and disclosed all the features of claim 1 with the exception of the features:

- the diaper length ratio is the longitudinal length of the absorbent chassis (32) divided by an expanded width of the absorbent chassis (32) measured from a distal edge (36) of the first tab (34) to a distal edge (36) of the second tab (34) [hereinafter referred to as the "diaper length ratio" feature],
- the waist elastic (56) has a retraction force of 100 grams or greater at 30% extension upon return from an extension of 50%, after cycling to 50% extension twice and when determined by the retraction force test method described herein, the back waist region including fastening components, and the retraction force being measured as a sum of all of the waist elastic components in the back waist region of the entire diaper. [hereinafter referred to as the "retraction force" feature].

T 1592/15

The feature "diaper length ratio" did not represent the overall size of the diaper, provided no effect and merely defined an arbitrary parameter. The features "diaper length ratio" and "retraction force" lacked synergy. The objective problem solved by the feature "diaper length ratio" was thus to provide an alternative fit.

- 6 -

The skilled person would consider the wider back portion of the diaper in D9 and increase the width of the back waist portion accordingly to arrive at the diaper length ratio of claim 1.

Further, regarding the feature "retraction force", in particular paragraphs [0186] to [0196], [0225] to [0231], [0255] disclose several modifications that can be made to the elastics of the underpant and paragraphs [0261] to [0265] and Tables III and IV of D10 disclose several elastic tension values above 100 grams for the elastic groups of the underpant. These Tables did not disclose the retraction force precisely, but, faced with the concept of modifying the elastics as well as the retraction forces of D10, the skilled person would have adapted the retraction force and arrived at an absorbent garment with a retraction force as claimed in an obvious manner.

IX. The arguments of the proprietor may be summarised as follows:

Admittance of the main request

The skilled person reading the application understood that the "single-point fastening system" defined in paragraph [0012] did not need to be claimed in order to fulfil the requirement of Article 123(2) EPC, since

- 7 - T 1592/15

this was only optional and not related to the feature "retraction force" of paragraph [0014].

The sentence of paragraph [0014] defining the feature "retraction force" disclosed unambiguously that the fastening components were in the back waist region.

The request was thus prima facie allowable.

Sufficiency of disclosure

The invention of claim 1 was disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The skilled person was able to measure the expanded width of the chassis. Paragraph [0037] disclosed that the measurement was done from one distal edge to the other. It was clear for the skilled person that the expanded width did not comprise the length of any possible additional fasteners on the tabs since paragraph [0053] defined the fasteners as something additional ("located along or adjacent") in regard to the distal edges of the tabs.

It was also clear by analogy with the methods to measure the crotch width and the diaper length that all elastics should be severed. Even if this were not the case, the applied load of 1500 grams would be large enough to overcome any opposing force by the elastics. The skilled person knew ways of severing the elastics without structurally compromising the diaper.

The skilled person was also able to establish the retraction force parameter defined in claim 1.

- 8 - T 1592/15

The claim now defined that the sum of all the elastic components located between the fastening components in the back waist region was to be used for the test and thus the whole diaper needed to be subjected to the test.

Garments with waist elastic components that did not reach 50% extension after cycling twice were not covered by the claim.

The skilled person also knew how to clamp the garment for the retraction force test in a manner that it would not distort the results. As disclosed in the embodiment of Figure 3 and paragraph [0050], even when the elastic member did not stretch across the full length of the diaper, the test procedure was to place the fastener in the jaws as disclosed in paragraph [0070]. The skilled person thus knew how to clamp the fasteners correctly such that the garment was not damaged or the measured retraction force values not valid.

Inventive step

The subject-matter of claim 1 involved an inventive step when starting from D10 and combining this with the teaching of D9 or with the general knowledge of the skilled person.

D10 disclosed all the features of claim 1 with the exception of the features "saturated retention capacity", "diaper length ratio" and "retraction force".

