UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PANTIES PLUS, INC.,
Petitioner,
v.

BRAGEL INTERNATIONAL, INC.
Patent Owner.

U.S. Patent No. 7,144,296
Issue Date: December 5, 2006
Inventors: David E. Chen, Jasper Chang, Alice Chang

Title: ATTACHABLE BREAST FORM ENHANCEMENT SYSTEM

Case Number: To Be Assigned

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,144,296 PURSUANT TO 35 U.S.C. §§ 311 *ET SEQ.* AND 37 C.F.R. § 42.100 *ET SEQ.*

TABLE OF CONTENTS

EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. 7,144,296 ("the '296 Patent")
1002	Declaration of Karin Yngvesdotter ("Karin Dec.")
1003	Prosecution History of the '296 Patent (App. Ser. No. 11/053,211), 11/1/2005 Office Action
1004	Prosecution History of the '296 Patent (App. Ser. No. 11/053,211), 1/23/2006 Amendment
1005	Prosecution History of the '296 Patent (App. Ser. No. 11/053,211), 4/21/2006 Notice of Allowance
1006	Prosecution History of the '720 Patent (App. Ser. No. 10/159,251), 12/31/2003 Final Office Action
1007	Prosecution History of the '720 Patent (App. Ser. No. 10/159,251), 2/10/2004 Declaration of Commercial Success, Long Felt Need, and Copying Under 37 C.F.R. §1.132.
1008	Prosecution History of the '720 Patent (App. Ser. No. 10/159,251), 2/5/2004 Amendment
1009	Prosecution History of the '720 Patent (App. Ser. No. 10/159,251), 2/27/2004 Notice of Allowance
1010	CA Application No. 2,101,509 ("Luckman")
1011	U.S. Patent No. 6,645,042 ("Davis")
1012	U.S. Patent No. 6,231,424 ("Valentin")
1013	U.S. Patent No. 5,755,611 ("Noble")
1014	U.S. Patent No. 6,857,932 ("Chen")
1015	U.S. Patent No. 5,922,023 ("Mulligan")
1016	U.S. Patent No. 3,196,878 ("Hedu")
1017	Memorandum of Points and Authorities in Support of Bragel International, Inc.'s Motion for Summary Judgment of Infringement, *Bragel International, Inc. v. Styles For Less, Inc.*, et al., 8:15-cv-01756-R (8/11/2016).
1018	BLANK
1019	Select Portions from VideoTaped Deposition Transcript of Frances Harder, *Bragel International, Inc. v. Charlotte Russe, Inc.*, et al., 2:15-cv-08364-R (9/21/2016).
1020	Claim Construction Order in *Bragel International, Inc. v. Telebrands Corporation*, Case No. 05-01141, Jan. 18, 2007.
1021	Memorandum Opinion and Order, *Randi Black v. Ce Soir Lingerie Co.,*

	Inc., Case No. 2:06-cv-544 (8/15/2008).
1022	Prosecution History of the '720 Patent (App. Ser. No. 10/159,251), 2/26/2004 Interview Summary
1023	Prosecution History of the '296 Patent (App. Ser. No. 11/053,211), 5/3/2005 Office Action
1024	Prosecution History of the '296 Patent (App. Ser. No. 11/053,211), 7/12/2005 Patent Owner's Response and Terminal Disclaimer

I. Notice of Real-Party-In-Interest Under 37 C.F.R. § 42.8(b)(1)

The real-party-in-interest for this Petition is Panties Plus, Inc. d/b/a PPI Apparel Group ("Petitioner"). No other entities or persons other than the Petitioner has authority to direct or control Petitioner's actions or decisions relating to this petition. Petitioner is funding all of the fees and costs of this petition.

II. Notice of Related Matters Under 37 C.F.R. § 42.8(b)(2)

Bragel International, Inc. ("Patent Owner") filed a complaint alleging infringement of the U.S. Patent No. 7,144,296 ("the '296 Patent") in a lawsuit against Petitioner in the following District Court cases: *Bragel International, Inc. v. Charlotte Russe, Inc. et al.*, 2:15-cv-08364 (CACD) and *Bragel International, Inc. v. Styles For Less, Inc. et al.*, 2:15-cv-01756 (CACD) ("Current Litigations"). PPI was not added to these cases until January 26, 2016 (15-cv-08364) and March 2, 2016 (15-cv-01756).

The '296 Patent has also been asserted in at least the following lawsuits: *Bragel International, Inc. v. AGaci LLC*, 2:15-cv-08439 (CACD); *Bragel International, Inc. v. E-Retail Society d/b/a Bra Society et al*., 2:15-cv-07148 (CACD); *Bragel International, Inc. v. Charlotte Russe, Inc.,* 2:14-cv-07691 (CACD); *Bragel International, Inc. v. Remi Collections, LLC,* 2:14-cv-02946 (CACD); *Bragel International, Inc. v. Love Culture, Inc*., 2:11-cv-04336 (CACD).

Other than the 2:15-cv-08364 (CACD) and 2:15-cv-01756 (CACD) civil actions, Petitioner was not a party to any of these proceedings.

Petitioner submits that the grounds presented in this Petition are not redundant. The Petition contains arguments regarding the patentability of the '296 Patent not previously presented to the United States Patent and Trademark Office.

III. Notice Under 37 C.F.R. § 42.8(b)(3) and (b)(4)

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Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney has been filed with this Petition. Petitioner consents to electronic service by email at: skolmykov@kskiplaw.com, gkroub@kskiplaw.com, info@kskiplaw.com.

IV. Payment of Filing Fee Under 37 C.F.R. § 42.103

A fee set forth in 37 C.F.R. § 42.15(a) accompanies this petition.

V. Grounds For Standing Under 37 C.F.R. § 42.104(a)

Petitioner hereby certifies that the patent for which review is sought is available for *inter partes* review and that the Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the

grounds identified in the petition. Petitioner was served with a complaint in Case No. 2:15-cv-08364 on April 5, 2016, and Petitioner was served with the complaint in Case No. 2:15-cv-01756 on March 17, 2016.

VI. Statement of Precise Relief Requested Per 37 C.F.R. § 42.104(b)(1)-(2)

Petitioner respectfully requests that claims **1**, **2**, and **5** of the '296 Patent be cancelled based upon the following grounds of unpatentability:

Ground	'296 Claims	Basis
Ground 1	**1**, **2** and **5**	Rendered obvious under 35 U.S.C. §103 over Luckman, in view of Davis.
Ground 2	**1**, **2** and **5**	Rendered obvious under 35 U.S.C. §103 over Valentin in view of Chen.
Ground 3	**1**, **2** and **5**	Rendered obvious under 35 U.S.C. §103 over Noble in view of Mulligan and Hedu.

VII. INTRODUCTION

This is a textbook obviousness case, where the prior art teachings neatly fit together like pieces of a puzzle to construct a predictable solution. The purported solution is trivial and the Patent Owner has admitted that "the claims do not contain complicated, technical language." (Ex. 1017 at 7).

The '296 Patent is directed to an alleged improvement to existing backless, strapless bras. The purported invention of the '296 Patent, which was issued *prior* to the Supreme Court's *KSR* decision on obviousness, aims to solve a well-

recognized need in the prior art – to add breast cleavage and push-up enhancement to a known "backless, strapless bra" – a problem that has a finite number of specifically identified predictable solutions, and more particularly, the single most simplistic solution of them all – to push breasts closer together, thus leading to a predictable result of adding cleavage and push-up.

The purported invention consists of three trivial and familiar claimed elements: a pair of silicone breast forms, a pressure sensitive adhesive layer and a connector. All three elements were well known in the prior art before the priority date of the '296 Patent and the Patent Owner admits this fact. All three elements were utilized in existing designs of women's bras or brassieres, with each performing their intended function. All three elements were specifically utilized to enhance the natural look and feel of a woman's breast. The purported claimed invention of the '296 Patent simply combines those familiar prior art elements with each performing the same exact function they had been known to perform, thus yielding no more than one would expect from such a combination. (Ex. 1002, ¶56)

That is why the Patent Owner was left with only one choice during prosecution – to bring forward secondary considerations of non-obviousness. As the evidence will show, the alleged secondary considerations have no nexus to the claimed features, but are at best tied to the features long known in the prior art.

In sum, as the Petition will show, the state of the prior art, the simplicity and availability of the components making up the claimed invention, and an explicit need in the prior art for a backless, strapless bra with cleavage and push-up support, compels a conclusion of obviousness as to the subject matter of each of the challenged claims.

VIII. BACKGROUND

A. The '296 Patent

1. The Specification of the '296 Patent

The '296 Patent relates generally to an "attachable breast form enhancement system", and more specifically, to a "pair of breast forms" which "have a re-usable pressure sensitive adhesive layer for adjoining to the user's skin and are adjustably adjoined together by a connector". (Ex. 1001, 1:16-22). The connector allows the user to "customize the amount of breast cleavage" and to provide a desired push-up enhancement effect. (*Id.*, 1:21-23). The patent explains that "women who… desire larger, more shapely breasts" typically choose between two options: 1) "using rudimentary externally worn articles, such as foam pads" or 2) "undergoing a surgical operation to be fitted with a breast implant." (*Id.*, 1:27-33). Because of the risks of surgery and the health dangers associated with silicone breast implants themselves, "women…opt to use one of the many types of externally worn articles" known in the prior art. (*Id.*, 1:33-41). These "articles" can be "worn for

the purpose of either enhancing or replacing human breasts" that have been removed as part of medical treatment, and are referred to as "breast forms." (*Id.*, 1:45-49).

The specification of the '296 Patent acknowledges that breast forms in the prior art included a "wide range of breast enhancers, breast inserts, and breast prostheses." (*Id.*, 1:49-51). Breast forms "made from a silicone gel material that is completely encased by plastic film material" were known to "look[] like a natural human breast" when worn and to "feel natural to the user" and were thus "popular". (*Id.*, 1:51-56).

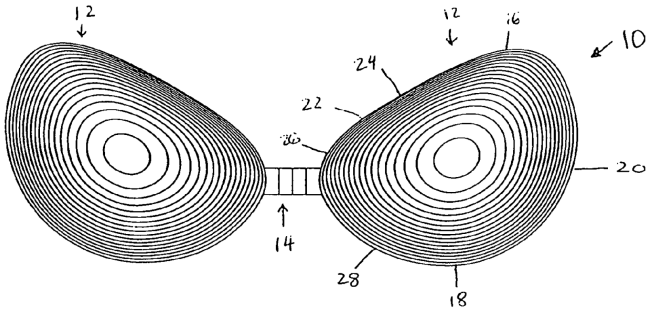
At the same time as women desired breast forms for their enhancement qualities, there were shortcomings with traditional bras, particularly when wearing a "backless dress or a halter top," for example. (*Id.*, 1:63-65). Thus, as the specification makes clear, there were "backless, strapless bras" in the prior art, including those that "used non-permanent adhesives, such as a disposable double-sided tape, to secure the bra to the user". (*Id.*, 1:65 – 2:1).

