Paper 62 Entered: March 26, 2019

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CANFIELD SCIENTIFIC, INC., Petitioner,

v.

MELANOSCAN, LLC, Patent Owner.

Case IPR2017-02125 Patent 7,359,748 B1

Before JOHN C. KERINS, MICHAEL W. KIM, and SCOTT C. MOORE, *Administrative Patent Judges*.

MOORE, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Canfield Scientific, Inc. ("Petitioner") filed a petition (Paper 9, "Petition" or "Pet.")¹ requesting *inter partes* review of claims 1–8, 11, 30, 32–34, 46, and 51 of U.S. Patent No. 7,359,748 B1 (Ex. 1001, the "'748 patent"). We issued a decision instituting an *inter partes* review as to some of the asserted grounds (Paper 15, "Institution Decision"), and then amended this decision in view of *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018), so as to institute an *inter partes* review as to all claims and all grounds set forth in the Petition (Paper 18).

Patent Owner subsequently filed a response (Paper 23, "Response" or "Resp."). Pursuant to our Scheduling Order, any arguments for patentability not set forth in this Response are waived. Paper 16, 6.

Petitioner filed confidential and public versions of a reply (Papers 33 and 35, "Reply"). Petitioner did not complete filing and serving the exhibits to the Reply until nearly a half hour after the filing deadline (*see* Paper 39), but we ordered that these exhibits be treated as timely filed (Paper 56). Petitioner also filed confidential and public versions of a motion to exclude certain materials and citations from evidence (Papers 42 and 43, "Petitioner's Motion to Exclude").

Patent Owner subsequently filed confidential and public versions of a sur-reply (Papers 45, 46, "Sur-Reply"), and also filed a motion to exclude part or all of several exhibits submitted by Petitioner (Paper 47, "Patent Owner's Motion to Exclude"). Patent Owner also filed confidential and

¹ References to the Petition herein refer to the Corrected Petition, entered November 27, 2017.

public versions of an opposition to Petitioner's Motion to Exclude (Papers 49, 50). Petitioner filed an opposition to Patent Owner's Motion to Exclude (Paper 51), and both parties filed replies supporting their Motions to Exclude (Papers 54, 55).

An oral hearing was held on December 7, 2018, and a transcript of the hearing is of record (Paper 59, "Hearing Tr.").

We have jurisdiction over this dispute under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, Petitioners have not shown by a preponderance of the evidence that any claim of the '748 patent is unpatentable. In addition, Petitioner's Motion to Exclude is *denied in part and dismissed in part*, and Patent Owner's Motion to Exclude is *dismissed as moot*.

II. BACKGROUND

A. Related Proceeding

The '748 patent is the subject of *Canfield Scientific, Inc. v. Melanoscan LLC and Dr. Rhett Drugge*, Civil Action No. 2:16-cv-04636
JMV-JBC (D.N.J. 2016). Pet. 1; Paper 6.

B. The '748 Patent

The '748 patent "relates to the detection, diagnosis and treatment of skin cancer as well as other diseases and cosmetic conditions of the visible human." Ex. 1001, 1:22–24. The disclosed invention involves "[a] device allow[ing] for the imaging of total or subtotal non-occluded body surfaces in order to detect health and cosmetic conditions and involves the measurement and analysis of an optically depicted image of a patient's surfaces." *Id.* at

1:6–11. According to the Specification, the disclosed invention solves "a need for a practical device that allows for the rapid screening of individuals for skin cancer and other maladies of the skin in early stages of development." *Id.* at 1:51–53. The '748 patent uses the terms "Total Immersion Photography" and "TIP" to refer to the disclosed invention. *Id.* at 3:47–53.

C. Illustrative Claim

Petitioner challenges claims 1–8, 11, 30, 32–34, 46, and 51 of the '748 patent. Of these, claims 1 and 51 are independent. Claim 1 is illustrative of the challenged claims, and is reproduced below.

- 1. A device for the identification of maladies that effect human tissue comprising:
 - an enclosure configured to receive a person or portion thereof for imaging the person or portion thereof, wherein the enclosure defines a specified imaging position for placing the person or portion thereof within the enclosure for imaging, and the specified imaging position defines a centerline;
 - a plurality of imaging devices, wherein a plurality of the imaging devices are vertically spaced relative to each other, a plurality of the imaging devices are laterally spaced relative to each other, a plurality of the imaging devices are located on opposite sides of the centerline of the specified imaging position relative to each other, and each imaging device is located a predetermined distance relative to the specified imaging position; and
 - a plurality of light sources spaced relative to each other and peripheral to the plurality of imaging devices that illuminate the person or portion thereof located at the specified imaging position and generate refraction and reflectance light therefrom;

wherein each of said imaging devices generates an image of the illuminated person or portion thereof located at the specified imaging position, and defines respective coordinates and said respective predetermined distance relative to the specified imaging position, and defines a respective focal length and resolution information, allowing precise measurement of imaged features of the person or portion thereof located at the specified imaging position.

Ex. 1001, 21:63-22:25.

D. Cited References and Instituted Grounds of Unpatentability

Ground	References	Basis	Challenged Claims
1	Voigt ² and Hurley ³	§ 103(a) ⁴	1–5, 8, 11, 30, 33, 34, 46, and 51 ⁵
2	Voigt and Crampton ⁶	§ 103(a)	1–4, 8, 11, 30, 33, 34, and 51 ⁷

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² Voigt and Classen, "Topodermatographic Image Analysis for Melanoma Screening and the Quantitative Assessment of Tumor Dimension Parameters of the Skin," Cancer 1995 Fed; 75(4):981–988 (Ex. 1003, "Voigt").

³ Hurley et al., "Body Measurement System Using White Light Projected Patterns for Made-to-Measure Apparel," SPIE Vol. 3131, July 7, 1997, 212–223 (Ex. 1004, "Hurley").

⁴ The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, which was enacted on September 16, 2011, made amendments to 35 U.S.C. § 103. AIA § 3(b), (c). Those amendments became effective on March 16, 2013. *Id.* at § 3(n). Because the challenged claims of the '748 patent have an effective filing date before March 16, 2013, all citations herein to 35 U.S.C. § 103 refer to the pre-AIA version of that statute.

