

United States District Court,
W.D. Wisconsin.

KIMBERLY-CLARK CORPORATION,
Plaintiff.

v.

TYCO INTERNATIONAL (US), INC., The Kendall Company, Inbrand Corporation, and Confab, Inc,
Defendants.

No. 98-C-0756-C

Nov. 1, 1999.

Michael J. Modl, for Plaintiff.

Mark A. Cameli, Reinhart, Boerner, Van Deuren, Milwaukee, WI, for Defendants.

OPINION AND ORDER

CRABB, J.

In this civil action for monetary and injunctive relief, plaintiff Kimberly-Clark Corporation contends that defendants Tyco International (US), Inc., The Kendall Company, Inbrand Corporation, and Confab, Inc., are infringing the claims of three patents plaintiff owns on the design of diapers: U.S. Patent No. 4,704,116 (Enloe I), U.S. Patent No. 5,415,644 (Enloe II), and U.S. Patent No. 5,599,338 (Enloe III). Jurisdiction is present. 28 U.S.C s. 1338(a). Previously I denied plaintiff's motion for summary judgment of infringement of the claims of the Enloe III patent and defendants' motion for summary judgment of non-infringement of the claims of Enloe I and Enloe II. Presently before the court are both parties' supplemental briefs addressing claim construction issues that were the subject of a September 15, 1999 *Markman* hearing.

In light of the *Markman* hearing and in reconsideration of my earlier ruling on summary judgment, I conclude that the specifications and prosecution histories of the Enloe II and III patents indicate that neither of those patents encompasses fluid impervious inner flaps. In addition, I reverse my earlier holding on summary judgment that the patents cover flaps pervious under pressures encountered during the normal use of a diaper and conclude that the flaps must be pervious to the same degree as the bodyside liner. Finally, with regard to the Enloe II and III patents, I reverse my earlier ruling on summary judgment and conclude that less than the whole distal edge of flaps must be spaced away from the bodyside liner and that the flaps must be attached to the liner at their ends.

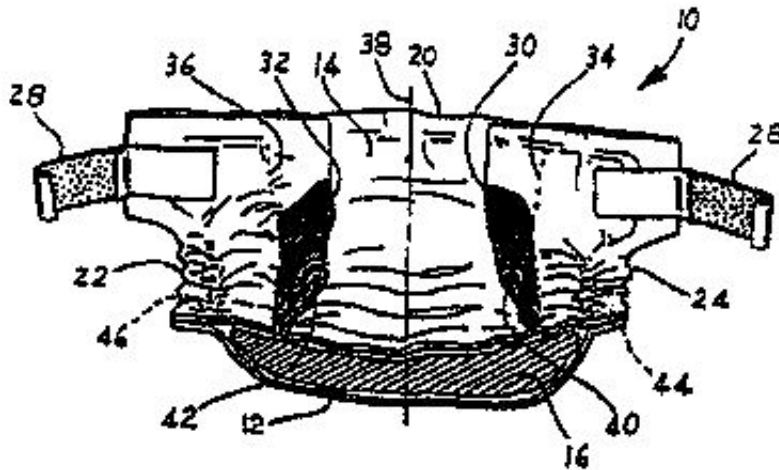
The following undisputed facts are taken from facts proposed by the parties for purposes of their earlier motions for summary judgment. In addition, I understand both parties to invite the court to rely upon undisputed facts taken from affidavits attached to their supplemental *Markman* briefs.

FACTS

Plaintiff is a corporation organized under the laws of Delaware with its principal place of business in Irving, Texas. Defendant Tyco International (US), Inc., is a corporation organized under the laws of Massachusetts with its principal place of business in Exeter, New Hampshire. Defendant Kendall Company was a subsidiary of Tyco. Sometime before plaintiff filed its complaint, defendant Tyco acquired defendant Inbrand and merged it with defendant Kendall. Defendant Kendall has since been renamed the Tyco Healthcare Group LP. Defendant Confab was acquired by Confab Holding Co. and is now doing business as the Kendall-Confab Retail Group, Inc.

This case involves a design development in the diaper industry: the use of stand-up inner flaps. Inner flaps slow the movement of liquid waste along the surface of the diaper's liner, giving the diaper's absorbent core more time to absorb the liquid waste and reducing leakage at the elasticized leg openings. One of plaintiff's employees, Kenneth Enloe, is the named inventor on the three patents at issue in this case: U.S. Patent No. 4,704,116 (Enloe I), U.S. Patent No. 5,415,644 (Enloe II), and U.S. Patent No. 5,599,338 (Enloe III). Plaintiff has been using Enloe's inventions in its Huggies(R) brand diapers since 1989. The flaps are known by a variety of names, including "inner leg cuffs" and "barrier cuffs." The parties use "inner flaps" and "barrier cuffs" synonymously. The accused products are sold under a variety of names.

An inner flap has two long edges that run parallel to the longitudinal centerline of a diaper. The upper edge, away from the garment, is called the distal edge. The edge contacting the garment is called the proximal edge. Each barrier cuff also has two short ends. If the cuffs are attached to, rather than made from, the material of the bodyside liner, they may be made of a different material from the bodyside liner. Figure 2 from the Enloe III patent shows the frontal view of a cross-section of a diaper with barrier cuffs:



The inner flaps or barrier cuffs are labeled 30 and 32 and are shaded. The bodyside liner or top surface is labeled 14. The longitudinal centerline is labeled 38. The absorbent core is labeled 16. The gasketing leg cuffs, which are different from the barrier cuffs, are labeled 22 and 24.

