

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FREE-FLOW PACKAGING INTERNATIONAL, INC.,
Petitioner,

v.

AUTOMATED PACKAGING SYSTEMS, INC.,
Patent Owner.

Case IPR2016-00447
Patent 8,357,439 B2

Before CHRISTOPHER L. CRUMBLEY, JON B. TORNQUIST, and
CHRISTOPHER M. KAISER, *Administrative Patent Judges*.

TORNQUIST, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

A. Background

Free-Flow Packaging International, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1, 2, 5–10, and 13–20 of U.S. Patent No. 8,357,439 B2 (Ex. 1001, “the ’439 patent”).

Automated Packaging Systems, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless the Director determines . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

After considering the Petition and the Preliminary Response, we determine that Petitioner has not demonstrated a reasonable likelihood that it would prevail in showing any of the challenged claims are unpatentable. Accordingly, we do not institute *inter partes* review.

B. Related Matters

The parties identify *Automated Packaging Systems, Inc. v. Free-Flow Packaging International, Inc.*, No. 5:14-cv-02022 (N.D. Ohio), as a related matter. Pet. 2; Paper 5, 2. In addition, the parties note that related patents are being challenged in IPR2016-00444 (challenging U.S. Patent No. 7,897,220), IPR2016-00445 (challenging U.S. Patent No. 8,425,994), and IPR2016-00446 (challenging U.S. Patent No. 7,757,459). Pet. 2; Paper 5, 2.

C. The Asserted Grounds of Unpatentability

Petitioner presents the following grounds of unpatentability
(Pet. 2–3):

Whether claims 1, 2, 5–10, and 13–20 would have been obvious under 35 U.S.C. § 103 over Peper¹ and Titchenal;² and

Whether claims 1, 2, 5–10, and 13–20 would have been obvious under 35 U.S.C. § 103 over Fuss,³ Peper, and Titchenal.

D. The '439 Patent

The '439 patent relates to a “preformed web and a method of producing dunnage units from the preformed web.” Ex. 1001, at [57]. Specifically, the '439 patent describes “plastic webs of interconnected pouches and processes of converting interconnected pouches to at least one row of dunnage units.” *Id.* at 1:41–43. It also describes “a gap [that] develops between each pair of adjacent fluid filled pouches” “upon inflation.” *Id.* at 1:43–45. The '439 patent describes this gap as “run[ning] between an inflation edge line of perforations and a spaced apart opposite edge line of perforations,” with the gap “mak[ing] separating the dunnage units much simpler and easier than separating dunnage units that are connected by a continuous line of un-ruptured perforations.” *Id.* at 1:56–65.

¹ Peper et al., US 2003/0094395 A1, published May 22, 2003 (Ex. 1006, “Peper”).

² Titchenal et al., U.S. Patent No. 3,791,573, issued Feb. 12, 1974 (Ex. 1007, “Titchenal”).

³ Fuss et al., is identified on Petitioner’s exhibit list as US 2001/0013215 A1, published Aug. 16, 2001 (Ex. 1008, “Fuss”); Pet. iii. However, as discussed below, Ex. 1008 does not correspond to the identified document.

E. Illustrative Claim

Challenged claims 1 and 9 are independent, with claims 2, 5–8, and 20 depending from claim 1 and claims 10 and 13–19 depending from claim 9. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A web for forming dunnage units, comprising:
 - a first elongated layer having an inflation edge and an opposite edge;
 - a second elongated layer having an inflation edge and an opposite edge, wherein the second elongated layer is superposed over the first elongated layer, the first and second layers connected together at the opposite edges;
 - a plurality of transverse seals extending from the opposite edge to within a predetermined distance from the inflation edge, wherein the connection at the opposite edges and said transverse seals form a plurality of adjacent inflatable pouches;
 - a plurality of inflation edge lines of perforations through the first and second elongated layers that extend inward from the inflation edges; a plurality of opposite edge lines of perforations through the first and second elongated layers that extend inward from the opposite edges; and a plurality of gap forming lines extending between the inflation edge lines of perforations and the opposite edge lines of perforations, wherein the inflation edge lines of perforations, the opposite edge lines of perforations, and the gap forming lines delineate side edges of adjacent pouches, wherein the web is configured such that inflation of the web causes the first layer to separate from the second layer along the side edges of the pouches, wherein the gap forming lines are configured such that inflation of the pouches also causes said web to separate along the gap forming lines such that portions of said side edges of adjacent pouches delineated by the gap forming lines move away from one another and wherein said inflation edge lines of perforations are configured such that inflation of the pouches leaves the inflation edge perforations intact.

