United States District Court, N.D. Illinois, Eastern Division.

#### ARQUEST, INC,

Plaintiff. v. **Rhonda TRACY,** Defendant.

Dec. 5, 2002.

#### **MEMORANDUM OPINION**

### KOCORAS, Chief J.

This matter comes before the court on Plaintiff Arquest, Inc.'s ("Arquest") motion for summary judgment of non-infringement under claim 2 of Defendant Rhonda Tracy's U.S. Pat. No. 5,797,824 (the " '824 patent"). For the reasons set forth below we grant the motion.

#### BACKGROUND

This lawsuit arises from a patent held by Ms. Tracy. As a new mother, Tracy developed an improvement to existing disposable diapers. On September 8, 1987, she filed an application at the United States Patent & Trademark Office ("PTO") for various aspects of her invention. She filed a second patent application on April 30, 1990. The second application was prosecuted to allowance and issued as U.S. Patent No. 5,064,421 (the " '421 patent") on November 12, 1991. That same day, Tracy filed another patent application seeking broader protection than what was covered by her '421 patent. Following a file wrapper continuation and a successful appeal to the PTO Board of Patent Appeals and Interferences, this application eventually matured into the '824 patent, which issued on August 25, 1998.

Tracy previously sued several defendants in this court for making and selling diapers that allegedly infringed the '824 patent. In that case, we held claims 1, 9, 10, and 14 of the '824 patent invalid as anticipated. Tracy v. Jewel Food Stores, Inc., 2000 WL 1721498 (N.D.III. Nov. 17, 2000). Tracy has appealed that decision, and the appeal is currently pending before the Court of Appeals for the Federal Circuit.

Regarding the instant case, Plaintiff Arquest makes and sells diapers (the "Arquest Diapers") and training pants (the "Arquest Pants") that allegedly infringe Tracy's '824 patent. Arquest filed the current action against Tracy seeking a declaratory judgment that the claims of the '824 patent are invalid and that Arquest's products do not infringe the '824 patent. Tracy filed a counterclaim alleging that Arquest has infringed and induced others to infringe her '824 patent. Although Tracy's counterclaim is silent as to what specific claims of the '824 patent she is asserting, she has since stated that claim 2 is the only valid claim asserted against the Arquest Diapers and that claims 2, 3, and 15 are the only valid claims being asserted against the Arquest

Pants. Tracy's Opp. n. 2, n .7. Arquest moves for summary judgment of non-infringement as to claim 2 only.

### LEGAL STANDARD

Summary judgment is appropriate when the record, viewed in the light most favorable to the nonmoving party, reveals that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. Bay v. Cassens Transport Co., 212 F.3d 969, 972 (7th Cir.2000). The moving party bears the initial burden of showing that no genuine issue of material fact exists. Celotex Corp. v. Catrett, 477 U.S. 317, 325 (1986). The burden then shifts to the non-moving party to show through specific evidence that a triable issue of fact remains on issues on which the non-movant bears the burden of proof at trial. *Id.* The non-movant may not rest upon mere allegations in the pleadings or upon conclusory statements in affidavits; it must go beyond the pleadings and support its contentions with proper documentary evidence. *Id.* A genuine issue of material fact exists when "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986).

### DISCUSSION

A determination of infringement or non-infringement is a two-step process. Catalina Lighting, Inc. v. Lamps Plus, Inc., 295 F.3d 1277, 1285 (Fed.Cir.2002). FN1 First, the court construes the claim, a question of law. *Id.* Second, the fact-finder compares the claim (as construed by the court) to the accused device to determine whether all of the claim limitations are present in the accused device, a question of fact. *Id.* Although the second step requires a finding of fact, "[s]ummary judgment of noninfringement is ... appropriate where the patent owner's proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial." TechSearch, L.L.C. v. Intel Corp., 286 F.3d 1360, 1369 (Fed.Cir.2002) (citing London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1537 (Fed.Cir.1991)).

FN1. The law of the Federal Circuit, as opposed to that of the Seventh Circuit, applies to the patent issues before us. Tennant Co. v. Hako Minuteman, Inc., 651 F.Supp. 945, 953 (N.D.Ill.1986).

To prove infringement, Tracy must show that every element of claim 2, the claim at issue, is found in the accused devices. *See* Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562 (Fed.Cir.1991). Claim 2 is a dependent claim that depends from claim 1. Thus, Tracy must also show that every element of claim 1 is also found in the accused diaper products.