All of the asserted claims of the Enloe I patent require that the flaps be "fluid pervious" or "liquid pervious." The terms are synonymous. The parent application of Enloe I, filed in July 1984, recited "two flaps extending toward each end." The original application was rejected as unpatentable over prior art, specifically Beckestrom U.S. Patent No. 4,490,148, which discloses a diaper with fluid impervious flaps. Faced with that rejection, Enloe abandoned his original application and filed the continuation-in-part that eventually became Enloe I. In the continuation-in-part application, Enloe added three paragraphs to the specification intended to distinguish his invention from Beckestrom's. He describes Beckestrom's prior art as having "liquid-tight" side flaps. Enloe then explains that Beckestrom's design has "resulted in the emergence of other problems." For example, "the waterproof material of the flaps" can cause urine, moisture and liquid fecal material to become trapped against the skin and cause irritation. Enloe then explains how his invention improves upon Beckestrom's: "the present application teaches an improved disposable garment which provides fluid pervious flaps." He describes the flaps as "made up of water pervious materials." In allowing the claims, the examiner stated, "The claims as amended recite the necessity of a fluid permeable flap and elastic in the flap as well as at the leg openings. This combination overcomes prior art."

Independent claim 1 of the Enloe I patent includes the requirement for "fluid pervious" flaps and a "liquid pervious" bodyside liner. The claims encompass:

An absorbent garment comprising:

a back sheet;

a liquid pervious bodyside liner, essentially coterminous with said back sheet, defining front and back waist sections and opposed first and second sides connecting said waist section(s), including a pair of leg sections delimited along said sides, each of said leg sections having a tensioned elastic member disposed therealong, forming elasticized leg gathers;

an absorbent body disposed between said liner and back sheet; and

first and second elasticized fluid pervious flaps attached to or formed from said bodyside liner and spaced inwardly of said leg elastic members, respectively, defining a waste containment package.

In *Kimberly-Clark Corp. v. Procter & Gamble Distributing Co.*, No. C89-502WD, 1191 U.S. Dist. LEXIS 19389 (W.D.Wash.1991), *aff'd in part and vacated in part*, *Kimberly-Clark Corp. v. Procter & Gamble Co.*, 973 F.2d 911 (Fed.Cir.1992), plaintiff sued Procter & Gamble for infringement of the Enloe I patent. The parties agree that Judge Dwyer's construction of the Enloe I claim term, "fluid pervious," in that case should be utilized in this case. Judge Dwyer construed the term "fluid" to mean "urine and liquified or runny BM, the body exudates which diapers are intended to contain." *Id.* at *11. He construed "pervious" to mean "that the diaper material would allow a body exudate to pass or transfer through" during the diaper's "normal use." *Id.*

One possible test of perviousness is the "hydrostatic head" test. In this test, the diaper material is attached to the bottom of a hollow glass tube. Liquid is then added slowly to the tube. The test is stopped when liquid penetrates the diaper material. The pressure required for liquid to pass through the material is determined by calculating the weight of the liquid above the test material at the point of penetration. One of defendants' diaper scientists may have employed the hydrostatic head test while developing the flaps in controversy and determined an approximate dividing line between perviousness and imperviousness, although his work was

not relied upon in developing the allegedly infringing products.

The hydrostatic head test is not specified in the Enloe I patent. In fact, nowhere in the patent is any test described to define pervious. Judge Dwyer did not use this test to determine whether Procter & Gamble's inner flaps were fluid pervious. Instead, he relied on the "runoff" test, in which flap material with absorbent material beneath was attached to a solid surface inclined at 10 degrees. Approximately 25 milliliters of synthetic liquid urine were then allowed to run down the inclined flap material. The absorbent material beneath the flap was weighed before and after the test to determine whether any liquid had penetrated the flap material. Finding that little if any liquid had reached the absorbent material, Judge Dwyer held that Procter & Gamble's flaps were impervious to fluid and thus did not infringe the Enloe I patent. That judgment on infringement was later vacated after the parties settled the issue privately.

As part of the litigation before Judge Dwyer, plaintiff sought to have declared invalid claims of a patent owned by Procter & Gamble issued to inventor Michael Lawson, U.S. Patent No. 4,695,278. Judge Dwyer found that the Lawson and Enloe patents covered "substantially identical subject matter." *Kimberly-Clark Corp* No. C89-502WD, 1191 U.S. Dist. LEXIS 19389 at *5. Because Judge Dwyer found that Enloe had anticipated the Lawson claims related fluid pervious flaps (claims 1, 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 19, 20, 23, 24 and 26), he invalidated those Lawson claims. *See id.* at *25. However, because Judge Dwyer also found that Enloe had given up his claims to fluid impervious flaps during the prosecution of Enloe I, he did not invalidate the claims of the Lawson patent related to impervious flaps (claims 13, 17, 21, 25, 27 and 28) in light of Enloe I. *See id.* Upon appeal, Judge Dwyer's determination of the invalidity of certain claims of the Lawson patent was left undisturbed by the Federal Circuit. *See Kimberly-Clark Corp.*, 973 F.2d at 914.

Defendants' expert applied the runoff test to all of the accused products in this case and found that they were even less pervious than the Procter & Gamble flaps that Judge Dwyer had decided did not infringe the Enloe I patent. In addition, defendants' expert examined both the non-infringing Procter & Gamble flaps and defendants' flaps under a microscope. He was able to detect small pores in the Procter & Gamble flaps but not in defendants' flaps.

