

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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20/20 VISION CENTER, LLC,  
Petitioner,

v.

DIGITALOPTOMETRICS LLC,  
Patent Owner.

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PGR2018-00100  
Patent 9,980,644 B2

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Before PATRICK M. BOUCHER, CHRISTOPHER G. PAULRAJ, and  
MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining All Challenged Claims Unpatentable  
*35 U.S.C. § 328(a)*

## I. INTRODUCTION

### A. OVERVIEW

20/20 Vision Center, LLC (“Petitioner”) filed a Petition requesting a post-grant review of claims 1–20 of U.S. Patent No. 9,980,644 B2 (Ex. 1001, “the ’644 patent”).<sup>1</sup> Paper 2 (“Pet.”). DigitalOptometrics LLC (“Patent Owner”) filed its Mandatory Notices in response to the Petition (Paper 5), but did not file an optional Preliminary Response. *See* 37 C.F.R. § 42.207 (2018) (“The patent owner *may* file a preliminary response to the petition.”) (emphasis added).<sup>2</sup>

On April 17, 2019, we issued a Decision ordering that “pursuant to 35 U.S.C. § 324, a post grant review of the ’644 patent is instituted as to claims 1–20 based on the unpatentability grounds set forth in the Petition.” Paper 7 (“Dec.”), 48. After institution, Patent Owner filed a Patent Owner’s Response (Paper 15; “PO Resp.”) and a statutory disclaimer of claims 1–11<sup>3</sup>

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<sup>1</sup> Petitioner identifies itself as the real party in interest. Pet. 1.

<sup>2</sup> Patent Owner identifies itself as the real party in interest. Paper 5, 2.

<sup>3</sup> The July 2019 Trial Practice Guide Update notes that “a patent owner may file a statutory disclaimer of one or more challenged claims to streamline the proceedings. Where no challenged claims remain, the Board would terminate the proceeding. Where one or more challenged claims remain, the Board’s decision on institution would be based solely on the remaining claims. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1315 (Fed. Cir. 2016); *Sony Computer Entm’t Am. Inc. v. Dudas*, 2006 WL 1472462 (E.D. Va. May 22, 2006).” Trial Practice Guide Update 21 (July 2019) (“July 2019 Trial Practice Guide Update”), <https://www.uspto.gov/TrialPracticeGuide3>; *see also* Office Patent Trial Practice Guide, July 2019 Update, 84 Fed. Reg. 33,925 (July 16, 2019); Patent Trial and Appeal Board Consolidated Trial Practice Guide 52 (Nov. 2019), <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>.

(Ex. 2005). Petitioner filed a Petitioner’s Reply to Patent Owner’s Response (Paper 20; “Pet. Reply”), and Patent Owner filed a Patent Owner’s Sur-Reply (Paper 21; “PO Sur-Reply.”). An oral hearing was held on January 23, 2020. Paper 25 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R § 42.73. After reviewing all relevant evidence and assertions, we determine that Petitioner has proven, by a preponderance of the evidence, that claims 12–20 of the ’644 patent are unpatentable.

B. RELATED PROCEEDINGS

Petitioner and Patent Owner represent that the ’644 patent is not involved in any other matters. Pet. 1; Paper 5, 2.

C. THE ’644 PATENT (EX. 1001)

The ’644 patent is titled “REMOTE COMPREHENSIVE EYE EXAMINATION SYSTEM.” Ex. 1001, code (54). The ’644 patent relates to a remote-based eye testing system that does not require an optometrist or ophthalmologist, i.e., a doctor, to be on-site when a patient receives a comprehensive eye examination. *Id.* at 1:64–66. Instead of an optometrist or ophthalmologist, the ’644 patent discloses that

an ophthalmic technician is present with the patient in the exam room to operate eye examination equipment and transmit patient information to [a] remote location. At that remote location, a skilled technician is present to provide the necessary optical and/or medical care, and may operate the phoropter from the remote location if he/she desires. Using video and/or teleconferencing equipment and a phoropter located in the patient examination room along with management software, the

system works to determine the final optical prescription for the patient. That information, coupled with findings from other devices which are integrated with the management software, and that the patient uses locally, are reviewed by a remote based optometrist or ophthalmologist.

While the patient is being evaluated for eyeglasses or contacts, the optometrist or ophthalmologist may also operate the phoropter located in the patient examination room from the remote location if he/she desires and evaluate the patient for other ocular-related medical issues. Once the findings are finalized by the optometrist or ophthalmologist remotely, the final prescription for eyeglasses and/or contact lenses, along with any additional comments or findings, will print locally at the examination location and be delivered to the patient.

*Id.* at 1:67–2:23.

The '644 patent describes that its system comprises “exam site 1100, central server (exam site and remote technician connection) 1200, remote technician 1300, remote doctor 1400, and central server (remote doctor connection) 1500.” *Id.* at 8:22–26. In this regard, the '644 patent describes that the patient, the local technician, and the phoropter are located at the exam site or local diagnostic center. *Id.* at 9:28–45, 14:41–44, 17:38–40. The '644 patent discloses that “[t]he local technician in the system is always physically located at the exam site. The local technician takes care of registering the patient, collecting patient history, and walking the patient through the entire exam process.” *Id.* at 19:63–66. The '644 patent further discloses that “[t]he local technician also performs the initial pre-refraction tests prior to the actual refraction by a remote technician and the final review by a remote doctor.” *Id.* at 19:66–20:2.

The '644 patent also discloses that “[t]he remote technicians in the system are responsible for performing the subjective refraction part of the

eye exam prior to the patient being transferred to the remote doctor.” *Id.* at 25:17–19. The ’644 patent discloses that “[t]he remote doctors in the system are responsible for evaluating the results of all tests performed during the eye examination process and they may optionally verify or refine the subjective refraction performed by the remote technician.” *Id.* at 28:42–46. The ’644 patent describes that both the remote technician and the remote doctor may control the phoropter equipment located at the exam site from their respective remote locations. *Id.* at 25:20–23, 48:46–49.

In some embodiments, the ’644 patent discloses that “the eyecare doctor, the remote technician and the local technicians are in different locations.” *Id.* at 17:48–50. However, the ’644 patent also discloses that while the patient and the local technician are located together at a local diagnostic center, the remote technician and the remote doctor may be located at the same remote location, i.e.,

[t]he patient is then assigned to a remote eyecare technician (possibly by the local technician), where the remote eyecare technician is located at *a first remote diagnostic center*. The patient is finally assigned (possibly by the local technician) to a eyecare doctor, where the eyecare doctor is located at *a second remote diagnostic center*, which may or may not be *the same remote diagnostic center as the first remote diagnostic center*.

*Id.* at 17:38–50 (emphases added).

D. ILLUSTRATIVE CLAIM

Petitioner challenged claims 1–20 of the '644 patent in the Petition. However, Patent Owner's disclaimer of claims 1–11 (Ex. 2005) leaves only claims 12–20 remaining. Independent claim 12 is illustrative of the remaining challenged claims and is reproduced below:

12. A system for providing eye health and vision examinations, comprising:

a diagnostic center including ophthalmic equipment comprising a set of instruments that are utilized in administering eye examinations and being coupled to an equipment controller that is configured to receive instructions for controlling the ophthalmic equipment, wherein the diagnostic center is configured to:

in response to receiving a first request from the diagnostic center, select a subset of remote technicians to administer an eye examination based, at least in part, on analyzing availability data to identify at least one remote technician who is logged into the web-based platform and not currently providing real-time eye examinations;

transmit a second request over a network to a select remote technician to administer the eye examination in real-time for a patient located at the diagnostic center;

receive first instructions over the network to permit the select remote technician to control operation of the ophthalmic equipment at the diagnostic center from a first remote location in order to administer at least one test pertaining to the eye examination;

generate patient examination data pertaining to the at least one test administered using the ophthalmic equipment;

in response to receiving a third request from the diagnostic center, select a subset of eyecare doctors to review the eye examinations based, at least in part, on analyzing the availability data to identify at least one eyecare doctor who is

logged into the web-based platform and not currently providing real-time eye examinations;

transmit a fourth request over the network to a select eyecare doctor to review the eye examination in real-time for the patient located at the diagnostic center;

receive second instructions over the network to permit the select eyecare doctor to control operation of the ophthalmic equipment at the diagnostic center from a second remote location in order to review the at least one test pertaining to the eye examination; and

review the patient examination data pertaining to the at least one test administered using the ophthalmic equipment;

wherein the eyecare doctor, the remote technician and the patient are in different locations.

Ex. 1001, 40:31–41:7.

E. EVIDENCE AND ASSERTED GROUNDS OF UNPATENTABILITY

We instituted review of claims 12–20 of the '644 patent on the following grounds:

Ground No.	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
2	12–20	§ 112(b)	Indefiniteness
3	12–20	§ 112(a)	Enablement
4	12–14, 17–20	§ 102	Seriani <sup>4</sup>
5	12–14, 17–20	§ 103	Seriani
6	15, 16	§ 103	Seriani, Cox <sup>5</sup>

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<sup>4</sup> U.S. 9,230,062 B2, issued Jan. 5, 2016 (Ex. 1003).

