

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION**

THE OHIO WILLOW WOOD COMPANY,

Plaintiff,

v.

**Case No. 2:04-cv-1223
JUDGE GREGORY L. FROST
Magistrate Judge Abel**

ALPS SOUTH, LLC,

Defendant.

OPINION AND ORDER

This is a patent infringement case involving Plaintiff The Ohio Willow Wood Company (“OWW”), and Defendant ALPS South, LLC (“ALPS”). Before the Court are ALPS’s Motion for Summary Judgment on the Issue of Collateral Estoppel (ECF No. 145), OWW’s Memorandum in Opposition (ECF No. 149), and ALPS’s Reply in Support (ECF No. 153). In its Motion, ALPS contends that OWW’s infringement claims are barred by the collateral estoppel effect of the court’s decision in *Ohio Willow Wood Co. v. Thermo-Ply, Inc.*, No. 9:07-cv-274, 2009 U.S. Dist. LEXIS 127488 (E.D. Tex. Nov. 20, 2009), *aff’d*, 440 F. App’x 926 (Fed. Cir. 2011) (“*Thermo-Ply*”). For the reasons set forth below, ALPS’s Motion is **GRANTED IN PART AND DENIED IN PART**.

I. Background

OWW is the owner of U.S. Patent No. 5,830,237 (“the ’237 patent”), which issued on November 3, 1998. The ’237 patent is titled “Gel and Cushioning Devices” and involves technology related to coverings for amputees employing a prosthesis. The relevant specification to the patent discloses a device in the form of a cushioned sock that fits over a residuum, or an

amputation stump, so as to provide a cushion between the residuum and the artificial limb. The “sock” has an open end for introduction of the residuum and a closed end opposite the open end. Additionally, the device features a gel coating on the interior surface of the “sock,” preferably comprised of a block copolymer and mineral oil compound, intended to ease discomfort and undesirable noise effects.

On December 27, 2004, OWW commenced this action, claiming that ALPS infringed on numerous claims of the ’237 patent. Many of the disputed claims were linked to Claim 1, which at that time read:

A tube sock-shaped covering for enclosing an amputation stump, said covering having an open end for introduction of said stump and a closed end opposite said open end, said covering comprising fabric in the shape of a tube sock coated on only one side thereof with a foamed or non-foamed gel composition comprising a block copolymer and mineral oil.

U.S. Patent No. 5,830,237 col.13 ll. 53-59 (filed Mar. 5, 1996).

Pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996), this Court convened a *Markman* hearing in January 2006 and issued its first claim construction opinion in this case on March 31, 2006. (ECF No. 50.) The Court construed the term “coated on only one side” to mean “the presence of a layer of a substance on a surface of a fabric, with no observable penetration of the substance onto the opposing surface of the fabric.” (*Id.* at 14.)

A. Reexamination of the ’237 Patent

On October 5, 2006, ALPS’s President, Dr. Aldo Laghi, requested an ex parte reexamination of the ’237 patent by the United States Patent and Trademark Office (“PTO”). The PTO Examiner granted the reexamination request and, on March 7, 2008, issued a Notice of

Intent to Issue Ex Parte Reexamination Certificate (“NIIRC”) addressing Claim 1 of the ’237 Patent. (Def.’s Mot. Ex. B, ECF No. 145-4.) In his Statement of Reasons for Patentability and/or Confirmation, the Examiner expressly stated that “Claim 1 is patentable because the prior art fails to disclose or suggest a tube sock-shaped covering for enclosing an amputation stump, wherein the covering has a coating of a polymeric material *residing on only an interior surface thereof.*” (*Id.* at 2 (emphasis in original).)

The Examiner also referred specifically to the reexamination of a related patent, Patent No. 6,964,688 (“the ’688 Patent”). During the reexamination proceeding for the ’688 patent, the Examiner noted that OWW presented a sample of a Silipos Silosheath product that “exhibited gel on its exterior.” (*Id.* at 3) Proposed amendments to Claim 1 of the ’688 patent “were discussed in order to more clearly recite that the polymeric material is resident *on only an interior surface of the fabric* and does not bleed through to the outside.” (*Id.* (emphasis in original).)

With respect to the reexamination of the ’237 patent, the Examiner proposed amending Claim 1 as follows:

A tube sock-shaped covering for enclosing an amputation stump, said covering having an open end for introduction of said stump and a closed end opposite said open end, said covering comprising fabric in the shape of a tube sock **and having a coating of polymeric material residing on only an interior surface** [coated on only one side] thereof, **said polymeric material comprising** [with] a foamed or non-foamed gel composition comprising a block copolymer and mineral oil.

(*Id.* at 2.)¹

The Examiner indicated that this amendment “is seen to overcome the Silipos Silosheath

¹Matter enclosed in brackets appeared in the patent, but was proposed to be deleted by the Examiner; matter printed in bold underline indicates additions proposed by the Examiner.

references” that formed the basis for Dr. Laghi’s reexamination request “since the claim limitation ‘having a coating of polymeric material residing on only an interior surface therefore [*sic*, thereof]’ is expressly defined by the [patent owner] to mean that the polymeric material is coated ***on*** the interior surface of the fabric with no polymeric material bleeding through the fabric to the exterior surface.” (*Id.* at 4 (emphasis in original).) On September 2, 2008, the PTO issued its Ex Parte Reexamination Certificate, which deemed Claim 1 to be patentable as amended above. *See* Ex Parte Reexamination Certificate, U.S. Patent No. 5,830,237 C1 col.2 ll.6-13 (issued Sept. 2, 1998).