When fluid is pressured into the flap material rather than allowed to run off without pressure, the fluid is more likely to penetrate the material. Plaintiff alleges that it has performed tests that indicate that defendants' inner flaps are pervious under pressure.

Enloe II

As part of the prosecution of the Enloe II patent, plaintiff provoked an interference with the Lawson Patent No. 4,695,278. When the patent office declared the interference, it omitted all the Lawson dependent claims (13, 17, 21, 25 and 27) directed to "liquid impervious" flaps. As a result of the declaration of the interference, Enloe included the Lawson claims in his Enloe II application, but omitted all the claims relating to liquid impervious flaps (13, 17, 21, 25, and 27) because they were not part of the interference that had been declared. Enloe then filed a motion in the interference to add the claims relating to the liquid impervious flaps to the count of the interference. The patent office rejected this motion, stating that the Lawson claims relating to liquid impervious flaps were "not anticipated" by the broader claims in "the count" that referred to flaps without specifying their perviousness.

The specification of the Enloe II patent contains the same language that appeared in the specification of Enloe I distinguishing Enloe's invention from Beckstrom's and describing his improvement through the use

of fluid pervious flaps. In an amendment filed on September 17, 1993, Enloe offered the following definition of "pervious" for purposes of the prosecution of Enloe II:

In the above claims (and elsewhere in Applicant's specification and claims), the term "*pervious*" is used in the ordinary sense as defined in *The American Heritage Dictionary* (Second College Edition, 1982), at page 927, a copy of which is attached, namely "Open to passage or entrance; permeable"; and the term "*impervious*" is used in the opposite sense, i.e., not open to passage or entrance, or impermeable.

In the same amendment, Enloe noted that the examiner had stated "that claims containing a recitation that the 'flaps' (barrier cuffs) were permeable may be patentable.... The above claims are accordingly presented for the Examiner's consideration."

The Enloe II patent requires the presence of inner flaps that have a central portion of the distal edge (the edge furthest from the bodyside liner) directed toward the longitudinal centerline of the garment by virtue of the way in which the inner flaps are attached to the bodyside liner of the diaper. Claim I is illustrative of this requirement:

An integral disposable absorbent article comprising:

a liquid pervious topsheet having a top surface;

* * * * *

a pair of barrier cuffs,

(a) each barrier cuff having a proximal edge and a distal edge;

(b) each barrier cuff being disposed inboard of one of the gasketing cuffs,

(c) at least a portion of each barrier cuff being attached to the top surface, and

(d) a central portion of the distal edge of each barrier cuff being directed, by means of said portions being attached to the top surface, toward the longitudinal centerline of the integral disposable article, between the gasketing cuffs of the integral disposable absorbent article; and

means for tensioning the barrier cuffs, to space a portion of the distal edge of each barrier cuff away from the top surface of the topsheet, whereby a channel is formed by the two barrier cuffs and a portion of the topsheet between the barrier cuffs.

Proposed claim 89 of the Enloe II patent was rejected by the examiner as unpatentable over Tetsujiro (Japanese Utility Model 41-18359) in view of Karami (U.S. Patent No. 4,527,989) and as being unpatentable over Karami (U.S. Patent No. 4,527,989) in view of Tetsujiro (Japanese Utility Model 41-18359). Eventually, the examiner allowed claim 89 as claim 1 of Enloe II after plaintiff added the language from (c) and (d) above, specifying that at least a portion of the barrier cuffs would be attached to the bodyside liner and that by means of that attachment a central portion of the distal edge of the cuffs would be directed inward:

(c) at least a portion of each barrier cuff being attached to the top surface, and (d) a central portion of the distal edge of each barrier cuff being directed, by means of said portions being attached to the top surface, toward the longitudinal centerline of the integral disposable absorbent article, between the gasketing cuffs of the integral disposable absorbent article.

Claim 1 is a modified version of rejected claim 89, which was substantively identical to claim 1 except that it did not include the limitations of (c) and (d).

Claim 12 of the Enloe II patent requires the presence of "adhesive means disposed adjacent each of the ends of the barrier cuffs for securing a portion of each barrier cuff." Claim 12 is dependent upon claim 6, an independent claim with language similar to that quoted above from claim 1.

Figure 7 of the patent shows "alternative embodiments of the garment" where the flaps are "curvilinear." Describing the alternative embodiment displayed in FIG. 7, the inventor states that "as before flaps 30, 32 may be folded and bonded to inner liner 14 at the respective ends of each flap. The flaps are folded or bonded whereby edges 54, 56 are directed toward centerline 38."

The examiner allowed the Enloe II patent to issue because it specified barrier cuffs directed inward by means of their attachment to the topsheet of the diaper. As the examiner stated in his reasons for allowance:

Applicant distinguishes over the best prior art of record with an integral disposable absorbent article having barrier cuffs inboard of the leg gasketing cuffs that are directed inwardly towards the longitudinal center of the article by means of their attachment to the top surface of the article [and] that are elasticized which is not shown nor fairly suggested by the best prior art of record.

At least some of defendants' products do not achieve inward directionality by attaching the *ends* of the inner flaps to the bodyside liner. These products have barrier cuffs made from a separate piece of material in the shape of a rectangle that is glued to the bodyside liner by securing only the proximal edge to the bodyside liner. These products do not have the ends of the inner flaps attached to the bodyside liner to direct the central portion of their distal edge toward the longitudinal centerline.