Even if the feature "saturated retention capacity" were considered to be disclosed in D10, the remaining features did not need to have synergy. The objective

- 9 - T 1592/15

problem to be solved by the feature "diaper length ratio" was to provide a good support at the hips without drooping, since the parameter gave an indication of the way the diaper fitted around the hips of a potential user.

The skilled person would not modify the basic shape of the diaper in D10 by increasing specifically the width of the waist back portion when considering D9. The diaper of D9 was of a different basic design and the teaching of D9 was to change the lengths of multiple length segments and did not concern the width.

Reasons for the Decision

- 1. Admittance of the main request
- 1.1 The main request was filed during the oral proceedings before the Board in response to an objection regarding Article 123(2) EPC concerning the test method, which was raised for the first time during the oral proceedings.
- 1.2 According to Article 13(1) RPBA, any amendment to a party's case may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

In order to be in line with the requirement of procedural economy, amendments should be prima facie allowable in the sense that they at least overcome the

- 10 - T 1592/15

objections raised against previous requests without giving rise to any new ones.

1.3 The argument of the opponent that the feature "retraction force" was inextricably linked to the feature "single point fastening system", such that both needed to be claimed, is not accepted by the Board.

Paragraph [0012] discloses that a narrow crotch region "allows" a single-point fastening system to maintain sufficient leg/hip fit. The skilled person reading the application would understand the term "allows" in the sense of making it possible (in addition to multiple point fastening systems) to also have a single-point fastening system. They would not understand the single-point option to be the only possibility disclosed.

Paragraphs [0012] and [0014] are also not inextricably linked in a way that they form a single disclosure. Since paragraph [0014] refers to "certain embodiments", the skilled person reading the application would understand that the features disclosed therein are only present in certain (i.e. not in all) possible embodiments. There is thus no reason to consider that the retraction force of paragraph [0014] is only directly and unambiguously disclosed in combination with the single point fastening system of paragraph [0012]. Paragraph [0012] notably refers to maintaining sufficient leg/hip fit to keep the garment on the wearer under extreme loads while paragraph [0014] refers to a waist region having sufficient traction force to maintain the garment on the wearer.

Contrary to the further argument of the opponent, paragraph [0052] equally only discloses that a refastenable fastening system 60 is simply a

- 11 - T 1592/15

possibility ("may be refastenable"). The single-point fastening system, which is a type of refastenable fastening system, disclosed at the end of the paragraph, is thus also understood to be optional by the skilled person reading the paragraph. Thus not only has the previous objection under Article 123(2) EPC been overcome, which as such was not contested, but no further objection under Article 123(2) EPC has resulted therefrom.

- 1.4 The opponent also argued that it was not clear from the wording of paragraph [0014] that the back waist region included fastening components, as was now expressly defined; the clarity requirement of Article 84 EPC was thus contravened. The Board however does not find this argument persuasive. The skilled person reading the last sentence of paragraph [0014] would not isolate the sentence clause "located between the fastening components" from the other clauses to mean that the waist elastic components are in the back waist region but the fastening components are not. It may be added that none of the embodiments nor any other passage of the description suggests to the skilled person that this sentence could be read in the manner argued by the opponent.
- 1.5 None of the arguments brought forward by the opponent convincingly supported its allegation that new objections had arisen and the Board also did not find any of its own motion. Thus the Board exercised its discretion to admit auxiliary request 1 into the proceedings.

- 12 - T 1592/15

- 2. Sufficiency of disclosure
- 2.1 The opponent argued that the invention of claim 1 was not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, since the skilled person was not able to measure the expanded width of the chassis, which was necessary to obtain the diaper length ratio. Nor did the skilled person know how to carry out the retraction force test defined as part of the invention.
- 2.2 The Board however finds that a skilled person is able to measure the expanded width of the chassis based on the information in the patent. Paragraph [0037] states that the expanded width can be measured in a manner similar to the longitudinal length measurement test described in the patent in paragraphs [0063] to [0066] but with some amendments. Paragraph [0037] discloses particularly that the measurement is carried out from a distal edge of one tab to the distal edge of the other tab. The tabs are also defined in paragraph [0037] as being included in the absorbent chassis and as possibly being ear panels, extending transversely outward along the back waist region of the absorbent chassis. The tabs are thus understood to be an integral part of the absorbent chassis.