Ex. 1001, 7:38–8:4.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, “[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. ___, No. 15-446, slip op. at 13 (U.S. June 20, 2016). In determining the broadest reasonable construction, we presume that claim terms carry their ordinary and customary meaning. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). A patentee may define a claim term in a manner that differs from its ordinary meaning; however, any special definitions must be set forth in the Specification with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Upon review of the parties’ arguments and supporting evidence, we determine that no claim terms require construction for purposes of this Decision. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”); *see also* Pet. 8 (asserting “that none of the ’439 patent terms require construction for this IPR”).

B. Obviousness over *Peper* and *Titchenal*

Petitioner argues that claims 1, 2, 5–10, and 13–20 are unpatentable under 35 U.S.C. § 103(a) as having been obvious over the combination of *Peper* and *Titchenal*. Pet. 25–43. In support of this asserted ground of unpatentability, Petitioner relies upon the declaration testimony of Dr. Robert M. Kimmel. Ex. 1003.

1. *Peper*

Peper is directed to an inflatable packaging system with “an inflation channel that feeds a plurality of inflatable cells [that] prevents buckling of the inflation header as the inflatable cells inflate by relieving stress along a seal line that separates the inflation header from the inflatable cells.” Ex. 1006, at [57]. The system of Peper “is formed from two film layers.” *Id.*

¶ 43. Figure 12 of Peper is reproduced below:

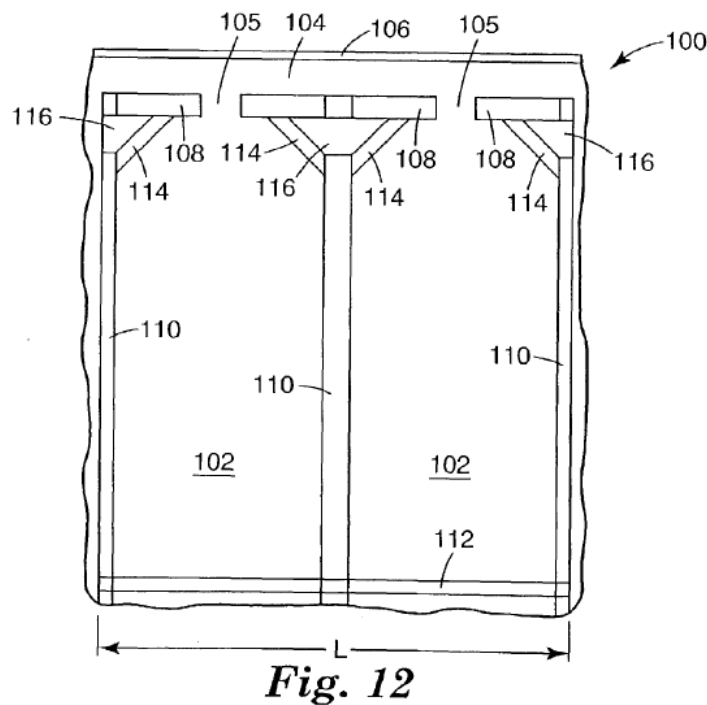


Figure 12 of Peper depicts two inflatable cells 102 formed from two joined film layers. *Id.* Inflatable cells 102 are formed by heat seals 108, 110, and 112, and optionally heat seal 114. *Id.* ¶¶ 44–45. Inflatable cells 102 are inflated using header 104, which communicates with the interior of cells 102 via inlets 105, which are gaps in heat seal 108. *Id.* ¶¶ 43–44. A separate embodiment of Peper is depicted in Figure 14, reproduced below:

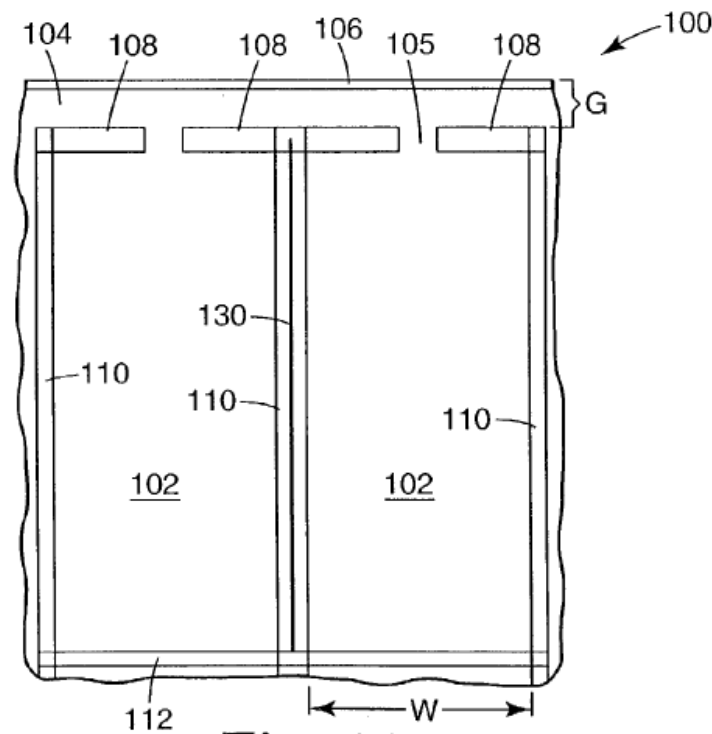


Fig. 14

Figure 14 of Peper depicts two inflatable cells 102, constructed similarly to inflatable cells 102 in Figure 12. *Id.* ¶ 47. As in Figure 12, cells 102 in Figure 14 are formed by heat seals 108, 110, and 112, and cells 102 are inflated via header 104, which communicates with the interior of cells 102 via inlets 105. *Id.* ¶¶ 43–44, 47. In Figure 14,

[e]ach heat seal 110 that separates adjacent cells 102 is provided with a central cut 130 that extends between seal 108 and seal 112. This central cut 130 permits each cell 102 to individually reduce in width *W* as cells 102 are inflated, such that a gap between adjacent cells 102 forms along cut 130.

Id. ¶ 47.

2. Titchenal

Titchenal is directed “to bag constructions wherein distortion of the bag accompanying filling [of the bag] is controlled to provide a wrinkle-free

region for placement of a closure seal.” Ex. 1007, 1:9–12. Figure 1 of Titchenal is reproduced below:

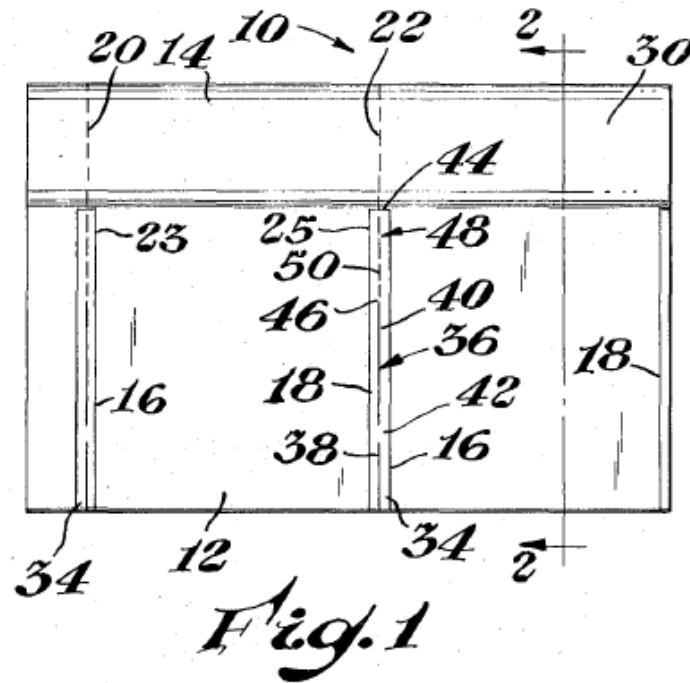


Figure 1 of Titchenal depicts “a chain of connected bag elements 10, each including bottom and top ends 12 and 14 and sides 16 and 18, respectively.” *Id.* at 2:35–38. Sides 16 and 18 “are closed except at their uppermost extents or their upper regions 20 and 22.” *Id.* at 2:38–40. This closure is accomplished “by cross-sealing a length of tubular film or material at regularly spaced intervals . . . by strip seals 34.” *Id.* at 2:53–55. Sides 16 and 18 each include lines of weakness 36, which, “at their lower extents comprise at least one slit or cut and preferably two slits 38 and 40 interrupted or separated by a land or joined region 42.” *Id.* at 3:6–9. “The upper extremity 46 of each slit 40 terminates at a point below the upper end 44 of seams 34.” *Id.* at 3:9–10. From upper extremity 46 to the upper edge of bag elements 10, perforations or serrations 50 are provided, with these perforations not weakening the connection between adjacent bag elements as

much as slits 38 and 40 do. *Id.* at 3:19–25. When bag elements 10 are filled with product, they “move or distort inwardly along . . . sides 16 and 18.” *Id.* at 4:34. “Such side movement is readily permitted by means of slits 38 and 40 usually accompanied by breaking of lands 42.” *Id.* at 4:37–39. “[A] connection between the bags 10 is maintained for a distance below terminating ends 44 of seams 34 subsequent to filling,” *id.* at 4:45–47, which eliminates or minimizes distortion at the upper ends of the bags during subsequent sealing of the bags, *id.* at 4:49–53.

3. Obviousness of Claims 1, 2, 5–10, and 13–20 over Peper and Titchenal

Petitioner asserts that each limitation of independent claims 1 and 9 is taught or suggested by at least one of Peper and Titchenal. Pet. 25–37. Patent Owner disputes this assertion, arguing that Peper and Titchenal fail to teach, at a minimum, the claimed “opposite edge lines of perforations.” Prelim. Resp. 6–11.

As shown in Figure 14 above, Peper does not use any perforations, and relies upon central cut 130 to allow a gap to form between cells during inflation. Ex. 1006 ¶ 47, Fig. 14. Petitioner contends, however, that Titchenal discloses “perforations or serrations 50” and a “line of weakness 42,” which would be understood by a person of ordinary skill in the art to be “a plurality of opposite edge lines of perforations,” as recited in claims 1 and 9. Pet. 28–29 (citing Ex. 1007, 3:19–24, 4:66–5:2).

Treating Titchenal’s fill side as the “inflation edge,” we agree that Titchenal discloses perforations 50 “that extend inward from the inflation edge.” Ex. 1007, 3:19–25, Fig. 1. Figure 1 of Titchenal does not disclose, however, a line of perforations extending inward from the edge opposite its

fill side, and slit 38, land 42, and slit 40 in combination cannot be the claimed “line[] of perforations,” because Petitioner relies on slit 40 as the claimed “gap forming line[] extending *between* the inflation edge line[] of perforations and the opposite edge line[] of perforations.” Ex. 1007, 3:6–9 (“Lines of weakness 36 at their lower extents comprise at least one slit or cut and preferably two slits 38 and 40 interrupted or separated by a land or joined region 42.”); Pet. 32 (“A POSA would understand the ‘slits’ disclosed by Tichenal to be the ‘gap forming lines extending *between* the inflation edge lines of perforations and the opposite edge lines of perforations.”). Without slit 40 as part of the “line[] of perforations,” Tichenal shows, at best, a single perforation in slit 38, which does not constitute a “line[] of perforations.”

