

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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SERTA SIMMONS BEDDING, LLC and  
DREAMWELL, LTD.

Plaintiffs,

v.

CASPER SLEEP INC.

Defendant.

ORDER GRANTING SUMMARY  
JUDGMENT

Civil Action No. 17-cv-7468-AKH

ALVIN K. HELLERSTEIN, U.S.D.J.:

Plaintiffs Serta Simmons Bedding, LLC and Dreamwell, LTD (Serta) filed this action against Defendant Casper Sleep, Inc. (Casper) on September 29, 2017 pursuant to 35 U.S.C. § 271, alleging that Casper's "Wave" mattress, launched August 15, 2017, infringes on U.S. Patents Nos. 7,424,763 ('763); 7,036,173 ('173); and 8,918,935 ('935). Serta alleges that the Wave contains channels and inserts that infringe on the product claims of '763 (Count I), and that the Wave is manufactured in a way that infringes on the method-of-manufacturing claims of '173 (Count II, III) and '935 (Count IV, V). Casper counterclaimed, alleging, among other things, that the asserted patents are invalid as anticipated or obvious (Counterclaims IV, V, VI) and are, furthermore, unenforceable due to Serta's inequitable conduct in withholding prior art in prosecuting these patents (Counterclaim VII). I denied Serta's previous motion to dismiss Counterclaim VII. *See* Dkt. No. 80.

Following a *Markman* hearing, a motion for reconsideration, my rulings on the claim terms presented to me for construction, *see* Dkt. No. 118, and the completion of fact and expert discovery, the parties now cross-move for summary judgment. Casper moves for summary judgment on non-infringement and invalidity on all asserted patent claims. Serta moves for summary judgment on there not having been inequitable conduct. Trial by jury is set to begin

August 6, 2018. See Dkt. No. 126. For the reasons stated below, I grant Casper's motions on non-infringement and I deny the remainder of the motions as moot.

## BACKGROUND

### *The Patents*

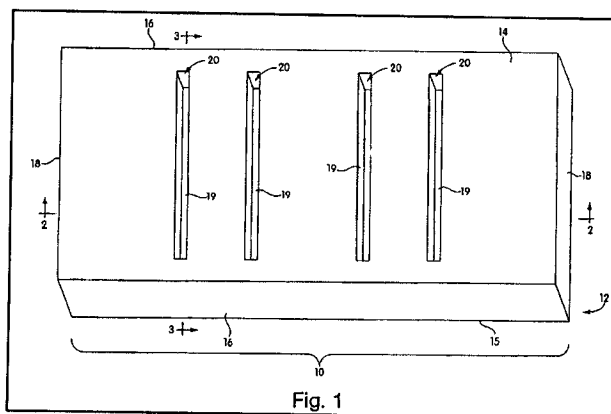
The patent claims can be divided into two categories, "product claims"<sup>1</sup> and "method-of-manufacturing"<sup>2</sup> claims.

### 1. Product Claims

The product claims are about a type of mattress with "channels" on the top or bottom of its surface that contain a "plurality of inserts." Claim 1 of '763, representative of the product claims, states:

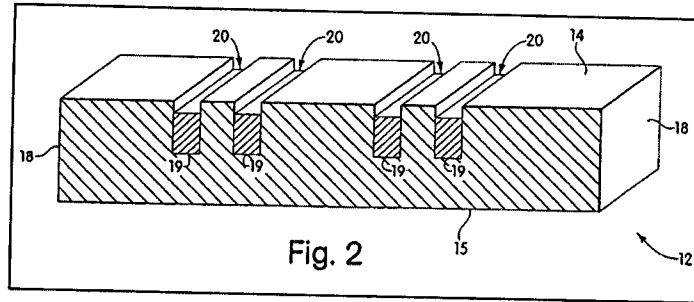
A mattress comprising:  
a body made of foam having a mechanical characteristic, the body having a top surface, a bottom surface, a first and second side surfaces and a first and second end surfaces, at least one of the top and bottom surfaces including a plurality of channels extending into the body perpendicularly therefrom; and  
a plurality of inserts, each insert having a mechanical characteristic different from the mechanical characteristic of the foam and affixed within one of the plurality of channels, each insert reinforcing the body.

Figure 1 and Figure 2, common to all asserted patents, depict a mattress with channels on its surface:



<sup>1</sup> The product claims are claims 1, 4-7 of '763.