<sup>5</sup> U.S. 6,499,843 B1, issued Dec. 31, 2002 (Ex. 1004).

Ground No.	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
7	20	§ 103	Seriani, Kangarloo <sup>6</sup>

In support of its asserted grounds of unpatentability, Petitioner relies on the Declaration of Dr. Michael Schuette. Ex. 1006 (“Schuette Decl.”). In support of its Response, Patent Owner relies on the Declaration of Dr. Brian Barsky. Ex. 2002 (“Barsky Decl.”). Dr. Schuette and Dr. Barsky were both cross-examined. *See* Ex. 1010 (deposition transcript of Dr. Barsky, “Barsky Dep.”); Ex. 2001 (deposition transcript of Dr. Schuette, “Schuette Dep.”).

F. ELIGIBILITY OF PATENT FOR POST-GRANT REVIEW

The post-grant review provisions of the Leahy-Smith America Invents Act (“AIA”)<sup>7</sup> apply only to patents subject to the first inventor to file provisions of the AIA. AIA § 6(f)(2)(A). Specifically, the first inventor to file provisions apply to any application for patent, and to any patent issuing thereon, that contains or contained at any time a claim to a claimed invention that has an effective filing date on or after March 16, 2013. AIA § 3(n)(1). Furthermore, “[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the date of the grant of the patent or of the issuance of a reissue patent (as the case may be).” 35 U.S.C. § 321(c) (2012); *see also* 37 C.F.R. § 42.202(a) (setting forth the same).

Petitioner asserts “that the ’644 patent is available for [post-grant review] and Petitioner is not barred or estopped from requesting [post-grant review] of the challenged claims of the ’644 patent.” Pet. 2. The issue date

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<sup>6</sup> U.S. 2009/0228299 A1, published Sept. 10, 2009 (Ex. 1005).

<sup>7</sup> Pub L. No. 112–29, 125 Stat. 284 (2011).

of the '644 patent is May 29, 2018 (Ex. 1001, code (45)) and the Petition was filed on September 14, 2018.<sup>8</sup> Patent Owner does not contest Petitioner's assertions. *See generally* PO Resp.; PO Sur-Reply. We are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that the '644 patent is eligible for post-grant review.

## II. ANALYSIS

We turn now to Petitioner's asserted grounds of unpatentability to determine whether Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 12–20 of the '644 patent are unpatentable.

### A. PERSON OF ORDINARY SKILL IN THE ART

Factual indicators of the level of ordinary skill in the art include “the various prior art approaches employed, the types of problems encountered in the art, the rapidity with which innovations are made, the sophistication of the technology involved, and the educational background of those actively working in the field.” *Jacobson Bros., Inc. v. U.S.*, 512 F.2d 1065, 1071 (Ct. Cl. 1975); *see also Orthopedic Equip. Co. v. U.S.*, 702 F.2d 1005, 1011 (Fed. Cir. 1983) (quoting with approval *Jacobson Bros.*).

Petitioner contends that the person of ordinary skill in the art (“POSITA”) “would have a bachelor’s degree in ophthalmology, or a similar field, with approximately two years of industry experience relating to optometry or ophthalmology. Additional graduate education might substitute for experience, while significant experience in the field of

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<sup>8</sup> The '644 patent claims priority to U.S. Provisional Application No. 62/394,369, which was filed on September 14, 2016. Ex. 1001, code (60).

optometry/ophthalmology might substitute for formal education.” Pet. 9 (citing Ex. 1006 ¶¶ 15–20).

Patent Owner disagrees with Petitioner’s proposed level of skill. Instead, Patent Owner asserts that

a POSITA would have had at least a combination of Bachelor’s Degree (or a similar technical Master’s Degree, or higher degree) in an academic area emphasizing electrical engineering, computer science, or a related field, and two or more years of work experience in vision examination (e.g., optometry, ophthalmology). [Ex. ]2002, ¶¶ 26–27. Additional education or industry experience may compensate for a deficit in one of the other aspects of the requirements stated above.

PO Resp. 2 (citing Ex. 2002 ¶¶ 26–27).

The parties’ respective proposed definitions of the skilled artisan are similar except for Patent Owner’s expansion of the education of the skilled artisan to further include “education or experience in computer network architecture,” or a combination of “education/experience in vision examination and network architecture.” PO Resp. 1–2 (citing Ex. 2002 ¶¶ 22–25). However, in the Oral Hearing, Petitioner conceded that it would accept Patent Owner’s articulation of level of skill in the art:

JUDGE BOUCHER: -- do you disagree with the Patent Owner’s articulation of level of skill in the art or is that something you’re willing to accept?

MR. WALDEN: I think I would say as I would be willing to accept it on the basis that I don’t think it makes any difference to the -- so the application of the Seriani reference which is the only one we’re really dealing with at this point to claim 12 and so for purposes of the proceeding, yes, I’d be willing to accept it on that basis.

Tr. 7. Therefore, on the present record, we adopt Patent Owner’s definition, which is consistent with the level of skill reflected in the asserted prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (holding that the prior art itself can reflect the appropriate level of ordinary skill in the art). However, our decision here would not change if we adopted Petitioner’s proposed definition.

B. CLAIM INTERPRETATION

In a post-grant 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. § 42.200(b) (2018);<sup>9</sup> *see also Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016).

In its Petition, Petitioner proposes two claim terms be construed: “[d]ifferent [l]ocations” and “[e]yecare [t]echnician/[d]octor.” Pet. 9–12.

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<sup>9</sup> The broadest reasonable interpretation (“BRI”) construction standard applies to post-grant reviews filed before November 13, 2018. Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents, 77 Fed. Reg. 48,680, 48,729 (Aug. 14, 2012), as amended at Amendments to the Rules of Practice for Trials Before the Patent Trial and Appeal Board, 81 Fed. Reg. 18,750, 18,766 (Apr. 1, 2016); *see also* 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) (changing the standard for interpreting claims in *inter partes* reviews filed on or after November 13, 2018). Because the Petition was filed prior to this date, on September 14, 2018, the BRI construction standard applies.

In our Decision on Institution, we construed the terms “different locations,” “[local/remote] eyecare technician,” and “eyecare doctor.” Dec. 8–10.

With respect to the term “different locations,” we declined to adopt Petitioner’s proffered construction and instead construed the term “‘different locations’ according to its plain meaning, i.e., each of the parties is in a different location.” Dec. 10; *cf.* Pet. 11. In its Response, Patent Owner asserts that “[t]he Board applied the correct plain meaning of this term, as confirmed by Dr. Barsky’s testimony.” PO Resp. 2–3 (citing Ex. 2002 ¶¶ 42–43). In its Reply, Petitioner asserts that “for purposes of this proceeding, Petitioner adopts this construction.” Pet. Reply 3.

With respect to the terms “eyecare technician” and “eyecare doctor,” we adopted Petitioner’s construction of the terms. Dec. 10–11; *cf.* Pet. 12. In its Response, Patent Owner asserts that “[t]he Board applied the correct interpretations of ‘eyecare technician’ and ‘eyecare doctor,’ as confirmed by Dr. Barsky’s testimony.” PO Resp. 3 (citing Ex. 2002 ¶ 44). In its Reply, Petitioner notes that “Patent Owner also agrees with the Board’s construction, originally proposed by Petitioner, for these two claim terms.” Pet. Reply 3.

Given that the parties do not identify a dispute in this proceeding that turns on the construction of any claim term, we determine that we need not expressly construe any claim term for purposes of this Decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy . . . .’” (quoting

*Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

### III. PATENTABILITY

#### A. 35 U.S.C. § 112(B) – INDEFINITENESS – GROUND 2<sup>10</sup>

Petitioner contends that claims 12–20 are indefinite under 35 U.S.C. § 112(b). Pet. 23–29 (citing Exs. 1001, 1006).

##### *I. Relevant Law*

In any patent, “[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b) (2012). “A decision on whether a claim is indefinite . . . requires a determination of whether those skilled in the art would understand what is claimed when the claim is read in light of the specification.” MPEP § 2173.02 (9th ed. rev. 08.2017 Jan. 2018). “The claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art.” *Interval Licensing, LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014); *see also Ex parte McAward*, Appeal No. 2015–006416, slip op. at 11 (PTAB Aug. 25, 2017) (precedential) (When applying the broadest reasonable interpretation standard, the proper criterion for determining definiteness is that “[a] claim is indefinite when it contains words or phrases whose meaning is unclear,”

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<sup>10</sup> We begin our analysis with Ground 2 because Ground 1, as asserted in the Petition, challenged disclaimed claims 1–11 and, thus, is not addressed in the Decision.

or that “claims are required to be cast in clear—as opposed to ambiguous, vague, indefinite—terms.” (citing *In re Packard*, 751 F.3d 1310, 1314, 1313 (Fed. Cir. 2014)).