Three days after the first reexamination certificate issued, Dr. Laghi requested a second reexamination of the ’237 patent. Ultimately, the Examiner rejected Claims 1 to 23 of the ’237 Patent as “unpatentable” over the Silipos “Comfort Zone” liner products and other prior art. *See Ex Parte Ohio Willow Wood Co.*, No. 2011-010158, slip op. at 5-6 (B.P.A.I. Sept. 30, 2011). The Examiner also rejected the claims in the ’237 Patent based on a declaration from a Jean-Paul Comtesse, who claimed that Silipos developed a line of products that had *no* gel bleeding through to the outer surface of the liner. *Id.* at 8.

OWW appealed the Examiner’s decision to the Board of Patent Appeals and Interferences (“BPAI”), which reversed the Examiner’s decision to reject the ’237 Patent claims on reexamination.² As to Claim 1 of the ’237 Patent, the BPAI found insufficient evidence to support the Examiner’s conclusion that the Silipos “Single Socket Gel Liner” “was covered in fabric with no gel bleed-through.” *Id.* at 10. Following the BPAI’s reversal, the PTO issued an

²Claim 1 was amended for purposes of appeal to the BPAI, but the terms “coating” and “residing on only an interior surface” remained undisturbed in the claim as amended for appeal.

Ex Parte Reexamination Certificate on November 29, 2011. The reexamined patent recited Claim 1 as follows:

A tube sock-shaped covering for enclosing an amputation stump, *said amputation stump being a residual limb*, said covering having an open end for introduction of said [stump] *residual limb* and a closed end opposite said open end, said covering comprising fabric in the shape of a tube sock [and], *said fabric* having a coating of [polymeric material] *a foamed or non-foamed block copolymer and mineral oil gel composition* residing on only an interior surface thereof[, said polymeric material comprising a foamed or non-foamed gel composition comprising a block copolymer and mineral oil].

Ex Parte Reexamination Certificate, U.S. Patent No. 5,830,237 C2 col.2 ll.4-14 (issued Nov. 29, 2011).³

Following the two reexaminations, the parties continued to dispute the import of language within Claim 1. Following a *Markman* hearing held in February 2012, the Court construed the Claim 1 term “having a coating of a foamed or non-foamed block copolymer and mineral oil gel composition residing on only an interior surface thereof” to mean “having a layer of a block copolymer and mineral oil gel composition on the interior surface of a fabric, with no penetration of the substance reaching the exterior surface of the fabric.” (Order and Opinion 15-16, ECF No. 150.)

B. The *Thermo-Ply* Litigation

During the pendency of this case, OWW was involved in another patent infringement lawsuit, the *Thermo-Ply* case in the Eastern District of Texas, relating to a related patent to the '237 Patent. In *Thermo-Ply*, OWW filed suit in the Eastern District of Texas, alleging that defendant Thermo-Ply, Inc. infringed 44 claims of Patent No. 7,291,182 (“the '182 Patent”).

³Matter in bold brackets appeared in the patent, but was deleted and is no longer part of the patent; matter printed in italics indicates additions made to the patent.

The '182 Patent is a continuation of the '237 Patent, and similarly discloses prosthetic liners made from a fabric coated with gel. *See* U.S. Patent No. 7,291,182, col.1 ll.1-36 (filed July 23, 1998). Thermo-Ply moved for summary judgment in the case, arguing that all of OWW's asserted claims of the '182 Patent were invalid as obvious within the meaning of 35 U.S.C. § 103(a).⁴

Claim 1 of the '182 Patent at issue in *Thermo-Ply* disclosed—

A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end, said fabric coated seamlessly on only an inside surface thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump when said liner is worn by a user thereof.

Thermo-Ply, slip op. at 4 (quoting '182 Patent, col. 14 ll. 7-16). The *Thermo-Ply* court's summary judgment decision focused mainly on this claim; in particular, the district court considered whether Claim 1 of the '182 Patent would have been obvious to a person of ordinary skill in the art based on the prior art of the Silipos Silosheath and United States Patent No. 4,923,474 ("the Klasson Patent"). *Id.* at 4-11.⁵

OWW argued that claim 1 of the '182 Patent was not obvious because neither the Silosheath nor any other relevant prior art disclosed a fabric cushion liner that is coated with gel

⁴35 U.S.C. § 103(a) provides: "A patent may not be obtained though the invention is not identically disclosed or described as set forth in [35 U.S.C. § 102], if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made."

⁵In *Thermo-Ply*, the parties agreed that a person of ordinary skill in the art was "a practicing prosthetist having at least two years of clinical experience as of December 31, 1994." *Thermo-Ply*, slip op. at 4.

only on one side, without the gel bleeding through to the exterior surface of the fabric. *See id.* at 5. OWW further contended that no one of ordinary skill in the art of prosthetics would have combined prior art references to achieve a fabric coated on only one side without bleed through. *Id.* at 6.

The *Thermo-Ply* court acknowledged that “there is no question that a thin layer of bleed-through is evident to the touch” on the Silosheath. *Id.* at 5. But in the final analysis, this difference between the Silosheath and OWW’s claimed invention was not enough to prevent the district court from invalidating for obviousness claim 1 of the ’182 Patent. The *Thermo-Ply* court concluded that claim 1 of the ’182 Patent was obvious based on a combination of the Silosheath and the Klasson Patent (as embodied in a product known as the “ICEROSS” liner). Though OWW argued that its invention was (1) patentable over the Silosheath because the Silosheath had bleed-through and (2) patentable over the ICEROSS because that product was simply a gel liner that required a separate fabric to be donned over it to facilitate insertion into a prosthesis (as opposed to the one-piece liner claimed in the ’182 and ’237 Patents), the *Thermo-Ply* court was not convinced—

OWW argues that earlier liners like the ICEROSS had a separate fabric that is donned over the liner to facilitate insertion into the prosthesis. Mr. Kania [inventor] testified at the hearing that a single piece liner would be easier to use than one that required the wearer to take on and off two or more layers. That is true, but it is also obvious. Because obviousness looks at combinations of prior art, each element of a claimed invention need not be present in a single piece of art for that invention to be obvious.