<sup>2</sup> The method-of-manufacturing claims are claims 8, 9, 11 of '763; claims 5, 6, 8 of '173; and claims 10, 13 of '935.



## 2. Method-of-Manufacturing Claims

The method-of-manufacturing claims are about a method for manufacturing a mattress containing channels and inserts. Independent claim 5 of '173 refers to a method of manufacturing “wherein forming the channel comprises assembling a plurality of rectangular foam pieces into a mattress that includes the channel.” Independent claim 8 of '763 and independent claim 10 of '935 similarly both refer to a method of manufacturing consisting of “assembling the [plurality of] rectangular foam pieces to form the body having a channel in the region.”<sup>3</sup> I previously construed these claims to require that the channels be formed by *assembling* foam blocks,<sup>4</sup> rather than by some other method, like cutting or molding. *See* Dkt. No. 118.<sup>5</sup>

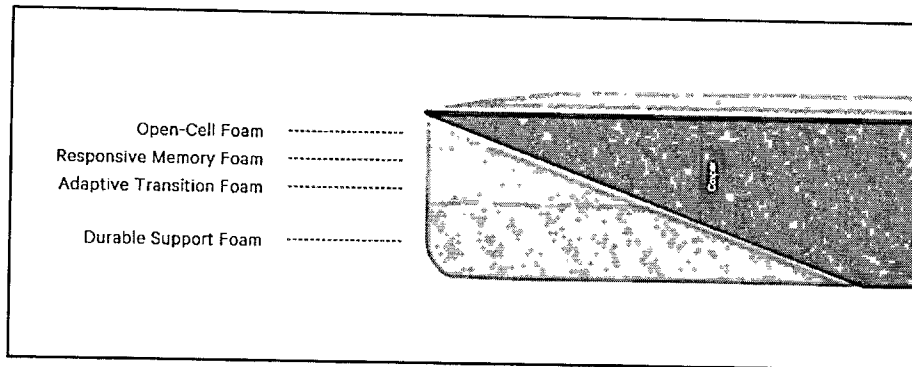
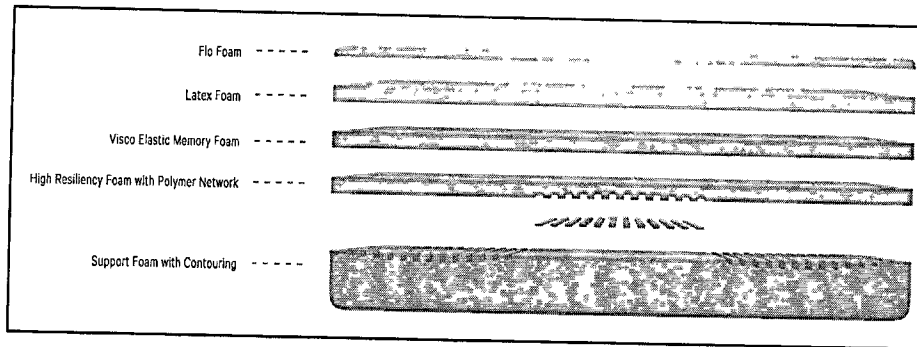
### *The Wave*

The accused product, Casper’s Wave mattress, consists of five layers of material, each varying in firmness, where channels are cut on the surface of the high-resiliency foam layer and filled with a liquid polymer gel (*i.e.*, the accused channels and inserts). *See, e.g.*, Complaint at ¶¶ 29–30, 47–53. The following images are illustrative of the Wave’s composition:

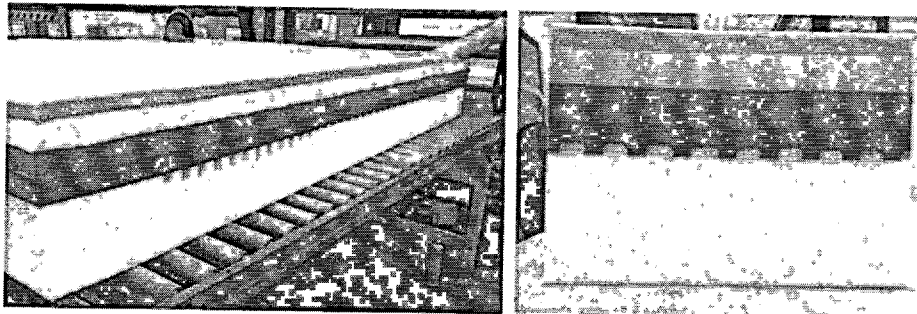
<sup>3</sup> The only difference between claim 8 of '763 and claim 10 of '935 is that the former contains the added term “plurality of.”