But the "known backless, strapless bras … provided limited means for enhancing breast size and shape," and suffered from two purported problems: 1) those with "full-size cups" were "not designed to easily accommodate a breast form" and 2) they did not "use an adhesive that allows the user to easily remove and re-use the bra". (*Id.*, 2:1-7).

In response to these purported problems with known backless, strapless bras, the '296 Patent suggests a "system that provides the benefits of a breast form, yet also the benefits of a backless, strapless bra". (*Id.*, 2:9-10). To improve performance, the system would include a "permanent and re-usable adhesive that allows the user to position the breast forms…without concern of…shifting from that position". (*Id.*, 2:12-14). Additionally, the "system should have means for pushing-up the breasts and enhancing breast cleavage". (*Id.*, 2:14-16).

The '296 Patent describes breast forms that ostensibly incorporates those suggested improvements. Fig. 1 illustrates a "breast form system having a pair of breast forms adjoined by a connector" according to the purported invention of the '296 Patent (*Id.*, 2:34-35; Fig. 1):

Fig. 1



The '296 Patent teaches that the "breast forms have an interior surface with a pressure sensitive adhesive layer that adjoins to the user's breasts". (*Id.*, 2:66-3:1). This adhesive layer "can be a permanently grown pressure sensitive adhesive" that adheres more strongly to the breast forms than they cohere to the

user's breasts when worn. (*Id.*, 3:1-4). A connector, which "adjoins the separated breast forms by attaching to the inner sides of the breast forms" can be used to pull together the user's breasts to create the desired cleavage effect. (*Id.*, 3:4-5). By adding the "pressure sensitive adhesive layer" and the "connector", the "breast forms system allows a user to eliminate the use of traditional bras". (*Id.*, 3:10-11). Instead, the patent teaches that the user can attach the breast forms directly to their breasts and use the connector to both adjoin them and create a cleavage effect as desired. (*Id.*, 3:10-25). The '296 Patent further suggests "the placement of the connector…will impact the degree of cleavage and push up enhancement." (*Id.*, 3:54-56). The '296 Patent acknowledges that "silicone gel encased between thermoplastic film material" is *not* a novel feature and provides alternative breast form materials, including "any liquid, air, or gel encased by any foam, plastic, rubber, fabric or molded unwoven fiber material," expressly stating that "a wide range of materials, structures, and sizes are within the scope of the breast forms 12 for purposes of this invention." (*Id.*, 4:1-8; 1:51-53).

Ultimately, the '296 Patent purports to provide "a replacement for the traditional bra", where users are able "to customize the shape and size of their breasts, as well as their breast cleavage and push-up enhancement". (*Id.*, 7:49-52; 3:21-24). The '296 Patent's "breast forms system" can be worn by the user "without needing any other type of bra". (*Id.*, 7:55-57). What purportedly

distinguishes the invention from then "currently available bras and enhancement systems" is "[t]he presence of both the pressure sensitive adhesive layer and the connector" on the breast forms. (*Id.*, 7:57-60). But those two purportedly novel characteristics were well-known in the prior art, and one of ordinary skill in the art would have found their inclusion on existing breast forms an obvious approach to addressing the purported and well recognized problems in the prior art.

2. Challenged Claims of the '296 Patent

Claim 1 recites:

> [**1.a**] An improved backless, strapless breast form system to be worn in place of a traditional bra, comprising:
>
> [**1.b**] a pair of breast forms, wherein each breast form comprises: a volume of silicone gel encased between thermoplastic film material;
>
> [**1.c**] a concave interior surface facing towards a user's breast having a pressure sensitive adhesive layer for securing the breast form to the user's breast; and
>
> [**1.d**] a connector adapted to adjoin the breast forms together, wherein the connector is positioned between inner sides of each of the breast forms.

The challenged claims of the '296 Patent are directed to "a pair of breast forms," comprising "a volume of silicone gel encased between thermoplastic film material," with "a pressure sensitive adhesive layer" on "a concave interior surface" of the breast form to secure the breast form to the user's breast, and a "connector … positioned between inner sides of each of the breast forms" so that the breast forms can be adjoined together. (Ex. 1001, Claim 1). Challenged claims

2 and 5 depend from independent challenged claim 1, and add that the connectors "are adapted to cooperatively engage" and "are permanently attached to the breast forms," respectively. (*Id.*, Claims 2, 5).

As will be shown in this petition, any purported novel features of the claimed breast forms were expressly disclosed in the prior art, and including those features in the claimed breast forms was obvious. As such, the challenged claims of the '296 Patent, which were allowed prior to the *KSR* decision on obviousness, should never have been issued in the first place.

B. Prosecution History of the '296 Patent and Its Parent

The '296 Patent issued from U.S. Patent Application No. 11/053,211 ("the '211 Application"), filed February 7, 2005. The '211 Application purports to be a continuation of U.S. App. No. 10/801,901, filed on March 15, 2004 and issued as Patent No. 6,852,001 ("the '001 Patent"), which purports to be a continuation of the U.S. App. No. 10/159,251, filed on May 31, 2002, and issued as Patent No. 6,758,720 ("the '720 Patent"). Thus, the earliest priority date for the '296 Patent is not earlier than May 31, 2002.

Prosecution History of the '720 Patent

The prosecution record of the parent, the '720 Patent, is pertinent to the discussion of the allowance of the '296 Patent. During the prosecution of the '720 Patent, the USPTO issued a Final Rejection on December 31, 2003, rejecting

multiple claims under 35 U.S.C. 102(b) as being anticipated by Noble (U.S. Patent No. 5,755,611) ("Noble"). The Examiner stated:

> In regard to claims 1, 2, 7, 16, 20-23, 26, 28 and 29 **Noble et al. discloses a backless, strapless bra** (22) comprising a pair of bra cups (22) with an interior surface (38) which **comprises pressure sensitive adhesive layer** (46, 48) to adhere the bra to the user's skin **and the connector** (50) as broadly claimed. The adhesive of the adhesive layer would inherently seep into the crevices of the fabric used (i.e. within the knit of the tricot fabric) and would therefore be incorporated within the interior surface or fabric which contracts the skin of the wearer. (See Noble et al, figures 18-21; col. 5, line 51-col. 6, line 22). In regard to claim 2, **Noble et al discloses the connector with the first and second portions decorative laced tying bands** (5) as seen in figure 18 and col. 6, lines 3-6. In regard to claims 7 and 26 **the adhesive is permanently given as broadly claimed** and defined in the specification since the adhesive would seep into the fabric covering layer next to the wearer's skin and when removed from the wearers body remains on the pad and would therefore have the level of adhesion as claimed. **Applicant's own specification on pages 4-6 states that any type of padding material structure and adhesive attachment can be used.** The preferred method being the silicone pad with adhesive "permanently grown" into the surface of the pad adjacent the skin of the wearer."

(Ex. 1006 at 4-5; emphasis added)

The above mentioned rejected claims included all of the same features of the challenged claims except the "volume of silicone gel encased between thermoplastic film material" limitation. However, the Examiner took

> Official Notice that **it is well known that silicone gel materials are used in bra pads to add bulk to the wearer's breasts**. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a breast form of thermoplastic and fabric with silicone as disclosed in Huang [U.S. Pat. No. 6,823,820] and which is well known in the art.

(Ex. 1006 at 7; emphasis added).

The Examiner went out of her way to address the newly added claims and stated that:

> It is noted that the substitution of the Noble et al pad structure with the pad structure seen in the Dr. Leonard's catalog, page 15, a copy of which is included in the present action, would also have been obvious, especially in view of applicant's statements on pages 4-6 of the specification which indicate that any type of known pad can be used. **It also would have been obvious to one of ordinary skill in the art at the time the invention was made to use silicone pad as seen in the Dr. Leonard's catalog which is a silicone pad with a polyurethane film covering since the pad is well known in the prior art** and known to give a desired aesthetic effect such as smoothness, a certain density and the replication of the texture of a human breast."

(Ex. 1006 at 10; emphasis added).

Significantly, in response to the final rejection, the Patent Owner did *not* challenge a single statement mentioned above by the Examiner, but instead cancelled all rejected claims and submitted a Declaration of Commercial Success, Long Felt Need, and Copying Under 37 C.F.R. §1.132. (Ex. 1007). The Patent Owner also added new claim 30 which added two new limitations: (1) "a volume of silicone gel encased between thermoplastic film material;" and (2) "substantially the entire interior surface comprises a pressure sensitive adhesive layer disposed thereon for adjoining the breast forms to the user's breast." (Ex. 1008). Notably, the second limitation is much narrower than the similar limitation in the '296 Patent, which states "a concave interior surface facing towards a user's breast having a pressure sensitive adhesive layer for securing the breast form to the

user's breast." Following a telephonic interview on February 26, 2004, (Ex. 1022), an agreement with respect to the new claim 30 with the new limitation was reached and Notice of Allowance followed on February 27, 2004:

> None of the cited references, alone or in combination, disclose a backless, strapless breast form system including a volume of silicone encased between thermoplastic film material with the concave interior surface facing the breasts of the wearer **with substantially the entire interior surface having a pressure sensitive adhesive disposed from edge to edge** and with connector positioned on the inner sides of the breast forms to connect the breast forms together as claimed in claim 30.

(Ex. 1009; emphasis added).

Of course, the new limitation of the adhesive substantially covering the entire surface is absent from the presently challenged claims of the '296 Patent. Furthermore, the Reasons for Allowance were silent as to the Secondary Considerations of Non-Obviousness Declaration submitted by the Patent Owner. (Ex. 1007).

Prosecution History of the '296 Patent

During the prosecution of the '296 Patent, the USPTO issued a first Office Action on May 3, 2005, rejecting claims 1-9 under the doctrine of obviousness-type double patenting over claims 1-7 of the '720 Patent and claim 1 of the '001 Patent. (Ex. 1023). In response, to obviate the rejections, on July 12, 2005, the Patent Owner submitted a Terminal Disclaimer. (Ex. 1024).

On November 1, 2005, the USPTO issued a second Office Action rejecting claims 1-9 as unpatentable under 35 U.S.C. §103(a). (Ex. 1003). Specifically, challenged claims 1, 2 and 5 were rejected as being obvious over Noble et al. (U.S. Pat. No. 5,755,611) in view of Mulligan (U.S. Pat. No. 5,922,023). (*Id*. at 2). The Examiner stated that Noble disclosed a dual breast form brasserie system with a connector and the forms were adhesively connected to the wearer's breasts. (*Id*. at 2). The only feature that was missing from Noble, according to the Examiner, was the volume of silicone gel encased between a thermoplastic film material. (*Id*. at 2). Mulligan, however, did disclose a breast form of silicone gel encased between thermoplastic film material, and Examiner concluded that,

> it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the specific breast form structure of Noble et al. with the teaching of Mulligan to construct it of known silicone and thermoplastic film structures in order to provide the breast structure and aesthetic appeal of the Mulligan form.

