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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

OLYMPUS AMERICA INC. and OLYMPUS MEDICAL SYSTEMS CORPORATION, Petitioner,

v.

PERFECT SURGICAL TECHNIQUES, INC., Patent Owner.

Case IPR2014-00233 Patent 6,030,384

Before FRANCISCO C. PRATS, BENJAMIN D. M. WOOD, and JAMES B. ARPIN, Administrative Patent Judges.

ARPIN, Administrative Patent Judge.

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

I. INTRODUCTION

Olympus America Inc. and Olympus Medical Systems Corporation (collectively, "Petitioner") filed a corrected Petition requesting *inter partes* review of claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of Patent No. US 6,030,384 (Ex. 1011, "the '384 patent") pursuant to 35 U.S.C. §§ 311–319. Paper 7 ("Pet."), 3. On June 16, 2014, we issued a Decision on Institution (Paper 16, "Dec. on Inst."), instituting *inter partes* review of claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent. Dec. on Inst. 22. Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 25, "PO Resp."), and Petitioner filed a Reply (Paper 35, "Pet. Reply") thereto.

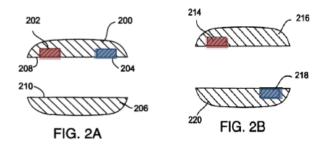
The parties requested an oral hearing (Papers 40 and 42) and appeared before us on February 23, 2015. The record includes a transcript of the hearing. Paper 55 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision, issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73, addresses issues and evidence raised during the *inter partes* review. For the reasons that follow, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent are unpatentable.

A. The '384 Patent

The '384 patent proposes to solve problems (Ex. 1011, col. 1, ll. 11–67) relating to current flux around tissue treated by electrosurgery and tissue heating, in two ways (*see id.* at col. 2, ll. 11–61). First, the '384 patent proposes to solve the problem of lateral current flux and heating by focusing the radio frequency

energy through the lateral placement of oppositely-charged electrode members. *Id.* at col. 2, ll. 11–27. Annotated Figures 2A and 2B are reproduced below.¹



Annotated Figures 2A and 2B depict alternative electrode configurations. *Id.* at col. 3, ll. 53–54. The lateral spacing of electrodes is depicted in these figures, in which red and blue annotations represent opposite polarities, and is described in detail in the Specification of the '384 patent. *Id.* at col. 4, ll. 29–52.

The '384 patent discloses that:

one jaw 200 may carry a first electrode member 202 which is laterally spaced-apart from a second electrode member 204, where the electrode members are connectable to opposite poles of a power supply. An opposed jaw 206 may be free from electrodes of any sort. . . . When tissue is grabbed between the jaws 200 and 206, current flow will be generally limited to between the electrode members 202 and 204.

Id. at col. 4, Il. 31–41. This configuration having both electrodes on the same jaw is depicted in annotated Figure 2A (above), and is illustrative of the configuration recited in challenged claims 4 and 41 ("wherein electrode members are on the same jaw"). *Id.* at col. 7, Il. 41–42; col. 10, Il. 11–12. In contrast, Figure 2B is described as "having a first electrode member 214 on a first jaw 216 and a second electrode member 218 on a second jaw 220," such that the electrodes "will generally limit current flow so that it does not extend significantly to tissue outside

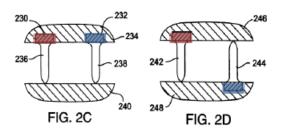
¹ Petitioner provided these annotated figures. Pet. 7.

the lateral boundaries of the jaws 216 and 220." *Id.* at col. 4, ll. 44–50. This configuration having electrodes on opposing jaws is illustrative of the configuration recited in challenged claims 5 and 42 ("wherein the first electrode member is on one jaw and the second electrode member is on the other jaw"). *Id.* at col. 7, ll. 43–45; col. 10, ll. 13–15.

In addition to laterally-spaced electrodes, the '384 patent discloses that "tissue penetrating elements" may be used to minimize the lateral current flow and, therefore, tissue heating outside of the jaws. *Id.* at Abstract. As the Specification of the '384 patent explains:

In operation, tissue may be grasped between the jaws[,] so that the electrode members contact and/or the tissue penetrating elements enter into the tissue. By energizing the electrode members at opposite polarities using a high frequency energy source, tissue between the jaws will be heated, coagulated, and/or necrosed, while heating of tissue outside of the lines will be minimized.

Id. (emphasis added). Annotated Figures 2C and 2D, depicting such "tissue penetrating elements," are reproduced below.²



Annotated Figures 2C and 2D depict the use of tissue penetrating elements on the laterally-spaced electrodes of Figures 2A and 2B (above). *See id.* at col. 5, ll. 7–14; *see also id.* at claims 6, 43, 44 (reciting a plurality of tissue penetrating

² Petitioner provided these annotated figures. Pet. 9.

elements). Figure 3A, depicting a perspective view of such laterally-spaced tissue penetrating elements, is reproduced below.