Claim 1 reads:

A disposable diaper comprising:

a body portion having two enlarged end portions and a narrowed intermediate portion therebetween, the body portion being shaped so that said diaper may extend about a waist and crotch of a wearer and have an inside and an outside with respect to the wearer;

each end portion having a respective waistband portion at an edge thereof so that when the diaper is worn, the waistband portions gird the waist of the wearer;

at least two body-portion layers including a layer of liquid-absorbent material and a plastic layer having an

edge at the edge of the diaper;

a *soft padding member* located along at least one of said waistband portions, being adjacent to said plastic layer edge, *the soft padding member being distinct from all of said body-portion layer*, the soft padding member including a material formed from a soft substance presenting a soft surface along at least a portion of said inside of the diaper waistband portion *despite said plastic layer edge*.

Claim 2 reads:

The diaper according to claim 1 wherein said padding member comprises a first strip of soft padding parallel to the waistband, *the first strip providing an additional absorbent barrier against leakage*.

U.S. Pat. No. 5,797,824 cl. 1, 2 (emphasis added to elements at issue in this motion). Tracy alleges infringement of two types of Arquest products: (1) the Arquest Diapers and (2) the Arquest Pants. As these two types of products contain different structural components, separate infringement analyses are required.

# I. The Arquest Diapers

Arquest contends that its Arquest Diapers do not infringe claim 2 for three reasons: (1) the Diapers do not have "a soft padding member", (2) the alleged soft padding member does not provide "an additional absorbent barrier against leakage" and (3) the alleged soft padding member does not "present[] a soft surface along at least a portion of said inside of the diaper waistband portion despite said plastic layer edge."

# A. Soft Padding Member

The Arquest Diapers have a waistband, part of which is elastic for forming a snug fit around a baby's waist. The elastic quality of the waistband is provided by a an elastic member that is sandwiched between a baby-facing liquid-permeable layer and a mommy-facing liquid-impermeable plastic layer. Tracy claims the elastic member serves as the "soft padding member" required by claim 2. A sample of the elastic member material was attached to Arquest's 56.1 Statement as Exhibit 1. Tracy concedes that the Exhibit I material is indeed the same material that forms the elastic member in the Arquest Diapers. *See* Tracy Opp. at 19; Tracy Decl. para. 22. The elastic member material is stretchable and recoils to its relaxed state after being stretched and released. It is very thin and provides very little padding. Tracy compares the material to bubble wrap. Arquest states that the closer analogy would be "bubble wrap, made of extremely thin plastic film, *in which all of the bubbles have been popped*." Arquest Reply at 11. The court agrees with Arquest's analogy, but this does not end the inquiry. The stated purpose of the soft padding member is to present a soft surface despite said plastic layer edge. The elastic member must only provide a soft padding against a plastic edge of a diaper.

# **B. Additional Absorbent Barrier Against Leakage**

Tracy claims that the elastic member is absorbent, thus satisfying the "additional absorbent barrier against leakage" element of the claim. To avoid summary judgment, Tracy must present evidence establishing a factual dispute as to whether the elastic member is absorbent. Tracy offers her declaration describing her own tests on the elastic member material. She conducted two tests. In the first test, she placed coffee-dyed water on the material, "found that the [material] absorbed the fluid and became dyed" and "concluded that

the [material] provides an absorbent barrier against leakage." Tracy Decl. para. 20. Whether or not the material dyes or stains from exposure to coffee does not mean that it absorbed the coffee in any meaningful way. To illustrate this point, one could spill coffee on a block of light wood, thereby staining the wood. One could not, however, use a block of wood to mop up spilled coffee. Tracy's second test involved applying a *single drop* of water onto the material and then, "after time, I observed that the water was absorbed." Tracy Decl. para. 22. How much time? We are talking about one drop of water, which in all likelihood, "after time," simply evaporated. Babies do not urinate one drop at a time. Moreover, urine needs to be absorbed immediately. If not absorbed immediately, the urine, while waiting to be absorbed, could leak out of the diaper, thus defeating the stated objective of "providing an additional absorbent barrier against leakage."

To bolster her own test data, Tracy offers the summary opinion of Wes Fritz, who is a chemistry teacher at a community college but who has been misrepresented to this Court by Tracy as "a chemistry *professor* at a *university*". Tracy Opp. at 19 (emphasis added). Fritz and Tracy jointly performed the one-drop test (discussed above). The report basically states in sum: I applied a droplet to the material and it was absorbed. The report is conclusory; Mr. Fritz's credentials were misrepresented; and the test, even if taken as true (e.g. that the droplet was absorbed), is not probative of whether the material "provid[es] an additional absorbent barrier against leakage."