The ICEROSS liner had the thick gel to provide cushioning, and used a separate smooth fabric cover to facilitate insertion into the prosthesis. The thinner gel of the Silosheath was bonded to a smooth fabric, such that it was a single piece. It is true that the early versions of the Silosheath had some bleed through of gel, making it more difficult to insert into the socket of the prosthesis. However, . . . the choice of an impermeable fabric, through which gel does not bleed, for use in the inventions

claimed by the '182 patent was merely the selection of a well-known material that simply performed in accordance with its well-known properties.

Id. at 9-10 (citation omitted). Accordingly, the *Thermo-Ply* court concluded that the use of an “appropriate fabric” (*i.e.*, one that was impermeable to bleed-through) to create a single-piece liner was an obvious combination of the Silosheath and ICEROSS prior art that was unpatentable. The *Thermo-Ply* court therefore invalidated Claim 1 of the '182 Patent for obviousness.

The *Thermo-Ply* court went on to invalidate as obvious the remaining independent claims of the '182 Patent, none of which differed substantially from claim 1. These claims were as follows:

'182 Patent Claim Number	Claim Language
12	A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end for introduction of said stump and a closed end opposite said open end, said fabric coated seamlessly on only an inside thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; <i>wherein said polymeric cushioning gel is thicker at said closed end of said fabric than at said open end of said fabric</i> ; and wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump when said liner is worn by a user thereof.
22	A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end for introduction of said stump and a closed end opposite said open end, said fabric coated seamlessly <i>and directly</i> on only an inside thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump when said liner is worn by a user thereof.

<p>33</p>	<p>A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end for introduction of said stump and a closed end opposite said open end, said fabric coated seamlessly and directly on only an inside thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; wherein said polymeric cushioning gel is thicker at said closed end of said fabric than at said open end of said fabric; and wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump when said liner is worn by a user thereof.</p>
<p>43</p>	<p>A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end for introduction of said stump and a closed end opposite said open end, said fabric coated on only an inside thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; <i>wherein said liner is donned by inverting and rolling said liner onto said amputation stump</i>; and wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump after donning.</p>
<p>53</p>	<p><i>A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end for introduction of said stump and a closed end opposite said open end, said fabric coated on only an inside thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; wherein said polymeric cushioning gel is thicker at said closed end of said fabric than at said open end of said fabric; wherein said liner is donned by inverting and rolling said liner onto said amputation stump; and wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump after donning.</i></p>

Thermo-Ply, slip op. at 11-14 (quoting '182 Patent) (emphasizing differences from claim 1 of the '182 Patent). The *Thermo-Ply* court found that none of these claims could overcome the prior art

of the Silosheath and the Klasson Patent (as embodied in the ICECROSS). Each of the emphasized features above that were different from claim 1 were deemed to be obvious based on either the Silosheath or a combination of the Silosheath and the Klasson Patent. *Id.*

The *Thermo-Ply* court also invalidated each of the dependent claims as obvious. The court grouped the various dependent claims into six categories: there were (1) “varying thickness” claims relating to the thickness of the gel (claims 4, 15, 23, 34, 44, and 54), (2) “completely coated” claims specifying that the fabric was completely coated with gel (claims 5, 16, 27, 37, 47, and 59), (3) “vitamin” claims (claims 7, 18, 29, 39, 49, and 61) specifying that the polymeric gel include a vitamin, (4) “mineral oil” claims specifying that the polymeric gel include mineral oil (claims 9, 19, 30, 40, 50, and 62), (5) “docking means” claims that claimed “only a fabric cover comprising a docking means at the distal end” (claims 10, 20, 31, 41, 51, and 55), and (6) “molded docking means” claims specifying that the “docking means” be molded to the fabric on the liner’s exterior (claims 11, 21, 32, 42, 52, and 56). *Thermo-Ply* at 15-18. The court found each of these claims invalid for obviousness, albeit for varying reasons: the “varying thickness” claims employed an obvious technique (*id.* at 15); the “completely coated” claims were simply “common sense” based on the testimony of OWW’s own expert (*id.* at 16); the “vitamin” claims were admitted by the patentee to be “not new” (*id.*); the “mineral oil” claims were not new because mineral oil was used in the gel of the Silipos Silosheath (*id.*); and the “docking means” and “molded docking means” claims were obvious because they merely added a known technique to known prior art (*id.* at 17).

Having found each of the ’182 Patent claims at issue to be invalid for obviousness, the district court granted summary judgment in favor of Thermo-Ply. OWW appealed the district

court's decision to the Court of Appeals for the Federal Circuit. During the pendency of the appeal, and following their participation in the Federal Circuit's mediation program, the parties to *Thermo-Ply* entered into a tentative settlement agreement, conditioned upon the district court vacating the summary judgment ruling of the '182 Patent's invalidity. Toward that end, the Federal Circuit granted the motion of the *Thermo-Ply* parties to remand the case to the district court in order to allow the district court to entertain a motion to vacate. Upon remand, ALPS intervened in the *Thermo-Ply* case in the district court, opposing the motion to vacate. The district court ultimately denied the motion to vacate and allowed the summary judgment decision to stand. *Ohio Willow Wood Co. v. Thermo-Ply, Inc.*, 769 F. Supp. 2d 1065, 1068-71 (E.D. Tex. 2011).

With the district court denying the motion to vacate its ruling, OWW's appeal proceeded to be heard on the merits in the Federal Circuit. In a summary decision, the Federal Circuit affirmed the judgment of the district court, upholding the determination that the '182 Patent is invalid for obviousness. *Ohio Willow Wood*, 440 F. App'x 926.