2. *Claims 12–20 – “diagnostic center”*

Petitioner argues that claims 12–20 are indefinite “because the meaning of the limitation: ‘a diagnostic center . . . configured to: . . . review the patient examination data pertaining to the at least one test administered using the ophthalmic equipment’ is unclear and vague.” Pet. 24–26. More particularly, Petitioner argues that “only a single paragraph in the [S]pecification even mentions the term ‘diagnostic center’ and this passage in no way describes any corresponding structure or functions performed by the diagnostic center.” Pet. 25 (citing Ex. 1001, 17:34–50).

In response, Patent Owner asserts that

[a]s properly understood, claim 12 actually recites the full feature of “a diagnostic center including ophthalmic equipment comprising a set of instruments that are utilized in administering eye examinations and being coupled to an equipment controller that is configured to receive instructions for controlling the ophthalmic equipment, wherein the diagnostic center is configured to: . . . review the patient examination data.”

PO Resp. 15–16 (citing Ex. 1001, 40:33–38, 41:3–5). Patent Owner further asserts that

Dr. Barsky’s testimony confirms that “given the ’644 Patent’s disclosure of an ‘exam site,’ a POSITA would not have understood the ‘diagnostic center’ to simply be only a room or office, but instead would have understood that the ’644 Patent discloses that the ‘exam site’ includes ophthalmic instruments such as a phoropter, autorefractor, lensometer, keratometer, etc.”

PO Resp. 16–17 (quoting Ex. 2002 ¶ 59 (citing Ex. 1001, 13:43–56, Fig. 1E)). We agree with Patent Owner.

At the outset, we note that Petitioner provides no support from its expert, Dr. Schuette, to rebut Dr. Barsky’s opinion. Instead, Petitioner attempts to support its position by pointing to a portion of Dr. Barsky’s deposition testimony that Petitioner believes establishes a “fatal lack of clarity.” Pet. Reply 25 (quoting Ex. 1010, 86:25–87:15). However, we credit Dr. Barsky, who states that “a POSITA would have instead understood claim 12 as reciting a component located in the ‘diagnostic center’ as being configured to ‘review the patient examination data pertaining to the at least one test administered using the ophthalmic equipment.’” Ex. 2002 ¶ 59.

Thus, we maintain that

the language of claim 12 conveys to a person of ordinary skill in the art that it is the “diagnostic center including ophthalmic equipment comprising a set of instruments that are utilized in administering eye examinations and being coupled to an equipment controller” that is configured to perform the function of “review[ing] the patient examination data pertaining to the at least one test administered using the ophthalmic equipment.”

Dec. 22 (quoting Ex. 1001, 40:33–38, 41:3–5). Accordingly, we are not persuaded that the “diagnostic center,” as it appears in independent claim 12, renders the claim indefinite.

### 3. *Claims 12–20 – “different locations”*

Petitioner asserts that the term “different locations” renders claims 12–20 indefinite because “it is unclear whether the eyecare doctor, the remote technician and the patient/local technician are required to be located in different geographic areas, different buildings, different rooms, or even within the same room, but in different locations within the room or using

different devices.” Pet. 27; Pet. Reply 26–27. Petitioner further argues that “because the [S]pecification of the ’644 patent does not resolve the ambiguities associated with the meaning of this claim limitation ((see [Pet.] at 9–11), it is impossible for a POSITA to reasonably determine the scope and meaning of this claim limitation.” Pet. 27 (citing Ex. 1006 ¶¶ 64–69).

In response, Patent Owner asserts that “Dr. Barsky’s testimony confirms that ‘a POSITA would have understood . . . the term ‘different locations’ to mean some separation in distance, as described in the ’644 Patent.” PO Resp. 17 (quoting Ex. 2002 ¶ 62 (citing Ex. 1001, 4:14–15)).

Relying on the testimony of its expert, Dr. Barsky, Patent Owner asserts that

a POSITA would have understood that a first individual is in a different location than a second individual if the first and second individuals are in different geographic locations and communicate via, for instance, video conferencing over an Internet connection, which is recognized as an exemplary communication technique employed by individuals at “different locations” in the ’644 Patent.

PO Resp. 17–18 (quoting Ex. 2002 ¶ 62 (citing Ex. 1001, 4:12–14, 4:35–36, 10:42–46)). We agree with Patent Owner.

Again, we note that Petitioner provides no support from its expert, Dr. Schuette, to rebut Dr. Barsky’s opinion. Instead, Petitioner attempts to support its position by pointing to a portion of Dr. Barsky’s deposition testimony. Pet. Reply 26. In this regard, Petitioner asserts that “in his declaration, Dr. Barsky opined that ‘different locations’ means the participants are ‘separated by some distance’” (Pet. Reply 26 (citing Ex. 2002 ¶ 61)), yet “[d]uring his deposition, Dr. Barsky acknowledged that two people in sitting in the same room are separated by some distance, but disagreed that this would satisfy ‘different locations’” (*Id.* (citing Ex. 1010,

39:24–52:11)). Petitioner further asserts that in the deposition, “Dr. Barsky modified his opinion of this phrase to require separation by “some distance **that’s not a trivial distance.**” *Id.* (emphasis added by Petitioner). And, according to Petitioner, the fact that “Dr. Barsky was unable to reasonably delineate how a POSITA would know whether or not two participants are separated by a ‘nontrivial’ distance” demonstrates that “the phrase ‘different locations’ is ambiguous on its face, and, therefore, renders claims 12–20 unpatentable as indefinite.” *Id.* at 27.

We are not persuaded by Petitioner’s argument. Instead, we maintain “that the claim language at issue would have been sufficiently clear, to a person of ordinary skill in the art, that an ‘individual’ at a ‘different location’ would be separated by some distance, as set forth in the ’644 patent.” Dec. 23–24 (citing Ex. 1001, 4:14–15); *see also* Ex. 1001, 10:42–46 (“At the exam site 1100, the exam is completed, and the video conference link may be disconnected and instructions may be displayed to wait for the doctor to issue the final prescription 1115.”). Here, we agree with Patent Owner that

Consistent with Dr. Barsky’s declaration testimony, when interpreted in the context of the system recited in claim 12, a POSITA would have understood that even though two individuals are separated by some distance but are in the same room, they are not in “different locations” because this would render the “remote” aspects of claim 12 trivial and obsolete.

PO Sur-Reply 21–22 (citing Ex. 2002 ¶¶ 60–62). Accordingly, Petitioner does not demonstrate on the record that the term “different locations” renders any of the challenged claims unpatentable for indefiniteness.

4. *Claims 12–20 – antecedent basis*

Petitioner asserts that “[t]he recitations of ‘the eyecare doctor’ and ‘the remote technician’ in claim 12 lack clear antecedent bases and, thus, render the claim indefinite.” Pet. 28. More particularly, Petitioner asserts that

claim 12 initially recites that “availability data [is analyzed]” “to identify *at least one remote technician*” and “to identify *at least one eyecare doctor*.” Claim 12 then recites that the diagnostic center is configured to “transmit a second request over a network to a *select remote technician*” and “transmit a fourth request over the network to a *select eyecare doctor*.” In turn, claim 12 concludes with a wherein clause stating that “*the eyecare doctor, the remote technician* and the patient are in different locations.”

Pet. 28.

Failure to provide explicit antecedent basis, however, does not always render a claim indefinite. For example, the failure to provide explicit antecedent basis does not render a claim indefinite if a POSITA would sufficiently understand the meaning of the claim when it is read in the context of the specification. *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370–71 (Fed. Cir. 2006) (finding implied antecedent basis for “said zinc anode” and characterizing the issue as one of what persons of ordinary skill would have understood when read in light of the specification). In our Decision on Institution, we stated that

independent claim 12 provides a context for the recited “eyecare doctor” and “remote technician” making it understandable that “the eyecare doctor” refers to the “select[ed] eyecare doctor,” i.e., the eyecare doctor selected from the “subset of eyecare doctors,” and “the remote technician” refers to the “select[ed] remote technician,” i.e., the remote technician selected from the “subset of remote technicians,” as set forth by independent claim 12.

Dec. 25.

In response, “Patent Owner agrees with the Institution Decision” and asserts that “Dr. Barsky’s testimony confirms that ‘a POSITA would have understood, based on the overall examination architecture disclosed in the ’644 Patent, that “the remote technician” coincides with the “select remote technician” and the “remote eyecare doctor” coincides with the “select eyecare doctor.”” PO Resp. 18 (citing Ex. 2002 ¶¶ 63–65; Ex. 1001, 8:20–12:5).

Petitioner provides no argument in response to the Decision on Institution or rebuttal to Dr. Barsky’s opinion. Instead, Petitioner simply “maintains that claims 12–20 are indefinite . . . under §112, and, therefore, unpatentable, for at least the reasons set forth in . . . the Petition.” Pet. Reply 24. Accordingly, for the reasons stated in our Institution Decision, Petitioner does not demonstrate, on this record, that a lack of antecedent basis for the recitations “the eyecare doctor” and “the remote technician” renders claims 12–20 indefinite.

5. *Claims 13 and 14 – “normal visual acuity test”*

Petitioner asserts that the term “*normal visual acuity test*,” as recited by dependent claim 13, “is vague and subjective because a POSITA would not understand what is meant by a ‘normal’ visual acuity test, much less what tests fall within this term.” Pet. 29 (citing Ex. 1006 ¶¶ 76–82).