(*Id*. at 2).

With respect to claims 2 and 5, the Examiner also noted that the "connector of Noble comprises a first tie portion and a second tie portion that cooperatively engage and wherein the first and second portions are permanently attached to the beast forms." (*Id*. at 3).

In response, the Patent Owner submitted an Amendment, modifying the term "a concave interior surface" to read "an interior surface shaped to fit over a

natural female breast." (Ex. 1004 at 4). In remarks, the Patent Owner did not dispute that all the elements of the pending claims were disclosed in the prior art. Instead, the Patent Owner argued that "there is no motivation to combine" Noble and Mulligan since the two "are directed to two very different purposes." (Ex. 1004 at 4). Specifically, Patent Owner noted that because Mulligan relates to a breast prosthesis, it was designed to replace a single surgically removed breast, rather than both breasts and "[t]here is no suggestion in Mulligan et al. that its prosthesis could be used as part of a bra." (*Id*. at 4-5). As such, the Patent Owner concluded that "there would be no motivation for one skilled in the art to modify said breast prosthesis to include two prostheses linked together with a connector." (*Id*. at 5).

Patent Owner further argued that Noble's bra cup covers only a portion of a woman's breast, and Mulligan was intended to replace an entire breast. As such, Patent Owner argued, "Mulligan provides no guidance on how its prosthesis could be modified to accomplish such a configuration." (Ex. 1004 at 5-6).

The Examiner accepted Patent Owner's arguments, but amended the claim back to the originally filed language, and issued an Allowance. (Ex. 1005, Examiner's Amendment). Significantly, the Examiner applied the *old* "teaching, suggestion, motivation" test in determining whether the invention was obvious in

view of the prior art. Such "rigid application" of the test was explicitly overruled in the Supreme Court's *KSR* decision:

> The diversity of inventive pursuits and of modern technology counsels against confining the obviousness analysis by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasizing the importance of published articles and the explicit content of issued patents. In many fields there may be little discussion of obvious techniques or combinations, and market demand, rather than scientific literature, may often drive design trends.

KSR International Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) ("*KSR*").

But of course, that is precisely what the Examiner did by ignoring the '296 Patent's own specification and by accepting the Patent Owner's argument that Mulligan did not explicitly suggest that its prosthesis can be used as part of a bra. In fact, as discussed below, a person of ordinary skill in the art looking to provide cleavage and push-up enhancement would have simply added a well-known generic connector utilized in a variety of bras and brassieres, such as Noble's or Hedu's, to adjoin the silicone prostheses of Mulligan together. (Ex. 1002, ¶¶51-54). As articulated by the Supreme Court, *no explicit teaching, suggestion or motivation is necessary within Mulligan itself*, but the knowledge generally available to one of ordinary skill in the art is all that's necessary to modify Mulligan and make the desired combination. (*Id.*). The Examiner also failed to consider numerous other combinations that would have been obvious to one of ordinary skill in the art, including combinations of known dual breast form

systems with connectors and known silicone encased in thermoplastic structures containing adhesives that were adapted for use with women's breasts that were not prostheses. (*Id.*, ¶55).

C. New Questions of Patentability

This Petition presents questions of patentability that have not been considered by the Patent Office. The Examiner allowed the presently challenged claims **1, 2** and **5** without citing to the prior art references discussed in **Ground 1**. However, **Grounds 2 and 3** do rely on some references cited by the Examiner, during the prosecution of the '296 Patent and its parent. But as will be shown below, the Examiner applied the wrong obviousness standard that was dismissed just over 16 months later by the Supreme Court's *KSR* decision.

A patent is invalid "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." 35 U.S.C. §103(a)(pre-AIA); *Graham v. John Deere Co*., 383 U.S. 1, 13-14 (1966). The Supreme Court in *Graham v. John Deere* stated that the obviousness analysis under §103 involves the following factual inquires: 1) determining the scope and content of prior art; 2) ascertaining the differences between the prior art and the claims at issue; 3)

resolving the level of ordinary skill in the pertinent art; and 4) secondary considerations of non-obviousness. *Id.* At 17-18.

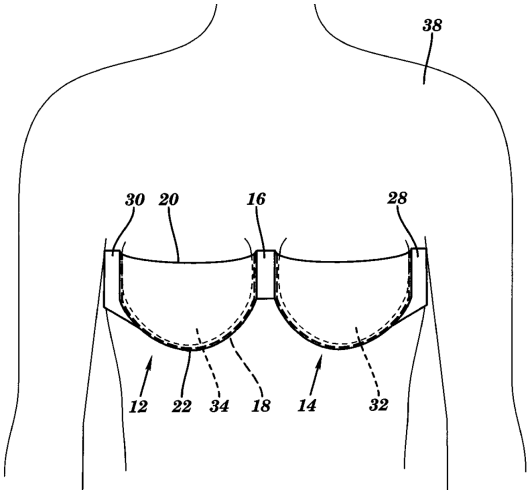
"[I]f a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability." *KSR* at 420 (2007). In evaluating whether the claims of a patent are obvious, courts should be "mindful that '[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.'" *Id.* at 416. As the Supreme Court recognized in *KSR*, the nature of the mechanical arts is such that "identified, predictable solutions" to known problems may be within the technical grasp of a skilled artisan. *Id.* at 421.

D. The Scope and Content of the Prior Art

The prior art pertaining to the purported invention of the '296 Patent is overwhelming and the purported invention itself is a simple one. There are multiple references disclosing each element of the challenged claims. (Ex. 1002, ¶56). The asserted claims are directed to backless, strapless bras with silicone pressure-sensitive adhesive cups that also include a center connector. All of these elements were well-known in the art before the priority date of the '296 Patent. (*Id*., ¶¶56-78).

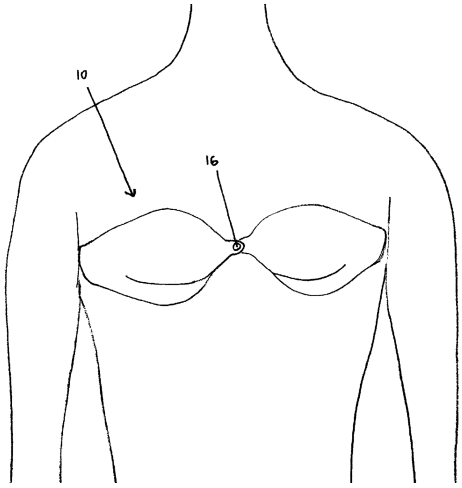
1. Backless, strapless bras with connectors were known.

U.S. Patent No. 6,231,424 ("Valentin") – Valentin issued on May 15, 2001 from an Application filed February 1, 1999. Valentin is therefore prior art to the '296 Patent under 35 U.S.C. §102(b) (Pre-AIA). Valentin describes a strapless and backless bra, consisting of two cups with a center connector and side tabs for securing the bra to the wearer, "providing uniform lift and support and enhanced appearance of the breasts of a user": (Ex. 1012; 1:5-9; Fig. 2)

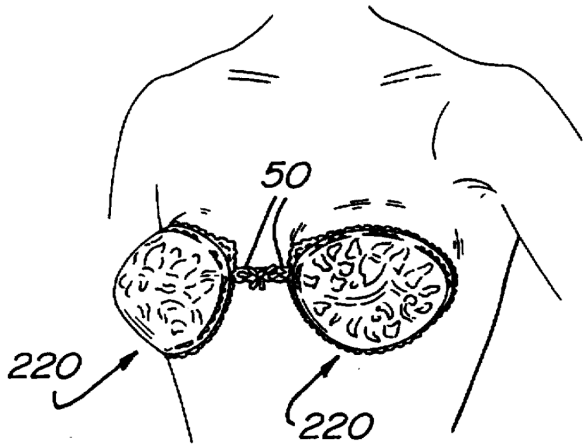


U.S. Patent No. 6,645,042 ("Davis") – Davis issued on November 11, 2003 from an Application filed by another on October 17, 2001 which is before the purported invention date of the '296 Patent, i.e., May 31, 2002. Davis is therefore prior art to the '296 Patent under 35 U.S.C. 102(e) (Pre-AIA). Davis discloses a "strapless, backless bra … including two cups and a connector" for detachably connecting the two cups in the center. (Ex. 1011, Abstract; 2:49-53). An adhesive tape is disposed on the inside surface of each cup for attachment of the cups to the user. (*Id*.) The Davis bra "enhances the appearance and provides uniform support

of the user's breasts" and is designed "for use with a greater variety of backless or other revealing clothing" (*Id.*, 2:29-34; Fig. 1):



U.S. Patent No. 5,755,611 ("Noble") – Noble issued on May 26, 1998 from an Application filed December 26, 1996. Noble is therefore prior art to the '296 Patent under 35 U.S.C. §102(b) (Pre-AIA). Similar to Valentin, Noble describes a backless, strapless brasserie comprising two "self-supporting" soft breast cups, which can be "pressed against the body", and thereby adhered to the body without the need for hooks and straps. (Ex. 1013, 2:6-15; 2:53). In Noble, the adhesive bra cups, which are connected together by a decorative band, contain a renewer adhesive on the inside surface which allows the cups to be worn several times. (Ex. *Id.* at Abstract; 3:58-64; 5:59-6:5). Noble's brasserie is "comfortable to wear, … has a soft natural shape … feels like skin … providing a natural yet supportive appearance to a woman's bust" (*Id.*, 2:10-15; Fig. 18):



2. Silicone breast forms with pressure sensitive adhesive were known

CA Application No. 2,101,509 ("Luckman") – Luckman published on January 29, 1995 from an Application filed on July 28, 1993. The publication date is more than one year prior to the priority date of the '296 Patent, i.e., May 31, 2002. Luckman is therefore prior art to the '296 Patent under 35 U.S.C. 102(b) (Pre-AIA). Luckman discloses "an external breast enhancement" acting "as a breast enlargement device, to be attached to the chest, over the natural female breasts." (Ex. 1010, Abstract, p. 2) Luckman's breast enhancement device proposes an improvement over foam rubber fillers or pads to provide an improved construction comprising silicone cups with adhesive for longer wear that has a "more natural appearance and feel to the woman wearing it." (*Id*., p.3).

U.S. Patent No. 6,857,932 ("Chen") – Chen issued on February 22, 2005 from an Application filed "by another" on February 12, 2002 which is before the purported invention date of the '296 Patent, i.e., May 31, 2002. Chen is therefore

prior art to the '296 Patent under 35 U.S.C. §102(e) (Pre-AIA). Notably, the '296 Patent and Chen have one common inventor – David E. Chen. However, the '296 Patent includes two additional inventors, namely Jasper Chang and Alice Chang. Accordingly, the Chen reference has a different inventive entity because not all inventors are the same. *See* MPEP 2136.04 ("'Another' means other than applicants, *In re Land,* 368 F.2d 866, 151 USPQ 621 (CCPA 1966), in other words, a different inventive entity. The inventive entity is different if not all inventors are the same. The fact that the application and reference have one or more inventors in common is immaterial." *Ex parte DesOrmeaux*, 25 USPQ2d 2040 (Bd. Pat. App. & Inter. 1992)).