Furthermore, neither Tracy's nor Fritz's tests are admissible expert evidence. Under Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993), we are to "perform a gate-keeping function and conduct a two-step analysis before admitting expert scientific testimony under [Federal] Rule [of Evidence] 702." Chapman v. Maytag Corp., 297 F.3d 682, 686 (7th Cir.2002). Firstly, the evidence must be "based upon sufficient facts or data," the evidence must be "the product of reliable principles and methods," and the expert must have "applied the principles and methods reliably to the facts of the case." Fed.R.Evid. 702; *see also* Chapman, 297 F.3d at 686-87. Secondly, the purported expert evidence must "assist the trier of fact to understand the evidence or to determine a fact in issue." Fed.R.Evid. 702; Chapman, 297 F.3d at 687.

Tracy and Fritz's absorbency tests do not satisfy either prong of this two-step analysis. The coffee test is inadequate because it is based upon the erroneous principle that a stainable material is an absorbent material capable of "providing an additional absorbent barrier against leakage." The one-drop test is inadequate because it is not based upon sufficient facts or data; the experiment only used one drop of water, and the report summarily concludes that it was absorbed. More importantly, the tests do not assist the trier of fact. Whether or not the material is absorbent is a simple factual finding easily determinable by a trier of fact. Thus, there is no need for expert evidence. *See* Buckner v. Sam's Club, Inc., 75 F.3d 290, 293 (7th Cir.1996) ("Much of what appears in the Timmons affidavit amounts to simple common sense. For example, expert evidence is unnecessary to establish that watches and jewelry are more likely to fall off tables without raised edges than those with."). Indeed, it is the simplicity and obviousness of this factual finding that probably led Tracy to submit such conclusory "expert" evidence in the first place.

Having examined the elastic member material ourselves, we find Tracy's position curious, to say the least. The material is utterly non-absorbent. When placed on the material, water balls up to form a single puddle that rolls around like spilled mercury on glass. The water is not only not absorbed, but it is actually repelled by the material, standing upright more than three-sixteenths of an inch. When left for hours, nothing changes; the puddle remains. The same results are obtained by testing either side of the material. When the material is lifted up, the water rolls off and spills to my desk. Furthermore, the portion of the desk below where the material lay with a puddle on top remained entirely dry. When attempting to use the material to sponge or mop up a puddle of water on my desk, the material fails to absorb any of the water. Instead, it

simply pushes the water around my desk. No reasonable jury could find the material absorbent. Additionally, no reasonable jury could find (and Tracy has not argued) that the material "provid[es] an additional absorbent barrier against leakage" under the doctrine of equivalents. That doctrine requires the substitute element (here the elastic member material) to "perform substantially the same function in substantially the same way to achieve substantially the same result", which it clearly does not. Creo Products, Inc. v. Presstek, Inc., 305 F.3d 1337, 1351 (Fed.Cir.2002). Thus, as a matter of law, the Arquest Diapers do not infringe claim 2 of the '824 patent.

### C. Despite Said Plastic Layer Edge

Tracy argues that the elastic member "present[s] a soft surface along at least a portion of said inside of the diaper waistband portion despite said plastic layer edge." Arquest argues that the elastic member does not satisfy the claim language because: (1) it does not wrap around the plastic layer edge as depicted in the only disclosed embodiment of the invention and (2) it does not otherwise provide protection from the plastic layer edge in its Arquest Diapers.

Claim 2 does not explicitly reference a soft padding member that wraps around a plastic layer edge, thereby protecting the baby's skin from the plastic layer edge. Arquest, however, maintains that claim 2, read in light of the specification and prosecution history, requires the padding member to wrap around the plastic edge. Tracy, on the other hand, urges us to avoid reading any limitations from the specification and prosecution history into the claims. The Federal Circuit has held that "[f]oremost among the tools of claim construction is of course the claim language itself, but other portions of the intrinsic evidence are clearly relevant, including the patent specification and prosecution history." All Dental Prodx, LLC v. Advantage Dental Prods., 309 F.3d 774, 780 (Fed.Cir.2002). Since the meaning of the claim language "despite said plastic layer edge" is not clearly discernible from reviewing the claim itself, we will examine the specification and prosecution history.