On the other hand, paragraph [0053] defines additional fastening components (such as fastening strips) located along or adjacent to the distal edges of the tabs. The skilled person reading paragraph [0053] would thus understand that any possible fastening components do not form part of the tabs but are located next to them and that consequently the expanded width should be measured between the tabs under every circumstance, and

- 13 - T 1592/15

not include any additional fastening component. Thus, contrary to the argument of the opponent, paragraphs [0037] and [0053] allow the skilled person to adapt the measuring method for other types of absorbent articles, such as the ones including additional fastening components, as it is known where to attach the clamps during the test.

- 2.3 Contrary to the argument of the opponent in its grounds of appeal, the Board finds that the parameter "expanded width" is an indicator for the general size of the garment, albeit only one among several possible choices (such as the total lateral width including the overhanging fasteners) that the skilled person can choose and carry out in order to assess the width or perimeter limitations of the garment.
- 2.4 The argument of the opponent that, for the measurement of the expanded width, it was not clear from paragraphs [0037] and [0063] to [0066] whether and which elastics needed to be severed, is not accepted. The method described in paragraphs [0063] to [0066] defines that any elastics running the length of the chassis need to be severed in order to measure the length of the garment. The claim and paragraph [0039] also specifically state that, for the measurement of the width of the crotch region, any (i.e. all) elastic components need to be disabled or removed. The skilled person would thus have no reason not to disable the elastics when measuring the expanded width of the chassis according to a method "similar" to the length measurement as suggested in paragraph [0037].

Even if the elastics were not disabled, which was a possibility according to the opponent, this would not change the expanded width measurement (or would hardly

- 14 - T 1592/15

be noticeable), since the applied loading with a 1500 gram weight according to the test would be expected to be large enough to overcome any opposing force exerted by the elastics. Even the opponent's reference to paragraph [0050] does not alter this conclusion as this refers to a force less than 1500g. And, for the case that a 1500g retraction force were used, and the weight did not fully overcome the elastics, it is self-evident that the elastics would need to be deactivated.

- 2.5 The argument of the opponent that in order to disable elastics in the width direction, the outer cover and body side liner also had to be severed, is not accepted by the Board. The skilled person knows several ways of disabling such elastics without damaging the chassis such as per heat application, that do not compromise its structural integrity nor change the expanded width results. Minimally invasive cutting at selected locations can also be imagined, as the proprietor argued, without having any noticeable effect on sheet integrity for measuring the expanded width.
- 2.6 The opponent further argued that, as disclosed in paragraph [0055], the outer cover may be elastic and stretchable and thus the skilled person did not know if such an elastic outer cover should also be severed or not in order to carry out the expanded width measurement test. The Board also does not find this argument convincing. The outer cover materials used are known generally to be thin and not to be stretchable enough for the test results to be significantly changed when using a 1500 gram weight. No evidence was filed by the opponent to support its argument in this regard.
- 2.7 As far as the feature "retraction force" is concerned, the amended claim 1 now defines the retraction force

- 15 - T 1592/15

method, referred to in the patent (see paragraphs [0069] to [0072]), and that the retraction force measured is a sum of all the waist elastic components located between the fastening components in the back waist region of the diaper. The claimed retraction force method is thus applied to the elastic components situated in the back waist region of the diaper and the whole diaper is subjected to the test.