⁵ The headings in the Petition indicate that claim 32 is challenged in Ground 1, but this appears to be a typographical error because the discussion of Ground 1 in the Petition does not address claim 32. *See* Pet. 11–47.

⁶ WO 98/28908, pub. July 2, 1998 (Ex. 1006, "Crampton").

⁷ Page 2 of the Petition indicates that claim 5 is included in Ground 2, but this appears to be a typographical error because the discussion of Ground 2 in the Petition does not address claim 5. *See* Pet. 47–60.

Ground	References	Basis	Challenged Claims
3	Hurley	§ 103(a)	1–8, 11, 30, 33, 34, and 46 ⁸
4	Voigt, Hurley, Daanen ⁹	§103(a)	6 and 7
5	Voigt, Crampton, Dye ¹⁰	§103(a)	32 and 46

Petitioner relies in its Petition on the Declaration of Dr. Jan-Peter Muller (Exhibit 1016, the "First Muller Declaration"). Petitioner also relies on the Second Declaration of Dr. Jan-Peter Muller (Exhibit 1031, the "Second Muller Declaration"), which was submitted after entry of our Institution Decision, 11 and the Third Declaration of Dr. Jan-Peter Muller (Ex. 1036, the "Third Muller Declaration"), which was submitted with Petitioner's Reply.

Patent Owner relies in its Response on the Declaration of Dr. Daniel Van Der Weide (Ex. 2019, the "Van Der Weide Declaration").

⁸ Page 2 of the Petition indicates that claim 51 is included in Ground 3, but this appears to be a typographical error because the discussion of Ground 3 in the Petition does not address claim 51. *See* Pet. 60–75.

⁹ Daanen and van de Water, "Whole Body Scanners," Displays 19 (1998) 111–120 (Ex. 1005, "Daanen").

¹⁰ WO 99/56249 (Ex. 1007, "Dye").

¹¹ Petitioner submitted the Second Muller Declaration along with a Motion to Submit Supplemental Information (Paper 19). We subsequently granted this Motion, but ruled that the Second Muller Declaration and supporting exhibits could only be used to support contentions that were set forth in detail in the Petition, and could not be used to modify Petitioner's contentions or raise new substantive arguments. *See* Paper 61.

III. ANALYSIS

A. Preliminary Issues

1. Patent Owner's Attempts to Incorporate by Reference Material from its Preliminary Response

At the beginning of its Response, Patent Owner includes a blanket statement that the "Preliminary Response" and "the exhibits filed therewith and the arguments therein" are "incorporated herein by reference." Response 1. Patent Owner then attempts at least 12 additional times to incorporate by reference, into its Response, arguments and supporting evidence that previously were set forth in its Preliminary Response. *See id.* at 3, 7, 10, 11, 33, 49, 51, 52. Patent Owner also argues in its Sur-Reply that Canfield has "failed to establish unpatentability . . . for the reasons set forth in Melanoscan's Preliminary Response." Sur-Reply, 1. These attempts to incorporate by reference material from the Preliminary Response are improper.

Our Rules clearly and unambiguously provide that "[a]rguments must not be incorporated by reference from one document into another document." 37 C.F.R. § 42.6(a)(3). Our Rules also limit Patent Owner's Response to 14,000 words, and its Sur-Reply to 5,600 words. 37 C.F.R. § 42.24(b). Patent Owner's attempt to incorporate by reference its 13,909 word Preliminary Response (*see* Paper 11, 62) into its 13,513 word Response (*see* Response, 63) and 5,594 word Sur-Reply (*see* Sur Reply 27) constitutes an improper attempt to circumvent the 14,000 word limit.

For the above reasons, the Preliminary Response will not be reviewed or considered in any way in rendering this Decision.

2. Patent Owner's Argument that the Petition is Barred by 35 U.S.C. § 315(a)

Patent Owner also argues in its Response that Canfield's Petition is barred by 35 U.S.C. § 315(a) "for all of the reasons Melanoscan set forth in its POPR." Response 3. We previously rejected this argument on the merits in our Institution Decision. *See* Paper 15, 3–7.

As discussed above, Patent Owner is not permitted to incorporate by reference arguments from its Preliminary Response. *See* 37 C.F.R. § 42.6(a)(3). The Response does not contain a substantive explanation of how or why the Petition allegedly is barred by 35 U.S.C. § 315(a). *See* Response 3. Accordingly, Patent Owner waived this argument by not substantively addressing it in the Response. *See* Paper 16, 6 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.").

In any event, the Petition is not barred by 35 U.S.C. § 315(a) for the reasons set forth in our Institution Decision. *See* Paper 15, 3–7.

B. Legal Principles

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, "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." 35 U.S.C. § 103(a). The question of obviousness under 35 U.S.C. § 103 is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of

nonobviousness, i.e., secondary considerations. ¹² *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

C. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art to which the '748 patent pertains "would have had at least a university degree in physics, electrical engineering, photogrammetry, surveying, or optics and at least two years of post-degree experience in the field of imaging." Pet. 5. Patent Owner, in contrast, asserts that one of ordinary skill in the art "would have at least an associate's degree (two-year) in photography or related disciplines with two years' experience in digital photography and use of computers for collecting, manipulating and viewing images." Resp. 5.

The '748 patent is directed to total immersion photography, which may be accomplished by way of a structure containing a plurality of imaging means, such as cameras. *See* Ex. 1001, Abst. The imaging means may be operated, for example, via USB hubs and a computer, and the image information may then be transferred to the computer via the USB connection for processing and aggregation. *See id.* The Specification notes that it was known in the art to use "digital imagery to deal with dermatologic diagnoses," but that prior art systems required "multiple posings by the photographer and the subject." Ex. 1001, 2:54–61. The disclosed system "automate[s] the imaging of potentially cancerous lesions in a more rapid and complete method" that "does not require the presence of a physician or medical photographer." *Id.* at 3:18–20, 26–27.

¹² Patent Owner does not direct us to any objective evidence of nonobviousness in this case. *See generally* Resp.

Patent Owner's formulation, which requires experience with digital photography and the use of computers to collect, manipulate, and view images, is consistent with the descriptions of the prior art and the invention set forth in the Specification.