The only evidence to which Petitioner directs us with respect to this point is paragraphs 80 and 81 of Dr. Kimmel’s declaration, which does nothing more than parrot the language of the Petition word for word, without providing any analysis or underlying facts to support the opinion. *Compare* Ex. 1003 ¶¶ 80–81, *with* Pet. 28–29. “Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” 37 C.F.R. § 42.65(a). And “[m]erely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.” *Kinetic Techs., Inc. v. Skyworks Solutions, Inc.*, Case IPR2014-00529, slip op. at 15 (PTAB Sep. 23, 2014) (Paper 8).

Because Petitioner has not made an adequate showing that the limitations of claims 1 and 9 are taught or suggested by the combination of Peper and Tichenal, Petitioner has not shown a reasonable likelihood that it

would prevail with respect to these claims. Accordingly, we do not institute *inter partes* review of claims 1 or 9 on this ground. And, because claims 2, 5–8, 10, and 13–20 each depend from claims 1 or 9, we also do not institute *inter partes* review with respect to those claims on this ground.

C. Asserted Obviousness over Fuss, Peper, and Titchenal

Petitioner argues that claims 1, 2, 5–10, and 13–20 are unpatentable under 35 U.S.C. § 103(a) as having been obvious over the combination of Fuss, Peper, and Titchenal. Pet. 43–60. In support of its arguments, Petitioner relies upon the testimony of Dr. Kimmel. *Id.*

1. Fuss

Fuss is directed to a “[s]ystem, method, and material for making pneumatically filled packing cushions.” Ex. 3001, at [57].⁴ Figure 6 of Fuss is reproduced below:

⁴ Ex. 1008 is U.S. Patent No. 6,582,800 B2, whereas Petitioner’s and Patent Owner’s citations are to U.S. Patent Application No. 09/765,064, which is not of record in this proceeding. As the exhibit is not in the record, pursuant to 35 U.S.C. § 312(a)(3)(A), at least those arguments in the Petition relying upon this exhibit may not be considered. However, even if the Petition were to be considered with respect to arguments addressing Ex. 1008, we would not institute *inter partes* review in this case for the reasons set forth below. For ease of reference, U.S. Patent Application No. 09/765,064 is provided as Ex. 3001 and all references in the Petition and Preliminary Response are presumed to be directed to this Exhibit.

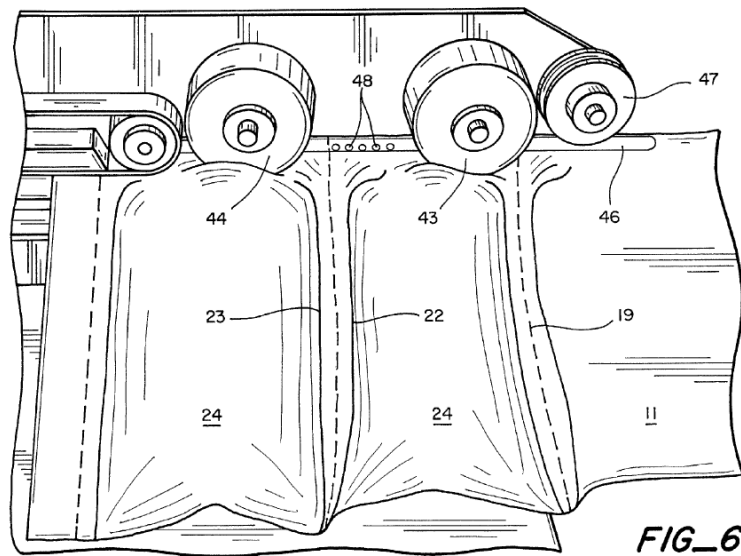


Figure 6 depicts the creation of inflated cushions. Ex. 3001 ¶ 41. Material 11 is fed into the machine of Fuss, where air is injected into chambers 24 via openings 48 in inflation tube 46. *Id.* ¶¶ 39, 41. Chambers 24 are defined by transverse seals along lines 22 and 23, extending from the longitudinal edge of material 11 opposite the inflation edge and terminating “a short distance from” the inflation edge. *Id.* ¶¶ 8, 24. Transversely extending rows of perforations 19 are placed between lines 22 and 23 and extend from one longitudinal edge of material 11 to the other longitudinal edge. *Id.* ¶¶ 8, 23.