Shortly after the affirmance by the Federal Circuit, ALPS filed its Motion for Summary Judgment on the Issue of Collateral Estoppel now pending before this Court. (ECF No. 145.) The parties have also filed motions for summary judgment addressed to the merits of this action, all of which are pending before the Court. (See ECF Nos. 162, 163, 164.) This Opinion and Order is addressed solely to ALPS's motion for summary judgment based on the collateral estoppel effect of the *Thermo-Ply* decision.

II. Discussion

A. Summary Judgment

ALPS moves for summary judgment on this entire case on the grounds of collateral estoppel. Summary judgment is appropriate “if the movant shows that there is no genuine issue of material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). The Court may therefore grant a motion for summary judgment if the nonmoving party who has the burden of proof at trial fails to make a showing sufficient to establish the existence of an element that is essential to that party’s case. *See Muncie Power Prods. v. United Techs. Auto., Inc.*, 328 F.3d 870, 873 (6th Cir. 2003) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 322, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986)).

In viewing the evidence, the Court must draw all reasonable inferences in favor of the nonmoving party, which must set forth specific facts showing that there is a genuine issue of material fact for trial. *Id.* (citing *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587, 106 S. Ct. 1348, 89 L. Ed. 2d 538 (1986)); *Hamad v. Woodcrest Condo. Ass’n*, 328 F.3d 224, 234 (6th Cir. 2003). An issue of fact is “material” if it might affect the outcome of the suit under the applicable law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986). The central issue is “whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law.” *Id.* at 251-52; *see also Hamad* at 234-35.

B. Collateral Estoppel

ALPS seeks summary judgment under Fed. R. Civ. P. 56(a) based on application of the collateral estoppel doctrine. Under the doctrine of collateral estoppel, a final judgment on the

merits in a prior case precludes relitigation in a later suit of issues that were actually litigated and determined in the first suit. For the doctrine to apply, the following elements must be present:

(1) the precise issue raised in the present case must have been raised and actually litigated in the prior proceeding; (2) determination of the issue must have been necessary to the outcome of the prior proceeding; (3) the prior proceeding must have resulted in a final judgment on the merits; and (4) the party against whom estoppel is sought must have had a full and fair opportunity to litigate the issue in the prior proceeding. *Pfeil v. State St. Bank & Trust Co.*, 671 F.3d 585, 601 (6th Cir. 2012) (quoting *Kosinski v. Comm’r*, 541 F.3d 671, 675 (6th Cir. 2008)).

In general, the law of the Federal Circuit governs issues relating to patent law whereas the law of the regional circuit (here, the Sixth Circuit) applies to nonpatent matters. *See Midwest Indus., Inc. v. Karavan Trailers, Inc.*, 175 F.3d 1356, 1359 (Fed. Cir. 1999). As applied to the doctrine of collateral estoppel, the Federal Circuit has explained that the application of the United States Supreme Court’s decision in *Blonder-Tongue Labs., Inc. v. University of Ill. Found.*, 402 U.S. 313, 91 S. Ct. 1434, 28 L. Ed. 2d 788 (1971), is a matter of patent law and a federal district court is therefore bound by the law of the Federal Circuit in adjudicating such issues. *See Pharmacia & Upjohn v. Mylan Pharms.*, 170 F.3d 1373, 1381 n.4 (Fed. Cir. 1999). In other words, the “exacting issue of the effect of a prior determination of invalidity on current patent claims is one of patent law.” *Collegenet, Inc. v. Applyyourself, Inc.*, No. CV-02-484, 2008 U.S. Dist. LEXIS 90156, at *8 (D. Or. Oct. 28, 2008) (citing *Pharmacia & Upjohn Co.*). In contrast, the law of the regional circuit governs application of more general collateral estoppel principles. *Id.*

By operation of collateral estoppel, a judgment of invalidity in one patent action renders

the same patent invalid in any subsequent action. *See Blonder-Tongue*, 402 U.S. at 349-50. Collateral estoppel may also operate to bar relitigation of common issues in actions involving *different but related* patents. *Mycogen Plant Science, Inc. v. Monsanto Co.*, 252 F.3d 1306, 1310 (Fed. Cir. 2001). Thus, contrary to OWW’s argument in opposition to ALPS’s motion for summary judgment, the collateral estoppel doctrine is not rendered inapplicable simply because *Thermo-Ply* involved the ’182 patent whereas this case involves the ’237 patent. Insofar as these two patents are related (the ’182 being a continuation of the ’237), collateral estoppel *can* theoretically bar relitigation here of identical *issues* adjudicated in the case involving the ’182 patent. Indeed, that is precisely what ALPS is asking this Court to do in this case with respect to the *Thermo-Ply* court’s determination that the various claims of the ’182 patent are invalid for obviousness.

Under Federal Circuit precedent, the key inquiry in determining the collateral estoppel effect of a previous adjudication is whether specific issues related to a patent’s validity have been determined in a prior proceeding. *Westwood Chem., Inc. v. United States*, 525 F.2d 1367, 1372 (Ct. Cl. 1975).⁶ “The realities of patent practice suggest that, merely because the invention, the patentee’s contribution to the art, is presented in varying language or varying combinations of elements does not necessarily mean that the issues bearing on nonobviousness of that concept or contribution vary from one claim to the next.” *Bourns v. United States*, 537 F.2d 486, 492 (Ct. Cl. 1976). Accordingly, where obviousness is the basis for a prior invalidity holding with regard to a related patent, a court must perform the inquiry set forth by the *Westwood* court in

⁶The United States Court of Claims was the precursor to the United States Court of Appeals for the Federal Circuit. *See South Corp. v. United States*, 690 F.2d 1368, 1370 (Fed. Cir. 1982) (en banc).

determining whether the unadjudicated patent claims are barred by collateral estoppel—

Thus, the inquiry should be whether the nonlitigated claims present new issues as to the art pertinent to the nonlitigated claims; as to the scope and content of that art; as to the differences between the prior art and the nonlitigated claims; and as to the level of ordinary skill in that art. If none of these inquiries raises any new triable issues, then the obviousness determination in the prior proceeding should be equally applicable to the nonlitigated claims.