In contrast, Petitioner has not offered a persuasive explanation of why a person of ordinary skill in the art would have needed a university degree in physics, electrical engineering, photogrammetry, surveying, or optics, to design an enclosure with multiple imaging devices of the type discussed in the Specification. Based on our review of the Specification and cited references, we determine that Petitioner's proposed formulation would require a higher level of skill than is appropriate in this case.

For these reasons, we adopt Patent Owner's formulation regarding the level of ordinary skill in the art. We also find that Patent Owner's formulation is consistent with the level of skill reflected by the cited prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

We note, however, that both Parties' declarants testify that their opinions would remain the same under either Party's formulation. *See* Ex. 1036 ¶ 24; Ex. 2019 ¶ 32. Our analysis of the issues in this case similarly would have remained unchanged had we instead adopted Petitioner's proposed formulation.

D. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the

specification of the patent in which they appear. 37 C.F.R. § 42.100(b).¹³ Under that standard, and absent any special definitions, we give claim terms their ordinary and customary meaning, as would have been understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech.*, *Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

"Imaging Position" and "Centerline"

The Petition does not provide an explicit construction of the claim term "imaging position." *See* Pet. 5–11. Petitioner contends in the Petition that the claim term "centerline" means "a line dividing the body along one of two planes, either the frontal plane of the person's body dividing the person from side to side . . . or the sagittal plane dividing the person from front to back." *Id.* at 7.

Patent Owner argues in its Response that a "specified imaging position" means "an imaging position that is defined by the enclosure 'specifically or definitively'." Response 7. Patent Owner asserts that the claim term "centerline" should be given its ordinary and customary meaning, and that Petitioner's proposed construction improperly treats the "centerline" as a characteristic of the object being imaged rather than a characteristic of the device recited in the claims. *Id.* at 8–9.

In its Reply, Petitioner does not directly dispute Patent Owner's construction of "specified imaging position," and instead argues that the

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¹³ The Petition was filed before the November 13, 2018 effective date of the amendment to 37 C.F.R. § 42.100 changing the claim-construction standard applied in *inter partes* reviews. *Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42).

claims would be obvious even under Patent Owner's construction. Reply 2–3. Regarding the claim term "centerline," Petitioner then asserts that it "objects to [Patent Owner's] proposed construction," but does not offer its own. *Id.* at 3.

In its Sur-Reply, Patent Owner reiterates its position concerning the claim term "centerline," but does not offer any additional arguments. *See* Sur-Reply 1–3.

Independent claim 1 recites a "device for the identification of maladies," which includes an "enclosure" that "defines a specified imaging position" wherein the "specified imaging position defines a centerline." Ex. 1001, 21:63–22:3. Independent claim 51 similarly recites a "device for the identification of maladies," which includes a "second means . . . for specifying an imaging position . . ., wherein the second means defines a centerline." *Id.* at 25:20–27. This claim language makes clear that the "imaging position" and "centerline" of claims 1 and 51 are defined and/or specified by the recited devices, and not by the position of a patient.

In particular, claim 1 explicitly provides that the "enclosure" of claim 1 "defines the specified imaging position" recited in this claim, and that the "second means" of claim 51 "specif[ies]" the imaging position recited in that claim. Similarly, the "specified imaging position" of claim 1 "defines" the centerline of claim 1, and the "second means" of claim 51 "defines" the centerline of claim 51.

On this record, we determine that it is unnecessary to further construe these claim terms, or to adopt explicit constructions of any other claim terms, in order to resolve the issues in dispute. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) ("claim terms

need only be construed 'to the extent necessary to resolve the controversy'' (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

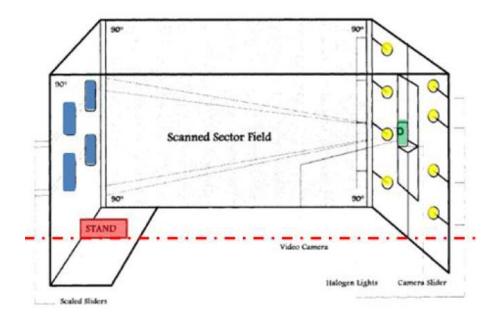
E. Asserted Grounds of Unpatentability

1. Ground 1: Alleged Obviousness of Claims 1–5, 8, 11, 30, 33, 34, 46, and 51 over Voigt and Hurley

a. Overview of Voigt

Voigt discloses a system for imaging and measuring skin lesions and measuring changes in such skin lesions over time. Ex. 1003, 981.

A figure depicting Voigt's system, with annotations added by Petitioner, is reproduced below. *See id.*, 982; Pet. 27.



The above annotated figure is a schematic view of Voigt's position framework. It depicts an enclosure that includes a video camera (annotated in green), a plurality of lights (annotated in yellow), and patient-positioning elements, i.e., a stand (annotated in red) and four horizontally adjustable sliders (annotated in blue). Ex. 1003, 982. Voigt indicates that sliders are

"scaled," i.e., mounted to a structure that contains indicators of some type that can be used to identify the position of each slider. *Id.* The above figure depicts the horizontally adjustable sliders as being attached to horizontal grooves or tracks on a wall. *See id.*

b. Overview of Hurley

Hurley discloses a three-dimensional ("3D") body imaging system that includes an apparatus employing six stationary imaging devices (sensors) positioned on three towers, with each tower having a lower and an upper sensor. Ex. 1004, 212–213. Two of the towers are laterally separated and disposed so that the sensors may image a front of a body, and the third tower is positioned so that its sensors may image a rear of the body. *Id*.

Figure 2.1 from Hurley, with annotations added by Petitioner, is reproduced below. *See id.* at 213; Pet. 29.

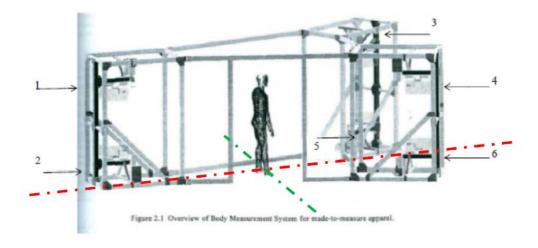


Figure 2.1, above, is a perspective view of Hurley's system, with the positions of the imaging devices identified by arrows numbered 1–6. *See id.*

c. <u>Independent Claim 1</u>

Petitioner asserts that the preamble is a non-limiting statement of intended use. Pet. 6.