The specification discloses only one embodiment of the diaper invention. That embodiment employs a soft padding member wrapped around the plastic layer edge of the waistband. Tracy argues that it is merely a preferred embodiment of the invention while Arquest argues that it is the only embodiment of the invention. A specification does not need to specifically illustrate all the subject matter of a particular claim in order to support that claim. Wang Labs. v. America Online, Inc., 197 F.3d 1377, 1383 (Fed.Cir.1999). In order to be covered by that claim, however, the subject matter must be sufficiently described so as to enable a person of ordinary skill in the art to practice the claimed invention. *Id*. Furthermore, although invalidity is not at issue in this motion, we will not construe the claims "to have a meaning or scope that would lead to their invalidity for failure to satisfy the requirements of patentability." *Id*. Thus, claim 2 is limited to embodiments that the specification enables.

The specification of the '824 patent discloses a soft padding member (50) which wraps around plastic border sections (40 and 42) at the waistline. Together, the border sections (40 and 42) form the plastic layer edge referred to in the claims. Thus, in the absence of soft padding member, the plastic layer edge has three exposed surfaces. The plastic layer edge includes the plastic border section (40) exposed on the interior, baby-facing side of the waistline, the plastic border section (42) exposed on the exterior, mommy-facing side of the waistline, and both border sections (40 and 42) exposed at the termination of the waistline (in the upward direction when the diaper is worn by a baby standing upright). The soft padding member (50) is divided into three sub-parts (50a, 50b, and 50c) that cover all three exposed areas of the border sections (40 and 42). Claim 2 requires a soft padding member to present a soft surface along the inside of the diaper

waistline. It does not require padding at the top or outside of the diaper waistline. With respect to the specification, claim 2 claims protection when the interior baby-facing side of the border section 40 is protected by sub-part 50c of the soft padding member 50 (for example, when sub-parts 50b and 50c are not necessarily present). Since claim 2 is enabled as written, there is no cause to read in the wraparound feature.

The prosecution history simply readdresses the preferred embodiment in the specification and, for the same reasons, does not limit Tracy to embodiments having soft padding members that wrap around.

Although we have construed claim 2 to not require a wrap around feature, we must still construe the claim language "despite said plastic layer edge." The claim language appears to imply that, but for the soft padding member, a plastic layer edge would present a non-soft surface along the inside of the diaper. Indeed, the specification and prosecution history command this interpretation. In the specification, Tracy discloses a sub-part of the padding member (50c) that covers an otherwise exposed plastic layer edge (40). Moreover, in amending the claims to include "despite said plastic layer edge", she made the following representation to the PTO:

[N]one of the prior art addresses the problem solved by the claims as amended ... [A] problem addressed by the invention is that a plastic edge is involved. In the manufacture of diapers, the plastic edges may be heat sealed edges and/or may be sharp edges. The present invention adds soft padding located along a waistband portion. *The effect of this is to provide some protection against the edge of the plastic*.

Arquest 56.1 Statement, Exhibit C at 7. (emphasis added). Additionally, when distinguishing her invention over the prior art, she represented to the PTO Board of Patent Appeals and Interferences that she was claiming a "soft padding member located in the waist region and *intended to avoid direct contact with the skin of the wearer of an edge portion of a plastic layer of the diaper*." Arquest 56.1 Statement, Exhibit D at 5. (Emphasis added). In light of the specification and prosecution history, we interpret "despite said plastic layer edge" to mean that the plastic layer edge would be otherwise more exposed to the wearer's skin but for the padding member there between.

Applying the claims as construed by the court to the accused Diapers, no reasonable jury could find that the plastic edge in the Arquest Diapers would be more exposed in the absence of the elastic member. Tracy states that in the Arquest Diapers, "the plastic edge is separated from the baby's skin by the 'fluted elastic' member." This is only a half-truth. As stated above, the waistband portion of the Arquest Diapers is comprised of three layers: a baby-facing liquid-permeable layer, an intermediate elastic member, and a mommy-facing liquid-impermeable plastic layer. Thus, the mommy-facing plastic layer is separated from the baby's skin by the fluted elastic member *and* by the baby-facing liquid-permeable layer. The plastic edge in the Arquest Diapers is no more exposed in the absence of the elastic member than in its presence. Thus, as a matter of law, the Arquest Diapers do not infringe claim 2 of the '824 patent.

### **II.** The Arquest Pants

Arquest contends that its Arquest Pants do not infringe claim 2 for two reasons: (1) the Pants do not have "a plastic layer having an edge at the edge of the diaper" and (2) the alleged soft padding member is not "distinct from all of said body-portion layer[s]".