Enloe III

The specification of the Enloe III patent contains the same language that appeared in the specifications of Enloe I and II distinguishing Enloe's invention from Beckstrom's and describing Enloe's improvement through the use of fluid pervious flaps. Claim 1 of the Enloe III patent is substantively identical to rejected claim 89 from the Enloe II patent. That is, claim 1 of the Enloe III patent is the same as claim 1 of Enloe II except for limitations (c) and (d) of Enloe II. The same examiner examined the applications for Enloe II and Enloe III. Before accepting claim 1 of Enloe III, he rejected it for double patenting over claim 1 of Enloe II. However, plaintiff issued a terminal disclaimer to overcome the double patent rejection, disclaiming rights to extend the life of claim 1 of Enloe II through the issuance of claim 1 of Enloe III. The patent then issued. Claim 1 of the Enloe III patent encompasses:

1. An integral disposable absorbent article comprising:

a liquid pervious topsheet having a top surface;

a backsheet connected to the topsheet;

an absorbent core disposed between the topsheet and the backsheet;

a pair of elastically contractible gasketing cuffs, each disposed adjacent to a longitudinal edge of the absorbent article;

a pair of barrier cuffs,

(a) each barrier cuff having a proximal edge and a distal edge, and

(b) each barrier cuff being disposed inboard of one of the gasketing cuffs; and

means for tensioning the barrier cuffs, to space a portion of the distal edge of each barrier cuff away from the top surface of the topsheet, whereby a channel is formed by the two barrier cuffs and a portion of the topsheet between the barrier cuffs.

When the ends of the inner cuffs are attached to the bodyside liner, the ends of the distal edges of those cuffs are necessarily in contact with the bodyside liner. However, a central portion of the distal edge of the cuffs is spaced away from the liner by means of an elastic that tensions the cuff when the diaper is in use. However, if the cuffs are *not* attached at the ends to the bodyside liner, then the *entire* distal edge of the cuffs is spaced away from the bodyside liner when the diaper is in use. Defendants' inner cuffs are not attached at the ends to the bodyside liner. Thus, the entire distal edge is spaced away from the bodyside liner when the diaper is in use.

OPINION

Determination of patent infringement is a two-step process. *See Desper Products, Inc. v. QSounds Labs, Inc.*, 157 F.3d 1325, 1332 (Fed.Cir.1998). First, the court must construe the claim as a matter of law to determine its proper scope and meaning. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). In doing so, the court must consider the claim language, patent specification and prosecution history. *See id.* The court should consider extrinsic evidence only if necessary. *See id.* Second, the trier of fact compares the properly construed claim to the allegedly infringing product. *See Desper Products*, 157 F.3d at 1332. Summary judgment is appropriate only if the composition of the allegedly infringing product is undisputed so that there is no genuine dispute of material fact. *See id.*

A. Do Enloe II and III Encompass Fluid Impervious Flaps?

In the earlier ruling on summary judgment, I correctly understood plaintiff to concede that Enloe I was limited to fluid pervious flaps but misunderstood plaintiff to concede that Enloe II was similarly limited. I also held that the prosecution history of the Enloe III patent showed that it was limited to fluid pervious flaps. Plaintiff argues that Enloe II is not limited to fluid pervious flaps and urges reconsideration of the decision that the Enloe III patent is so limited. Having considered whether the Enloe II patent is so limited and having reconsidered whether the Enloe III patent is so limited, I hold that both patents are limited to fluid pervious flaps.

Both parties agree that Enloe I does not encompass fluid impervious flaps. The prosecution history of Enloe

I demonstrates that the original application was rejected by the patent examiner, at least in part, because prior art from Beckstrom U.S. Patent No. 4,490,148 discloses a diaper with fluid impervious flaps. Faced with that rejection, Enloe abandoned his original application and filed the continuation-in-part that eventually became Enloe I. In the continuation-in-part application, Enloe added three paragraphs to the specification intended to distinguish his invention from Beckstrom's. He describes Beckstrom's prior art as having "liquid-tight" side flaps and explains that Beckstrom's design has "resulted in the emergence of other problems": "the waterproof material of the flaps" causes urine, moisture and liquid fecal material to become trapped against the skin and cause irritation. He explains that his invention improves upon Beckstrom's: "the present application teaches an improved disposable garment which provides fluid pervious flaps" composed "of water pervious materials." Apparently recognizing that Enloe had abandoned his claim to fluid impervious flaps, the examiner allowed the claims: "The claims as amended recite the necessity of a fluid impermeable flap and elastic in the flap as well as at the leg openings. This combination overcomes prior art."

Although plaintiff concedes that this language and the prosecution history of Enloe I limit its scope to fluid pervious flaps, plaintiff insists that Enloe II and III are not so limited and, in fact, were prosecuted in part to recapture the claim to fluid impervious flaps that was abandoned in the prosecution of Enloe I. In support of its position, plaintiff advances three arguments. First, it points out that in the claims of Enloe I the flaps are described as "fluid pervious," but in the claims of Enloe II and III the flaps are not described as fluid pervious; that are simply called flaps or "cuffs." Second, the specification of all three patents states that "liquid pervious material is preferred," implying that liquid impervious materials were the non-preferred embodiment contemplated by Enloe. Third, claim 26 of Enloe II describes the flaps as "when placed in contact with wet skin of a wearer, permitting moisture to escape from the surface of the skin so contacted." Plaintiff argues that if the claims of Enloe II encompass only fluid pervious flaps, the language from claim 26 would be unnecessary. Therefore, the doctrine of claim differentiation compels the conclusion that the other claims encompass fluid impervious flaps.