In our Decision on Institution, we stated that “the term ‘normal visual acuity test’ would have been sufficiently clear, to a person of ordinary skill in the art, in light of the steps described in the ’644 patent.” Dec. 26.

In response, “Patent Owner agrees with the Institution Decision” and asserts that

Dr. Barsky's testimony confirms that "a POSITA would have understood the term 'normal visual acuity test' to mean a usual, ordinary, standard eye test in which a patient's vision is tested and an evaluation performed resulting in a visual acuity measurement for the left eye, the right eye, and vision using both eyes in concert, stated in the U.S. conventionally as 20/20 or 20/25 or 20/15, etc.," as described in the '644 Patent.

PO Resp. 19 (quoting Ex. 2002 ¶ 68).

Petitioner provides no argument in response to the Decision on Institution or rebuttal to Dr. Barsky's opinion. Instead, Petitioner simply "maintains that claims 12–20 are indefinite . . . under §112, and, therefore, unpatentable, for at least the reasons set forth in . . . the Petition." Pet. Reply 24. Accordingly, for the reasons stated in our Institution Decision, Petitioner does not demonstrate on the record that the term "normal visual acuity test" renders claims 13 and 14 indefinite.

## 6. *Conclusion*

Accordingly, we determine that Petitioner has not shown by a preponderance of the evidence that claims 12–20 of the '644 patent are indefinite under this ground.

### B. 35 U.S.C. § 112(A) – ENABLEMENT – GROUND 3

Petitioner contends that claims 12–20 are unpatentable under 35 U.S.C. § 112(a) for lack of enablement. Pet. 29–31 (citing Exs. 1001, 1006).

#### 1. *Relevant Law*

"The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." *United*

*States v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988). “[A] patent specification complies with the statute even if a ‘reasonable’ amount of routine experimentation is required in order to practice a claimed invention . . . .” *Enzo Biochem, Inc. v. Calgene, Inc.*, 188 F.3d 1362, 1371 (Fed. Cir. 1999). Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). These factors, referred to as the *Wands* factors, include:

(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breath of the claims.

*Id.*

## 2. *Analysis*

Petitioner argues that the ’644 patent fails to enable “a diagnostic center . . . configured to: . . . review the patient examination data pertaining to the at least one test administered using the ophthalmic equipment,” as recited by independent claim 12. Pet. 29–30 (citing Ex. 1006 ¶¶ 57–63).

More particularly, Petitioner asserts that

not a single passage in the ’644 patent discusses anything with respect to the diagnostic center (or the exam unit) being configured to review patient examination data associated with tests administered using the ophthalmic equipment. The specification provides no guidance to a POSITA as to how a diagnostic center itself (i.e., a room or office) could be configured to review this data (i.e., rather than a human being).

Pet. 30 (citing Ex. 1006 ¶¶ 57–63).

In response, Patent Owner asserts that “Petitioner fails to meet [its] burden, setting forth instead a flawed enablement analysis that not only fails to meet Petitioner’s evidentiary burden, but includes various defects.” PO Resp. 20. We agree with Patent Owner.

Here, as Patent Owner points out, “[e]ven after the [Patent Owner Response] identified the eight *Wands* factors, Petitioner neglects to identify evidence and chooses instead to rest its entire enablement ground on its expert’s original declaration, which provided no analysis of the *Wands* factors.” PO Sur-Reply 20 (citing PO Resp. 22; Ex. 1006 ¶ 61). Instead, Petitioner simply “maintains that claims 12–20 . . . lack enablement under §112, and, [are] therefore, unpatentable, for at least the reasons set forth in . . . the Petition.” Pet. Reply 24. In addition, contrary to the premise of Petitioner’s arguments, we do not find claims 12–20 to preclude the involvement of a human being (e.g., a local technician) in reviewing the patient examination data at the diagnostic center. Accordingly, Petitioner has not carried its burden to establish, by a preponderance of the evidence, that the ’644 patent fails to enable a POSITA to make and use the full scope of the claimed invention without undue experimentation.

### 3. *Conclusion*

Accordingly, we determine that Petitioner has not shown by a preponderance of the evidence that claims 12–20 are unpatentable for lack of an enabling disclosure.

C. ANTICIPATION BY SERIANI – GROUND 4

Petitioner asserts that claims 12–14 and 17–20 are anticipated by Seriani. Pet. 56–73 (citing Exs. 1001, 1003, 1006); *see also* Pet. 31–56 (mapping claims 1–7, 10, and 11 to Seriani).

1. *Overview of Seriani*

Seriani is titled “SYSTEMS AND METHODS FOR ENABLING CUSTOMERS TO OBTAIN VISION AND EYE HEALTH EXAMINATIONS.” Ex. 1003, code (54). Seriani is directed to a “customer diagnostic center” or “CDC,” which “provides data pertaining to the customer and the tests to a remote practitioner via a network for review and evaluation and receives an eye health report from the remote practitioner to be provided to the customer.” *Id.* at 1:24–29. More particularly, Seriani discloses its

customer diagnostic center includes a user interface for receiving input from, and providing information to, the customer. The customer diagnostic center also includes ophthalmic equipment for administering tests to the customer and an equipment controller configured to control the operation of the ophthalmic equipment. Customer examination data is received from the customer diagnostic center over a computer network at a diagnostic center server. The diagnostic center server permits the customer examination data to be accessed by an eye-care practitioner. The customer examination data is received at a practitioner device associated with the eye-care practitioner from the diagnostic center server. At least a portion of the customer examination data is displayed to the eye-care practitioner. Customer evaluation data pertaining to the eye-care practitioner’s review and evaluation of the customer examination data is generated. An eye health report based, at least in part, on the customer evaluation data is provided to the customer via the network.

*Id.* at 4:40–57. Seriani describes that customers receive vision examinations at a customer diagnostic center that includes the necessary “vision testing equipment and instruments for administering a range of tests and procedures and collecting various data pertaining to the customers’ eyes and vision.” *Id.* at 7:21–27. Seriani further describes that its customer diagnostic center includes “on-site operator interface 170, which may allow an operator, technician, examination assistant, or any other suitable individual, who is at the same location as the customer diagnostic center to control certain aspects of the customer diagnostic center.” *Id.* at 20:56–61. Seriani discloses that its “customer diagnostic center interfaces with a remote practitioner (e.g., ophthalmologist, optometrist, or other suitable eye doctor or eye care professional) through a network.” *Id.* at 7:27–31.

Seriani further discloses that “CDC server 20 may establish a real-time connection between customer diagnostic center 10 and a device associated with an offsite technician (e.g., an equipment operator or the remote practitioner’s assistant, etc.) for monitoring and/or controlling the equipment and the administration of the tests.” *Id.* at 12:56–62; *see also id.* at 33:11–15. In some embodiments, Seriani discloses that

customer diagnostic center 10 and/or CDC server 20 may interface with a remote eye care practitioner through one or more devices associated with the practitioner, such as remote practitioner device 30 shown in FIG. 1. Remote practitioner device 30 may be a computing device, such as a personal computer, workstation, laptop, tablet, smartphone, or PDA, or any other suitable device . . . that enables a remote practitioner to receive, access, view, and/or send data over one or more networks (e.g., network 50). In certain embodiments, the remote eye care practitioner may be a licensed optometrist or ophthalmologist. In certain other embodiments, the remote eye

care practitioner may be any eye care professional or other individual who is qualified, licensed, or otherwise capable of administering or monitoring one or more eye health and visual acuity tests and procedures and/or reviewing, analyzing and providing diagnoses, reports, prescriptions or recommendations based upon the data and results associated with administering such tests and procedures.

*Id.* at 10:65–11:16. And, in some embodiments, Seriani further discloses that

where the customer diagnostic centers communicate with a remote practitioner and/or off-site technician, this data may be sent to these individuals along with (or instead of) customer data and/or customer examination data, such as to allow the remote practitioner to view the customers, view or hear responses from the customers, and/or to determine whether certain equipment was setup and operated appropriately and whether one or more tests were administered properly.

*Id.* at 23:60–24:1. Seriani describes that customer data along with “data associated with the eye health and vision tests and procedures administered to the customer is provided to the remote practitioner for analysis, diagnosis and/or confirmation.” *Id.* at 7:31–35. Seriani also describes that the remote practitioner transmits “an eye health report, optical prescription, recommendations and/or referrals based on the customer and testing data” to the customer. *Id.* at 7:35–39.

## 2. Discussion

Petitioner contends that claims 12–14 and 17–20 of the ’644 patent are anticipated by Seriani. Pet. 56–73. We have reviewed the Petition, Patent Owner Response, Petitioner Reply, and Patent Owner Sur-Reply, as well as the relevant evidence discussed in those papers and other record papers, and are persuaded based on the record that Petitioner has established

by a preponderance of the evidence that claims 12–14 and 17–20 are anticipated by Seriani.