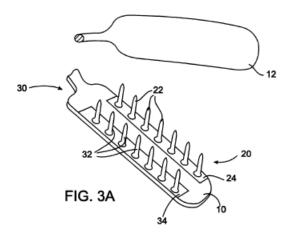


Figure 3A depicts two rows of penetrating elements 22 and 32 mounted upon electrode members 24 and 34, respectively. Tissue penetrating elements 22 and 32 are arranged in two straight lines, which may be disposed on the same or opposing jaws and which are parallel to each other when the jaws are closed over tissue. *See id.* at col. 5, 1. 46–col. 6, 1. 30; *see also id.* at claims 9, 47.

B. Illustrative Claims

Claims 1 and 38 are independent and are illustrative. Challenged claims 4–6, 8, 9, 11, 12 depend from claim 1; and challenged claims 41–44, 46, 47, and 49 depend from claim 38. Claims 1 and 38 are reproduced below with distinctive limitations emphasized:

- 1. A bipolar surgical instrument comprising:
 - a shaft having a proximal end and a distal end;
 - a pair of opposed jaws at the distal end of the shaft;
 - a first electrode member on one of the jaws;
- a second electrode member on one of the jaws, wherein the first and second electrode members are electrically isolated from each other; and

an actuating mechanism for moving the jaws between an opened and closed configuration,

wherein electrode members lie parallel to and laterally spacedapart from each other when the jaws are closed,

wherein at least one of the electrode members comprises a plurality of tissue penetrating elements which project toward the opposed jaw.

38. A bipolar surgical instrument comprising:

- a shaft having a proximal end and a distal end;
- a pair of opposed jaws at the distal end of the shaft;
- a first electrode member on one of the jaws;

a second electrode member on one of the jaws, wherein the first and second electrode members are electrically isolated from each other;

wherein at least one of the jaws is perforated to permit the release of steam during use; and

an actuating mechanism for moving the jaws between an opened and closed configuration, wherein electrode members lie parallel to and laterally spaced-apart from each other when the jaws are closed.

Ex. 1011, col. 7, 11. 20–34; col. 9, 1. 36–col. 10, 1. 4 (emphases added).

C. References, Declarations, and Depositions

Petitioner and Patent Owner rely primarily upon the following references, declarations, and depositions:

Exhibit No.	References, Declarations; and Depositions
1013	Application Publication No. JP H10-33551 A, with certified English translation ("JP'551")

Eyhibit No	Deferences Declarations, and Denositions	
Exhibit No.	References, Declarations; and Depositions	
1014	Patent No. FR 598,149, with certified English translation ("FR'149") ³	
1018	Declaration of Roger Odell	
1020	Translation of Bibliographic Page of JP'551 (including Certification of Accuracy)	
2002	Nezhat Laboratory Notebook Scanned (Partial)	
2003	Nezhat Laboratory Notebook Photographs (Partial)	
2004	Letter, dated January 28, 1998, from James M. Heslin, Esq., to Dr. Camran Nezhat	
2005	Declaration of Florence Leto	
2006	Letter, dated April 13, 1998, from James M. Heslin, Esq., to Dr. Camran Nezhat	
2007	Facsimile Cover Sheet (with Transmission Confirmation), dated March 12, 1998, from James M. Heslin, Esq., to Dr. Camran Nezhat	
2008	U.S. Patent Application No. 09/071,689	
2010	Declaration of Dr. Camran Nezhat	
2012	Declaration of James M. Heslin, Esq.	
2013	Declaration of Jee Y. Shin	
2014	Declaration of Dr. Robert D. Tucker	
2016	Nezhat Laboratory Notebook Scanned (Complete)	
2018	Supplemental Declaration of Dr. Camran Nezhat	
2019	Supplemental Declaration of Jee Y. Shin	
2020	Letter (redacted), dated March 12, 1998, from James M. Heslin, Esq., to Dr. Camran Nezhat; and Facsimile Cover Sheet (with Transmission Confirmation), dated March 12, 1998, from James M. Heslin, Esq., to Dr. Camran Nezhat	

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³ Unless noted otherwise, citations to JP'551 and FR'149 are to the certified English translations of those references.