Petitioner asserts that Voigt's position framework, depicted in the annotated figure reproduced *supra* at Section III.E.1.a, is "an enclosure configured to receive a person or portion thereof for imaging the person or portion thereof" of the type recited in claim 1. Pet. 26–27. Petitioner asserts that Voigt's horizontally adjustable sliders "defin[e] a specified imaging position for placing the person or a portion thereof within the enclosure for imaging." *Id*. Petitioner asserts that this specified imaging position defines a centerline, depicted with a red dashed line in the above-referenced figure. *Id*.

Petitioner argues that Hurley discloses the recited "plurality of imaging devices, wherein a plurality of the imaging devices are vertically spaced relative to each other, a plurality of the imaging devices are laterally spaced relative to each other, a plurality of the imaging devices are located on opposite sides of the centerline of the specified imaging position relative to each other, and each imaging device is located a predetermined distance relative to the specified imaging position." Referring to the annotated figure reproduced *supra* at § III.E.1.b, Petitioner asserts that cameras 1 and 2 constitute a plurality of imaging devices vertically spaced relative to each other; that cameras 3 and 4 constitute a plurality of imaging devices laterally spaced relative to each other; and that that cameras 2 and 6, and cameras 3 and 4, each constitute pluralities of imaging devices that are located on opposite sides of the centerline of the specified imaging position. Pet. 29.

Petitioner then asserts that "Voigt in combination with Hurley discloses a plurality of imaging devices located in the positions recited in claim 1." Pet. 29. The Petition, however, does not specify how the systems of Voigt and Hurley allegedly could have been combined with a reasonable expectation of success. *See id.* In particular, the Petition also does not identify any modifications to Voigt's position framework that a skilled artisan would have made as part of Petitioner's proposed combination. *See id.* Petitioner sets forth several rationales for why such a person would have had reason to combine the teachings of Voigt and Hurley, but these rationales also are general in nature and do not address any modifications to Voigt specifically. *See id.* at 29–31.

After setting forth its rationales for combining Voigt and Hurley, Petitioner vaguely states that a skilled artisan would have been able "to modify Voigt to provide cameras behind, in front and to the sides of the person to be imaged," and then cites to seven paragraphs from the First Muller Declaration. Pet. 31 (citing Ex. 1016 ¶¶ 123–128, 146). The Petition, however, does not identify or substantively discuss any such modifications to Voigt.

Patent Owner argues, in its Response, that a skilled artisan would not have had reason to combine Voigt's position framework with multiple imaging devices in the layout depicted in Hurley because, for example, Voigt's sliders would occlude (i.e., block the camera's view of) certain portions of the patient's skin, and Voigt's rear wall (i.e., the wall to which the sliders are mounted) would completely block the view of the cameras located behind the patient. Resp. 30–32. Patent Owner supports its

assertions with detailed testimony from Dr. Van Der Weide. *See* Ex. 2019, ¶¶ 55–58. We are persuaded by Patent Owner's arguments.

A petition for *inter partes* review must identify "with particularity the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim." 35 U.S.C. § 312(a)(3) (emphasis added). An invention "composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Rather, Petitioner must demonstrate "both 'that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367–68 (Fed. Cir. 2016) (citation omitted); *see KSR*, 550 U.S. at 418 (for an obviousness analysis, "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does").

We find that Petitioner has failed to establish, by a preponderance of the evidence, that a person of ordinary skill in the art would reasonably have expected to be successful in combining the unmodified Voigt's system with Hurley's arrangement of imaging devices. We agree with and credit Dr. Van Der Weide's detailed testimony that a skilled artisan would not reasonably have expected such a combination to be successful, because Voigt's rear wall would have blocked the view of two rear-facing cameras, and Voigt's horizontally adjustable sliders would have partially blocked the views of the remaining cameras. *See* Ex. 2019, ¶¶ 55–58.

The Petition does not identify any specific modifications to Voigt's system that would have allowed it to operate together with Hurley's arrangement of imaging devices, much less offer any persuasive rationale for why a person of ordinary skill in the art would have implemented such modifications. The Petition thus fails to make the evidentiary showings required to demonstrate obviousness under 35 U.S.C. § 103 based on combining a modified version of Voigt's system and Hurley arrangement of imaging devices. *See Intelligent Bio-Sys.*, 821 F.3d at 1367–68

Petitioner's attempt to incorporate by reference the potential modifications and alternative unpatentability theories described in Paragraphs 123–128 and 146 of the First Muller Declaration is improper. See Pet. 31 (citing Ex. 1016 ¶¶ 123–128, 146). A declaration is not a vehicle to make, or preserve the right to make, additional or alternative substantive arguments that are not developed in the briefs. Our Rules and precedent make clear that Petitioner may not incorporate by reference arguments from the First Muller Declaration into the Petition. See 37 C.F.R. § 42.6(a)(3) ("Arguments must not be incorporated by reference from one document into another document.); see also DeSilva v. DiLeonardi, 181 F.3d 865, 866–67 (7th Cir. 1999) (Incorporation "by reference amounts to a self-help increase in the length of the [] brief[,]" and "is a pointless imposition on the court's time. A brief must make all the arguments accessible to the judges, rather than ask them to play archeologist with the record."); Cisco Sys., Inc. v. C-Cation Techs., LLC, Case IPR2014–00454, slip op. at 7–10 (PTAB August 29, 2014) (Paper 12) (informative) (declining to consider arguments from a declaration that the petitioner attempted to incorporate by reference into its petition).