Westwood, 525 F.2d at 1375.

The first step in undertaking this inquiry is to compare the adjudicated and unadjudicated claims—here, that entail a comparison of the '182 patent claims adjudicated in the Texas district court case and the '237 patent claims at issue in this case. *See id.* If the scope of the claims is identical, then there are no new issues relating to the obviousness determination and collateral estoppel would bar litigation of the unadjudicated claims. But if a claim comparison reveals a substantive difference between the adjudicated and unadjudicated patent claims, the court must go a “step further” in deciding the applicability of collateral estoppel. As explained in *Westwood*—

[S]uch a comparison may reveal some differences of a substantive nature. In that event, it will be necessary to go a step further and determine whether those differences are of a kind that would have been itemized in a *Graham* analysis [*Graham v. John Deere Co.*, 383 U.S. 1, 86 S. Ct. 684, 15 L. Ed. 2d 54 (1966)] as a difference between the claim and the prior art, or whether it was known in the prior art and is only a part of the claimed combination as a whole that provides the context in which the obviousness determination is made. If it is only of the latter character, *i.e.*, it is known in the prior art and does not alter the issue as to the differences between the claimed subject matter and the prior art, it is still necessary to assess the importance of the difference to the combination as a whole since it is from that standpoint that the obviousness determination must be made.

Id. In other words, even if the substantive differences identified by the patentee are disclosed in the prior art, collateral estoppel may not apply to invalidate the unadjudicated claims. “It is only where the claim comparison ‘indicates that the additional elements recited in the unadjudicated

claims do not distinguish the *claimed combination as a whole* from the prior art,’ that those newly asserted claims may not be litigated in a subsequent proceeding.” *Medinol Ltd.*, 341 F. Supp. 2d at 315-16 (quoting *Bourns*, 537 F.2d at 493); *see also Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1137 (Fed. Cir. 1985) (noting that the invention *as a whole* must be evaluated for obviousness); *Collegenet, Inc.* at *51-*52) (noting that collateral estoppel does not apply simply because additional elements are contained in prior art; court must determine whether additional elements raise “any new factual issues” when “viewed in combination with the rest of the claim”).

1. Claim 1 of the '237 Patent

In arguing for *Thermo-Ply* to have collateral estoppel effect in this litigation, ALPS first attacks Claim 1 of the '237 Patent at issue in this case. ALPS compares Claim 1 of the '237 Patent to Claim 1 of the '182 Patent, which the court invalidated for obviousness in *Thermo-Ply*. A side-by-side comparison of the two claims reveals the following—

Claim 1 of the '237 Patent	Claim 1 of the '182 Patent (invalidated for obviousness in <i>Thermo-Ply</i>)
<p>A tube-sock shaped covering for enclosing an amputation stump being a residual limb, said amputation stump being a residual limb, said covering having an open end for introduction of said residual limb and a closed end opposite said open end, said covering comprising fabric in the shape of a tube sock, said fabric having a coating of a foamed or non-foamed block copolymer and mineral oil gel composition residing on only an interior surface thereof.</p>	<p>A cushion liner for enclosing an amputation stump, said liner comprising a fabric covering having an open end, said fabric coated seamlessly on only an inside surface thereof with a polymeric cushioning gel that substantially conforms to the shape of said amputation stump when said liner is worn; wherein said liner is configured such that said polymeric cushioning gel is in contact with the skin of said amputation stump when said liner is worn by a user thereof.</p>

(*See* Def.’s Mot. Summ. J. Ex. A ('237 Patent) and Ex. G at 4 (reciting Claim 1 of '182 Patent),

ECF No. 145-9.) ALPS contends that what is described in Claim 1 of the '182 Patent “aptly describes what is claimed in claim 1 of the '237 Patent.” (*Id.* at 16.) OWW disagrees, contending that the features of Claim 1 of the '237 Patent indicated in bold type above differentiate that claim from invalidated Claim 1 of the '182 Patent in the *Thermo-Ply* litigation. (Pl.’s Opp’n 10, ECF No. 149.)

In opposing application of collateral estoppel, OWW first contends that the doctrine cannot operate here for the simple reason that the *Thermo-Ply* court did not discuss or consider the features indicated in bold with respect to Claim 1 of the '237 Patent. OWW says that “[w]hile the devices claimed by the '182 and '237 patents may be similar, they are not identical, which is required” for collateral estoppel to apply. (*Id.*) On this point, OWW is incorrect under the prevailing case law governing collateral estoppel in patent cases. The question is not whether the features of the '237 patent cited by OWW (*e.g.*, the “foamed or non-foamed block copolymer and mineral oil gel”) were adjudicated in *Thermo-Ply*, but, rather, whether any of these limitations “lends patentable significance to the claimed combination, thereby altering the issues bearing on the obviousness determination.” *Medinol Ltd.*, 341 F. Supp. 2d at 322 (citing *Bourns*, 537 F.2d at 490). In other words, unadjudicated differences between claim 1 of the '237 patent and invalidated claim 1 of the '182 patent will *not* foreclose application of collateral estoppel if the differences are not significant enough to lend “patentable significance” to the claimed invention. OWW’s insistence on a rigid requirement that the claims at issue be “identical” before collateral estoppel may apply is inconsistent with the law governing application of collateral estoppel in patent cases.