<sup>4</sup> *See* '763 at 5:40–43 ([T]he body may be formed of a number of rectangular foam sections assembled so that the assembled body includes the channels.); '173 at 5:38–41 (same).

<sup>5</sup> Dependent claims 9 and 10 of '763, which refer respectively to forming channels by cutting and molding, refer to forming channels *after* channels have been formed by the process of assembling. *See* 35 U.S.C. § 112(d) (“A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.”). The same refers to all relevant dependent claims of the method-of-manufacturing claims.



See Dkt. No. 10, Brooks Decl., Ex. 7.



See Dkt. No. 144, Statement of Material Facts, at ¶ 4.

### *Procedural History*

Serta filed this action September 29, 2017 and moved the same day for a preliminary injunction. Following oral argument on November 27, 2017, I denied the motion for preliminary injunction and set a trial date. See Dkt. No 56.

Thereafter, on January 25, 2018, I held a hearing in accordance with *Markman v. Westview Instruments, Ind.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd* 516 U.S. 370 (1996), and issued rulings on the terms presented to me for construction. See Dkt. No. 81. Following

my claim construction rulings, Casper moved for summary judgment on non-infringement, *see* Dkt. No. 84, and Serta moved for reconsideration of my rulings on the term “body,” *see* Dkt. No. 88. On March 22, 2018, on Serta’s motion for reconsideration, I issued revised claim construction rulings, and denied Casper’s motion for summary judgment as moot in light of these revisions. *See* Dkt. No. 118.

The parties proceeded with discovery, *see* Dkt. No. 126, with fact discovery completed by May 3, 2018, and expert discovery by June 8, 2018. Cross-motions for summary judgment were filed May 18, 2018.

### LEGAL STANDARDS

A court should grant summary judgment if there “is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *Nike Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 646 (Fed. Cir. 1994) (standard for summary judgment in patent cases same as for other cases). A genuine issue of material fact exists “if the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). “[T]he court must view the evidence in the light most favorable to the party against whom summary judgment is sought and must draw all reasonable inferences in [its] favor.” *Matsushita Elec. Indus. Co. Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

“An infringement analysis is a two-step process in which the court first determines, as a matter of law, the correct claim scope, and then compares the properly-construed claim to the accused device to determine, as a matter of fact, whether all of the claim limitations are present, either literally or by a substantial equivalent, in the accused device.” *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 988 (Fed. Cir. 1999).

Under the doctrine of equivalents, “a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is

‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). “When, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733–34 (2002).

## DISCUSSION

### I. The Product Claims

#### 1. The Wave Does Not Infringe on the Product Claims

Claim 1 of ’763 requires a “mattress comprising a body made of foam” where “at least one of the top and bottom surfaces [of the body] includ[es] a plurality of channels extending into the body perpendicularly.” I previously constructed the term “body” to mean “physical structure.” *See* Dkt. No. 118. Casper argues in moving for summary judgment of non-infringement for claims 1 and 4–7 of ’763<sup>6</sup> that the Wave does not satisfy the elements of these claims since the Wave’s channels are in the *middle* of the mattress, rather than on its *surface*. *See* Dkt. No. 142, 143. Since Serta does not dispute the location of the Wave channels, in the middle of the mattress and not on the top or bottom surface, and extending to the side of the mattress and not perpendicularly to or from the top or bottom surface, there is no material issue to try. Casper’s Wave does not infringe Serta’s product claims.

There are two reasons why ’763 does not cover mattresses with internal channels, the plain meaning of ’763 as construed, and Serta’s disclaimer in the prosecution history.

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<sup>6</sup> Claims 4–7 of ’763 are dependent on claim 1.