Exhibit No.	References, Declarations; and Depositions	
2022	Deposition Transcript of Dr. Robert Tucker	
2023	Deposition Transcript of Dr. Camran Nezhat	
2024	Deposition Transcript of James M. Heslin, Esq.	
2025	Deposition Transcript of Jee Y. Shin	

D. Reviewed Grounds of Unpatentability

We instituted *inter partes* review on the following grounds of unpatentability:

Ground(s)	Reference(s)	Challenged Claims
§ 102(a) and § 103(a)	JP'551	1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49
§ 103(a)	JP'551 and FR'149	1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are construed according to their broadest reasonable interpretation in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs*. *LLC*, 778 F.3d 1271, 1281–82 (Fed. Cir. 2015) ("Congress implicitly adopted the broadest reasonable interpretation standard in enacting the AIA," and "the standard was properly adopted by PTO regulation."); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).⁴ Only terms which are in controversy

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⁴ Patent Owner contends that the Board's adoption of the broadest reasonable interpretation standard exceeded its rulemaking authority. PO Resp. 35–37. In view of the Federal Circuit's decision in *Cuozzo*, we do not consider this

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

Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.,* 504 F.3d 1249, 1257 (Fed. Cir. 2007). A patentee may act as his or her own lexicographer by providing a special definition for a claim term in the specification with "reasonable clarity, deliberateness, and precision." *In re Paulsen,* 30 F.3d 1475, 1480 (Fed. Cir. 1994). Generally, in the absence of such a special definition or other considerations, "limitations are not to be read into the claims from the specification." *In re Van Geuns,* 988 F.2d 1181, 1184 (Fed. Cir. 1993).

In the Decision on Institution, we provided constructions for various terms of the challenged claims. Dec. on Inst. 8–12. Petitioner indicates that it agrees with our previous claim constructions. Tr. 12:19–13:8. Patent Owner disagrees with our previous construction of the term "perforated." *Id.* at 45:24–46:19.

The Specification of the '384 patent describes that "either or both of the jaws may be *perforated or otherwise provided with passages* in order to permit the release of steam which is a byproduct of tissue heating." Ex. 1011, col. 3, ll. 25–27 (emphasis added). Such perforations or passages are not depicted in the figures of the '384 patent. Consequently, although claim 38 only recites that the jaws may be *perforated*, the Specification describes *passages* as another form of *perforations* and does not distinguish between these terms. Thus, we determined that "perforated" does not clearly exclude the formation of a "passage."

In the Decision on Institution, we construed the limitation "at least one of the jaws is perforated to permit the release of steam during use" as "at least one jaw has one or more perforations or passages formed therethrough, so that steam generated between that jaw and tissue is released through the one or more perforations or passages." Dec. on Inst. 10–12. We further noted that a relevant definition of "perforate" is "[t]o pierce or puncture; particularly, to make a line or series of holes for such purposes as identification, decoration, or easy separation"; and a relevant definition of "perforation" is "[a]ny hole made by boring, punching, or piercing." *Id.* at 11 (citing McGraw-HILL DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS, 1394 (4th ed. 1989) (emphasis added) (Ex. 3001)).

Contrary to Petitioner's suggestion, we remain unpersuaded that the phrase "to permit the release of steam during use" may be ignored in construing this limitation. Pet. 18. Even if the phrase "to permit the release of steam during use" describes a *function* of the perforations, *functional* language may not be ignored in construing the claims. *Id.* A patent applicant is free to recite features of an apparatus either structurally or functionally. *See In re Swinehart*, 439 F.2d 210, 212 (CCPA 1971). A relevant definition of "steam" is "[w]ater vapor or water in its gaseous state." McGraw-Hill Dictionary of Scientific and Technical Terms, 1817. Because claim 38 recites that "at least one of the jaws is perforated to permit the release of steam during use," we understand that claim 38 requires only a single perforation or passage formed through either jaw. Thus, the at least one perforation or passage must pass through the jaw, such that the steam may be *released* from the tissue between the jaws.

Patent Owner contends that the term "perforations" does not include "passages," and that we erred in construing a "perforated" jaw to include at least one jaw having "one or more perforations or passages formed therethrough." PO

Resp. 19–20. Although Patent Owner contends that the Specification distinguishes perforations from passages, Patent Owner does not suggest how each term is to be understood, such that a person of ordinary skill in the art would distinguish between them. *Id.*; *see* Tr. 45:14–16 (perforations as "small holes"). A "passage" is "an opening or entrance into, through, or out of something." RANDOM HOUSE WEBSTER'S COLLEGE DICTIONARY, 964 (Random House ed. 1999) (Ex. 3003). Consequently, we conclude that Patent Owner does not explain adequately why a perforation excludes a passage. Within the context of the Specification of the '384 patent and in view of ordinary and customary meanings of the relevant words, as evidenced by the cited definitions, we interpret a perforation formed through a jaw and a passage formed through a jaw as alternative expressions of the same concept. Therefore, we maintain that this limitation is construed properly to mean "at least one jaw has one or more perforations or passages formed therethrough, so that steam generated between that jaw and tissue is released through the one or more perforations or passages."

Because the parties agree with our constructions for the remaining claim terms construed in the Decision on Institution, to the extent necessary, we adopt these constructions for the Final Written Decision. Tr. 12:19–13:8; 45:24–46:8. Because no other claim terms are in controversy, no other claim terms need to be construed.