- 2.8 It was not disputed between the parties that garments with waist elastic components which could not reach 50% extension twice were not covered by the claim. The Board also sees no reason to find otherwise.
- 2.9 The argument of the opponent that the skilled person would not be able to carry out the retraction force test, since they did not know where to clamp the diaper without undue burden, is not found convincing by the Board. The skilled person would not doubt whether the jaws should be placed at the end of the elastics when the elastics did not stretch over the whole waist edge, since the patent already discloses a diaper with a waist elastic member 56 that does not stretch across the full length of the waist edge in Figure 3. Paragraph [0050], which also relates to the embodiment of Figure 3, also discloses that the waist elastic member may extend across "part or a full length" of the waist edges and that "the test procedure for measuring retraction force is ASTM D2433 with minor modifications listed below". These listed modifications are the modifications in paragraphs [0070] to [0072], with paragraph [0070] explicitly stating that the fasteners are placed in the jaws in order to carry out the test.

The skilled person would thus understand that the modified test with the fasteners placed in the jaws

- 16 - T 1592/15

applies also to all the diapers with waist elastic members that extend only across part of the waist edge.

- 2.10 The Board is also not persuaded by the argument of the opponent that the skilled person did not know where the exact clamping position of the fasteners should be when having to carry out paragraph [0070] of the patent in relation to the retraction force test. The Board finds that the skilled person knows how to clamp the fasteners of a back waist region adequately such that they are not too close to the edge and to avoid tearing. Further, the exact clamping position within the fasteners in the back waist portion would not be expected to influence the results of the test significantly, since the fasteners in the back waist portion are small in comparison to the overall size of the absorbent garment and do not possess significant elongation properties.
- 2.11 The invention according to claim 1 of the main request therefore fulfils the requirements of Article 83 EPC.
- 3. Inventive step
- 3.1 The embodiment disclosed in paragraphs [0179] and [0180] of D10, relating to Figures 10, 13a and 14, which is considered the most promising starting point by both parties for considering inventive step, discloses:

"an absorbent garment (article 10), in the form of a diaper (underpant 12), comprising:

an absorbent chassis (the underpant forms a chassis) defining a waist opening (waist opening 20, see e.g. Fig. 5) and first and second leg openings (leg openings

- 17 - T 1592/15

28 and 30, see e.g. Fig. 5), the absorbent chassis comprising an outer cover (outer cover 13, see paragraph [0131] and e.g. Figs. 6 and 7) and the body side liner (body liner 80);

the absorbent chassis having a longitudinal length, and first and second tabs (back portions 82 and 84) defining transverse distal edges (edges 62, 68) of a back waist region (back body portion 15) of the absorbent chassis (underpant 12); and

wherein:

the absorbent chassis (underpant 12) comprises a crotch region (crotch portion 18) positioned between front and back waist regions (front body portion 14, back body portion 15) of the absorbent chassis (underpant 12), and the absorbent chassis (underpant 12) has a droop design ratio of 150 millimeters or less (see paragraph 3.2 below), wherein the droop design ratio is the longitudinal length of the absorbent chassis (underpant 12) multiplied by a width of the crotch region (crotch potion 18) of the absorbent chassis (underpant 12) and divided by said expanded width of the absorbent chassis (underpant 12), wherein the width of the crotch region (crotch portion 18) is measured across the narrowest transverse width of the crotch region (crotch portion 18) when the diaper (product 10) is in a laid flat state with any elastic components either removed or otherwise disabled;

the absorbent chassis (underpant 12) has an absorbent length design ratio of 280 millimeters or less, wherein the absorbent length design ratio is the sum of the longitudinal length of the absorbent chassis (underpant 12) and a longitudinal length of the absorbent core

- 18 - T 1592/15

(core 50), multiplied by said width of the crotch region (crotch portion 50) of the absorbent chassis (underpant 12) and divided by said expanded width of the absorbent chassis (underpant 12);

the absorbent chassis (underpant 12) has a saturated retention capacity of 350 grams or greater; and

said garment (product 10) further comprises a waist elastic (waist portion elastic 22) in back waist regions (back body portion 15)."