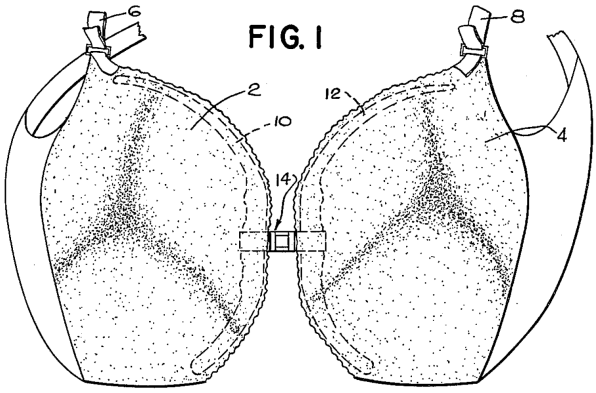
Chen discloses an *identical* breast form to the '296 Patent that is "encased with fabric laminated thermoplastic film" except the connector. (Ex. 1014, 1:5-9). The Chen breast form includes "a permanently grown, re-usable pressure-sensitive adhesive (PSA) backing on an interior surface of the breast form" for attaching to user's breasts, thus preventing the breast form moving from its desired position. (*Id*., 2:19-26, 27-32). According to Chen, such breast form "looks like a natural human breast when worn and feels natural to the user." (*Id*., 1:35-40).

U.S. Patent No. 5,922,023 ("Mulligan") - Mulligan issued on July 13, 1999 from an Application filed on April 30, 1997. Mulligan is therefore prior art to the '296 Patent under 35 U.S.C. §102(b) (Pre-AIA). Mulligan describes two silicone

"shell-like bodies" in the form of a breast prosthesis, wherein the cup is enclosed "between synthetic resin films" and has an adhesive layer on the inside, covering more or less of the inside of the cup, which attaches to the skin and can be used repeatedly. (Ex. 1015, Abstract, 1:34-38; 1:50-52, 58-59; 2:65-67).

3. Bra Center Connectors Were Known

Connectors of various types were also known for their use in bras to provide a cleavage and lift enhancing effect. (Ex. 1002, ¶¶71-75). For example, U.S. Patent No. 3,196,878 ("Hedu") describes a brassiere with two cups, a band attached to the sides of the cups that go around the torso in back, and an adjustable center connector of a clasp assembly type in place between the two cups. (Ex. 1016, 1:7-13; Fig. 1):



Hedu issued on July 27, 1965 from an Application filed on September 28, 1962. Hedu is therefore prior art to the '296 Patent under 35 U.S.C. §102(b) (Pre-AIA).

E. Person of Ordinary Skill in the Art ("POSITA")

In view of the subject matter of the '296 Patent, a person of ordinary skill in the art ("POSITA") as of the patent's filing date would typically have knowledge and at least one year's experience in the design, manufacture, and evolution over time of women's brassieres. (Ex. 1002 at ¶16). The Patent Owner has taken the position in the Current Litigations that one of skill in the art has at least 7-10 years of experience in designing apparel, including bras and other intimate apparel or 4-5 years of experience in developing intimate apparel plus a mechanical or chemical engineering degree. Such definition, however, is "unnecessarily restrictive and inconsistent with the straightforward, commonplace nature of the technology as used in the intimate apparel field at issue in this case, and the broad nature of the '296 Patent claims." (Ex. 1002 at ¶17). Indeed, Patent Owner along with their expert, admit that "[t]he claims do not contain complicated, technical language that would require special construction." (Ex. 1017, p.7). Petitioner's definition is further supported by the district court's order on obviousness in another case involving Bragel's NuBra product embodying the purported invention of the '296 patent, which concluded that due to the overwhelming prior art in the area of bras "there is no specialized skill involved in the art" of improvements to existing bras or other breast coverings using well-known prior art components. (Ex. 1021 at 7-8; Ex. 1002, ¶17).

IX. Claim Construction Under 37 C.F.R. § 42.104(b)(3)

In accordance with the Trial Practice Guide, Petitioner hereby provides "a simple statement that the claim terms are to be given their broadest reasonable interpretation, as understood by POSITA and consistent with the disclosure." (77 Fed. Reg. 48764). The broadest reasonable interpretation of a claim term may be the same as or broader than the construction under the Philips standard, but it may not be narrower. *See Facebook, Inc. v. Pragmatus AV LLC*, 2014 U.S. App. LEXIS 17678, *11 (Fed. Cir. 2014).

Only one relevant term of the '296 Patent was subject to construction in the above-mentioned litigations brought by the Patent Owner. The rest of the relevant terms were given their plan and ordinary meaning. While not binding on the Office, these claim constructions are instructive of at least the broadest reasonable interpretation and will be used throughout the Petition. Patent Owner along with their expert, has admitted that "[t]he claims do not contain complicated, technical language that would require special construction." (Ex. 1017, p.7).

In *Bragel International, Inc., v. Telebrands Corp.*, Case No. cv05-00141 (C.D. Ca.), the Court construed the term "pressure sensitive adhesive layer" as it appears in claim 7 of Patent Owner's U.S. Pat. No. 6,852,001 (parent of '296 Patent) to mean "a layer of any type of pressure sensitive adhesive that is suitable for removably attaching a breast form to a user's skin." (Ex. 1020 at 26). The Court noted that "non-permanent adhesives are within the scope of the invention"

and that the specification "expressly notes that the adhesive used can include double-sided tape." (*Id.* at 23). The Court also emphasized that "[t]he amount and type of pressure sensitive adhesive layer can vary, as can the portion of the interior surface to which is attached." (*Id.* at 5).

X. Analysis

A. GROUND 1: Claims 1, 2 and 5 are Rendered Obvious Under 35 U.S.C. § 103 over Luckman in View of Davis.

1. Claim 1 is invalid.

1.a An improved backless, strapless breast form system to be worn in place of a traditional bra, comprising:

Davis teaches a "strapless, backless bra" that includes first and second cups with a connector for detachably and pivotally connecting the cups. (Ex. 1011, Abstract; 2:44-47). Davis provides a strapless and backless bra that can be worn "with a variety of revealing clothing that creates symmetrical appearance of the user's breasts and that provides uniform lift and support while also permitting adjustment to conform to or enhance the shape of the user's breasts." (Ex. 1011, 2:15-20). Accordingly, Davis alone teaches a backless, strapless breast form system that can be worn in place of a traditional bra.

Luckman also teaches a backless, strapless breast form system in a form of "an external breast enhancement" device "to be attached to the chest, over the natural female breasts." (Ex. 1010, Abstract, p. 2). Luckman emphasizes "[t]his

adaptation is not a prosthesis. However, for purposes of clarification is referred to herein as such." (*Id*.) Luckman differentiates from "fillers or pads for bras that are made out of many materials, including foam rubber." (*Id.*) According to Luckman, "these devices can only be worn inside a bra," while Luckman's device "may also be worn without a bra inside outer garments." (*Id*., p. 3, ll. 9-10). The result is a breast form that "can be adhered to the chest wall of the person so that it will have a natural appearance and feel as well as normal flexibility in movement." (Ex. 1010, p. 5, ll. 24-26). The "concave rear wall portion" of the device "provides and acts as support and bra to the natural female breast." (Ex. 1010, p. 3, l. 19). Thus, Luckman's breast enhancement device can be worn in place of a traditional bra underneath a dress.

1.b a pair of breast forms wherein each breast form comprises: a volume of silicone gel encased between thermoplastic film material;

Luckman teaches a pair of breast forms with each breast form comprising a volume of silicone gel encased between thermoplastic film material. Specifically, Luckman teaches that "the external breast enhancement is comprised of a thin flexible shell of an elastomeric material, latex or similar … and a filler retained within the confines of the thin shell having soft flexible physical characteristics." (Ex. 1010, p. 3, ll. 11-14). A POSITA would appreciate that the disclosure of "elastomeric material, latex or similar" encompasses a thermoplastic film material for performing the same function, namely, encasing the injected silicone. (Ex.

1002, ¶88). This is because the '296 Patent specification teaches that: "The breast forms also include any liquid, air, or gel encased by any foam, plastic, rubber, fabric, or molded unwoven fiber material, as well as any solid material that is suitable for external breast enhancement… Accordingly, it is understood that a wide range of materials, structures, and sizes are within the scope of the breast forms 12 for purposes of this invention." (Ex. 1001, 4:1-8).

The filler is "a flexible silicone rubber material injected into the flexible shell of latex rubber adjacent to the peripheral edge thereof." (Ex. 1010, p. 3, 14-16; p. 5, ll. 5-7; Claim 2 ("filler 18 is located within this flexible shell 12 and is constructed of suitable material having soft flexible physical characteristics. The filler can be suitably constructed in the form of silicone rubber" or "silicone foam"). The filler "can be a silicone elastomer of the type sold by DOW CORNING CORPORATION as SILASTIC RTV silicone rubber." (Ex. 1010, p. 4, ll. 19-20). Similarly, a POSITA would recognize that silicone rubber is an elastomer that may come in a form of gel. (Ex. 1002, ¶88).

1.c a concave interior surface facing toward a user's breast having a pressure sensitive adhesive layer for securing the breast form to the user's breast; and

Luckman teaches breast enhancement device that "may be attached to the chest wall, over the natural breasts, with medical adhesive allowing it to be worn for long periods of time, and it can be worn to bed and in the water." (Ex. 1010, p.

3, ll. 7-9). The device "forms a concave rear wall portion" that "provides and acts as support and bra to the natural female breast." (*Id.* p. 3, ll. 16-19). The rear portion of the device "is concave" for attaching to the breast. (*Id.* p. 4, ll. 10-11). Luckman also discloses that the "device can be attached to the chest wall with a strong silicone adhesive of non-toxic nor hypoallergenic properties. (*Id.*, p.3, ll. 22-23). In addition, the Luckman breast form is "attached to the chest wall by applying adhesive to the peripheral rear margin 14 and pressing it into place." The adhesive "may be a medical adhesive silicone Type A sold by DOW CORNING CORPORATION under its trademark SILASTIC." (Ex. 1010, p. 5, ll. 17-19). As discussed above, with reference to the construction of the term "pressure sensitive adhesive layer," the specification "expressly notes that the adhesive used can include double-sided tape" and as noted by the Court, the amount can vary "as can the portion of the interior surface to which is it attached. (*See* Sec. IX above). Thus, the infringing adhesive does not need to cover the entire rear portion of the breast form. Accordingly, this feature is anticipated by Luckman.