Turning to the differences between claim 1 of the '237 Patent and the invalidated claims

of the '182 Patent, OWW argues that the “foamed or non-foamed block copolymer” limitation was not recited in any of the claims at issue in *Thermo-Ply*. But the *Thermo-Ply* court invalidated for obviousness dependent claims 9, 19, 30, 40, 50, and 62 of the '182 patent, all of which claim “a polymeric gel with mineral oil.” *Thermo-Ply* at 16. Grouping all of these claims as the “mineral oil claims,” the *Thermo-Ply* court observed that mineral oil “was used in the gel of the Silipos sheaths—like the Silosheath—prior to 1995, as admitted by OWW’s expert, Mr. Michael, at deposition.” *Id.* OWW does not explain how the limitation on the mineral oil gel as being a “foamed or non-foamed block copolymer” distinguishes the claim 1 of the '237 Patent in a meaningful way from the mineral oil “polymeric gel” specified in the invalidated claims of the '182 Patent. OWW has therefore failed to establish how the limitation creates a *substantive difference* between claim 1 of the '237 Patent and the invalidated claims of the '182 Patent, much less how the difference “distinguish[es] the *claimed combination as a whole* from the prior art.” *Bourns*, 537 F.2d at 493 (emphasis added).

As for the other differences cited in bold type above, the Court likewise finds that these do not foreclose the application of collateral estoppel. OWW points to the claimed invention being described as a “tube-sock shaped covering” designed for an “amputation stump being a residual limb” and highlights these limitations as not being found in claim 1 of the '182 Patent invalidated in *Thermo-Ply*. While OWW is correct that these differences were not (and could not have been) litigated in *Thermo-Ply*, that does not end the collateral estoppel inquiry. The question is not whether these limitations contained in the '237 Patent were adjudicated in the prior case, but whether the difference “lends patentable significance to the claimed combination, thereby altering the issues bearing on the obviousness determination.” *Medinol Ltd. v. Guidant*

Corp., 341 F. Supp. 2d 301, 322 (S.D.N.Y. 2004). While OWW cites these differences, it makes no argument in its summary judgment opposition as to how these differences are “of a substantive nature,” such that they could conceivably differentiate claim 1 of the ’237 Patent claim from invalidated claim 1 of the ’182 Patent. *Westwood*, 525 F.2d at 1375. Without such a showing in response to ALPS’s motion for summary judgment, OWW cannot escape the collateral estoppel bar.⁷

“Where the differences revealed by a comparison of the claims do not vary the relevant issues bearing on obviousness, collateral estoppel should apply.” *Bourns*, 525 F.2d at 493 (citing *Westwood Chemical, Inc. v. Molded Fiber Glass Body Co.*, 380 F.Supp. 517 (N.D. Ohio 1973), *aff’d*, 498 F.2d 1115 (6th Cir. 1974)). Such is the case here. Though OWW has identified differences between claim 1 of the ’237 Patent and the invalidated claim 1 of the ’182 Patent, it has not shown a triable issue of fact with respect to how the differences “vary the relevant issues bearing on [the] obviousness” determination by the *Thermo-Ply* court. Without such a showing, “neither due process nor any provision of the patent statute would appear to require that the patentee be heard once again on those same issues and on the same obviousness determination simply because a different claim is involved.” *Bourns* at 492. The Court therefore concludes that the doctrine of collateral estoppel renders claim 1 of the ’237 Patent invalid for obviousness.

⁷As an additional argument, ALPS contends that the differences noted by OWW are present in “admitted prior art” contained in the text of the ’237 Patent, making claim 1 invalid for obviousness. This Court does not find invalidity on this basis. Whether there is “admitted prior art” that would render the additional limitations on claim 1 invalid for obviousness (which OWW disputes) is an argument for summary judgment *on the merits* and not an argument for collateral estoppel. See Part II.B.3, *infra*.

2. Dependent Claims 2, 4, 15, 16, and 20

In addition to claim 1, ALPS argues that the collateral estoppel effect of *Thermo-Ply* bars OWW from litigating claims 2, 4, 15, 16, and 20 of the '237 Patent. The language of these claims is as follows—

Claim Number	Claim Language
2	The tube sock-shaped covering as claimed in claim 1, wherein said gel has a thickness profile such that the gel is thicker at the closed end of the covering than at the open end.
4	The tube sock-shaped covering as claimed in claim 1, wherein said gel has a uniform thickness profile.
15	The tube sock-shaped covering according to claim 1, wherein said gel composition is a non-foamed gel composition.
16	The tube sock-shaped covering as claimed in claim 15, wherein said gel composition has a thickness of 0.150 – 0.500 inches.
20	The tube sock-shaped covering as claimed in claim 1, wherein said gel composition has a thickness of 0.150 – 0.500 inches.

ALPS argues that claims 2, 4, 16, and 20 are foreclosed by *Thermo-Ply* because the court there invalidated as obvious claims that similarly dealt with the varying or uniform thickness of the gel liner described in claim 1 of the '182 Patent. *See Thermo-Ply*, slip. op. at 15 (“Varying the thickness of the liner to dimensions within those previously used in the prior art does not create a patentable invention.”) (citing *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417, 127 S. Ct. 1727, 1740, 167 L. Ed. 2d 705 (2007)).

OWW does not contend that these claims contain limitations that were absent from the claims invalidated in *Thermo-Ply*. In fact, OWW makes no argument specific to these patent claims in its opposition to summary judgment, presumably resting its case on the arguments

raised in opposition to collateral estoppel being applied to bar claim 1 of the '237 Patent. But for the same reasons stated above with regard to claim 1, the Court finds that OWW is barred from litigating dependent claims 2, 4, 16, and 20; those claims are invalid for obviousness by virtue of the collateral estoppel effect of *Thermo-Ply*.