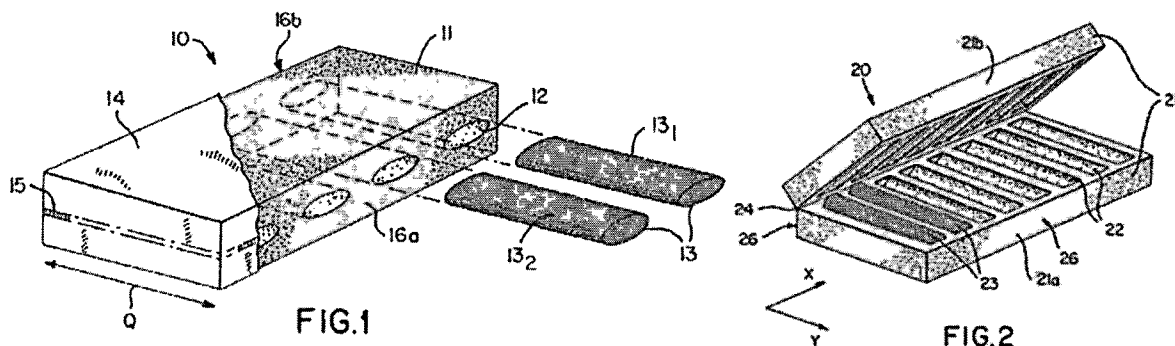
First, as a matter of interpretation, the patent requires that the channels be located on “at least one of the top and bottom” surfaces of the body, or “physical structure” of the mattress. The Wave comprises layers of foam, where the aggregate of such layers results in a physical structure, with the Wave channels inside, rather than on the surface, of the mattress.<sup>7</sup> There is no dispute that Casper’s channels are not at the top or bottom of the physical mattress structure. Clearly, as a matter of plain meaning of the claims of ’763, Casper’s Wave does not infringe on ’763.

Furthermore, the prosecution history precludes Serta from now arguing that ’763 covers mattresses with internally-located channels. “An applicant’s statements to the PTO characterizing its invention may give rise to prosecution disclaimer.” *Tech. Properties Ltd. LLC v. Huawei Techs. Co.*, 849 F.3d 1349, 1357 (Fed. Cir. 2017). “[B]y distinguishing the claimed invention over prior art, an applicant is indicating what the claims do not cover, he is by implication surrendering such protection.” *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (quoting *Ekchian v. Home Depot, Inc.*, 104 F.3d 1299, 1304, 41 USPQ2d 1364, 1368 (Fed.Cir.1997)). Here, in attempting to overcome a prior art rejection based on U.S. Patent No. 6,061,856 (“Hoffman”), Serta amended its claims and stated to the U.S. Patent Office examiner that the claimed channels were on the surface of, top or bottom, and not on the inside of, the mattress.

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<sup>7</sup> The specifications of ’763 clearly indicate that the *aggregate* of the Wave layers comprises the body, or physical structure. The specification states: “While the embodiment in FIG. 1 has a body of homogenous construction, the body could be formed of a combination of various types of foam with different mechanical characteristics. For example, *the body could be composed of multiple layers of such material*, varying in respective mechanical characteristics, progressing in layer upon layer from the top surface to the bottom surface.” ’763 at 2:26–33 (emphasis added). Cf. ’935, claim 1 (referring to a “multilayered foam body”). Thus, where the body is composed of multiple layers (like the Wave), the channels must be on the outer surface of the layers comprising the body. The Court notes that, even where a body comprises multiple layers, a “mattress cover” or other materials might be placed atop the channels located on the surface of such a multilayered body. See ’763, claims 4, 5; ’763 at 4:6–27. See also ’935 at 3:50–65; ’935 at Fig. 8. It is disingenuous, even incredulous, for Serta to argue that the Wave channels are on the “surface” of an internal body and that the additional layers are covers atop that surface.

In particular, the pre-amended claim required a mattress comprising a “body . . . having . . . at least one of the surfaces being a channel surface that includes a plurality of channels extending into the body perpendicularly therefrom.” *See* Dkt. No. 112, Ex. 9, at 11. The claim had the term “surfaces,” but not the term “top and bottom,” leaving ambiguous where such “surfaces” were located. The patent examiner rejected the pre-amended claim as anticipated by Hoffman, noting that Hoffman discloses channels extending to the *side* surfaces. Figures 1 and 2 of Hoffman depict:



The examiner described the basis for its rejection:

Hoffman discloses a mattress comprising a channel extending into the body 11 perpendicularly therefrom, the side surface 16a being read as the channel surface. . . . Hoffman discloses channels extending from the side surface. . . . Furthermore, it is not readily ascertainable [with respect to the pre-amended claims] as to what openings the channels extend to. . . . The channels extend from adjacent one side of the mattress to the other, but not to any type of opening. *See* Dkt. No. 44, Ex. 8, at 4–5.