- 3.2 Paragraph [0179] discloses the dimensions for the diaper (length 854mm, width 715mm, crotch width 120mm and core length of 438mm). These dimensions result in a droop design ratio of 143mm and an absorbent length design ratio of 215mm, both within the respective claimed ranges, and a diaper length ratio of 1.18, outside the claimed range.
- 3.3 Regarding the further feature of claim 1 "the absorbent chassis (32) has a saturated retention capacity of 350 grams or greater", paragraph [0180] discloses a retention capacity of 500 grams for the embodiment of Figures 10, 13a and 14, thus within the claimed range. Thus contrary to the argument of the proprietor, this feature is disclosed in D10.
- 3.4 It was not disputed between the parties that the values of the parameters "diaper length ratio" and "retraction force" were not disclosed in D10. The Board also finds no reason to disagree. These are the sole differentiating features with regard to D10.
- 3.5 The argument of the opponent, that the feature "diaper length ratio" did not represent the overall size of the

- 19 - T 1592/15

diaper and that the diaper length ratio provided no effect and was an arbitrary parameter, is not found convincing by the Board. Whilst it is true that the diaper length ratio does not reflect the overall size of the diaper, the diaper length ratio quantifies the way the diaper fits around the hips by creating a ratio between the amount of support on the hips (a wider back waist portion provides more support) and the length of the diaper (a shorter diaper with a tighter fit provides less drooping). Thus, a diaper length ratio below 0.85 does not only provide an alternative fit, (as the opponent argues) but provides good support at the hips without drooping.

As can also be derived from paragraphs [0015] and [0050] of the patent, the feature "retraction force" allows the garment to be maintained at the wearer's waistline without falling.

Although the respective effects of each individual feature are related, since drooping and the maintenance at the waistline both contribute to solving the technical objective problem of providing a better garment fit, the features are not functionally interdependent or synergistic (i.e. they do not mutually influence each other to achieve a technical success over and above the sum of their respective individual effects). The differentiating features are thus merely aggregated and can be treated separately.

3.6 Faced with the objective problem of providing a better fit, the skilled person would not modify the underpant 12 in D10 in order to arrive at an underpant with a diaper length ratio according to the invention in an obvious manner merely by resorting to their own knowledge. As can be seen from Figures 1a to 3 and 10

- 20 - T 1592/15

to 12, all the underpant embodiments in D10 have a back and a front waist portion with the same width, and present a similar I-shaped design. In addition, D10 proposes several possible changes to the elastics to provide a better fit (see paragraphs [0135], [0186] to [0196], [0225] to [0231], [0255] and [0259]) and does not provide any hint that the shape of the underpant, more precisely the width of the front and back body portions or the length of the diaper, should be changed.

3.7 The argument of the opponent that the skilled person would also consider D9 and thus increase the width of the back waist portion to arrive at the diaper length ratio of claim 1, is not accepted. Whilst D9 discloses a longer waist back portion, the configuration of the garment in D9 is so different from that in D10 that the skilled person would not be prompted to change specifically the back waist portion. In fact, D9 discloses ratios between different longitudinal lengths of diaper segments and proposes to adapt the ratio between two longitudinal segments of the back waist portion (see page 8, lines 3-5) to provide a better fit.

The skilled person, starting from D10 and faced with the objective problem of providing a better fit, would thus not adapt the back waist length or reduce the longitudinal length of the chassis such that a diaper length ratio of 0.85 or less is obtained in an obvious manner.

3.8 For the sake of completeness, it should be added that the Board finds that the skilled person starting from D10 would also not arrive at an absorbent garment comprising the value of "retraction force" (as defined

- 21 - T 1592/15

in the claim) in an obvious way. Paragraphs [0261] to [0265] and Tables III and IV of D10 disclose several elastic tension (i.e. retraction force) ranges for the various elastic groups of the underpant of D10. Several waist elastics have values above 100 grams but they have been obtained during the first cycle extension at 100% elongation (see paragraph [0265]) and not at 30% after cycling to 50% extension twice as defined in the claim. It may also be noted that the opponent did not argue or provide any evidence that these precise values were implicit from the values given in D10, instead simply arguing that they were obvious to a skilled person.