If only it were that simple. Like its flaps, plaintiff's argument is full of holes. First, Enloe included exactly the same three paragraphs from the specification of Enloe I distinguishing his invention from Beckstrom's in the specification of both Enloe II and Enloe III. From the fact that the specifications of both Enloe II and III describe prior art as encompassing fluid impervious flaps and teach how the Enloe patents improve upon prior art by the use of fluid pervious flaps, I draw the inference that neither Enloe II nor III encompasses fluid impervious flaps. Plaintiff argues that what distinguishes Enloe's invention from Beckstrom's is not the perviousness of his flaps but the combination of inner flaps (whether pervious or impervious) and leg cuffs in the same diaper. If this is so, it does not explain why Enloe took such care to describe Beckstrom's prior art as fluid impervious and to explain why pervious flaps were an improvement.

Moreover, as late as 1993, during the prosecution of the Enloe II patent, Enloe's attorneys acknowledged in an amendment filed on September 17, 1993, that the examiner had stated "that claims containing a recitation that the 'flaps' (barrier cuffs) were permeable may be patentable.... The above claims are accordingly presented for the Examiner's consideration." Thus, available evidence from the Enloe II and III specifications and the patents' prosecution histories suggest strongly that, like the flaps described in Enloe I, the flaps contemplated by Enloe II and III are pervious. "The best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.... [T]he evolution of restrictions in the claims ... reveals how those closest to the patenting process-the inventor and the patent examiner-saw the subject matter." *Multiform Dessicants v. Inc., v. Medzam, Ltd.*, 133 F.3d 1473, 1478 (Fed.Cir.1998). Here the specifications and prosecution histories clearly indicate that the inventor and patent

examiner understood the flaps to be pervious and that the perviousness was a patentable improvement over impervious flaps.

In addition, the interference between the Enloe II application and Procter & Gamble's Lawson Patent No. 4,695,278 indicates that Enloe II is limited to fluid pervious flaps. When the patent office declared the interference, it omitted all the Lawson dependent claims (13, 17, 21, 25 and 27) directed to "liquid impervious" flaps. As a result of the declaration of the interference, Enloe moved the Lawson claims to the Enloe II application, but omitted all the claims relating to liquid impervious flaps (13, 17, 21, 25, and 27) because they were not part of the interference that had been declared. Enloe then filed a motion in the interference to add the claims relating to the liquid impervious flaps to the count of the interference. The patent office rejected this motion, stating that the Lawson claims relating to liquid impervious flaps were not covered by the broader claims in the interference that referred to flaps without specifying their perviousness. Thus, although Enloe won the interference regarding claims related to liquid pervious flaps, liquid impervious flaps were not included in that victory despite the broad claim Enloe made to flaps regardless of their perviousness. The conclusion to be drawn from the patent office's refusal to include the Lawson claims relating to the liquid impervious flaps in the interference is that such flaps were not invented by Enloe and not patentable by him.

This is the same conclusion that was drawn by Judge Dwyer in the 1991 lawsuit between plaintiff and Procter & Gamble. Although Judge Dwyer found that Enloe had priority of invention over certain claims in the Lawson patent, he did not find that Enloe had priority with regard to the claims relating to impervious flaps (dependent claims 13, 17, 21, 25 and 27). The Federal Circuit affirmed Judge Dwyer's ruling with regard to Enloe's priority over Lawson with regard to certain claims and left undisturbed his ruling that Enloe was not entitled to the claims relating to impervious flaps. In addition, in the district court of Delaware, Procter & Gamble successfully sued Paragon Trade Brands for infringement of dependent claim 17 of the Lawson patent because Paragon's flaps were fluid impervious. *See Procter & Gamble v. Paragon Trade Brands*, 989 F.Supp. 547, 575-76 (D.Del.1997). Both of these cases indicate that fluid impervious flaps are not encompassed by Enloe's patents.

That each of the Enloe patents describes liquid pervious material as "preferred" does not necessarily mean that the patent encompasses liquid impervious material as well. As explained in the earlier order on summary judgment, a general claim limitation may be restricted to a specific embodiment if the inventor commits himself to that embodiment through the prosecution history and by using that embodiment to distinguish the invention over prior art. *See I.O. Corp. v. Tekmar Co. Inc.*, 115 F.3d 1576, 1581 (1997). In *Tekmar*, the Federal Circuit held that the term "passage" did not encompass smooth-walled structures because the structures contemplated by the written description in the patent were nonsmooth and the description distinguished prior art by stating that the older passages were generally smooth-walled. Similarly, in this case, the prosecution history and the description of prior art in each of the patents indicate clearly that Enloe used a fluid pervious embodiment of the flaps to distinguish his invention over prior art. In doing so, he committed himself to a fluid pervious embodiment of the flaps. Therefore, despite the fact that each of the patents states that liquid pervious material is merely preferred, each is limited to fluid pervious flaps.

Claim 26 of Enloe II specifies that the flaps permit "moisture to escape from the surface of the skin," in other words, that the flaps are fluid pervious. Plaintiff contends that because claim 26 specifies that the flaps are fluid pervious, other broader references to flaps must encompass flaps that are pervious and impervious; if all the flaps were fluid pervious, there would be no need to specify that the flaps in claim 26 are fluid

pervious. As plaintiff points out, the doctrine of claim differentiation supports its construction. *See Tandon Corporation v. U.S. International Trade Commission*, 831 F.2d 1017, 1023 (Fed.Cir.1987) ("There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant."). Although there is logic to plaintiff's argument, it is impossible to reconcile it with either the prosecution of the patent or its own specification, which as noted before, distinguishes prior art on the basis of perviousness.