Davis teaches using "double-sided adhesive tape" disposed on the inside surface of each breast cup. (Ex. 1011, 2:49-53; 4:52-63; Claim 20). The inside surface of the cups includes tape with the "breast-side medical grade non-sensitizing adhesive 26 for adhering the bra cups to the user that is non-irritating to the skin." (*Id*.) Davis explicitly suggests that such double-sided tape is "pressure

sensitive" and is "well known in the art." (*Id*.) "It is understood that many equivalent adhesive materials exist and may be used to adhere cups 12 and 14 of the bra 10 to the user." (*Id.*)

1.d a connector adapted to adjoin the breast forms together, wherein the connector is positioned between inner sides of each of the breast forms.

Davis expressly teaches such a connector that is positioned between the inner sides of each of the breast forms. (See. Fig. 1 above.) Davis's goal is to "provide a strapless, backless bra having a connector system that allows separate closed cell foam bra pads to function as a one-piece bra." (Ex. 1011, 2:38-41). The Davis connector is designed for "detachably connecting the two cups." (Ex. 1011, 2:51-52). Davis discloses that "right and left cups 12, 14 of the bra 10 are attachable to each other by a connector 16, which may be any mechanism capable of connecting cups 12 and 14 and permitting movement of the cups relative to each other, such as a snap, as shown." (Ex. 1011, 4:12-16; Figs. 1-3). The connector "enhances the appearance of the user's breasts by creating more cleavage." (Ex. 1011, 4:50-51). Overall, Davis's "backless, strapless bra" with a connector "enhances the appearance and provides uniform support of the user's breasts." (Ex. 1011, 2:29-31).

2. Claim 2 is invalid.

2.a The breast form system of claim 1 wherein the connector comprises a first portion attached to the inner side of one of the breast forms and a second portion attached to the inner side of the other breast form,

As discussed above in **1.d**, Davis teaches a connector. The connector disclosed in Davis is a "snap" connector that has two portions attached to the inner side of both breast forms. "In the preferred embodiment of the invention, right and left cups 12, 14 of the bra 10 are attachable to each other by a connector 16, which may be any mechanism capable of connecting cups 12 and 14 and permitting movement of the cups relative to each other, such as a snap, as shown." (Ex. 1011, 4:12-16; Figs. 1-3). Davis further teaches that "the connector 16 comprises a snap having a female part 16a and a male part 16b. The snap is preferably made of metal and plastic, but other materials may be used which permit pivotal movement of the cups 12, 14 relative to the snap 16." (Ex. 1011, 4:19-25). Accordingly, as also shown in Figs. 1-3, the Davis connector includes a first portion attached to the inner side of one of the breast forms (male part) and a second portion attached to the inner side of the other breast form (female part).

2.b and the first portion and the second portion are adapted to cooperatively engage.

As discussed above with reference to **2.a**, the male part and the female part of the connector snap together, thus cooperatively engaging with each other. (Ex. 1011, 4:19-25). Notably, the '296 Patent teaches that the claimed connector's function is to adjoin "the separated breast forms by attaching to the inner sides of the breast forms and pulling the user's breasts together. The connector can be

either permanently or removably attached to the breast forms. Several different configurations of breast forms and connectors are available to achieve the benefits of the present system." (Ex. 1001, 3:4-10; 4:54-56). In describing the connector, the '296 Patent explicitly teaches a very similar connector to the one used by Davis: "In FIGS. 5a and 5b, the connector 14 is shown permanently fixed to the breast forms. More specifically, the first portion 44 and second portion 42 are permanently attached to the inner side of the breast forms 12." (Ex. 1001, 6:17-20). The snap connector type also falls within the scope of the claim: "the first portion and second portion could attach to the breast forms by way of a button type assembly that snaps through a small hole in each of the breast forms." (Ex. 1001, 6:22-25).

3. Claim 5 is invalid.

5.a The breast form system of claim 2 wherein the first portion and the second portion are permanently attached to the breast forms.

Davis teaches that the right and left cups are connected by a connector that may be in form of a "snap." (Ex. 1011, 4:26-39; Claim 2). Therefore, the first portion (male) and the second portion (female) are inherently permanently attached to the breast forms:

> FIG. 1 shows the right and left cups 12, 14 connected by a snap. FIGS. 2 and 3 illustrate the snap mechanism of FIG. 1 in greater detail. A female part 16a is affixed to a first end 32 of the right cup 12 and a male part 16b is affixed to a corresponding first end 32 of the left cup 14. Right cup 12 and left cup 14 may be connected by engaging the female snap part 16a with

> male snap part 16b, either before or after adhering cups 12, 14 to the user's body. It is understood that female part 16a and male part 16b of the connector 16 are interchangeable with respect to the right and left cups 12, 14.

(*Id.*)

Accordingly, the permanent attachment of the first and second portions of the connector to the breast forms was well known in the art and a POSITA would have easily recognized the use of various types of connectors, including permanent ones, which were known in the field of bra design. (Ex. 1002, ¶86).

4. Combination of Luckman and Davis is Obvious

With regard to the first *Graham* factor, the scope and content of the prior art, both, Luckman and Davis reflect the state of the art in the area of backless, strapless bras as described in the '296 Patent. (Ex. 1002, ¶90). Both, Luckman and Davis recognize related needs to each other and the '296 Patent, particularly with respect to providing a backless, strapless bra that enhances the appearance of user's breasts by providing visual enlargement, support and cleavage. (*Id.*)

As recognized by a POSITA prior to the priority date of the '296 Patent, various types of silicone gel breast cups, such as Luckman, were well known to provide natural look and feel enhancement to woman's breasts. (Ex. 1010, p. 5, ll. 24-26). The '296 Patent itself acknowledges the state of the art prior to its priority date: "[a] popular type of breast form has been made from a silicone gel material

that is completely encased by plastic film material." According to the '296 Patent, "[t]he advantage of this type of breast form is that it looks like a natural human breast when worn and feels natural to the user, thus enhancing the self image and confidence of the user." (Ex. 1001, 1:51-56). Furthermore, as shown above, backless, strapless bras with a connector, but without silicone, as exemplified by Davis, were available as of the priority date of the '296 Patent. As such, the state of the art is clear – all of the claimed components making up the claimed invention were available well before the priority date of the '296 patent. (Ex. 1002, ¶91).

With regard to the second *Graham* factor, the differences between the asserted claims and the prior art, as shown above, Luckman teaches each and every element of claims 1, 2 and 5. The only basic component that was missing from Luckman was the connector positioned between the inner sides of each of the breast forms. But such connectors, as exemplified by Davis in particular, and other references in general, were well known in the prior art. (Ex. 1002, ¶92).

Taking into the account the third *Graham* factor, and the simple nature of the claimed invention, the appropriate level of skill in the art should be less sophisticated, e.g, knowledge of at least one year's experience in the design, manufacture, and evolution over time of women's brassieres. (Ex. 1002 at ¶16-18).

Accordingly, considering the well-recognized needs in the prior art, e.g., to provide natural look and feel, together with breast enhancement, cleavage and

push-up support, it would have been obvious to a POSITA to modify Luckman's breast enhancement device to add Davis's connector. (Ex. 1002 at ¶81, 82, 92). As explained above, a connector is a well-known component that, as demonstrated by Davis, provides enhanced cleavage, uniform support and overall appearance of the breasts, in addition to "permitting adjustment to conform to or enhance the shape of the user's breasts." (Ex. 1011, 2:15-20, 29-31; 4:51).

While the Patent Owner may contend that such a solution to the "cleavage" and "support" need is not predictable and actually required special modifications of the asserted prior art (e.g., different connection type for silicone vs. fabric vs. foam materials), one of ordinary skill in the art would *not* have viewed the subject matter of the asserted claims as unpredictable. (Ex. 1002 at ¶93).

The inventors failed to claim a specific type of a connector or connection type and the plain and ordinary meaning of the term "a connector adapted to adjoin the breast forms together" includes different types of connectors: "[t]he connector 14 can have many different forms, but generally will have two or more separate portions, where a first portion attaches to one breast form and a second portion attached to the other breast form." (Ex. 1001, 4:51-54). In addition:

> The connector 14 can be adjoined to the breast form at the interior surface 30 or the exterior surface 32, or both surfaces. Further, the connector can be adjoined to either the thermoplastic film material or the fabric layer, or both. Because the particular material used to construct the breast forms will vary (i.e. thermoplastic film, rubber, fabric, etc.), the material to which the connector is adjoined should be able to withstand a number of different

pulling forces without separating from the breast forms.

(Ex. 1001, 5:52-60).

The specification of the '296 Patent goes on to teach all kinds of different connectors, including, "adjustable clasp assembly", "button type assembly", hooks and loops, snapping arms, (Ex. 1001, 5:62, 6:24, 6:29-45; 6:46-53). "Therefore, it is understood that **there are many possible configurations for the connector 14 and the manner in which it connects to the breast forms**." (Ex. 1001, 6:64-67, emphasis added).

As the Supreme Court recognized in *KSR*, the nature of the mechanical arts is such that "identified, predictable solutions" to known problems may be within the technical grasp of a skilled artisan. 550 U.S. at 421; *see also Rothman*, 556 F.3d at 1319 (stating that, in the predictable arts, a claimed invention may be invalidated more readily by showing "a motivation to combine known elements to yield a predictable result"). Certainly, adding a connector has the predictable effect of bringing the breasts together and providing uniform support to both breasts. That is simply common sense. (Ex. 1002, ¶94; Ex. 1001, 3:49-53; 6:12-16). For years prior to the priority date of the '296 Patent, runway models used to simply tape their breasts with a rudimentary connector, such as duct tape, to enhance support and cleavage. (*Id.*) Armed with such common sense, as well as general knowledge in the field of bra design, a POSITA would have been

motivated to pursue the known options within his or her technical grasp in the prior art to combine the teachings of Luckman and Davis and would have expected to succeed. (*Id.*) Because adding a connector would lead to the anticipated success, the claimed product of the '296 Patent is not of innovation, but of ordinary skill and common sense. (*Id.*)

Thus, it would have been obvious to one of ordinary skill and creativity to adapt the Luckman silicone breast forms to fit a center connector as disclosed by Davis, even if it required some variation in the selection or arrangement of particular elements. *KSR Int'l Co.*, 550 U.S. at 417 ("When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one."). (Ex. 1002, ¶¶80-83, 94).

B. GROUND 2: Claims 1, 2, and 5 are rendered obvious under 35 U.S.C. § 103 over Valentin in view of Chen.

1. Claim 1 is invalid.

1.a An improved backless, strapless breast form system to be worn in place of a traditional bra, comprising:

Valentin teaches "a strapless and backless bra for providing uniform lift and support and enhanced appearance of the breasts of a user." (Ex. 1012, 1:5-8; 2:15-17). Valentin fulfills the need "for a strapless and backless bra that can be worn with revealing clothing while lifting and supporting the breasts of a user with

uniformity and comfort." (Ex. 1012, 1:52-55).

1.b a pair of breast forms wherein each breast form comprises: a volume of silicone gel encased between thermoplastic film material;

Valentin explicitly discloses a pair of breast forms, in a form of "a pair of cups connected together, each cup having an open top end and a closed bottom end." (Ex. 1012, 2:1-6; Figs. 1-3,7). Valentin also teaches that "U-shaped cups 12 and 14 each have an outer side 24, an inner side 26, an open top end 20, and a closed bottom end 22." (Ex. 1012, 2:59-64).