# A. At the Edge of the Diaper

Arquest moves for non-infringement as to the Arquest Pants on the basis that they do not have a plastic edge

at the edge of the diaper. Inspection of the Arquest Pants (Exhibit J to Arquest 56.1 Statement) reveals that the plastic edge is approximately three-quarters of an inch from the edge of the diaper. Tracy admits that the plastic edge is "not 'at' the edge of the diaper but near the edge." Tracy's Opp. at 17. There is no basis to interpret the claim language "at" to mean "near." Thus, Tracy effectively concedes that the Arquest Pants do not literally infringe claim 2. The Arquest Pants might nevertheless infringe under the doctrine of equivalents if the plastic edge, which is near the diaper edge, "perform[s] substantially the same function in substantially the same way to achieve substantially the same result." Creo Products, 305 F.3d at 1351. The range of equivalents available to Tracy, however, may be limited by prosecution history estoppel. *See* Southwall Techs. v. Cardinal IG Co., 54 F.3d 1570, 1579 (Fed.Cir.1995).

During prosecution of the '824 patent, Tracy added the element "a plastic layer having an edge at the edge of the diaper" to claim 1 and to all claims depending from claim 1. Arquest 56.1 Statement, Exhibit C at 2. With regard to that change, she made the following representation to the PTO:

Claims 26 and 34 [ (claims 1 and 10 in the issued patent) ] have been amended to call for plastic material at edges ... Thus, a problem addressed by the invention is that a plastic edge is involved. In the manufacture of diapers, the plastic edges may be heat sealed edges and/or may be sharp edges. The present invention adds soft padding located along a waistband portion. The effect is to provide some protection against the edge of the plastic.

Id at 7. She further represented to the PTO Board of Patent Appeals and Interferences that claim 1 "specifically claim[s] a soft padding member located in the waist region and intended to avoid direct contact with skin of the wearer of an edge portion of a plastic layer of the diaper." Arquest 56.1 Statement, Exhibit D at 5. She further amended claim 1 to include the language "despite said plastic layer edge" consistent with her representations to the PTO. Arquest 56.1 Statement, Exhibit C at 2. Perhaps most significant is Tracy's admission that "the novelty of the claimed invention was that the soft padding member provides protection from what would otherwise be an *exposed plastic edge at the waistband*." Arquest 56.1 Statement para. 18 (admitted) (emphasis added). In order to receive some patent protection, Tracy was forced to limit her claims to only those diapers that had plastic edges *not* at the edges of the diapers. *See* Southwall, 54 F.3d at 1579 ("prosecution history estoppel limits the range of equivalents available to a patentee by preventing recapture of subject matter surrendered during prosecution of the patent"). Thus, as a matter of law, the Arquest Pants do not infringe claim 2 of the '824 patent.

### **B.** Soft Padding Member Being Distinct From All of Said Body-Portion Layers

Arquest also moves for non-infringement as to the Arquest Pants on the basis that the alleged padding member is not "distinct from all of said body portion layer[s]". The alleged padding member in the Arquest Pants is the "backsheet layer." Tracy Opp. at 17. The backsheet layer spans the entire body of the Arquest Pants and is therefore a body-potion layer. The claim specifically calls for a padding member that is distinct from all of the body-portion layers. Since the soft padding member is integral with one of the body-portion layers, literal infringement is precluded. Infringement under the doctrine of equivalents is also precluded because to extend claim coverage to soft padding members that are not distinct from all of the body-portion layers, as the claim element requires, would entirely read that element out of the claim. *See* Warner-Jenkinson Co. v. Hilton Davis Chem., 520 U.S. 17, 39 n. 8 (1997) ("if a theory of equivalence would entirely vitiate a particular claim element," the theory in inapplicable). Furthermore, Tracy was under an obligation to respond to Arquest's argument and evidence that there was no padding member distinct from all of the

body-portion layers. *See* Celotex, 477 U.S. at 333 n. 3 ("Once the moving party has attacked whatever record evidence-if any-the nonmoving party purports to rely upon, the burden of production shifts to the nonmoving party"). Tracy completely ignored this issue in her opposition brief. Thus, as a matter of law, the Arquest Pants do not infringe claim 2 of the '824 patent.

#### CONCLUSION

Based on the foregoing analysis, we grant the motion for summary judgment. The Arquest Diapers do not infringe claim 2 for two independent reasons: (1) the elastic member material is not absorbent and (2) the elastic member material does not present a soft surface along any portion of the inside of the diaper waistband despite the plastic layer edge. The Arquest Pants do not infringe claim 2 for two independent reasons: (1) the plastic layer edge is not at the edge of the diaper and (2) the alleged soft padding member is integral with one of the body-portion layers.

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