We also note that paragraphs 123–128 and 146 of the First Muller Declaration are conclusory in nature and unpersuasive. For example, Dr. Muller asserts "to the extent that the sliders referred to in Voigt were retained to position the subject, a person of ordinary skill in the art would understand that they could remain attached to the existing outer framework or, alternatively, to the stand." Ex. 1016 ¶ 125. But this testimony, at best, explains that such modifications would have been possible. Dr. Muller does not persuasively explain why a skilled artisan would have retained Voigt's sliders (the components of Voigt that allegedly "defin[e] a specified imaging position," as recited in the claims), while simultaneously modifying Voigt's structure in ways not taught or suggested by the prior art. See id. This assertion appears to be based on little more than hindsight. Dr. Muller also posits that "the specified imaging position of Hurley could be substituted for the lateral sliders of Voigt." *Id.* at \P 126–127. But this argument is not set forth in the Petition, which relies on Voigt alone with respect to this claim limitation. See Pet. 26–27. For these reasons, we would remain unpersuaded by the arguments set forth in Paragraphs 123–128 and 146 of the First Muller Declaration even if these arguments had been set forth properly in the Petition.

Petitioner argues in its Reply that Dr. Muller has opined that one of ordinary skill in the art would have had "many means to maintain Voigt's position framework or an equivalent." Reply 12 (citing Ex. 1016 ¶¶ 125–127). The Reply also cites testimony from the Third Muller Declaration to explain how Voigt could have been modified to operate with Hurley's arrangement of imaging sensors. *See* Reply 11 (citing Ex. 1036 ¶¶ 45–47, 51, 56, 57). These portions of the Reply again attempt to improperly

incorporate by reference arguments from declarations that are not substantively addressed in the briefs. We also agree with Patent Owner that that these portions of the Reply "improperly assert[] new theories" of unpatentability that were not set forth in the Petition. *See* Sur-Reply 7.

"Unlike district court litigation—where parties have greater freedom to revise and develop their arguments over time and in response to newly discovered material—the expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute." *Intelligent Bio-Sys.* 821 F.3d at 1369. In an *inter partes* review, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). Thus, although "the introduction of new evidence in the course of the trial is to be expected in inter partes review trial proceedings," *Genzyme Therapeutic Prods. LP v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1366 (Fed. Cir. 2016), the shifting of arguments is not, *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1286 (Fed. Cir. 2017).

To the extent modifications to Voigt's system would have been needed to successfully incorporate imaging devices in the arrangement of Hurley, Petitioner was required to explain these modifications "with particularity" in its Petition. *See* 35 U.S.C. § 312(a)(3). Having failed to do so, Petitioner cannot cure this deficiency by providing the required explanation in its Reply. Allowing Petitioner to hide the ball in this manner also would be fundamentally unfair to the Patent Owner, which was entitled to a complete explanation of Petitioner's contentions at the outset of this proceeding.

For the foregoing reasons, Petitioner has failed to demonstrate by a preponderance of the evidence that claim 1 is unpatentable under 35 U.S.C. § 103 over Voigt and Hurley.

d. <u>Independent Claim 51</u>

Petitioner asserts that "[c]laim 51 recites the same limitations as claim 1 but in means-plus-function format." Pet. 34. Petitioner asserts that Voigt's position framework corresponds to the recited "first means for receiving and enclosing a person or portion thereof," and that Voigt's stand and sliders correspond to the recited "second means located within the first means for placing the person or portion thereof within the first means wherein the second means defines a centerline." *Id.* at 34–36. Petitioner argues that there are no other substantive differences between claims 1 and 51 that need to be addressed, that the analysis "of the obviousness of Claim 1 in light of the Voigt/Hurley combination is identically applicable to these corresponding limitations in Claim 51." *Id.* at 34. In other words, Petitioner relies on the same allegedly obvious combination of Voigt and Hurley with respect to claim 51 that it relied on with respect to claim 1.

Petitioner does not provide any additional description of how a person of ordinary skilled art allegedly would have combined the teachings of Voigt and Hurley, or any additional rationales for why such a combination would have been obvious. *See id.* at 34–36.

Petitioner's arguments regarding claim 51 thus fail for the same reasons those arguments fail with respect to claim 1. *See* § III.E.1.c, *supra*. Accordingly, Petitioner has failed to demonstrate by a preponderance of the evidence that claim 51 is unpatentable under 35 U.S.C. § 103 over Voigt and Hurley.

e. <u>Dependent Claims 2–5, 8, 11, 30, 33, 34, and 46</u>

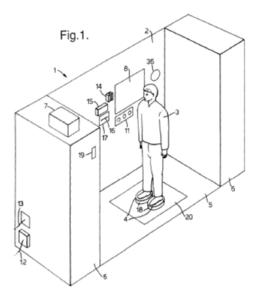
Claims 2–5, 8, 11, 30, 33, 34, and 46, all depend from, and incorporate the limitations of, claim 1. Petitioner's arguments regarding these claims fail for the same reasons those arguments fail with respect to claim 1. *See* § III.E.1.c, *supra*. Thus, Petitioner has failed to demonstrate by a preponderance of the evidence that claims 2–5, 8, 11, 30, 33, 34, and 46, are unpatentable under 35 U.S.C. § 103 over Voigt and Hurley.

2. Ground 2: Alleged Obviousness of Claims 1–4, 8, 11, 30, 33, 34, and 51 over Voigt and Crampton

a. <u>Crampton</u>

Crampton discloses an "avatar kiosk" that captures a three-dimensional image of a person in order to create an avatar of that person. Ex. 1006, 3.14

Figure 1 of Crampton is reproduced below.



¹⁴ Citations to Crampton refer to the page numbers added by Petitioner that appear at the bottom right of each page.

Figure 1 depicts avatar kiosk 1, which includes central area 2 for a person to stand in, and two raised footstands 4 located on the floor. Ex. 1006, 15. The depicted kiosk also includes sensing equipment 6 enclosed in the device and situated in front of and behind the person. *Id*.

Figure 6 of Crampton, with colored annotations added by Petitioner, is reproduced below. *See* Ex. 1006, 29; Pet. 51.