Valentin does *not* disclose using a volume of silicone gel encased between thermoplastic film for the breast cups. However, Chen teaches *identical* breast forms to the challenged claims of the '296 Patent that "comprise a silicone material that is encased by a fabric laminated thermoplastic film material." (Ex. 1014, 2:40-43, 50-65). According to Chen, the breast form "is intended to serve as full-range of externally worn articles that can be worn to enhance or replace a user's breasts. Accordingly, the breast form 10 can be configured as and/or used in the capacity of breast inserts, breast enhancer, and breast prostheses." (Ex. 1014, 2:44-49). Chen's "Background of the Invention" mirrors that of the '296 Patent, which acknowledges the well-known and "popular type of breast form" made of "silicone gel material that is completely encased by plastic film material" that was available before the priority date of the '296 Patent. (Ex. 1014, 1:35-37; Ex. 1001, 1:51-53). The Chen prior art and the '296 Patent both emphasize that

the "advantage of this type of breast form is that it looks like a natural human breast when worn and feels natural to the user." (Ex. 1014, 1:37-39; Ex. 1001, 1:53-55). Chen aims to solve the need for a breast form that "that can be made available in a wide range of colors" and made "lighter in weight" yet still maintaining a desirable appearance. (Ex. 1014, 1:50-56).

Petitioner notes that Chen is a 102(e) prior art reference predating Patent Owner's purported date of invention of May 31, 2002 by three and a half months. In all of its district court litigations, the Patent Owner failed to show an earlier date of invention and has relied on its filing date as the constructive reduction to practice. In fact, because Chen and the '296 Patent are *unrelated*, it is further prima facie evidence that Chen predates the '296 Patent's invention date. (As an alternative to Chen, Petitioner submits Mulligan discussed in more detail in a separate Ground 3.)

1.c a concave interior surface facing toward a user's breast having a pressure sensitive adhesive layer for securing the breast form to the user's breast; and

Valentin discloses a strapless and backless bra with two cups that have the outer and inner sides. (Ex. 1012, 2:62-66). As depicted in Figures 1, 3 and 7, for example, the inner side of the cups is concave for covering the user's breast. Valentin also teaches the use of an adhesive in the form of a "two sided tape" with "a body side adhesive 62 on one side and a fabric side adhesive 64 on the other

side." (Ex. 1012, 3:47-50). "Body side adhesive 62 is preferably a hypoallergenic, pressure sensitive, acrylate adhesive that is non-toxic and reduces irritation of the skin of a user 38." (Ex. 1012, 3:51-53). Valentin's adhesive, however, is applied to the tabs 28 and 30 for the bra to adhere to the user, rather than the inner surface of the cups. (Ex. 1012, 3:63-4:2; 4:11-19).

Chen teaches an *identical* pressure sensitive adhesive layer which is applied to the concave interior surface of the silicone breast forms to the adhesive claimed in the '296 Patent. Chen teaches that each breast form "includes a permanently grown, re-usable pressure-sensitive (PSA) backing on an interior surface of the breast form, i.e., a surface of the breast form placed against a user's body, which prevents the breast form from moving from its desired position on the user." (Ex. 1014, 2:27-32; 4:35-37).

1.d a connector adapted to adjoin the breast forms together, wherein the connector is positioned between inner sides of each of the breast forms.

Valentin teaches a connector adapted to adjoin the breast forms together: "[b]ridge connector 16 represents any form of connection between the U-shaped cups 12 and 14, such as a unitary piece of material, as shown. However, it should be appreciated that many equivalent alternatives exist. For example, bridge connector 16 could be, inter alia, a releasable snap-fit connector 16, an eye and hook connector, or a system for joining the inner sides 26 of the U-Shaped cups 12 and 14 together." (Ex. 1012, 3:20-27; Fig. 7):

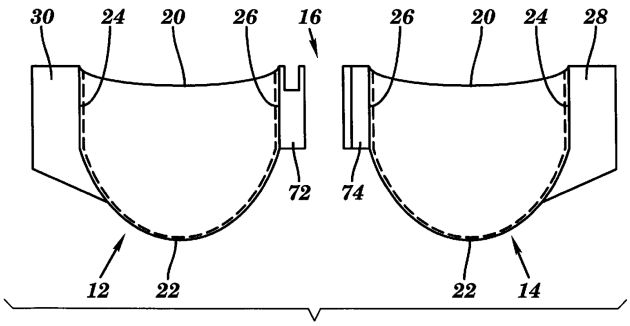


FIG. 7

That is precisely the *same* exact connector taught by the '296 Patent and encompassed by the claim. (Ex. 1001, 6:20-45: "the connector 14 has a body 50 with a pair of hooks 52 attaches at each end of the body.")

2. Claim 2 is invalid.

2.a The breast form system of claim 1 wherein the connector comprises a first portion attached to the inner side of one of the breast forms and a second portion attached to the inner side of the other breast form,

As discussed above in **1.d**, Valentin teaches a bridge connector for adjoining the two breast forms together. In addition, Valentin specifically discloses that the bridge connector may be in the form of a "releasable snap-fit connector" which has "complementary snap-like female 72 and male 74 interconnections positioned proximate each inner side 26." (Ex. 1012, 3:28-32; 4:62-5:10). As shown in Fig. 7 above, the female and male connectors are clearly two portions that are attached to the inner side of each breast form. (*Id.*, Fig. 7).

2.b and the first portion and the second portion are adapted to cooperatively engage.

As discussed above with reference to **1.d** and **2.a**, Valentin's first and

second portions, i.e., male and female, cooperatively engage: "[t]o join the U-shaped cups 12 and 14 together, the user would snap male interconnection 74 into complementary female interconnection 72." (Ex. 1012, 3:31-35; Fig. 7).

3. Claim 5 is invalid.

5.a The breast form system of claim 2 wherein the first portion and the second portion are permanently attached to the breast forms.

As discussed with reference to **2.a** and **2.b**, Valentin teaches precisely the same type of connector as taught by the '296 Patent and encompassed by claim 5. Specifically, Valentin, as shown in Fig. 7, discloses the use of a "releasable snap-fit connector 16" with "complementary snap-like female 72 and male 74 interconnections positioned proximate each inner side 26" that can be snapped together and released. (Ex. 1012, 5:3-6). A POSITA would recognize that it is the same type of a connector that the '296 Patent refers to as "permanently fixed": "In FIGS. 5a and 5b, the connector 14 is shown permanently fixed to the breast forms. More specifically, the first portion 44 and second portion 42 are permanently attached to the inner sides of the breast forms 12." (Ex. 1001, 6:17-20; Ex. 1002, ¶97).

4. Combination of Valentin with Chen is Obvious

With respect to the scope and content of the prior art, both, Valentin and Chen reflect the state of the art in the area of backless, strapless bras as taught by the '296 Patent. As discussed above, the references are analogous art as they

intend to enhance the appearance of a woman's breasts. Chen, for example, discusses the need for enhancing breast size by means that "look and feel natural so as to complement and not detract from the existing female breast that it is used to enhance." (Ex. 1014, 1:26-28). Thus, both cited references represent the knowledge of a POSITA in the field of bra design. (Ex. 1002, ¶100).

With respect to the differences between the challenged claimed and the prior art, Valentin anticipates each and every element of the challenged claims, *except* Valentin utilizes "soft woven or knitted fabric, such as cotton and/or lace" for its breast forms rather than volume of silicone gel encased between thermoplastic film material." (Ex. 1012, 3:3-6) Valentin also applies pressure sensitive adhesive to the side tabs rather than to the cups' interior surface. However, Chen expressly teaches breast forms that are composed of a volume of silicone gel encased between thermoplastic film material with a pressure sensitive adhesive layer applied to the concave interior surface of each breast form for securing the breast forms to the user's breasts. Moreover, the '296 Patent itself acknowledges the state of the art prior to its priority date: "[a] popular type of breast form has been made from a silicone gel material that is completely encased by plastic film material." According to the '296 Patent, "[t]he advantage of this type of breast form is that it looks like a natural human breast when worn and feels natural to the user, thus enhancing the self image and confidence of the user." (Ex. 1001, 1:51-

56).

Thus, a POSITA, armed with the general knowledge of the prior art, would simply look to Chen to substitute Valentin's fabric cups with silicone cups that include pressure sensitive adhesive. (Ex. 1002, ¶102). Using silicone for the cups in Valentin would have been obvious, particularly in light of the teachings in Chen, which suggested that a breast form containing a pressure sensitive adhesive layer should "look and feel natural so as to complement and not detract from the existing female breast." (*Id.*, Ex. 1014, 1:26-28). In fact, Chen *expressly* suggests replacing "breast forms, such as foam pads, water-filled pads and the like" as well as "fabric," that do not offer natural feel and look when worn, with silicone gel. (*Id*., 1:37-50).

Since the substituted components, i.e., silicone with adhesive, and their properties and functions were well known in the art, as demonstrated by Chen, a POSITA at the time of the invention could have substituted these elements for Valentin's fabric cups, and the results of such a substitution would be predictable. (Ex. 1002, ¶103). The result or solution would have been predictable because these components would function precisely as they were intended to function – silicone would provide the natural look and feel and the pressure sensitive adhesive would be used to secure the breast forms to the user's breasts. (Ex 1002, ¶103).

Alternatively, just as the inventors of the 296 Patent did, it would have also been obvious to combine known silicone breast forms containing a pressure sensitive adhesive layer, such as those taught by Chen, and then add known center connectors as disclosed in Valentin to create a self-adhesive silicone backless, strapless bra with a center connector. (Ex. 1002, ¶104)

A POSITA would have easily known of various types of connectors used in bras generally, with center connectors of a bra being used to hold breasts together in a desired position, whether it be for more support or more cleavage. (*Id.*) Center connectors were well-known in the art for many decades, and were a known and necessary element of bras that allowed the wearer to control the amount of cleavage. (*Id.*) Valentin is just one exemplary reference that teaches a connector that meets the elements of challenged claims 1, 2 and 5. (*Id.*)

Thus, if a person of ordinary skill in the art were to start out with a basic pair of adhesive silicone cups taught by Chen, and armed with the general knowledge of the center connectors and their functions in the field of bras, as exemplified by Valentin, he/she would have easily recognized that the base device, i.e., the adhesive silicone cups, could be improved in the same exact way as the similar bras have been improved for decades – adding cleavage and support, thus enhancing the general appearance of the user's breasts. (Ex. 1002, ¶105). Such an improvement of the base device would be predictable. (*Id.*) The technique of

adding a center connector to improve the adhesive silicone breast forms is certainly part of the ordinary capabilities of a POSITA, in view of the express teachings in Valentin for improvement of a very similar strapless and backless bra. (*Id.*)

Therefore, although the prior art at the time of the '296 Patent's invention did not include a product that included all of the elements present in the challenged claims, each missing element was well known in the art of bra construction and products designed to enhance the appearance of a woman's breasts, and one of skill in the art would have easily looked at the various references cited above and combined those to arrive at the invention claimed in the '296 Patent. (*Id.*) As such, the combination of Valentin and Chen would render the challenged claims 1, 2 and 5 obvious. (*Id.*)

C. GROUND 3: Claims 1, 2 and 5 are rendered obvious under 35 U.S.C. § 103 over Noble in view of Mulligan and Hedu.

1. Claim 1 is invalid.

1.a An improved backless, strapless breast form system to be worn in place of a traditional bra, comprising:

Noble's invention relates generally to "brassiere[s] requiring no straps or hooks," that "enhances the wearing of strapless, backless dresses," that provides "a soft natural shape to a woman's bust," and that "feels like skin." (Ex. 1013, 1:5-8, 2:21-30). Thus, Noble teaches a reusable "self-supporting breast cup" apparatus

that is "pre-formed in the shape of different breast sizes (including left and right) and provides requisite support for the breast without using hooks and straps." (*Id*., 2:6-15). One of the Noble's embodiments describes "a full cup that covers the entire breast." (Ex. 1013, 5:51-54; Fig. 18).