Fuss discloses that inflation tube 46 “is arcuately curved in a horizontal plane so that the film material will follow an arcuate path as it passes through the machine.” *Id.* ¶ 50. Fuss discloses that the curved form of the inflation tube is “advantageous in accommodating the changes in shape which occur in the film as the cushions are inflated.” *Id.*; *see id.* ¶ 54 (same disclosure).

2. *Analysis of Obviousness of Claims 1, 2, 5–10, and 13–20*

Petitioner asserts that every limitation of claims 1, 2, 5–10, and 13–20 is taught or suggested by at least one of the Fuss, Peper, and Titchenal. Pet. 43–60.

With respect to the rationale for combining the three references, Petitioner’s first argument is that a person of ordinary skill in the art would have been “strongly motivated” to combine Peper, Titchenal, and Fuss because “all three patents are directed to the same problem—automated, continuous production of inflatable, sealed, separable plastic bag units.” Pet. 21 (citing Ex. 1003 ¶ 65). Although this argument may be enough to show that the two references are analogous art, *see Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010), simply demonstrating that a set of references are all directed to the same problem is not, by itself, a sufficient rationale to combine the references. *See id.* (upon finding that two references were directed to the same problem, the Court proceeded to analyze whether a person of ordinary skill in the art would have been motivated to combine the references); *see also In re Kahn*, 441 F.3d 977, 987–88 (Fed. Cir. 2006) (noting that the inquiry as to whether a person of ordinary skill in the art would have sought to combine the references “picks up where the analogous art test leaves off”). Thus, even if we were to consider Petitioner’s first argument, we would not find it persuasive.

Petitioner’s second argument is that a person of ordinary skill in the art would have combined the teachings of Fuss with those of Peper and Titchenal because Fuss teaches that “unreliable inflation was largely the result of wrinkling at the fill edge” and Peper “is explicitly directed to solving” this problem. Prelim. Resp. 22 (citing Ex. 1003 ¶ 67). Fuss does

recognize that the inflation of cushions causes “changes in shape . . . in the film,” and that this phenomenon should be “accommodat[ed].” Ex. 3001 ¶¶ 50, 54. Petitioner does not explain, however, why one of ordinary skill in the art would have understood that wrinkling at the fill edge in Fuss is the cause of “unreliable inflation.”⁵ See Pet. 22. Moreover, after noting the change in shape of the film during inflation, Fuss goes on to accommodate this phenomenon through the use of an arcuately curved inflation tube. Ex. 3001 ¶ 50. Given that Fuss already accommodates the change in shape of cushions during inflation, Petitioner does not explain adequately why one of skill in the art would then seek to add additional modifications to the device of Fuss, including the modifications of Peper and Titchenal.

Because Petitioner has not made an adequate showing that a person of ordinary skill in the art would have sought to combine Fuss with Peper and Titchenal, even if we were to consider Petitioner’s arguments with respect to the application of Fuss, we would not be persuaded that Petitioner has demonstrated a reasonable likelihood that claims 1, 2, 5–10, 13–20 of the ’439 patent would have been obvious. Accordingly, we do not institute *inter partes* review of the challenged claims on this ground.

III. CONCLUSION

Upon consideration of the Petition and the Preliminary Response, we conclude that Petitioner has not demonstrated a reasonable likelihood that it

⁵ The only relevant evidence Petitioner cites to in the Petition in support of its argument is paragraph 67 of Dr. Kimmel’s declaration, which merely parrots the language of the Petition word for word, without providing any additional analysis or explanation. *Compare* Ex. 1003 ¶ 67, *with* Pet. 22–23.

would prevail in showing the challenged claims are unpatentable.
Accordingly, we do not institute *inter partes* review of any of the challenged claims on either of the asserted grounds.

IV. ORDER

It is hereby
ORDERED that the Petition is *denied* as to all challenged claims, and no trial is instituted.

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