The Federal Circuit addressed an analogous dilemma in *Tandon*, 831 F.2d 1017. There, an independent claim in the patent at issue required a transducer (a magnetic head that receives and transfers information from and to both sides of a floppy disk) to be "non-gimballed" (in the disk drive industry, the term "gimballed" refers to a suspension system that allows the magnetic head to pitch and roll). *See id.* at 1020 and n. 2. The patent holder argued that because one claim specified that the transducer be non-gimballed, the doctrine of claim differentiation compelled the conclusion that other claims encompassed transducers that were gimballed. The Federal Circuit disagreed, holding that "the specification and prosecution history require that the claims be limited to a non-gimballed, fixed, lower transducer." *Id.* As the Federal Circuit explained, "claims may not be construed one way in order to obtain their allowance and in a contrary way against infringers." *Id.* at 1021. Even though only one claim specified that the transducer be non-gimballed, the Federal Circuit held that the specification and prosecution history compelled the conclusion that all of the claims were limited to non-gimballed transducers. Similarly, in this case, even though claim 26 specifies that the flaps be fluid pervious, the specification and prosecution history compel the conclusion that all of the claims are limited to fluid pervious flaps. In short, the specifications and prosecution histories of *Enloe II* and *III* compel the conclusion that, like *Enloe I*, those patents encompass only fluid pervious flaps and do not encompass fluid impervious flaps.

B. Must The Flaps Be As Pervious As The Bodyside Liner?

There is no dispute between the parties about what fluid perviousness must mean in regard to the bodyside liner. The bodyside liner must be pervious with or without pressure placed upon it in order to work properly. Like the bodyside liner, the inner flaps are also described by *Enloe I* as "fluid pervious," and as explained above, the same limitation applies to the flaps described in *Enloe II* and *III*. The parties dispute whether the inner flaps must also be pervious with or without pressure. In the order on summary judgment I agreed with plaintiff's contention that even if defendants' flaps are pervious only under pressure, they still infringe *Enloe's* patents if they are pervious during the normal use of a diaper. I held that the *Markman* hearing would be used to determine what range of pressures flaps encounter in normal use and that the trier of fact could then determine whether defendants' flaps were pervious under those conditions.

Upon reflection and with the benefit of the *Markman* hearing, I am persuaded that this ruling was an error. What became evident during the *Markman* hearing was that plaintiff had absolutely no measurement of pressure in mind during the prosecution of any of its patents. The test plaintiff presented as the appropriate test for pressure during the normal use of a diaper was concocted solely for purposes of this litigation and employed instruments apparently unavailable at the time *Enloe* prosecuted his patent. At this time, this test cannot provide the appropriate definition of pervious as it pertains to the flaps. Because the *Markman* hearing made clear that *Enloe* relied on no industry standard test for a definition of perviousness that would have given his competitors notice of the meaning of the term at the time he prosecuted his patents, the only appropriate definition (if there is one) must be found in the patent itself.

The patent refers to two objects as liquid or fluid pervious: the bodyside liner and the flaps. The patent states that the flaps "may" be made from the bodyside liner, but does not suggest other materials from which they may be made. Instead, the only notice the patent provides regarding degrees of perviousness is that at least the bodyside liner must be instantly pervious without pressure; otherwise the diaper would not work. Like the liner, the flaps are described simply as "pervious." Because the same words are to be given the same meaning, the inevitable conclusion is that both the "pervious" flaps and the "pervious" bodyside liner must be pervious without regard to pressure.

This true despite the fact that claim I contemplates that the flaps may be formed from "or attached to" the bodyside liner. As explained in the order on summary judgment, logic dictates that flaps *made from* the bodyside liner must be pervious even without pressure. However, logic does not compel a similar conclusion for flaps that are *attached to* the bodyside liner. Such flaps could be made from a different material that is pervious only under some amount of pressure. But the onus was on Enloe at the time he prosecuted his patents to provide other inventors with some notice differentiating the perviousness of the bodyside liner from the perviousness of the flaps. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). An inventor is entitled to be his own lexicographer, but if he intends a special definition of a term he must state it clearly in the specification or file history. *See id.* Enloe did not provide a special definition at the time of the patent prosecution and plaintiff cannot do so now. Indeed, the only definition of "pervious" Enloe provided during the prosecution of Enloe II explicitly failed to adopt any specific meaning for the term relative to the flaps:

In the above claims (and elsewhere in Applicant's specification and claims), the term "*pervious*" is used in the ordinary sense as defined in *The American Heritage Dictionary* (Second College Edition, 1982), at page 927, a copy of which is attached, namely "Open to passage or entrance; permeable"; and the term "*impervious*" is used in the opposite sense, i.e., not open to passage or entrance, or impermeable.

Just as the court is left without notice of what different degree of perviousness the flaps may possess compared to the bodyside liner, a competing inventor would have no fair warning of what she must avoid. Despite the common sense appeal of the idea that flaps encounter pressure during normal use, it is unfair to hold that the flaps are "pervious" within the meaning of the patent at some amount of pressure measured and designated by plaintiff many years after the patent issued. It is also outside the canon of claim construction that requires courts to construe claim language according to the standards of what those words would have meant to persons of ordinary skill in the art at the time of the application. *See W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1556 (Fed.Cir.1983). In *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563 (Fed.Cir.1997), the Federal Circuit explained that the inventor, who had literally built a better mouse trap, could not concoct a scientific test to define a term in a patent after the patent had issued:

While Zeliger's test may have some common sense appeal, it provides no certainty to Eaton's competitors, who are entitled to know the point in time at which their products will infringe claim I. Nor does Zeliger's test give any measure of certainty to Eaton, which is also entitled to know in advance how to test competing product for infringement of claim 1.