In addition, the tests in D10 were carried out on samples of 10 mm width (see paragraph [0264]) and not using the whole garment. The test disclosed in D10 is thus performed under such different conditions that the Board cannot establish any meaningful comparison with the claimed test data and finds that the value of retraction force as defined in claim 1 is not disclosed or hinted at in D10. The skilled person would thus not modify the retraction force of the back waist elastics in the underpant of D10 and provide them with the claimed retraction force in an obvious way merely when considering the elastic tensions provided in Tables III and IV.

- 3.9 For the above reasons, the subject-matter of claim 1 involves an inventive step (Article 56 EPC) when starting from D10 and combining this with the teaching of D9 or with the general knowledge of the skilled person.
- 3.10 Claims 2 to 6 filed at the oral proceedings as claims dependent on claim 1 met with no objections from the

- 22 - T 1592/15

opponent. The Board also sees no objections to these claims.

3.11 Thus, the claims of the patent as amended meet the requirements of the European Patent Convention.

However, the patent description and figures to be appended to the amended set of claims have not yet been adapted, this being entrusted to the opposition division, to which the case is thus remitted in accordance with Article 111(1) EPC.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the opposition division with the order to maintain the patent on the basis of the following documents:
 - claims 1 to 6 of the main request filed at the oral proceedings before the Board and $\,$
 - a description and figures to be adapted thereto.

- 23 - T 1592/15

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated

Claim 1 of the main request

MAIN FIFTH AUXILIARY REQUEST

CLAIMS

5

10

15

20

25

1. An absorbent garment (20), in the form of a diaper, comprising:

an absorbent chassis (32) defining a waist opening (50) and first and second leg openings (52), the absorbent chassis (32) comprising an outer cover (40), a body side liner (42), and an absorbent core (44) positioned between the outer cover (40) and the body side liner (42);

the absorbent chassis (32) having a longitudinal length, and first and second tabs (34) defining transverse distal edges (36) of a back waist region (24) of the absorbent chassis (32); and

the absorbent chassis (32) having a diaper length ratio of 0.85 or less, wherein the diaper length ratio is the longitudinal length of the absorbent chassis (32) divided by an expanded width of the absorbent chassis (32) measured from a distal edge (36) of the first tab (34) to a distal edge (36) of the second tab (34), where the characterised in that:

the absorbent chassis (32) comprises a crotch region (26) positioned between front and back waist regions (22, 24) of the absorbent chassis (32), and the absorbent chassis (32) has a droop design ratio of 150 millimeters or less, wherein the droop design ratio is the longitudinal length of the absorbent chassis (32) multiplied by a width of the crotch region (26) of the absorbent chassis (32) and divided by said expanded width of the absorbent chassis (32), wherein the width of the crotch region (26) is measured across the narrowest transverse width of the crotch region (26) when the diaper (20) is in a laid flat state with any elastic components either removed or otherwise disabled;

the absorbent chassis (32) has an absorbent length design ratio of 280 millimeters or less, wherein the absorbent length design ratio is the sum of the longitudinal length of the absorbent chassis (32) and a longitudinal length of the absorbent core (44), multiplied by said width of the crotch region (26) of the absorbent chassis (32) and divided by said expanded width of the absorbent chassis (32);

the absorbent chassis (32) has a saturated retention capacity of 350 grams or greater; and

said garment (20) further comprises a waist elastic (56) in attleast one of the front and back waist region (22, 24), and the waist elastic (56) has a retraction

30

-

35

force of 100 grams or greater at 30% extension upon return from an extension of at least 50%, after cycling to 50% actions on twice and when determined by the retraction force text me mod described herein, <

5

10

15

the back waist region induding lastoning components, and the retraction love being the measured as a sum of all of the waist elastoning components in the back waist region of the gutin diaper.)