That is, the examiner found that Hoffman discloses internal channels and that these channels extend to the mattress’s *side* surfaces.

In response to this objection, Serta amended its claims to add the term “top and bottom” to clarify that its channels extend perpendicularly from the top or bottom surface, not from the side surface. In so amending, Serta stated to the examiner and distinguished Hoffman:

Hoffman is directed to a mattress having a base member provided with cylindrical cavities whereupon cylindrical inserts are adapted to be placed into the cavities. *These cavities or bores are centrally disposed within the base member and “extend through the interior” of the base member sometimes from the sides,*



*but not on the top or bottom surface of the mattress.* Figure 2 of Hoffman shows a divided base that again does not include a channel extending from its top or bottom surface. In particular, the base member in Figure 2 is divided “to facilitate placement of inserts” within the centrally disposed cavities. *See* Dkt. No. 44, Ex. 12, at 6–7 (emphasis added).

Thus, in distinguishing Hoffman, Serta indicated that the amended claims (those asserted in this case) refer to a mattress with channels extending perpendicularly from the top or bottom surface of the mattress, and not to a mattress (like the Wave) with internal channels extending from the side surface of the mattress. Although other grounds for distinguishing Hoffman may have been present, Serta is bound by the distinction and disclaimer it made, *see Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1374 (Fed. Cir. 2007), and is precluded from now arguing that the claim covers mattresses with internally-located channels.

## 2. Validity of the Product Claims<sup>8</sup>

In addition to arguing that the Wave does not infringe on ’763, Casper argues, *see* Dkt. No. 146, that claims 1 and 4–7 of ’763 are invalid as anticipated by or obvious in light of three prior art references: U.S. Patent No. 4,161,045 (“Regan”), filed December 19, 1977; U.S. Patent

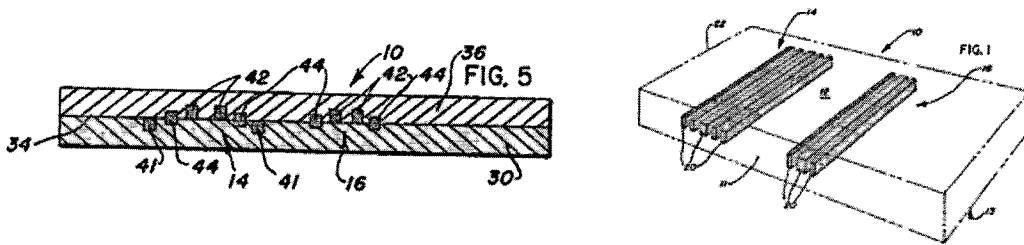
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<sup>8</sup> “[A] patent enjoys a presumption of validity, *see* 35 U.S.C. § 282, which can be overcome only through facts supported by clear and convincing evidence.” *See SRAM Corp. v. ADII Engineering, Inc.*, 465 F.3d 1351, 1357 (Fed. Cir. 2006). “Thus, a moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of facts underlying invalidity that no reasonable jury could find otherwise.” *Id.* An invention is anticipated under 35 U.S.C. § 102(b) if it “was . . . described in a printed publication in this . . . country . . . more than one year prior to the date of application for patent in the United States.” “A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. In addition, the reference must be enabling and describe the applicant’s claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention.” *In re Paulsen*, 30 F.3d 1475, 1479 (Fed. Cir. 1994). Under 35 U.S.C. § 103, “[a] patent claim is invalid as obvious if an alleged infringer proves that the differences between the claims 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.’” *Spectrum Pharm., Inc. v. Sandoz, Inc.*, 802 F.3d 1326, 1333 (Fed. Cir. 2016) (quoting § 103). “Obviousness is ultimately a conclusion of law premised on underlying findings of fact, including the scope and content of the prior art, the differences between the claimed invention and the prior art, and the level of ordinary skill in the pertinent art.” *Spectrum*, 802 F.3d at 1333.