Similarly, in *Schering Corp. v. Amgen, Inc.*, 25 F.Supp.2d 293 (D.Del.1998), an inventor "urge[d] that it be allowed to use post-filing definitions to define disputed claim terms that a person of ordinary skill in the art of reading the patent could not have understood since the classification was not adopted or published until

after the filing date." Because the plaintiff's purported definition in *Schering* was based on a classification not adopted at the time of the patent application, it was not adopted by the court. In this case, because plaintiff's definition of perviousness is based on tests not conducted or even conceived at the time of the patent application, it cannot be adopted. As the Federal Circuit explained in *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1345 (Fed.Cir.1998):

because a patent applicant has the burden to 'particularly point out [] and distinctly claim [] the subject matter which the applicant regards as his invention,' 35 U.S.C. s. 112, para. 2, if the claim is susceptible to a broader and narrower meaning, and the narrow one is clearly supported by the intrinsic evidence while the broader one raises questions of enablement under s. 112, para. 1, [a court should] adopt the narrower of the two.

In this case, the claim language is susceptible to both a broad and narrow reading of the term pervious as it relates to the flaps: it may mean as pervious as the bodyside liner or it could mean some other degree of pervious, depending on the material used to construct the flaps and the range of pressure they encounter. Because the broader construction raises questions of enablement under s. 112, para. 1 (that is, raises questions whether others skilled in the art would be enabled to reproduce the invention and understand the scope of the patent), this court should adopt the narrower construction under the applicable claim construction principles. *See id.*

Because the Enloe patents use the same word "pervious" with regard to the bodyside liner and flaps, a person of ordinary skill in the art reading the patent would assume that "pervious" has the same meaning in reference to both parts of the diaper. Because pervious with regard to the bodyside liner must mean pervious without pressure, one of ordinary skill in the art reading the patent would be put on notice only that the flaps are also pervious without pressure. Any other interpretation would leave competitors in the dark regarding the scope of the patent. Therefore, I conclude that the Enloe patents encompass flaps that, like the bodyside liner, are pervious without pressure. Although common sense suggests that both the flaps and the bodyside liner will often be under some amount of pressure during normal use, this understanding cannot substitute for the simple fact that Enloe could have defined a standard or a test for perviousness as part of his three patent prosecutions, but chose not to.

As explained at the *Markman* hearing, there are several appropriate tests to measure whether flaps are pervious without pressure, including the run-off test employed by Judge Dwyer in the 1991 litigation and the side-seal test employed by Judge Longobardi during the 1997 litigation. If defendants' flaps are pervious under such conditions, they infringe on the claims of the Enloe patents relating to the perviousness of the flaps; if they are not, they do not.

C. Flap Attachment and The Meaning Of "To Space A Portion" Away

Defendants urge reconsideration of that part of the decision on summary judgment related to how the inner flaps are attached to the bodyside liner and interpreting the requirement that "a portion" of the distal edge be spaced away from the bodyside liner. In particular, defendants argue that the flaps must be attached at their ends and that only a portion of the distal edge of the flaps can be spaced away from the liner (at least some of defendants' flaps are attached only along their proximal edges; thus, they are not attached at the ends and the entire distal edge is spaced away from the liner). I am now persuaded that defendants' construction is the more reasonable.

The patent calls for "means for tensioning the barrier cuffs, to space *a portion* of the distal edge of each barrier cuff away from the surface of the topsheet." In the ruling on summary judgment, I held that, although it was a tortured construction, "a portion" could include the whole distal edge. Upon reconsideration, I am persuaded that "to space *a portion*" away can and should be given its ordinary meaning: that is, *less than the whole* distal edge is spaced away. As explained above with reference to the interpretation of the term "pervious," an inventor is entitled to be his own lexicographer, *see Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996), but words in a claim are to be given their ordinary and accustomed meaning unless it clearly appears the inventor used them differently. *See Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 758 (Fed.Cir.1984). The onus was on Enloe to give the term "portion" a special definition if he intended it to have something other than its ordinary and accustomed meaning. He did not provide a special definition. The ordinary and accustomed meaning of "portion" is some part less than the whole. *See Webster's New International Dictionary*, 2d ed. (1957) (defining "portion" as "a part of a whole ... a part abstracted from a whole; a limited amount of quantity"). Because Enloe failed to provide any other definition, I must conclude that less than the whole distal edge is spaced away from the bodyside liner. If less than the whole distal edge is spaced away from the bodyside liner, however, there remains the need to determine which portion of the distal edge must be attached to the bodyside liner.

Defendants argue that it must be the ends of the distal edge that are attached. In the ruling on summary judgment, I disagreed with defendants' interpretation. I held that because dependent claim 12 of Enloe II required attachment at the ends but the same limitation could not be found in the independent claim from which it depended (claim 6), the narrow limitation of the dependent claim should not be read into the broader independent claim. *See Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 770 (Fed.Cir.1983). Therefore, I concluded that the patent broadly covered any flap directed inward by means of its attachment to the bodyside liner, regardless whether that attachment occurred at the ends of the flaps.