1.b a pair of breast forms wherein each breast form comprises: a volume of silicone gel encased between thermoplastic film material;

Noble discloses a pair of breast forms, with the covering material comprising "Tricot or poly material for giving the … [breast forms] … a natural skin-like texture." (Ex. 1013, 5:61-64). The breast cup portion comprises "a soft foam quality LD (low density)" material. (*Id*., 4:9). Both, the soft foam and the covering material are laminated "by pressing under heat … a laminated sheet … comprising thin foamed plastics such as polyurethane sheet material." (Ex. 1013, 4:15-24).

However, while teaching the use of thermoplastic film and foam, Noble does *not* disclose a volume of silicone encased between thermoplastic film. Mulligan teaches "a breast prosthesis comprising two shell-like bodies … each welded in between synthetic resin films and consisting of silicone compositions of different softness." (Ex. 1015, Abstract). Mulligan's two breast "bodies" feature "a softer material with a gel-like consistency, for instance a two-component, addition cross-linked silicone rubber" which is "enclosed within synthetic resin films 2a, 3a, for instance polyurethane films." (Ex. 1015, 2:35-45).

1.c a concave interior surface facing toward a user's breast having a pressure sensitive adhesive layer for securing the breast form to the user's breast; and

Noble discloses breast cups that are "pre-formed in the shape of different breast sizes" and thus including a concave interior surface that receives a breast and has the "soft, skin-like" feel to it. (Ex. 1013, 2:6-10, 36-41; 4:33-35). Noble also teaches using "releasably securing means" comprising "two inner double-sided tape strips" that are "skin-friendly" and "anti-allergic to normal skin" which are releasably secured to the inside of the breast forms by pressing to the breast. (*Id.*, 4:52-58; 5:8-14, 54-59; 6:13-17).

Mulligan also teaches an adhesive layer "arranged on the inner prosthesis body" composed of silicone that can be manufactured to be "permanently tacky." (Ex. 1015, 1:49-50; 2:47-52). Mulligan specifies that the adhesive layer may be provided "in a groove formed at the inner side of the prosthesis body" or "in an encircling form" or in a "wave-like form" or "in continuous lines" to improve "wearing comfort for the user" so that "adhesion of the adhesive layer is obtainable." (Ex. 1015, 3:12-18, 19-22, 24-26, 36-38).

1.d a connector adapted to adjoin the breast forms together, wherein the connector is positioned between inner sides of each of the breast forms.

Noble teaches a center connector for adjoining the breast forms together in a form of "a provision, e.g., a decorative lace band 50, for coupling two SSBCs 220 being worn, as shown in FIG. 18." (Ex. 1013, 5:59-61; Fig. 18). Noble explicitly

describes using two "respective bands … that are *joined* (e.g., tied) together in the center" appealing to a wearer "with breasts that have a close separation." (*Id*., 6:1-5; Claim 11; Fig. 18; emphasis added). The Patent Owner may argue that Noble's band connector is not adapted to "adjoin" breast forms together, but simply performs an aesthetic function to look like a normal strapless brassiere. However, such argument ignores the explicit language of the Noble's specification cited to above as well as the plain and ordinary meaning of the term "adjoin" which simply means "to join together." Regardless, various types of center connectors were already well known in the prior art field of bras and brassieres prior to the invention date of the '296 Patent. (Ex. 1002, ¶72-76, 109).

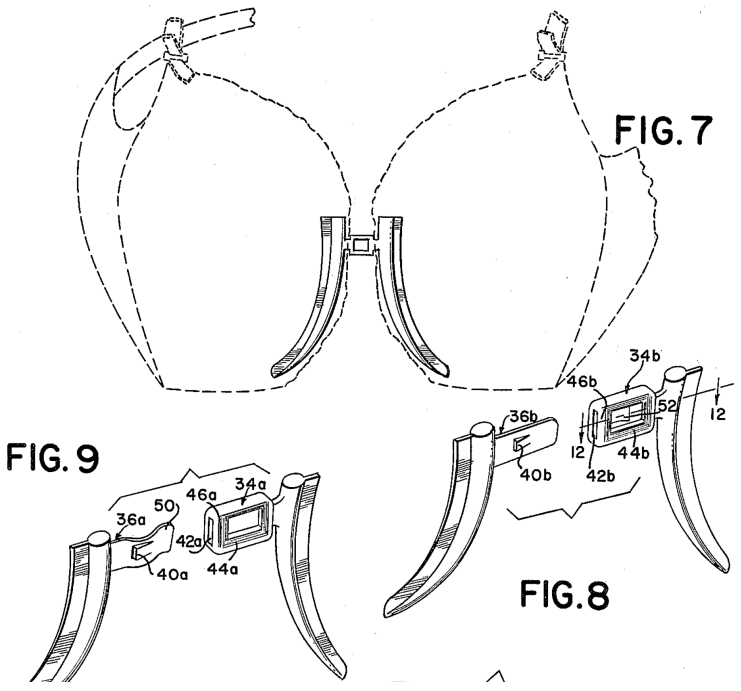
One such prior art connector is taught by Hedu which discloses a connector that is adjustable and is especially designed "for front closing brassieres" providing more accurate conformance "to the physique of the individual wearer" and "yielding greater comfort and better support to the user." (Ex. 1016, 1:24-29, 41-43). Hedu's preferred embodiment describes a "front clasping type" connector that "involves an improved clasp assembly" "for detachably releasing the connection between the breast cups for simple, efficient, and trouble-free donning or removing of the garment." (Ex. 1016, 1:9-13, 33-36; 2:39-41). As shown in Fig. 1 of Hedu, the clasp 14 is positioned between inner sides of each breast forms: "[a]long the inner edges of the cups 2 and 4 are stay members 10 and 12 which

may be held in pockets in the brassiere or by any other suitable means… The cups are held together by a joining member 14 which is mounted for longitudinal adjustment along the stays." (Ex. 1016, 2:20-27).

2. Claim 2 is invalid.

2.a The breast form system of claim 1 wherein the connector comprises a first portion attached to the inner side of one of the breast forms and a second portion attached to the inner side of the other breast form,

As discussed above in **1.d**, Noble teaches a connector in a form of a lace band that includes two left and right portions "that are joined (e.g., tied) together in the center." (Ex. 1013, 6:1-5; Claim 11; Fig. 18). Hedu also teaches a connector in a form of a clasp that "has interfitting male and female members." (Ex. 1016, 1:52-55). Each member is attached to the inner side of respective breast forms. (*Id*., e.g., Figs. 1, 5-9):



2.b and the first portion and the second portion are adapted to cooperatively engage.

As discussed above with reference to **1.d** and **2.a**, Hedu's connector includes two portions, male and female: "the male member has a shoulder thereon which engages an edge of an aperture located in the face of the female member." (Ex. 1016, 1:52-55). Thus, Hedu teaches two members cooperatively engaging. (Ex. 1002, ¶109).

3. Claim 5 is invalid.

5.a The breast form system of claim 2 wherein the first portion and the second portion are permanently attached to the breast forms.

As discussed with reference to **2.a** and **2.b**, Hedu teaches a similar type of "clasp assembly" connector as taught by the '296 Patent and encompassed by claim 5: "Referring to FIGS. 5a and 5b, the connector 14 is shown as an adjustable clasp assembly." (Ex. 1001, 5:61-62). "In FIGS. 5a and 5b, the connector 14 is shown permanently fixed to the breast forms. More specifically, the first portion 44 and second portion 42 are permanently attached to the inner side of the breast forms 12." (Ex. 1001, 6:17-20). Similarly, Hedu's first and second portions of the connector may be held permanently inside the inner pockets of the cups. (Ex. 1016, 2:20-22). A POSITA would appreciate that one of the "suitable means" to attach the connector portions is by permanently "sewing" them to the cups. (Ex. 1002, ¶110; Ex. 1016, 1:14-18).

4. Combination of Noble with Mulligan and Hedu is Obvious

During the prosecution of the parent, '720 patent, as discussed above with reference to Sec. **VIII.B**, the Patent Owner did not challenge Examiner's finding that Noble anticipated all of the elements of the challenged claims except for the "volume of silicone" limitation, which the Examiner found to be an obvious modification of Noble. Instead, the Patent Owner cancelled the claims and drafted new narrower claims requiring the pressure sensitive adhesive to be substantially covering the entire interior surface of the breast forms "edge to edge." (Ex. 1008, 1009). This limitation is not part of the challenged claims in the '296 Patent. Accordingly, and also as shown above, Noble discloses each and every element of the challenged claim 1, except for the "silicone gel encased between thermoplastic film material" limitation.

Mulligan, however, does disclose using silicone breast forms, with the volume of silicone gel encased between thermoplastic film material. Mulligan also teaches a pressure sensitive adhesive layer applied to the concave interior surface of each silicone breast form for securing the breast forms to the user's breasts. (See **X.C.1b** and **X.C.1c** above). Moreover, the '296 Patent itself acknowledges that using silicone gel for breast forms was well known prior to its priority date: "[a] popular type of breast form has been made from a silicone gel material that is completely encased by plastic film material." (Ex. 1001, 1:51-56). According to

the ‘296 Patent, “[t]he advantage of this type of breast form is that it looks like a natural human breast when worn and feels natural to the user, thus enhancing the self image and confidence of the user.” (*Id.*)

Patent Owner may argue, as they did in the prosecution history, that Mulligan is intended to be a medical prosthesis, rather than a bra. However, that’s misleading since the ‘296 Patent expressly suggests that “[i]n addition to enhancing an existing breast, externally worn articles are designed to replace a female human breast that has been surgically removed.” (Ex. 1014, 1:28-35; Ex. 1001, 1:44-47). The ‘296 Patent specifically defines “breast forms” to include “a wide range of breast enhancers, breast inserts, and breast prostheses.” (Ex. 1014, 1:31-35; Ex. 1001, 1:47-51).