3. *Petitioner’s Contentions Regarding Claims 12–14 and 17–20*

Petitioner asserts that independent claim 12 is anticipated by Seriani. Pet. 56–69 (citing Exs. 1001, 1003, 1006). For example, the preamble<sup>11</sup> of independent claim 12 sets forth “[a] system for providing eye health and vision examinations, comprising . . . .” Ex. 1001, 40:31–32. Petitioner asserts that Seriani “recites an identical preamble.” Pet. 56; Ex. 1006 ¶¶ 167–169; *see also* Pet. 31 (citing Ex. 1003, 1:16–29, 6:62–7:15, 4:36–57, 7:15–44, Figs. 6–10; Ex. 1006 ¶ 84).

Independent claim 12 additionally recites “a diagnostic center including ophthalmic equipment comprising a set of instruments that are utilized in administering eye examinations and being coupled to an equipment controller that is configured to receive instructions for controlling the ophthalmic equipment.” Ex. 1001, 40:33–38. Petitioner asserts that Seriani’s eye testing and evaluation system “includes a customer diagnostic center that enables a customer to obtain an eye examination.” Pet. 57 (citing Pet. 31–32; Ex. 1003, 1:16–29, 7:16–44, 24:31–45, 24:31–27:53, 27:55–31:40, Figs. 2, 4, 5, 10A–10E; Ex. 1006 ¶¶ 170–174). Petitioner further asserts that Seriani discloses that its “ophthalmic equipment and instruments are coupled to an equipment controller.” Pet. 57–58 (citing Ex. 1003, 20:1–

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<sup>11</sup> We need not decide whether the preamble of claim 12 is limiting for purposes of this Decision, because Petitioner has shown that the cited art teaches the preamble.

55, 21:16–44, 25:15–30, 28:58–29:6, 43:37–60, 4:15–35, 19:8–32, Figs. 3–5 at 130; Ex. 1006 ¶ 174).

Independent claim 12 further recites:

in response to receiving a first request from the diagnostic center, select a subset of remote technicians to administer an eye examination based, at least in part, on analyzing availability data to identify at least one remote technician who is logged into the web-based platform and not currently providing real-time eye examinations.

Ex. 1001, 40:39–45. Petitioner asserts that Seriani “discloses that remote practitioners can be selected using availability data” based on requests “submitted by customers via a customer interface 160 located at the customer diagnostic center.” Pet. 58–59 (citing Ex. 1003, 5:11–6:4, 16:44–17:3, 20:56–22:18, 25:44–67, 33:49–64, 43:5–29, 44:30–45:16, Fig. 3 at 160, 170; Ex. 1006 ¶¶ 177–183).

Independent claim 12 also recites that the diagnostic center is configured to “transmit a second request over a network to a select remote technician to administer the eye examination in real-time for a patient located at the diagnostic center.” Ex. 1001, 40:46–48. Petitioner asserts that Seriani discloses

that a “remote practitioner” can represent either a remote eyecare doctor (e.g., such as a “licensed optometrist or ophthalmologist”) and/or a remote eyecare technician (e.g., such as an “individual who is qualified, licensed, or otherwise capable of administering or monitoring one or more eye health and visual acuity tests and procedures”).

Pet. 58 (citing Ex. 1003, 10:65–11:16; Pet. 32–34). Petitioner further asserts that Seriani discloses that its “customer diagnostic center can select one or more remote practitioners (e.g., from the list of available remote

practitioners), and transmit a request (e.g., ‘second request’) to the selected remote practitioner(s) to administer the eye examination.” Pet. 61–62 (citing Ex. 1003, 5:11–6:4, 10:54–64, 16:44–17:24, 18:41–54, 21:56–22:18, 43:5–29, 44:58–45:16; Ex. 1006 ¶¶ 180–183). More particularly, Petitioner asserts that Seriani “explains that the eye examinations administered through the system can correspond to a ‘synchronous’ eye examination that ‘allows the remote practitioner to review and evaluate the customer examination data and provide evaluations and reports to the customer in real-time or near real-time.’” Pet. 62 (citing Ex. 1003, 12:41–65, 13:38–61, 17:4–24, 17:46–18:10, 23:49–24:7, 33:49–64, 43:5–44:8, 44:58–45:48, Figs. 7, 9, claims 3, 5, 15, 17; Ex. 1006 ¶¶ 181–183).

Independent claim 12 additionally recites that the diagnostic center is configured to “receive first instructions over the network to permit the select remote technician to control operation of the ophthalmic equipment at the diagnostic center from a first remote location in order to administer at least one test pertaining to the eye examination.” Ex. 1001, 40:49–53. Petitioner asserts that Seriani discloses “that a remote eyecare technician (e.g., a remote practitioner) can administer tests pertaining to the eye examination for a patient from a remote location” and “[t]his process of remotely administering the tests to the patient includes the use of a remotely-controlled phoropter and other remotely-controlled ophthalmic equipment.” Pet. 63 (citing *id.* at 38–41, 49–50). Petitioner further asserts that Seriani discloses “that an equipment controller located at the customer diagnostic center can receive instructions over a network (e.g., via network interface 180) from remote practitioners, offsite technicians and/or other individuals for controlling the ophthalmic equipment at the diagnostic center during the

administration of the eye examination.” *Id.* at 63 (citing Ex. 1003, 12:41–65, 20:1–55, 24:46–25:30, 28:58–29:6, 43:37–60; Ex. 1006 ¶¶ 175–183).

Independent claim 12 further recites the diagnostic center is configured to “generate patient examination data pertaining to the at least one test administered using the ophthalmic equipment.” Ex. 1001, 40:54–55. Petitioner asserts that Seriani “discloses that customer examination data (i.e., patient examination data) is generated by/at the diagnostic center.” Pet. 64 (citing Ex. 1003, 4:15–6:4, 11:17–45, 23:49–24:7, 39:9–45, 41:65–42:23; Ex. 1006 ¶¶ 184–186).

Independent claim 12 additionally recites that

in response to receiving a third request from the diagnostic center, select a subset of eyecare doctors to review the eye examinations based, at least in part, on analyzing the availability data to identify at least one eyecare doctor who is logged into the web-based platform and not currently providing real-time eye examinations.

Ex. 1001, 40:56–61. Independent claim 12 also recites that the diagnostic center is configured to “transmit a fourth request over the network to a select eyecare doctor to review the eye examination in real-time for the patient located at the diagnostic center.” *Id.* at 40:62–64. Initially, Petitioner identifies that Seriani discloses “a remote practitioner can represent either a remote technician or an eyecare doctor, and that two or more remote practitioners can be selected to participate in an eye examination (e.g., one remote practitioner performing the role of the remote technician and another performing the role of the eye doctor).” Pet. 64–65 (citing *id.* at 41–44). Petitioner asserts that Seriani discloses “how subsets of remote practitioners (e.g., eyecare doctors) are identified based on availability data via a web-based platform, and particular remote practitioners are selected to administer

an eye examination, in response to requests transmitted over networks.” *Id.* at 65 (citing *id.* at 57–62); Ex. 1006 ¶¶ 188–190.

Independent claim 12 further recites that the diagnostic center is configured to “receive second instructions over the network to permit the select eyecare doctor to control operation of the ophthalmic equipment at the diagnostic center from a second remote location in order to review the at least one test pertaining to the eye examination.” Ex. 1001, 40:65–41:2. Petitioner asserts that Seriani discloses “that an eyecare doctor (e.g., a remote practitioner) can administer tests pertaining to the eye examination on a patient from various remote locations” and “[t]he process of administering the tests to the patient can involve the use of a remotely-controlled phoropter and other remotely-controlled ophthalmic equipment to review the examination data and/or update the refraction results and other test results.” Pet. 66 (citing *id.* at 38–41, 49–50). Petitioner further asserts that Seriani discloses “the equipment controller located at the customer diagnostic center receives instructions over a network . . . from remote practitioners, offsite technicians and/or other individuals for controlling the ophthalmic equipment at the diagnostic center, while administering the examinations, reviewing the customer examination data, and generating customer evaluation data.” *Id.* at 66 (citing Ex. 1003, 12:41–65, 20:1–55, 24:46–25:30, 28:58–29:6, 43:37–60; Ex. 1006 ¶¶ 188–190).

Independent claim 12 further recites that the diagnostic center is configured to “review the patient examination data pertaining to the at least one test administered using the ophthalmic equipment.” Ex. 1001, 41:3–5. Petitioner asserts that Seriani “discloses that customer examination data (i.e., patient examination data) can be reviewed by the customer diagnostic center

itself, as well as an onsite technician located at the customer diagnostic center.” Pet. 67 (citing Ex. 1003, 22:31–49, 22:31–49, 25:31–27:15, 32:5–46, 35:50–36:4; Ex. 1006 ¶¶ 191–195). Petitioner further asserts that Seriani discloses “how remote practitioners and offsite technicians review the customer examination data pertaining to the tests administered using the ophthalmic equipment.” Pet. 68 (citing Ex. 1003, 4:15–35, 11:17–67, 12:41–65, 15:34–52, 23:49–24:7, 33:1–64, 41:65–42:43; Ex. 1006 ¶¶ 196–197).