No. 6,223,371 (“Antinori”), filed April 15, 1999; and Great Britain Patent Specification No. 1483433 (“GB ’433”), filed September 2, 1975.<sup>9</sup>

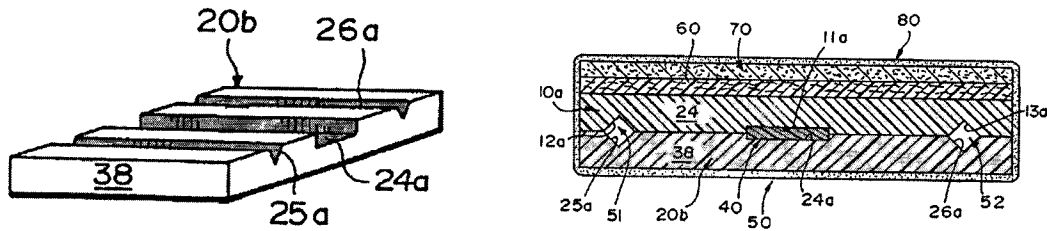
**a. Regan**

Regan discloses a mattress, made of one or two layers of foam, having two sets of “less compressible” ribs (or inserts), placed in the areas of the mattress with the greatest weight of the user. Figures 1 and 5 below depict the description:



**b. Antinori**

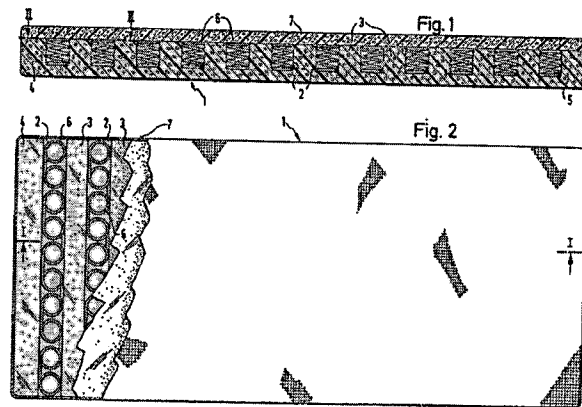
Antinori discloses a mattress with multiple layers, with channels or recesses cut into these layers, where the layers are adhered together to form the entire mattress. Figures 3 and 4 below depict the description:



**c. GB ’433**

<sup>9</sup> Casper’s briefing focuses on these three examples of prior art, but Casper notes that its expert, Bernhard Kutchel, opined that at least nine prior art patents anticipate or render obvious the product claims.

GB '433 discloses a foam mattress with spring elements inserted into channels in the foam. Figures 1 and 2 below depict the description:



Given my ruling on non-infringement, there is no reason to discuss Casper's invalidity contention that '763 is invalid as anticipated or rendered obvious by prior art.<sup>10</sup>

## II. The Method-of-Manufacturing Claims

### 1. Casper's Method of Manufacturing Does Not Infringe on Serta's Claims

Serta's method-of-manufacturing claims, *see supra* Background, Section 2, claim a method of manufacturing a mattress by assembling foam pieces in a way that forms channels. Casper does not assemble foam pieces to create channels; Casper uses a saw to cut channels in the high-resiliency foam layer. *See* Dkt. No. 152, Statement of Material Facts, at ¶¶ 1–3, 7–8. That factual difference is not disputed. *See* Dkt. No. 166, Response Statement of Material Facts, at ¶¶ 1, 7–8. Casper therefore argues, *see* Dkt. Nos. 150, 151, that its method of manufacturing does not infringe on Serta's method-of-manufacturing claims. I agree.

<sup>10</sup> Two of Casper's invalidity contentions, those from Regan and Antorini, whose channels and inserts are internal to the mattress, are made as alternatives to Casper's non-infringement contentions, to the extent that Serta prevails on its argument that '763 covers internal channels. *See* Dkt. No. 147, Ex. B, at 1 n.1; Ex. C., at 1 n.1. My construction of '763 and ruling on non-infringement moot these issues.

Claim 5 of '173 specifically describes that the assembly of “a plurality of rectangular foam pieces” is the method of manufacturing “a mattress that includes the channel.” Independent claim 8 of '763 and independent claim 10 of '935 were constructed in the *Markman* procedure to also refer to a method of manufacturing channels by assembling foam pieces. *See* Dkt. No. 118.<sup>11</sup> Here, since Casper does not form the Wave channels by assembling foam pieces, but by cutting, Casper does not infringe on Serta’s method-of-manufacturing claims.<sup>12</sup>