The same is true of dependent claim 15, which is differentiated from claim 1 only by its specification that the gel composition be “non-foamed.” As noted above with regard to claim 1 of the '237 Patent, the *Thermo-Ply* court invalidated for obviousness a number of dependent claims of the '182 Patent that dealt with the limitation of “a polymeric gel with mineral oil.” *Thermo-Ply* at 16. Nowhere in its response to ALPS’s motion for summary judgment does OWW explain how the limitation of a “non-foamed gel composition” distinguishes claim 15 from the mineral oil “polymeric gel” specified in the invalidated claims of the '182 Patent. If anything, OWW’s opposition to summary judgment suggests that there is nothing that differentiates dependent claim 15 of the '237 Patent from the invalidated “mineral oil claims” of the '182 Patent: whereas OWW illustrated in bold type differences between the claim language of other '237 Patent claims and the invalidated '182 Claims, there was no difference noted in claim 15 of the '237 Patent. (*See* Pl.’s Opp’n 6, ECF No. 149.)

For these reasons, the Court finds that dependent claims 2, 4, 15, 16, and 20 are invalid for obviousness based on the collateral estoppel effect of *Thermo-Ply*.

3. Dependent Claims 18, 19, and 21-23

OWW is also suing for infringement of dependent claims 18, 19, 21, 22, and 23. These dependent claims read as follows—

Claim Number	Claim Language
18	The tube sock-shaped covering according to claim 1, wherein said gel composition comprises 60 – 85% by weight mineral oil.
19	The tube sock-shaped covering as claimed in claim 18, wherein said fabric is a stretchable fabric having an elasticity of 10 – 400%.
21	The tube sock-shaped covering as claimed in claim 20, wherein said fabric is a stretchable fabric having an elasticity of 10 – 400%.
22	The tube sock-shaped covering as claimed in claim 1, wherein said fabric is a stretchable fabric having an elasticity of 10 – 400%.
23	The tube sock-shaped covering as claimed in claim 1, wherein said gel composition has a Shore A Durometer of from 1 – 20.

According to OWW, none of the limitations in bold type above were adjudicated by the *Thermo-Ply* court and, therefore, these claims cannot be barred by collateral estoppel. For its part, ALPS argues that collateral estoppel should still apply to bar these dependent claims, on the basis that the additional limitations “are perfect examples of adding well-known techniques to a known or obvious invention.” (Def.’s Reply 11, ECF No. 153.) *See KSR Int’l.*, 550 U.S. at 417 (noting that a claimed subject matter is obvious when it is “the mere application of a known technique to a piece of prior art ready for the improvement”). ALPS then cites to various pieces of prior art that demonstrate the obviousness of the limitations described in these dependent claims. (Def.’s Reply 11-12.)

The Court will not apply collateral estoppel to these dependent claims, as ALPS’s arguments for invalidity of these claims reach issues that were not decided by the *Thermo-Ply* court. In *Thermo-Ply*, the district court concluded (and the Federal Circuit affirmed) that the various ’182 Patent claims at issue were invalid for obviousness “over the combination of the Silosheath and the Klasson patent.” *Thermo-Ply*, slip. op. at 4; *see also id.* at 11-18. Thus, the

Silosheath and the Klasson patent were the prior art that the *Thermo-Ply* court considered in declaring the '182 Patent claims invalid for obviousness. But in arguing for collateral estoppel to bar the above-quoted dependent claims, ALPS pulls in additional pieces of prior art order to assert the merits-based argument (based on *KSR Int'l*) that OWW's dependent claims 18, 19, 21, 22, and 23 simply add "well-known techniques to a known or obvious invention." (Def.'s Reply 11, ECF No. 153.)

By going beyond the prior art considered by the *Thermo-Ply* court, ALPS has departed from arguing collateral estoppel and drifted into a discussion of the merits of the dependent claims. ALPS's arguments are entirely appropriate in the context of a summary judgment motion *on the merits*. But absent an indication that the additional prior art cited by ALPS was a basis for the *Thermo-Ply* court's decision, it is not appropriate for this Court to consider it in a collateral estoppel analysis. As the *Westwood Chem.* court explained, the collateral estoppel inquiry asks, in part, "whether the nonlitigated claims present new issues *as to the art pertinent to the nonlitigated claims*" as well as to "the scope and content of that art." *Westwood Chem.*, 525 F.2d at 1375 (emphasis added). By pulling in additional prior art not considered by the *Thermo-Ply* court in support of its claims, ALPS has necessarily created — not demonstrated the absence of — a new issue with respect to art pertinent to these dependent claims. The Court therefore denies ALPS's motion for summary judgment on collateral estoppel grounds as to dependent claims 18, 19, 21, 22, and 23 of the '237 Patent.⁸

⁸This does not, of course, mean that ALPS cannot prevail on the merits. ALPS may ultimately establish that these claims are also invalid for obviousness. For these claims, however, collateral estoppel is not a proper basis for reaching this conclusion. *See Medinol Ltd.*, 341 F. Supp. 2d at 323 n.117.

C. Full and Fair Opportunity to Litigate

In arguing against application of collateral estoppel, OWW also contends that it did not have a “full and fair opportunity to litigate” the claims of the ’237 Patent in the *Thermo-Ply* litigation. OWW’s arguments, however, are based entirely on the notion that “OWW could not have litigated the validity of the ’237 patent claims before the Texas District Court because the ’237 patent was not at issue.” (Pl.’s Opp’n 13, ECF No. 149.) Thus, OWW contends that it could not have possibly had the opportunity to litigate the obviousness of various limitations (such as the mineral oil ranges and the recitation of the “Shore A Durometer”) that were not contained within the asserted claims of the ’182 Patent at issue in *Thermo-Ply*.

OWW’s argument in this regard is unpersuasive. As ALPS aptly notes, OWW undoubtedly had a full and fair opportunity to litigate the question of whether the presence of the gel composition on *only* the interior surface of the tube sock-shaped covering was obvious to a person of ordinary skill in the art. (Def.’s Reply 15, ECF No. 153.) This issue was central to the *Thermo-Ply* litigation, was vigorously contested in that case, and promised to be an issue in this case in the absence of the *Thermo-Ply* adjudication becoming final. Indeed, OWW does not claim that it did not have a full and fair opportunity to litigate that issue in *Thermo-Ply*.