Independent claim 12 last recites “wherein the eyecare doctor, the remote technician and the patient are in different locations.” Ex. 1001, 41:6–7. Petitioner first asserts Seriani discloses that its on-site operators are located at the customer diagnostic centers to “facilitate and assist customers with one or more aspects of the vision examinations, eye-health examinations, and/or other services.” Pet. 32, 44–45 (citing Ex. 1003, 7:16–44, 8:38–61, 9:30–52, 20:56–21:15, 32:47–67, 44:9–29, 45:49–46:6; Ex. 1006 ¶ 131); *see* Pet. 69 (citing *id.* at 44–48). Petitioner next asserts that Seriani discloses that “both the eyecare doctor (e.g., a remote practitioner) and the remote technician (e.g., an offsite technician or second remote practitioner) are located remotely with respect to the onsite technician and patient at the customer diagnostic center.” Pet. 45–46 (citing Ex. 1003, 8:38–9:9, 10:36–11:25, 12:41–13:61, 13:38–61, 20:30–23:34, 23:49–24:7, 33:17–33, 34:18–35:14, 42:24–39, Fig. 2; Ex. 1006 ¶¶ 132–136). More particularly, Petitioner asserts that Seriani discloses that “the remote practitioner is situated at ‘a location that is located remotely from the customer diagnostic center where the one or more tests are administered to the customer’” (Pet. 45–46 (citing Ex. 1003, 33:17–33, 42:24–39)), and “the

offsite technician is situated remotely from the onsite technician and patient, such as, located at a ‘remote call center’” (Pet. 46 (citing Ex. 1003, 33:1–16 (“[S]ome or all of the assistance provided by, and functionality associated with, the on-site operators may be provided by one or more remote operators (e.g., a technician located at a remote call center or an assistant associated with a remote practitioner).”))). Petitioner explains that Seriani discloses “that the ‘eyecare doctor’ (e.g., a remote practitioner) and the ‘remote technician’ (e.g., an offsite technician or a second remote practitioner) can also be in physically separate locations.” Pet. 46–47 (citing 12:41–65, 23:49–24:7, 20:30–55); *see id.* at 47 (citing Ex. 1003, 13:38–61 (“[I]n certain embodiments, customer diagnostic center 10 may establish a real-time connection with remote practitioner device 30 and/or a device associated with an off-site technician, and may manage the communication of data to and from various other systems and devices, such as customer device 40 and/or optical lab server 90.”))).

Petitioner provides similar detailed analysis, supported by the testimony of Dr. Schuette, for each of claims 13, 14, and 17–20. Pet. 69–73; Ex. 1006 ¶¶ 200–218.

Notwithstanding Patent Owner’s arguments, which we have considered and which we address below, we are persuaded by Petitioner’s arguments and evidence, discussed above, and determine that Petitioner establishes by a preponderance of the evidence that claims 12–14 and 17–20 are anticipated by Seriani.

#### 4. *Patent Owner’s Contentions*

Patent Owner contends that Petitioner’s ground of unpatentability based on Seriani is deficient. PO Resp. 29–36, 39–53; PO Sur-Reply 1–19.

More particularly, Patent Owner argues that Seriani does not disclose (i) “Transmit[ting] A Second Request” and “Transmit[ting] A Fourth Request” (PO Resp. 41–43; PO Sur-Reply 15–19) and (ii) “Receiv[ing] First Instructions” and “Receiv[ing] Second Instructions.” PO Resp. 43–53; PO Sur-Reply 1–15. We address each argument in turn.<sup>12</sup>

*i. Transmitting Second and Fourth Requests*

Patent Owner asserts that Seriani fails to disclose a “diagnostic center” configured to transmit “a second request . . . to a select remote technician to administer the eye examination” and “a fourth request . . . to a select eyecare doctor to review the eye examination,” as recited by independent claim 12. PO Resp. 30–33, 41–43; PO Sur-Reply 15–19. According to Patent Owner,

[t]he claimed “second request” and the “fourth request” represent two distinct requests since they permit a remote individual to perform a different segment of the tiered segmented examination procedure enabled by the claimed system architecture, i.e., “administer the eye examination in real-time,” and “review the eye examination in real-time.”

PO Resp. 41 (citing Ex. 2002 ¶ 73). Consequently, Patent Owner argues that

Petitioner is unable [to] point to, or make any contention that, Seriani teaches that one individual reviews an operation performed by the other individual, much less that Seriani’s system sends two distinct requests, with the first request requesting administration of an eye examination and the second and distinct request requesting review of the administered eye examination.

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<sup>12</sup> Patent Owner presents no argument or evidence specifically directed to claims 13, 14, and 17–20. *See generally* PO Resp.; PO Sur-Reply.

PO Resp. 33. We are not persuaded by Patent Owner’s argument.

Instead, we agree with Petitioner that Seriani discloses that its diagnostic center is configured to transmit one (i.e., a “second”) request to select an offsite technician or first remote practitioner (i.e., a “remote technician”) to administer the examination/at least one test, and another (i.e., a “fourth”) request to a remote practitioner (i.e., an “eyecare doctor”) to review the eye examination/at least one test.

Pet. Reply 17 (citing Ex. 1003, 12:41–65, 13:38–61, 23:49–24:7, 32:5–11, 33:1–33). We also agree with Petitioner that Seriani “teach[es] a ‘segmented’ and ‘sequential’ eye examination process wherein a remote technician first administers a set of tests to the customer and then an eyecare doctor reviews those same administered tests.” Pet. Reply 17–19 (citing Ex. 1003, 20:30–55, 26:46–52, 32:4–34:64, 33:1–33, 35:15–32; Ex. 1006, ¶¶ 121–127, 167, 175–197).

In response, Patent Owner asserts:

Petitioner has not shown that Seriani discloses two distinct electronic messages—one that inspires generation of a human perceptible signal prompting a first human (i.e., the select remote technician) to perform the operation of “administering” the eye examination, and another that inspires generation of a distinct human perceptible signal that prompts a second human, i.e., the select eye doctor, to perform the distinct operation of “reviewing” the eye examination.

PO Sur-Reply 18. We disagree.

In making this determination, we note that Seriani discloses that its “eye testing and evaluation system may be implemented using different levels of automation and/or different types of assistance from on-site and/or

remote individuals.” Ex. 1003, 32:5–8.<sup>13</sup> And, in addition to the real-time connection between “customer diagnostic center 10 and remote practitioner device 30,” Seriani discloses that “CDC server 20 may establish a real-time connection between customer diagnostic center 10 and a device associated with an offsite technician . . . for monitoring and/or controlling the equipment and the administration of the tests.” *Id.* at 12:56–62; *see also id.* at 20:43–50 (“In certain embodiments, such as where the ophthalmic equipment and/or test administration can be monitored and controlled by various individuals (e.g., a remote practitioner, off-site technician, and/or on-site operator) equipment controller 130 may also (or instead) receive instructions, or execute instructions based on input received, from various other components of customer diagnostic center 10.”). Thus, we agree with Petitioner that Seriani discloses the transmission of a distinct request “to a select remote technician to administer the eye examination in real-time for a patient located at the diagnostic center,” as required by independent claim 12. Pet. 58–63; Ex. 1006 ¶¶ 117–120, 175–183.

We also agree with Petitioner that Seriani discloses the transmission of another distinct request “to a select eyecare doctor to review the eye examination in real-time for the patient located at the diagnostic center.” Pet. 64–65; Ex. 1006 ¶¶ 121–127, 187–190. For example, Seriani discloses that

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<sup>13</sup> In some embodiments, Seriani discloses that “some or all of the assistance provided by, and functionality associated with, the on-site operators may be provided by one or more remote operators (e.g., a technician located at a remote call center or an assistant associated with a remote practitioner).” *Id.* at 33:11–16.

when a customer receives a vision examination and/or eye health examination through a customer diagnostic center, various data associated with the customer and one or more of the tests and procedures administered to the customer is provided to a remote practitioner (e.g., via a remote practitioner device) to allow the remote practitioner to confirm, evaluate and diagnose the customer's visual ability and/or eye health and/or create a vision and/or eye health report (or similar evaluation) to be provided to the customer.

Ex. 1003, 33:25–33. Seriani also discloses that

[i]n certain embodiments, such as where the customer diagnostic centers communicate with a remote practitioner and/or off-site technician, this data may be sent to these individuals along with (or instead of) customer data and/or customer examination data, such as to allow the remote practitioner to view the customers, view or hear responses from the customers, and/or to determine whether certain equipment was setup and operated appropriately and whether one or more tests were administered properly.

*Id.* at 23:60–24:1. Accordingly, Patent Owner's argument that Seriani fails to disclose a "diagnostic center" configured to transmit "a second request . . . to a select remote technician to administer the eye examination" and "a fourth request . . . to a select eyecare doctor to review the eye examination," as recited by independent claim 12, is not persuasive.