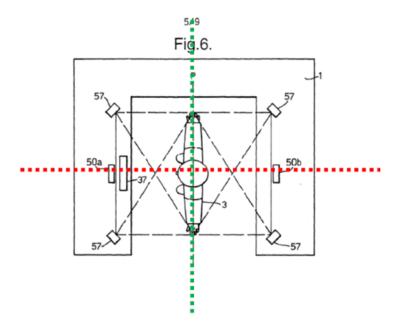


Figure 6 of Crampton is a plan view of avatar kiosk 1, which depicts sensors 57 that are rigidly attached to axis 50a or axis 50b. *Id.* at 16. Each sensor includes two cameras and several light sources. *Id.*

b. <u>Independent Claim 1</u>

Petitioner asserts that the preamble is a non-limiting statement of intended use. Pet. 6.

Petitioner asserts that Voigt discloses "an enclosure configured to receive a person or portion thereof for imaging the person or portion thereof" of the type recited in claim 1 for the same reasons discussed *supra* at Section III.E.1.c. Pet. 50. Petitioner also asserts that Crampton also

discloses "an enclosure for imaging a person" (Pet. 50), but it is unclear why Petitioner makes this assertion because Petitioner's unpatentability argument relies only on the enclosure of Voigt, not the enclosure of Crampton. *See* Pet. 53.

Petitioner then asserts that Crampton discloses the recited "plurality of imaging devices" arranged in the manner recited in claim 1. Pet. 52–53. Petitioner then asserts "for the same reasons set forth in connection with Hurley" in connection with Ground 1, "it would have been obvious to a POSA to modify the enclosure of Voigt to include additional cameras as suggested by Crampton, having the vertical and lateral spacing of claim 1, in order to achieve the advantages of such total body, multi-camera systems." Pet. 53.

Once again, the Petition fails to provide any detail as to how Voigt and Crampton allegedly could have been combined with a reasonable expectation of success. *See* Pet. 53. The Petition does not identify any modifications to Voigt's position framework that one of ordinary skill in the art would have made as part of Petitioner's proposed combination. *See id*. The Petition also does not set forth any rationales, beyond those discussed in Ground 1, for why a person of ordinary skill in the art would have combined Voigt and Hurley. *See id*.

Patent Owner points out in its Response that Petitioner "has alleged the same rationales for modifying Voigt in view of Crampton as it does for modifying Voigt per Hurley," and that those rationales "do not stand up with respect to Crampton for the same reasons they fail for Hurley." Response 47. We agree.

The Petition fails to explain how or why a person of ordinary skill in the art would have combined the teachings of Voigt and Crampton with a reasonable expectation of success in the same way it fails to explain how or why such a person would have combined the teachings of Voigt and Hurley. As Dr. Van Der Weide explains, if cameras were positioned on more than one side of a person in the arrangement suggested by Crampton, Voigt's position framework (i.e., the rear wall and horizontally adjustable sliders) would block the cameras from viewing portions of the body. Ex. 2019 ¶ 82 (cited at Response 47). As discussed above, we credit this testimony. The Petition does not identify any modifications to Voigt's position framework that would have allowed a skilled artisan to successfully incorporate cameras in the arrangement of Crampton. As discussed above in our analysis of Ground 1, Petitioner cannot rely on modifications set forth in declarations but not substantively discussed in the Petition, or modifications set forth for the first time in the Reply. See § III.E.1.c, supra. In addition, as discussed above, the modifications and alternative arguments set forth in Paragraphs 123–128 and 146 of the First Muller Declaration would have been unpersuasive even if they had been set forth explicitly in the Petition. See id.

For the foregoing reasons, Petitioner has failed to demonstrate by a preponderance of the evidence that claim 1 is unpatentable under 35 U.S.C. § 103 over Voigt and Crampton.

c. <u>Independent Claim 51</u>

Petitioner asserts that the "only limitations of claim 51 not addressed in the analysis of claim 1 are its 'first' and 'second' means," and that "Voigt discloses these further limitations" for the reasons set forth in its discussion

of Ground 1. Pet. 55. In other words, Petitioner relies on the same allegedly obvious combination of Voigt and Crampton with respect to claim 51 that it relied on with respect to claim 1.

Petitioner makes an additional assertion that if the "second means" requires physical structures, such as floor markings, Crampton would disclose such means. *See* Pet. 55. Petitioner, however, never argues that such physical structures would have replaced or made unnecessary Voigt's position framework. *See id*.

Petitioner's arguments regarding claim 51 fail for the same reasons those arguments fail with respect to claim 1. *See* § III.E.2.b, *supra*. Accordingly, Petitioner has failed to demonstrate by a preponderance of the evidence that claim 51 is unpatentable under 35 U.S.C. § 103 over Voigt and Crampton.

d. Dependent Claims 2–4, 8, 11, 30, 33, and 34

Claims 2–4, 8, 11, 30, 33, and 34, all depend from, and incorporate the limitations of, claim 1. Petitioner's arguments regarding these claims fail for the same reasons they fail with respect to claim 1. *See* § III.E.2.b, *supra*. Accordingly, Petitioner has failed to demonstrate by a preponderance of the evidence that claims 2–4, 8, 11, 30, 33, and 34, are unpatentable under 35 U.S.C. § 103 over Voigt and Crampton.

3. Ground 3: Alleged Obviousness of Claims 1–8, 11, 30, 33, 34, and 46 over Hurley

a. <u>Independent Claim 1</u>

Petitioner asserts that the preamble is a non-limiting statement of intended use. Pet. 6.

Petitioner asserts that Hurley's frame, which is constructed of black anodized aluminum extrusion and covered with black theater cloth, corresponds to the "enclosure" recited in claim 1, and that Hurley's imaging sensors correspond to the recited "plurality of imaging devices." *See* Pet. 60–63.

Petitioner asserts that "Hurley discloses that the location of the imaged person is specified." *Id.* at 61. Importantly, however, the Petition never asserts that Hurley's cloth-covered frame (which allegedly corresponds to the recited "enclosure") "defines the specified imaging position," as required by claim 1. *See* § III.D, *supra*. Rather, Petitioner asserts that the "specified imaging position" is defined via a calibration process. *See id.* at 61–62.

Petitioner also asserts that Hurley discloses at least two centerlines of the type recited in claim 1: a line along "a frontal plane dividing the person from side to side" (depicted in green in the annotated version of Hurley's Figure 2.1 reproduced *supra* at Section III.E.1.b), and a line along "a sagittal plane dividing the person from front to back" (depicted in red in that figure). Pet. 62. The Petition, however, does not explain how the position defined via Hurley's calibration process (the alleged "specified imaging position") "defines" either of these two centerlines, as recited in claim 1. *See id.*; § III.D, *supra*.