Although it is a difficult and close question, I am now persuaded that this conclusion was in error for two reasons. First, I have concluded that because a portion (that is, less than the whole) of the distal edge is spaced away from the liner, a portion must also be attached to the liner. It seems the only portion of the distal edge that could be attached within the intended use of the diapers is the ends: if the distal edge of flaps were attached in the middle, they would be unlikely to contain the liquid exudates effectively. Secondly, as defendants argue, although dependent claim 12 refers specifically to attachment at the ends, the *only* teaching in the patents shows the flaps attached at their ends. Each drawing of the patented item shows attachment at the ends. Although plaintiff argues that figure 7 of Enloe II achieves inward directionality by attaching the inner flap to the bodyside liner along a curved line rather than by attachment at the ends, that interpretation of the figure is never made explicit in the patent. Instead, the description of figure 7 states that the flaps are attached at the ends and attributes the inward directionality of the flaps to folding and bonding: "As before flaps 30, 32 may be folded and bonded to inner liner 14 *at the respective ends of each flap*. The flaps are *folded or bonded whereby edges 54, 56 are directed toward centerline 38*." Thus, even figure 7 contemplates flaps attached at their ends. This would not place competitors on notice that some means other than attachment at the ends had been used in that one figure in contrast to all of the others. I conclude that the combination of the requirement that some portion of the distal edge be attached to the bodyside liner and the fact that the patent teaches only attachment at the ends of the flaps means that the most logical interpretation of the Enloe II and III patents is that the flaps must be attached at their ends.

This conclusion is supported by my new understanding of claim 1 of Enloe III. The decision on summary judgment interpreting claim 1 of Enloe III so that the entire distal edge of the flaps could be spaced away from the bodyside liner was supported by my erroneous understanding that claim 1 of Enloe III did not

contain limitations (c) and (d) of claim 1 of Enloe II. Limitations (c) and (d) of claim 1 of Enloe II describe the flaps with:

(c) at least a portion of each barrier cuff being attached to the top surface, and (d) a central portion of the distal edge of each barrier cuff being directed, by means of said portions being attached to the top surface, toward the longitudinal centerline of the integral disposable absorbent article, between the gasketing cuffs of the integral disposable absorbent article.

Limitation (c) indicates that at least a portion of the flap must be attached to the bodyside liner. Defendants argued that despite that fact that limitations (c) and (d) do not appear in claim 1 of Enloe III, they should be read into that claim because the same examiner required those limitations before allowing Enloe II to issue and thus must have also read them into Enloe III before allowing it to issue. I rejected that argument, reasoning that if the examiner had read limitations (c) and (d) into claim 1 of Enloe III, claims 1 of Enloe II and III would have been substantively identical and thus claim 1 of Enloe III would have been rejected for double patenting. Further, I reasoned that to read those limitations into claim 1 of Enloe III would place in doubt the claim's validity as a result of double patenting, contravening the doctrine of claim construction that patents should be presumed valid. *See* 35 U.S.C. s. 282. Therefore, I held that there was no indication that claim 1 of Enloe III required any portion of the distal edge of the flap to be attached to the bodyside liner.

In so ruling, I was unaware that in fact claim 1 of Enloe III *was* rejected for double patenting over claim 1 of Enloe II and that consequently plaintiff had issued a terminal disclaimer in the prosecution of Enloe III to avoid rejection for double patenting over Enloe II. That disclaimer allows the court to read into claim 1 of Enloe III limitations (c) and (d) of claim I of Enloe II. When claim 1 of Enloe III is understood to require that "at least a portion" of the flap be attached to the bodyside liner, some light is shed on the requirement that "a portion of the distal edge" also be spaced away from the liner. One reading of limitations (c) and (d) of Enloe II is that some portion of the distal edges of the flaps must be attached to the bodyside liner. Although I need not decide the issue for purposes of this ruling, defendants offer somewhat persuasive evidence that the requirement of limitation (c) that "at least a portion" of the flap be attached to the top surface can mean only that at least a portion of the distal edge be attached to the top surface, because prior art from Tetsujiro already encompasses flaps attached by their proximal edges. If defendants' position is correct, it would lend even more support to my conclusion that some part of the distal edges of the flaps must be attached to the top surface and that this attachment must occur at the ends of the flaps.

CONCLUSION

In light of the *Markman* hearing and upon reconsideration, I conclude that none of the Enloe patents encompasses fluid impervious flaps. In addition, I conclude that the flaps must be pervious to the same degree as the bodyside liner, that is, pervious with or without pressure. Finally, I conclude that less than the whole distal edge of the flaps must be spaced away from the bodyside liner and that the ends of the flaps must be attached to the liner.

Having adopted these claim constructions, it remains to be decided whether any the accused products infringe upon the claims of the Enloe patents. *See* *Desper Products, Inc. v. QSounds Labs, Inc.*, 157 F.3d 1325, 1332 (Fed.Cir.1998) (first step in determining patent infringement is claim construction; second is comparing accused products to claims as construed). Therefore, I will not grant either party's motions for summary judgment at this time. Instead, I will require the parties to advise the court whether they believe

any issues remain for the trier of fact in light of the claim constructions adopted in this ruling.

ORDER

The parties are to advise the court by 1:00 p.m. central time, Thursday, November 4, 1999, whether issues remain for the trier of fact in the trial scheduled to begin November 8, 1999.

W.D.Wis.,1999.

Kimberly-Clark Corp. v. Tyco Intern., Inc.

Produced by Sans Paper, LLC.