*ii. Receiving First and Second Instructions*

Patent Owner argues that Seriani fails to disclose a "diagnostic center" configured to receive "first instructions" and "second instructions" because "the 'first instructions' and 'second instructions' limitations of claim 12 require permitting remote control of *the same ophthalmic equipment by both a select remote technician and a select eyecare doctor during the same examination.*" PO Sur-Reply 1; PO Resp. 34–36, 43–49. Patent Owner takes the position that because independent "claim 12 recites a system

enabling an examination procedure in which two distinct individuals (remote technician, remote eyecare doctor) sequentially control the *same* ophthalmic equipment from two distinct locations (first remote location of the remote technician, second remote location of the remote eyecare doctor) for two distinct purposes” (PO Resp. 34–35),

the configuration of the diagnostic center within claim 12 further implicates *an ophthalmic equipment permission and control process* involving transmission of requests that enable sequential control of the ophthalmic equipment during the same eye examination, i.e., a shift from control by the remote technician to control by the remote eyecare doctor.

*Id.* at 35 (citing Ex. 1001, 22:17–35, 23:1–30). Patent Owner asserts that its position is supported by the testimony of Dr. Barsky. PO Sur-Reply 1 (citing Ex. 2002 ¶¶ 39, 53).

Consequently, Patent Owner argues that Seriani fails to disclose “that its CDC is configured to perform a permission and control process for the same ophthalmic equipment in response to receipt of first and second instructions as recited in claim 12.” PO Resp. 45 (citing Ex. 2002 ¶¶ 78–79); *see also* PO Sur-Reply 3 (arguing that Seriani fails to disclose “the requirement that multiple individuals be permitted to control the same ophthalmic equipment during the same examination”). Patent Owner further argues that Seriani lacks “any disclosure of its CDC being configured to perform a permission and control conflict resolution process” because Seriani simply “contemplates a single individual controlling the same ophthalmic equipment during a same eye examination to thereby avoid the complexity of dealing with receipt of conflicting control instructions from the multiple remote individuals.” PO Resp. 49 (citing Ex. 2002 ¶ 83). We are not persuaded by Patent Owner’s arguments.

At the outset, we agree with Petitioner that independent claim 12 does not recite “any ‘permission and control process’ or ‘conflict resolution process.’” Pet. Reply 13; *cf.* Ex. 1010, 93:11–95:12, 99:20–100:5. Here, independent claim 12 recites, in relevant part, that “the diagnostic center is configured to:”

receive first instructions . . . to permit the select remote technician to control operation of the ophthalmic equipment at the diagnostic center from a first remote location in order to administer at least one test pertaining to the eye examination; [and]

receive second instructions . . . to permit the select eyecare doctor to control operation of the ophthalmic equipment at the diagnostic center from a second remote location in order to review the at least one test pertaining to the eye examination.

Ex. 1001, 40:38–41:2. Thus, independent claim 12 simply requires a “diagnostic center” configured to receive first/second instructions to permit the select remote technician/select eye care doctor to control the ophthalmic equipment according to their respective roles (i.e., administer, review) from their respective remote location.

Consistent with this understanding, we agree with Petitioner that “Seriani teaches that multiple remote individuals participating in the eye examination can monitor and control the ophthalmic equipment while **both** ‘administering’ tests and ‘reviewing’ those tests.” Pet. Reply 21 (citing Ex. 1003, 33:1–64, 32:4–34:64; 20:30–55, 35:15–32, 12:41–65). For example, Seriani discloses:

In certain embodiments, such as where the ophthalmic equipment and/or test administration can be monitored and controlled by various individuals (*e.g., a remote practitioner, off-site technician, and/or on-site operator*) equipment controller 130 may also (or instead) receive instructions, or execute

instructions based on input received, from various other components of customer diagnostic center 10. In certain of these embodiments, for example, *equipment controller 130 may receive instructions or input from a remote practitioner and/or offsite technician (e.g., remote practitioner's assistant, remote equipment operator) via network interface 180, o[r] from an on-site operator or technician via on-site operator interface 170.*

Ex. 1003, 20:43–55 (emphases added).

Patent Owner responds that “as established by Dr. Barsky’s declaration testimony—and un rebutted by any contrary testimony—none of the portions of Seriani cited in the Reply supports any interpretation that Seriani discloses remote control of the *same* ophthalmic equipment by multiple individuals during the *same* examination.” PO Sur-Reply 6 (citing Ex. 2002 ¶¶ 48–50, 55, 81); PO Resp. 46–48. We cannot agree.

In making this determination, we give little or no weight to paragraphs 48, 49, and 55 of Dr. Barsky’s declaration, which simply reproduce text from Seriani (Ex. 2002 ¶ 48 (citing Ex. 1003, 33:35–48), ¶ 49 (citing Ex. 1003, 33:51–64)), or are unrelated to Seriani’s disclosure entirely (*see* Ex. 2002 ¶ 55 (discussing Kangaroo (Ex. 1005))). With respect to paragraph 50 of Dr. Barsky’s declaration, Dr. Barsky states that “the offsite technician is not referenced for any of Seriani’s descriptions for the types of eye examinations shown in Figures 7–10.” Ex. 2002 ¶ 50 (citing Ex. 1003, 43:5–44:8, 44:9–57, 44:58–45:48, 45:49–21 (sic)). This statement deserves little weight, however, given that Seriani expressly discloses that “CDC server 20 may establish a real-time connection between customer diagnostic center 10 and a device associated with an offsite technician (e.g., an equipment operator or the remote practitioner’s assistant, etc.) for monitoring and/or controlling the equipment and the administration of the

tests.” Ex. 1003, 12:57–63. Moreover, Petitioner does not rely exclusively on Figures 7–10 of Seriani to address the argued limitations. *See, e.g.*, Pet. 63–64, 65–66 (citing Ex. 1003, 12:41–65, 20:1–55, 24:46–25:30, 28:58–29 (sic), 43:37–60; Ex. 1006 ¶¶ 175–183, 188–190).

Lastly, with respect to paragraph 81, Dr. Barsky acknowledges that “Seriani teaches that ‘equipment controller 130 may receive instructions or input from a remote practitioner and/or offsite technician (e.g., remote practitioner’s assistant, remote equipment operator) via network interface 180.’” Ex. 2002 ¶ 81 (citing Ex. 1003, 20:30–55). Dr. Barsky points out, however, that

[n]otably missing from this portion is the recognition or understanding that the “instructions” or “input” are received to permit sequential control of the equipment controller 130 in the manner recited in claim 12, or that the instructions or input are received during the same examination such that Seriani’s system would have to coordinate the inputs or instructions in a way that would avoid conflicts between the instructions or inputs.

Ex. 2002 ¶ 81 (citing Ex. 1003, 7:16–44, 10:36–53, 12:1–65, 13:38–61). Dr. Barsky explains that “there is minimal or no detail regarding mechanisms to handle control between multiple locations, to avoid conflicts of the same ophthalmic equipment during the same eye examination” (Ex. 2002 ¶ 81), and concludes that Seriani

seems to avoid such conflicts by limiting the control of the ophthalmic equipment during the same examination to a single individual. [Ex. 1003, 7:16–44; 10:36–53; 12:1–65; 13:38–61.] For example, with respect to step 730 of FIG. 7 of Seriani, the remote practitioner controls the ophthalmic equipment with another individual controlling the equipment only when the remote practitioner is unable to control the equipment.

Ex. 2002 ¶ 81 (citing Ex. 1003, 43:55–60). We accord little or no weight to paragraph 81 of Dr. Barsky’s testimony at least because independent claim 12 does not recite any limitations directed to “mechanisms to handle control between multiple locations” and/or “avoid[ing] conflicts.” Here, as Petitioner points out,

the express claim language plainly does not preclude both the remote technician and the eyecare doctor from controlling some or all of the ophthalmic equipment at the same time or in an overlapping manner. All that is required by claim 12 is that the diagnostic center be configured to receive instructions to permit control of the ophthalmic equipment by both individuals.

Pet. Reply 14 (citing Ex. 1001, claim 12). Notwithstanding, Seriani does, in fact, disclose that its “tele-presence server and/or server framework may be configured to route the examination and/or examination session to an available remote practitioner.” Ex. 1003, 34:37–40. More particularly, Seriani discloses that

the endpoint associated with the remote practitioner may be configured to send various data back to the endpoint associated with the customer diagnostic center, thereby enabling two-way communication between the remote practitioner and the customer. For example, the remote practitioner may send back commands for controlling the ophthalmic equipment and/or the administration of the tests, audio/video data to be output to the customer (e.g., instructions, questions, guidance, etc.) and/or evaluation data pertaining to the customer’s vision and/or eye health (e.g., vision and/or eye health reports, prescriptions, recommendations, referrals, etc.).

*Id.* at 34:51–57.