While it is true that some of the limitations set forth in the various claims of the ’237 Patent were not litigated in *Thermo-Ply*, this does not mean that OWW did not have a full and fair opportunity to litigate for purposes of applying the collateral estoppel doctrine. In patent cases, the question is not whether the limitations identified by OWW were adjudicated in the Texas case, but whether the nonadjudicated limitations “lend[] patentable significance to the claimed combination, thereby altering the issues bearing on the obviousness determination.”

Medinol Ltd., 341 F. Supp. 2d at 322. For claims 1, 2, 4, 15, 16, and 20 of the '237 Patent, OWW has not presented a genuine issue of material fact as to how the differences lend “patentable significance.” Absent that showing, the obviousness determination of the *Thermo-Ply* court applies equally to the claims of the '237 Patent, as discussed above.

D. Effect of BPAI Decision and USPTO Reexaminations

In another argument to avoid collateral estoppel, OWW points to (1) the decision of the BPAI to uphold the validity of the '182, '688, and '237 Patents and (2) the two reexaminations of the '237 patent, both of which resulted in the USPTO upholding the patent. (Pl.'s Opp'n 13-15, ECF No. 149.) OWW argues that these events cut against application of collateral estoppel because they evidence the presumed validity of the '237 Patent. (*See id.*) In the Court's view, neither the BPAI decision nor the USPTO reexaminations affect the application of collateral estoppel in this case.

In placing great emphasis upon the BPAI decision and the USPTO reexaminations, OWW is essentially arguing that this Court should allow those circumstances to trump any application of collateral estoppel in this case. This is another way of saying that this Court should overlook the decision of the *Thermo-Ply* court with regard to the obviousness of related patent claims because the *Thermo-Ply* court was incorrect. But it is well-settled that the correctness of a court's earlier decision is *not* a prerequisite to giving it collateral estoppel effect. *Westwood Chem.*, 525 F.2d at 1375.

Moreover, the Court is not persuaded that the '237 Patent is accorded a “presumption of validity” that trumps the application of collateral estoppel. OWW's position in this respect is incorrect, for the doctrine of collateral estoppel in patent cases is not so restrictive. *See Bourns*,

537 F.2d at 491. Though expressly acknowledging the principle that “each claim of a patent is entitled to a presumption of validity,” the *Bourns* court nevertheless observed nothing in any of those long-accepted principles that would foreclose application of collateral estoppel to claims whose differences “do not vary the relevant issues bearing on obviousness.” *Bourns*, 537 F.2d at 493. The Court has explained above why various claims of the ’237 Patent are “substantively the same” for purposes of applying collateral estoppel. The so-called “presumption of validity” that the ’237 Patent claims enjoyed following reexamination by the PTO does not overcome the doctrine of collateral estoppel when, as demonstrated above, claims of a related patent that have been shown to be “substantively the same” have been finally adjudicated as invalid for obviousness.⁹

E. Due Process

As a last ditch effort to avoid the collateral estoppel effect of *Thermo-Ply*, OWW raises a constitutional issue, arguing that application of collateral estoppel to invalidate claims of the ’237 Patent would deprive it of property rights without due process of law. This argument fails, however, as there is no constitutional infirmity that results from a proper application of collateral estoppel. “[I]f a patentee has once been heard on all the factual issues necessary to an

⁹OWW also contends that application of collateral estoppel is inappropriate because the *Thermo-Ply* court did not have the “benefit” of the BPAI’s decision upholding the validity of the ’182 claims. (Pl.’s Opp’n 13, ECF No. 149.) OWW cites no authority for the proposition that this circumstance should undercut the collateral estoppel effect of a final adjudication on the merits by a court. Moreover, the Court observes that OWW’s logic could be turned the other way around: in its decision with regard to the ’237 Patent, the BPAI stated, “We have not been made aware of any decision that may affect the outcome of the current appeal.” *Ex Parte Ohio Willow Wood Co.*, slip op. at 2. This statement begs the question of whether the BPAI would have viewed the *Thermo-Ply* summary judgment decision as affecting the outcome of the appeal, had it been made aware of it.

obviousness determination, and that determination already has been made adversely to one claim, neither due process nor any provision of the patent statute would appear to require that the patentee be heard again on those same issues and on the same obviousness determination simply because a different claim is involved.” *Bourns*, 537 F.2d at 492; *see also Blonder-Tongue Labs.*, 402 U.S. at 330 (stating that the application of nonmutual defensive collateral estoppel to prevent patentee from relitigating validity did not present a due process question).

In the analysis of the '237 Patent claims compared with the claims of the '182 Patent invalidated in *Thermo-Ply*, the Court determined that the *Thermo-Ply* court's determination of obviousness was readily applicable to claims 1, 2, 4, 15, 16, and 20 of the '237 Patent. Though OWW had the opportunity here to establish how any differences between these claims and the invalidated '182 Patent claims distinguished “the claimed combination as a whole from the prior art,” *Bourns* at 493, OWW has not presented a genuine issue of material fact to overcome summary judgment. Thus, it cannot be said that OWW is entitled to be heard again on the factual issues of obviousness that it has already litigated (and lost) in *Thermo-Ply*.

III. Conclusion

Defendant ALPS's Motion for Summary Judgment on the Issue of Collateral Estoppel is **GRANTED IN PART AND DENIED IN PART**. Plaintiff OWW's patent claims based on claims 1, 2, 4, 15, 16, and 20 of the '237 Patent are invalid for obviousness based on the collateral estoppel effect of *Thermo-Ply*. OWW's claims based on claims 18, 19, 21, 22, and 23 of the '237 Patent are not barred by collateral estoppel.

IT IS SO ORDERED.

/s/ Gregory L. Frost
GREGORY L. FROST
UNITED STATES DISTRICT JUDGE