## 2. Invalidity of the Method-of-Manufacturing Claims

Again, because I hold that Casper’s method of manufacturing does not infringe on Serta’s method-of-manufacturing claims, it is not necessary to rule on Casper’s alternative argument, *see* Dkt. No. 151, that Serta’s method-of-manufacturing claims are invalid as anticipated by or obvious in light of prior art, specifically U.S. Patent No. 4,161,045 (“Regan”) (manufacturing method of stacking together layers that have channels already cut in them).<sup>13</sup>

### III. The Redesigned Wave

In April 2018, Casper redesigned the Wave to have trapezoidal, rather than perpendicular, channels. *See* Dkt. No. 154, Statement of Material Facts, at ¶ 1. The redesigned

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<sup>11</sup> The prosecution history supports this interpretation and also precludes Serta, under the doctrine of prosecution history disclaimer, from arguing that these claims cover the method of forming channels by cutting. For example, with respect to '763, Serta amended its claims (in overcoming a prior art rejection) to recite more clearly that the channels are created by *assembling*. *See* Dkt. No. 44, Ex. 12, at 7; Dkt. No. 44, Ex. 8, at 4; *see also* Dkt. No. 44, Ex. 5, at 4–5 (patent '173). The prosecution history of '173 and '763 informs as well the interpretation of '935. Relatedly, given Serta’s amendments, the doctrine of prosecution history estoppel precludes Serta from arguing infringement under the doctrine of equivalents. *See Festo*, 535 U.S. at 733–34.

<sup>12</sup> It is true that, after the cutting process, the cut pieces have to be assembled. But the latter function does not modify the essentials of Casper’s method of manufacturing its channels.

<sup>13</sup> Casper’s invalidity contentions, here too, are made in the alternative to its non-infringement contentions, to the extent that Serta prevails on its construction of the term “assembling.” *See, e.g.*, Dkt. No. 151, Ex. A, at 1 n.1. These invalidity issues are moot in light of my holding that Casper’s method of manufacturing does not infringe on Serta’s method-of-manufacturing claims.

Wave (like the earlier-designed Wave) has channels inside, rather than on the surface, of the mattress. This is sufficient reason for me to hold that the redesigned Wave does not infringe on Serta's product claims. *See supra* Section I.<sup>14</sup>

#### **IV. Serta's Motion for Summary Judgment is Denied as Moot**

Serta moved for summary judgment on Casper's counterclaim that Serta did not engage in inequitable conduct in prosecuting its patents. Since summary judgment is granted to Casper on non-infringement, Serta's motion regarding Casper's counterclaim is moot.

#### **V. Motions To Seal**

Serta moves, *see* Dkt. No. 140, to seal Exhibits 23 and 27 to the Fourth Declaration of Paul M. Schoenhard, *see* Dkt. No. 139, and papers quoting these exhibits, on the basis that they had been designated by Casper as "Highly Confidential-Outside Counsel Eyes Only." Serta further moves, *see* Dkt. No. 172, to seal Exhibits 1, 6, 11, 12, and 13 to the Declaration of Sarah P. Hogarth, *see* Dkt. No. 162, and papers quoting these exhibits, on a similar basis. Other than noting that these exhibits were all designated as confidential, the motion papers fail to provide the court with particular privacy interests at stake to justify an exception to the presumption of public access. *See Lugosch v. Pyramid Co. of Onondaga*, 435 F.3d 110, 124 (2d Cir. 2006). The motions to seal are denied, and the parties shall timely file unredacted versions of these documents.

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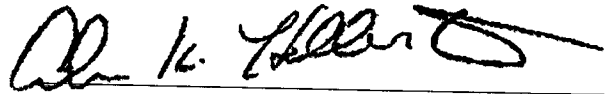
<sup>14</sup> In light of this holding, it is not necessary for me to rule on Casper's alternative argument, *see* Dkt. No. 153, 155, that the redesigned Wave does not infringe on '763 since the channels do not extend "into the body *perpendicularly* therefrom," *see* '763, claim 1 (emphasis added).

## CONCLUSION

Summary judgment is granted to Defendant Casper that neither its Wave mattress, nor its method of manufacturing the Wave mattress, infringes on Serta's patents 7,424,763; 7,036,173; and 8,918,935. The Clerk shall terminate the motions (Dkt. Nos. 136, 140, 142, 146, 150, 153, 172, 174), and enter judgment for Defendant Casper, dismissing the Complaint, with costs to be taxed by the Clerk.

SO ORDERED

Dated: New York, New York  
June 20, 2018



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ALVIN K. HELLERSTEIN  
United States District Judge