We also find nothing in paragraph 81 of Dr. Barsky’s testimony to support Patent Owner’s argument that “none of the portions of Seriani cited in the Reply supports any interpretation that Seriani discloses remote control

of the *same* ophthalmic equipment by multiple individuals during the *same* examination.” PO Sur-Reply 6; PO Resp. 46–48. Instead, we agree with Petitioner that “Seriani explains that a first set of tests may be administered by a remote practitioner or technician by remotely controlling the ophthalmic equipment, after which another remote eye-care practitioner controls the same ophthalmic equipment while reviewing those tests.” Pet. Reply 22 (citing Ex. 1003, 33:1–64). Here, Seriani discloses, in certain embodiments, that “some or all of the assistance provided by, and functionality associated with, the on-site operators may be provided by one or more remote operators (e.g., a technician located at a remote call center or an assistant associated with a remote practitioner).” Ex. 1003, 33:11–16. Seriani further discloses that that its system

may be configured to enable remote practitioners (e.g., practitioners who are not at the sites where the customer diagnostic centers are located) to facilitate and assist customers with one or more aspects of the vision examinations, eye-health examinations, and/or other services, features and functionality provided through the customer diagnostic centers.

*Id.* at 33:17–24. Seriani still further discloses that its

*customer diagnostic center may establish a connection with the remote practitioner prior to, during, or after performing the automated refraction procedure, such as to allow the remote practitioner to monitor and control the tests, view and interact with the customer, review and analyze the examination data, and/or provide the evaluation data in real-time.*

*Id.* at 26:46–52 (emphases added). In this regard, Seriani discloses that

[t]he remote practitioner may also be able to monitor and control certain ophthalmic equipment and instruments and/or the administration of one or more eye health and vision tests in real-time. As an alternative (or *in addition*), CDC server 20 may establish a real-time connection between customer diagnostic

center 10 and a device associated with an offsite technician (e.g., an equipment operator or the remote practitioner’s assistant, etc.) for monitoring and/or controlling the equipment and the administration of the tests.

*Id.* at 12:53–63 (emphasis added); *see also id.* at 33:49–64 (“[A]ssistance from remote practitioners may occur synchronously.”). Accordingly, Patent Owner’s argument that Seriani fails to disclose a “diagnostic center” configured to receive “first instructions” and “second instructions,” as recited by independent claim 12, is not persuasive.

## 5. Conclusion

We have considered the entirety of the evidence submitted by the parties, and determine that Petitioner has shown, by a preponderance of the evidence, that claims 12–14 and 17–20 of the ’644 patent are anticipated by Seriani.

### D. OBVIOUSNESS OVER SERIANI – GROUND 5

Petitioner asserts that claims 12–14 and 17–20 would have been obvious over Seriani. Pet. 73–77 (citing Exs. 1003, 1006).

#### 1. Discussion

Petitioner contends that claims 12–14 and 17–20 of the ’644 patent would have been obvious over Seriani. Pet. 73–77. We have reviewed the Petition, Patent Owner Response, Petitioner Reply, and Patent Owner Sur-Reply, as well as the relevant evidence discussed in those papers and other record papers, and are persuaded that the record establishes by a preponderance of the evidence Petitioner’s contentions for claims 12–14 and 17–20, and we adopt Petitioner’s contentions discussed below as our own findings and conclusions.

2. *Petitioner's Contentions Regarding Claims 12–14 and 17–20*

Petitioner asserts that Seriani discloses the subject matter of claims 12–14 and 17–20, as discussed above with respect to Ground 4. Pet. 73. However, to the extent Seriani does not explicitly disclose the “different locations” feature, as required by claim 12, Petitioner contends that the argued feature would have been obvious based on Seriani’s disclosure. Pet. 75–77 (citing Ex. 1006 ¶¶ 138–142).

Petitioner first asserts that Seriani describes that its eye testing and evaluation system includes varying levels of assistance “from on-site and/or remote individuals.” Pet. 76 (citing Ex. 1003, 32:5–11). Petitioner argues that one of the major benefits provided by Seriani’s system is “that remote individuals (e.g., the offsite technician and second remote practitioner) are able to provide customers situated at a customer diagnostic center with eye examinations services from virtually any locations that are different (e.g., geographically separate) from the customer diagnostic center.” Pet. 76 (citing Ex. 1003, 3:62–4:11, 35:33–39). Petitioner further asserts that a POSITA would understand from Seriani’s disclosure that “the offsite technicians and remote practitioners could be in different locations from each other” and Seriani provides the necessary architecture to support such a configuration. Pet. 76–77 (citing Ex. 1003, 12:1–40, 15:53–16:3, 17:46–18:40, 33:34–48, 34:18–35:32, 38:48–39:8, 46:28–43; Ex. 1006 ¶¶ 138–142). Petitioner concludes that

[a] POSITA would have been be [sic] motivated to configure the system in this manner for a number of reasons, such as in order to provide greater flexibility (e.g., to permit individuals to participate in the eye examinations at their convenience regardless of where they are located). Among other things, this

would increase the number of individuals who can provide the eye examinations, increase the number of customers, and expand the hours of operation.

Pet. 77 (citing Ex. 1006 ¶ 141).

Notwithstanding Patent Owner's arguments, which we have considered and which we address below, we are persuaded by Petitioner's arguments and evidence, discussed above, and determine that Petitioner establishes by a preponderance of the evidence that claims 12–14 and 17–20 would have been obvious over Seriani.

### 3. *Patent Owner's Contentions*

Patent Owner contends that Petitioner's ground of unpatentability based on Seriani is deficient. PO Resp. 3–39, 54–58; PO Sur-Reply 11–14. However, other than assertions that have already been addressed above with respect to Ground 4, Patent Owner does not further challenge this ground of unpatentability. *See* PO Resp. 37 (“Petitioner's alleged obviousness ground based on Seriani similarly fails to address the two requirements of claim 12 as discussed above . . .”).<sup>14</sup>

### 4. *Conclusion*

We have reviewed Petitioner's arguments and the underlying evidence cited in support of Ground 5 (Pet. 75–77), and for the reasons discussed above with respect to Ground 4 and Ground 5, we are persuaded that

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<sup>14</sup> We acknowledge Patent Owner's assertion regarding “new obviousness theories” advanced by Petitioner in its Reply. PO Sur-Reply 11–14. However, it is unnecessary to address these arguments as our decision does not rely on Petitioner's alleged “new obviousness theories.” Instead, our decision relies on Petitioner's arguments and the underlying evidence cited in support of Ground 5 (Pet. 75–77), and the reasons discussed above with respect to Ground 4.

Petitioner has shown, by a preponderance of the evidence, that claims 12–14 and 17–20 would have been obvious over Seriani (Ground 5).

E. GROUND 6 AND 7

With respect to Ground 6, Petitioner asserts that claims 15 and 16 would have been obvious over Seriani and Cox. Pet. 77–82 (citing Exs. 1003, 1004, 1006). With respect to Ground 7, Petitioner asserts that claim 20 would have been obvious over Seriani and Kangaroo. Pet. 83–84 (citing Exs. 1003, 1005, 1006).

Patent Owner presents no argument or evidence specifically directed to Grounds 6 and 7. PO Resp. 38–39; *see generally* PO Sur-Reply 1–24. Instead, Patent Owner asserts that “Petitioner does not rely on Kangaroo to address the deficiencies of Seriani discussed above for independent claim 12. Petitioner similarly does not rely on Cox to address the deficiencies of Seriani. As such, Petitioner also fails to demonstrate that any of claims 13–16 or 20 are unpatentable.” PO Resp. 38–39.

We have reviewed Petitioner’s arguments and the underlying evidence cited in support of Grounds 5 and 6 (Pet. 77–84), and for the reasons discussed above with respect to Ground 4, we are persuaded that Petitioner has shown, by a preponderance of the evidence, that claims 15 and 16 would have been obvious over Seriani and Cox (Ground 6) and claim 20 would have been obvious over Seriani and Kangaroo (Ground 7).

#### IV. CONSTITUTIONAL CHALLENGE

Patent Owner argues that “for purposes of preserving these issues, Patent Owner asserts that any future final written decisions that may be rendered by the Board will be unconstitutional for violation of the

Appointments Clause.” PO Sur-Reply 24 (citing *Arthrex, Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320 (Fed. Cir. 2019), *reh’g denied*, 933 F.3d 760 (Fed. Cir. 2020)).

We decline to consider Patent Owner’s constitutional challenge because the issue has been addressed by the Federal Circuit in *Arthrex, Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320, 1328 (Fed. Cir. 2019) (holding that there is “no constitutional infirmity in [an] institution decision as the statute clearly bestows such authority on the Director pursuant to 35 U.S.C. § 314”).

## V. CONCLUSION<sup>15</sup>

For the foregoing reasons, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 12–20 of the ’644 patent are unpatentable. The results are summarized in the table below.

## VI. ORDER

For the reasons given, it is:

ORDERED that claims 12–20 of U.S. Patent No. 9,980,644 B2 have been shown to be unpatentable; and

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<sup>15</sup> Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*, 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

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

In summary:

<b>Claims</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Claims Shown Unpatentable</b>	<b>Claims Not Shown Unpatentable</b>
12–20	112(b)	Indefiniteness		12–20
1–6	112(a)	Enablement		12–20
12–14, 17–20	102(a)	Seriani	12–14, 17–20	
12–14, 17–20	103(a)	Seriani	12–14, 17–20	
15, 16	103	Seriani, Cox	15, 16	
20	103	Seriani, Kangarloo	20	
<b>Overall Outcome</b>			12–20	

PGR2018-00100  
Patent 9,980,644 B2

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