As discussed above, center connectors were also well known in the prior art before the invention date of the ‘296 Patent. For example, both Noble and Hedu disclose a center connector used in bras and brassieres for adjoining the breast forms together in the middle, thereby enhancing support and cleavage. (Ex. 1002, ¶112). Thus, a POSITA knew precisely how to improve the prior art strapless and backless bras with a center connector and would recognize that a comparable backless and strapless bra made of silicone cups can be improved in the same way to achieve the same predictable result – enhanced cleavage and support. (*Id.*) At the very least, it would have been obvious for a POSITA *to try* to improve the

silicone breast forms in the same way that the prior art bras have been improved before the invention of the '206 Patent. (*Id.*) The design need for an enhanced cleavage and support already existed in the prior art and was in fact solved in a similar type of backless and strapless bra with the addition of a center connector as demonstrated by Noble and Hedu. (*Id.*)

Noble in combination with Hedu discloses each feature of claims 1, 2 and 5, with the exception of the volume of silicone gel encased in thermoplastic film material element. A POSITA, however, would readily combine Noble with a known silicone containing breast form, to create a self-adhesive silicon backless strapless bra with a center connector. (Ex. 1002, ¶113). A POSITA, armed with the general knowledge of the prior art, would simply look to Mulligan to substitute Noble's foam breast cups with silicone cups that include pressure sensitive adhesive. (*Id.*) Using silicone for the cups in Noble would have been obvious, particularly in light of the teachings in Mulligan, which suggested that a breast form containing a pressure sensitive adhesive layer could be constructed of soft and natural-feeling materials resembling a "natural breast tissue," in order to obtain a bra that feels and looks natural. (*Id.*, Ex. 1015, Abstract). Furthermore, a POSITA would also look to Hedu's clasp assembly connector to add the connector feature that comprises two portions that are permanently attached to the left and right breast cups and can cooperatively engage in the middle. (Ex. 1002, ¶109).

Because these features (silicone and connector) were well known to enhance the existing bras, the design incentives provided a POSITA with a reason to make such a predictable adaptation, resulting in the claimed invention. (Ex. 1002, ¶114).

XI. SECONDARY CONSIDERATIONS

During prosecution, Patent Owner argued that secondary considerations are relevant when considering obviousness of the ’296 Patent, but such considerations are not impactful to the grounds presented in this petition.

With respect to the commercial success factor, Patent Owner submitted a “Commercial Success Declaration” to the USPTO on March 25, 2004, after the USPTO repeatedly rejected the predecessor to the ‘296 Patent, the ‘720 Patent, over the prior art to the ‘296 Patent. (Ex. 1007). However, the Patent Owner fails to demonstrate that purported commercial success is due to the patented features of the product itself, rather than expensive advertising, paid for promotions or simply the company’s brand name. See *In re DBC*, 545 F.3d 1373, 1384 (Fed. Cir. 2008) (commercial success of $130 million in sales could not rebut obviousness finding because there was no “evidence that sales of XanGo™ juice were not merely attributable to the increasing popularity of mangosteen fruit or the effectiveness of the marketing efforts employed”); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1129-30 (Fed. Cir. 2000) (commercial success of patentee’s “Capri” cigarette rebutted by evidence that the commercial success was

primarily due to marketing promotions and marketing to female smokers through use of feminine packaging, not to patented features).

Patent Owner has also suggested that copying by others and long-felt need are additional relevant secondary considerations. But copying by others is not enough on its own to find that the patent is non-obvious, since "more than the mere fact of copying by an accused infringer is needed to make that action significant to a determination of the obviousness issue." *In re GPAC, Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (quoting *Cable Elec. Prods. v. Genmark, Inc.*, 770 F.2d 1015, 1028 (Fed. Cir. 1985)). Regardless, Patent Owner's allegations of infringement are simply not enough. Copying requires evidence of efforts to replicate a specific product and that a stipulation of infringement alone is not probative evidence of copying. *See Ecolochem, Inc. v. S. Cal. Edison Co.*, 227 F.3d 1361, 1380 (Fed. Cir. 2000) (noting that "a showing of copying is only equivocal evidence of non-obviousness in the absence of more compelling objective indicia of other secondary considerations").

Regarding the long felt need factor, during prosecution, Patent Owner's suggested that "[f]or years, women have been searching for a product that would provide them with an option for temporarily enlarging and/or enhancing the size and/or shape of their breasts in a manner that was both natural looking and natural feeling, and in a manner that would permit use with dresses or blouses designed to

reveal the wearer's shoulders and/or back. (Ex. 1007, ¶3). However, this statement is conclusory and unsupported by any facts, and thus should be afforded little or minimal weight. (37 C.F.R. 42.65(a)). That is simply not enough to overcome the prima facie case of obviousness present here. Especially in light of the fact that women had long had other solutions available to them when wearing low-cut dresses. (Ex. 1002, ¶¶57-63, 80). There is also nothing special about the silicone gel either. The specification itself acknowledges that the breast form system of the '296 Patent "can be formed from several different types of breast forms" that "enhance or replace a user's breasts," including not only silicone gel encased by a thermoplastic film, but also "foam, plastic, rubber, fabric, or molded fiber material … suitable for external breast enhancement." (Ex. 1001, 3:62-4:8). All types of connectors were also known to be used in bras to connect the two breast forms in the center to enhance cleavage as confirmed by Patent Owner's expert:

> Q. Right. Connectors were known in the bra industry prior to the patent; right?
>
> A. Correct.
>
> Q. And silicone breast forms were known in the industry prior to the patent; right?
>
> A. Correct.

(Ex. 1019, at 119:19-24)

> Q. Right. But both the foam bra and the silicone

bra could be used to enhance cleavage?

A. Correct.

Q. And it's the connector that allows them to do so?

A. Correct.

(Ex. 1019, at 133:15-20).

Moreover, the alleged secondary considerations have no nexus to claims **1**, **2** and **5**, but rather, appear to be driven by unclaimed factors. *See* IPR2015-00266, Paper 7 at 22 (PTAB Apr. 28, 2015), *citing In re GPAC*, 57 F.3d 1573, 1580 (Fed. Cir. 1995). For example, "natural look and feel" factor is nowhere in the claims and is entirely subjective. Apart from lacking any novelty, the specific construction techniques and special machinery required for the connection type to the thermoplastic film is also not claimed and Patent Owner's experts admits it:

Q. Okay. Now, where in the claims in the case does it talk about how the connector is adjoined to the breast form?

A. As far as I'm aware, they didn't put that in to the patent application.

(Ex. 1019, at 113:22-25 – 114:1).

Q. Okay. Is there anything in the description of the connector in Claim 1 of the '296 patent that has anything to do with heat or how the connector is actually manufactured on these products?

A. No.

(Ex. 1019, at 115:3-7)

> Q. In fact, Claim 1 is not limited to heat-placed connectors; correct?
> A. Correct.
> Q. Okay. And Claim 1 is completely silent about all the effort that goes into manufacturing these products, correct?
> A. Correct.
> Q. In fact, Claim 1 is not -- is not directed to manufacturing of the products at all; correct?
> MR. KOSTOLANSKY: Object to the form.
> THE WITNESS: It's a description of what the end result is, but it doesn't explain exactly how the garment is made.
> MR. KROUB: Right. So in your opinion, the claim covers the end product as a whole.
> THE WITNESS: Correct.

(Ex. 1019, at 115:18-25 – 116:1-8).

The evidence shows that the alleged secondary considerations at most relate to a concept of a "backless, strapless" bra providing "breast cleavage and push-up enhancement" – features wholly taught by a plethora of references - with no allegation of secondary considerations relating to the expressly claimed features being combined in Grounds 1 and 2. (Ex. 1001, 3:15-24).

Furthermore, reviewing the Declaration of Commercial Success, Long Felt Need, and Copying submitted by the Patent Owner during prosecution, the inventors fail to point to any specific features attributable to the alleged secondary considerations. (Ex. 1007). There is no mention of "a connector" of any kind whatsoever. (*Id.*) Nor is there mention of silicone with the pressure sensitive adhesive. (*Id.*) On the contrary, the inventors admit that breast forms in the form of silicone already existed. (*Id.* at 3). Inventors' only feature attributable to their success is a breast form that "is specifically engineered to enlarge and/or enhance the size and/or shape of a wearer's breast in a manner that is both natural looking and natural feeling, and in a manner that avoid the use of a traditional bra or even straps." (*Id.* at 3). That is it. But as shown above, the prior art was abundant with natural looking and natural feeling strapless, backless bras.

While the commercial success factor "may have relevancy" to the overall obviousness determination, *Graham*, 383 U.S. at 18, a nexus must exist between the commercial success and the claimed invention. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311–12 (Fed. Cir. 2006) ("Evidence of commercial success . . . is only significant if there is a nexus between the claimed invention and the commercial success."). If commercial success is due to an element in the prior art, no nexus exists. *Id.* at 1312; *see also Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1580 (Fed. Cir. 1983) (holding claimed invention obvious where patent

holder "failed to show that such commercial success . . . was due to anything disclosed in the patent in suit which was not readily available in the prior art").

Finally, the obviousness case is simple, straight forward, and driven by prior art's explicit teachings. Thus, even if a nexus had been shown, the evidence of commercial success would not have carried sufficient weight to override the strong prima facie showing of obviousness. *See Media Tech. Licensing, LLC v. Upper Deck Co.*, 596 F.3d 1334, 1339 ("Even if [the patentee] could establish the required nexus, a highly successful product alone would not overcome the strong showing of obviousness.") As such, Patent Owner's secondary considerations evidence cannot overcome the strong obviousness grounds, even if it was tied to the features identified as obvious, which it is not.

XII. CONCLUSION

Petitioner respectfully requests that Trial be instituted and that claims **1**, **2** and **5** of the '296 Patent be cancelled.

Dated: October 7, 2016.

Respectfully submitted,

/s/ Sergey Kolmykov
Sergey Kolmykov, Esq.
Reg. No. 47,713

CERTIFICATION UNDER 37 CFR 42.24(d)

Under the provisions of 37 CFR 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petition for Inter Partes Review totals 13,906, which is less than the 14,000 allowed under 37 CFR 42.24(a)(i).

Respectfully submitted,

Dated: October 7, 2016

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Attorneys for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned hereby certifies that a complete and entire copy of the foregoing **PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,144,296 UNDER TO 35 U.S.C. §§ 311 *ET SEQ.* AND 37 C.F.R. § 42.100 *ET SEQ.*** and all accompanying exhibits, have been served via FedEx, a means at least as fast and reliable as Priority Mail Express®, on October 7, 2016 upon the following correspondence address of record for patent owner:

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A courtesy copy with all accompanying exhibits was also served on the following attorneys of record for the related district court proceeding by electronic transmission:

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Dated: October 7, 2016

/s/ Sergey Kolmykov
Sergey Kolmykov, Esq.