Patent Owner argues in its Response that "Hurley lacks an enclosure that defines a specified imaging position," because "there is no particular or specific location at which the person stands within the Hurley device." Response 51–52. According to Patent Owner, if "Hurley had a specified imaging position . . ., there would be no need for calibration." *Id.* at 52.

Patent Owner also asserts that Hurley "necessarily also lacks a specified imaging position . . . defining a centerline as claimed." *Id*. We are persuaded by Patent Owner's arguments.

As discussed above, the Petition never asserts that Hurley's cloth-covered frame (which allegedly corresponds to the recited "enclosure") "defines the specified imaging position," as required by claim 1. *See* § III.D, *supra*. Instead, Petitioner asserts that the "specified imaging position" is determined by placing a calibration object "approximately where the subject will be standing," and then confirming "the distance between each camera and [the] position that will be occupied by the subject." Pet. at 61–62. The Petition lacks any persuasive explanation of how Hurley's cloth-covered frame could "define the specified imaging position," when that position is determined via a separate calibration process that is performed after the frame is already in place. *See* Pet. 60–62.

Petitioner argues in its Reply that if "Hurley lacks a description of a clearly demarcated imaging position, . . . it would have been obvious for a POSA to incorporate [this] element into the system disclosed in Hurley." Reply 18. In particular, Petitioner argues that after the calibration process is complete, "[i]t would have been obvious to a POSA to provide a visual marker of this location to ensure that the subject positioned themselves at the precise location just calibrated." Reply 19 (citing Ex. 1036 ¶¶ 27). But this assertion is not merely an attempt to bolster a contention set forth in the Petition; this is an entirely new and substantively different argument in which Petitioner attempts to rely on the common sense of one of ordinary skill in the art, rather than the disclosure of Hurley, to supply the "specified imaging position" limitation.

As discussed above, Petitioner was required to explain with particularity in its Petition why the '748 patent is unpatentable; and while new evidence may be offered, Petitioner may not shift substantive arguments during trial. *See Harmonic*, 815 F.3d at 1363; *Genzyme*, 825 F.3d at 1366; *Wasica*, 853 F.3d at 1286. Petitioner may not shift substantive arguments in its Reply and rely on the common sense of one of ordinary skill in the art, rather than Hurley, to supply the "specified imaging position" limitation.

In addition, this improper new argument would be unconvincing even if it had been raised in the Petition. Even if we were to accept Petitioner's theory that a skilled artisan would have known to place a visual marker at the position determined during the calibration of Hurley's device (i.e., the "specified imaging position"), Petitioner would still have failed to adequately explain how Hurley's cloth-covered frame (i.e., the recited "enclosure") "defines [this] specified imaging position" as recited in the claim. Like the Petition, the Reply lacks any persuasive explanation of how Hurley's cloth-covered frame could "define the specified imaging position," when that position is determined via a separate calibration process performed after the frame is already in place. *See* Reply 18–19.

Petitioner's arguments regarding the recited "centerline" also are not persuasive. As discussed above, the Petition does not explain how the position determined via Hurley's calibration process (the alleged "specified imaging position") "defines" either of these two alleged centerlines, as recited in claim 1. *See* Pet. 62; § III.D, *supra*. Both of the alleged centerlines identified in the Petition are lines defined by the standing position of the patient. *See id*. These lines would change according to the patient's orientation, even if the patient were to remain standing at the

location that Petitioner identifies as the "specified imaging position." For example, if the patient were to remain standing at this location, but rotate 45 degrees in a clockwise direction, the centerlines identified by Petitioner also would rotate by 45 degrees even though the patient remained standing at the location Petitioner contends is the specified imaging position. The Petition fails to offer any persuasive explanation of how such centerlines could be considered to be defined by the specified imaging position, as required by claim 1. *See id*.

Petitioner argues in its Reply that the orientation of Hurley's enclosure dictates the direction the patient faces, and thereby defines a centerline. Reply 20 (citing Ex. 1036 ¶ 30). However, neither the Reply nor the cited portion of the Third Muller Declaration identifies any particular disclosure in Hurley that the patient must face a particular direction. *See* Reply 20; Ex. 1036 ¶ 30. Moreover, Petitioner asserts in its Petition that Hurley's arrangement of imaging devices has "the ability to cover the entire body without repositioning." Pet. 30. It, therefore, is unclear why a person would have to face a particular direction in order to use Hurley's system. Thus, we are not persuaded that Hurley's enclosure dictates the direction a patient faces.

For the foregoing reasons, Petitioner has failed to demonstrate by a preponderance of the evidence that claim 1 is unpatentable under 35 U.S.C. § 103 over Hurley.

b. <u>Dependent Claims 2–8, 11, 30, 33, 34, and 46</u>

Claims 2–8, 11, 30, 33, 34, and 46, all depend from, and incorporate the limitations of, claim 1. Petitioner's arguments regarding these claims fail for the same reasons they fail with respect to claim 1. *See* § III.E.3.a,

supra. Accordingly, Petitioner has failed to demonstrate by a preponderance of the evidence that claims 2–8, 11, 30, 33, 34, and 46, are unpatentable under 35 U.S.C. § 103 over Hurley.

4. Ground 4: Alleged Obviousness of Claims 6 and 7 over Voigt, Hurley, and Daanen

a. Overview of Daanen

Daanen discusses eight commercially available products for performing optical 3D measurements in a manner that produces a digital copy of the surface geometry of the human body. Ex. 1005, 111–120. One of the disclosed products is the Vitronic imaging system, which Petitioner alleges employs either 16 or 24 cameras that are "arranged in four scanning heads, one on each of the four walls of the enclosure." *Id.* at 113, 115; Ex. $1016 \, \P \, 70$.

b. <u>Dependent Claims 6 and 7</u>

The Petition asserts that "Voigt in combination with Hurley discloses all limitations of" claims 6 and 7 "except for the particular placement of multiple sensor arrays," and that "the remaining elements" of these claims "would have been obvious in light of Daanen." Pet. 76, 78. Thus, Petitioner is asserting that Voigt and Hurley collectively teach or suggest the elements of claims 6 and 7 that are incorporated from claim 1 by way of dependence, and that one of ordinary skill in the art would have further modified the allegedly obvious Voigt/Hurley system to incorporate the "arrays" of Daanen (i.e., the four "scanning heads" of the Vitronic imaging system) in a

manner that would have satisfied the additional limitations recited in claims 6 and 7. ¹⁵ See Pet. 76–79.

Petitioner's argument that the combination of Voigt and Hurley would have taught or suggested the limitations of claim 1 that are incorporated by way of dependence fails for the same reasons set forth above in our discussion of Ground 1. *See* § III.E.1.c, *supra*.

Petitioner also has failed to set forth any persuasive reason why a person of ordinary skill in the art would have further modified the combination of Voigt and Hurley (which already would have included three sets of imaging devices) to further include the "arrangement of arrays" of Daanen. *See* Pet. 77. Petitioner's asserted rationale is that using the "arrangement of arrays" of Daanen "would be an obvious design choice to achieve total body coverage." *Id.* But Petitioner asserted previously that the combination of Voigt and Hurley would "cover the entire body without repositioning." *Id.* at 30. The Petition is devoid of any persuasive explanation of how Voigt's position framework could have been modified to simultaneously employ both Hurley's arrangement of imaging sensors and Daanen's arrangement of arrays, or of why a person of ordinary skill in the art would have had reason to simultaneously use both Hurley's imaging sensors and Daanen's arrays. *See* Pet. 76–79.

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¹⁵ To the extent Petitioner intended to assert that Daanen would have taught or suggested any of the limitations that are incorporated from claim 1 by way of dependence, Petitioner's argument would fail because the Petition fails to explain "with particularity" how Daanen would have taught or suggested any such limitations. *See* 35 U.S.C. § 312(a)(3).

For each of the above reasons, Petitioner has failed to demonstrate by a preponderance of the evidence that claims 6 and 7 are unpatentable under 35 U.S.C. § 103 over Voigt, Hurley, and Daanen.

5. <u>Ground 5: Alleged Obviousness of Claims 32 and 46 over Voigt, Crampton, and Dye</u>

a. Overview of Dye

Dye discloses a system that includes video display monitors to view two and three-dimensional images, with the candidates for display devices including LCD screens, flat panels, computer monitors, and also personal digital assistants (PDAs). Ex. 1007, 5. Dye additionally discloses that USB ports are a preferred method for connecting a computer to one or more display devices. *Id.*, Fig. 2B.

b. Claims 32 and 46

Petitioner relies on Voigt and Crampton with respect to the limitations of claims 32 and 46 that are incorporated from claim 1 by way of dependence, and relies on Dye only with respect to the additional limitations recited in claims 32 and 46. *See* Pet. 80–82. Petitioner's argument that the combination of Voigt and Hurley would have taught or suggested the limitations of claim 1 that are incorporated by way of dependence fails for the same reasons set forth above in our discussion of Ground 2. *See* § III.E.2.b, *supra*.

For the foregoing reasons, Petitioner has failed to demonstrate by a preponderance of the evidence that claims 32 and 46 are unpatentable under 35 U.S.C. § 103 over Voigt, Crampton, and Dye.

F. Petitioner's Motion to Exclude

In its Motion to Exclude (Paper 42), Petitioner asks that we exclude from evidence three categories of materials: (1) the citations to Ex. 1001 at 1:51-53 and 3:59-61 and Ex. 1001 at 6:6-10 on page 5 of the Response; (2) Paragraphs 22, 27, and 40 of the Drugge Declaration; and (3) certain statements from paragraphs 44, 45, 64, 72, 77, and 90 of the Van Der Weide Declaration. Paper 42, 6–10. For the reasons set forth below, Petitioner's Motion to Exclude is *denied in part and dismissed in part*.

This Decision does not rely in any way on the allegedly inadmissible citations to Exhibit 1001 contained on page 5 of the Response. *See* Paper 42, 6. Accordingly, the inclusion of these allegedly improper citations in the Response did not prejudice Petitioner, and this portion of Petitioner's Motion to Exclude is *dismissed as moot*.

This Decision also does not rely in any way on the allegedly inadmissible portions of the Drugge Declaration. *See* Paper 42, 7. Accordingly, the presence of these paragraphs did not prejudice Petitioner, and this portion of Petitioner's Motion to Exclude is *dismissed as moot*.

Petitioner's objections to portions of paragraphs 44, 45, 64, 72, 77, and 90 of the Van Der Weide declaration are based on relevance and prejudice under Rules 402 and 403 of the Federal Rules of Evidence. *See* Paper 42, 8–11. In this case, we considered only the arguments made in the briefs and the evidence sufficiently tied to those arguments. In addition, the Board is capable of assessing the credibility of Dr. Van Der Weide's testimony and according his testimony proper weight, as informed by the relevance and prejudice concerns raised by Petitioner. Accordingly, this portion of Petitioner's Motion to Exclude is *denied*.

G. Patent Owner's Motion to Exclude

In its Motion to Exclude, Patent Owner seeks to exclude Exhibits 1008, 1009, and 1011–1015, as well as portions of Exhibits 1016, 1036, and 1038–1047. Paper 47, 10.

Our Decision in this proceeding considered only the arguments made in the briefs and the evidence sufficiently tied to those arguments. We did not consider arguments for unpatentability that were not properly set forth in the Petition. Moreover, this Decision determines that Petitioner has failed to demonstrate the unpatentability of any challenged claim. Thus, the admission into evidence of these allegedly inadmissible exhibits did not prejudice Patent Owner. Accordingly, Patent Owner's Motion to Exclude is dismissed as moot.

IV. ORDER

Accordingly, it is

ORDERED that claims 1–8, 11, 30, 32–34, 46, and 51 of U.S. Patent No. 7,359,748 B1, have not been shown to be unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude is *denied* in part and dismissed in part;

FURTHER ORDERED that Patent Owner's Motion to Exclude is *dismissed as moot*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2017-02125 Patent 7,359,748 B1

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