B. Grounds of Unpatentability

1. Overview

We instituted *inter partes* review of claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent on Petitioner's asserted ground that these claims are anticipated by or rendered obvious over JP'551 and of claims 1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47 on Petitioner's asserted ground that these claims would have

been obvious over JP'551 and FR'149. Pet. 11, 22. In the Patent Owner Response, Patent Owner contends that (1) because Petitioner failed to provide a complete translation of JP'551, Petitioner fails to demonstrate that JP'551 is prior art to the '384 patent (PO Resp. 8–11); (2) because Dr. Nezhat conceived of the invention recited in the challenged claims before the effective date of JP'551 and because Dr. Nezhat and Mr. Heslin acted with reasonable diligence from before the effective date of JP'551, i.e., February 10, 1998, until the date of constructive reduction to practice, i.e., May 1, 1998, JP'551 is not prior art to the '384 patent (id. at 11–17); (3) JP'551 does not disclose or teach each and every element of challenged claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 (id. at 18–22); and (4) Petitioner fails to demonstrate that a person of ordinary skill in the art would have reason to combine the teachings of JP'551 and FR'149 to achieve the instruments recited in challenged claims 1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47 (*id*. at 23–35). On this record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 are anticipated by or rendered obvious over JP'551 and that claims 1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47 are rendered obvious over JP'551 and FR'149.

2. Translation of JP'551

Pursuant to 37 C.F.R. § 42.63(b), "[w]hen a party relies on a document or is required to produce a document in a language other than English, a translation of the document into English and an affidavit attesting to the accuracy of the translation must be filed with the document." In support of its challenges to the claims of the '384 patent, Petitioner filed a Japanese language copy of JP'551; an English language translation of JP'551, and a certification, signed by the translator,

attesting to the accuracy of the English language translation of JP'551 and stating that JP'551 was "published on February 10, 1998." Ex. 1013.

Nevertheless, Petitioner's English language translation of JP'551 did not include a translation of the bibliographic information contained on the first page of JP'551.⁶ PO Resp. 9; Pet. Reply 2. Patent Owner contends that, because the translation relied upon by the Petitioner failed to include a translation of this single page, the translation is incomplete, and Petitioner may not rely on this translation in support of the grounds of unpatentability under review. PO Resp. 9; Tr. 42:9–19.

Despite Petitioner's omission of a translation of the page containing the bibliographic information of JP'551, neither party disputes that JP'551's publication date is February 10, 1998, as evidenced by the translator's certification and the face of the Japanese language copy of JP'551. Tr. 44:1–5; Pet. Reply 1–2 (citing Manual of Patent Examining Procedure § 901.05(a) (9th ed. Mar. 2014) (describing how to convert Japanese format publication date information to Gregorian calendar date information)). Patent Owner also does not dispute the completeness of the translation of the remainder of JP'551. Tr. 42:1–8. Further,

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⁵ The parties acknowledge that, due to a typographical error, Petitioner indicates in the Petition that JP'551 was published on February 2, 1998, instead of February *10*, 1998. Pet. Reply 1; PO Resp. 9 n.1; Tr. 43:21–44:16.

⁶ Although Petitioner attempted to correct this deficiency by filing a translation of this missing page as Exhibit 1020 to the Reply, this exhibit was not served or filed as supplemental evidence under 37 C.F.R.§ 42.64(c) or filed as supplemental information under 37 C.F.R. § 42.123 and is new evidence exceeding the scope of the Patent Owner Response. Therefore, we do not consider Exhibit 1020 in rendering this Decision. *See Vibrant Media Inc. v. General Electric Co.*, Case IPR2013-00170, slip op. at 31 (PTAB June 26, 2014) (Paper 56) ("Whether a reply contains arguments or evidence that are outside the scope of a proper reply under 37 C.F.R. § 42.23(b) is left to our determination.").

Patent Owner acknowledges that it did not timely object to the completeness of the translation of JP'551, which was filed with the Petition. *Id.* at 13:16–18; 39:4–10; 40:19–23; *see* 37 C.F.R. § 42.64(b)(1) ("Any objection to evidence submitted during the preliminary proceeding *must be served* within ten days of the institution of the trial."; emphasis added). Therefore, because Petitioner filed a Japanese language copy of JP'551; an English language translation of JP'551; and a certification, signed by the translator, attesting to the accuracy of the English language translation of JP'551; we conclude that Petitioner satisfied the requirements of 37 C.F.R. § 42.63(b). Further, we conclude that Patent Owner waived any objection to the completeness of the translation due to its failure to raise such objection in a timely manner, in accordance with 37 C.F.R. § 42.64(b)(1). Therefore, for purposes of this Decision, we determine that JP'551 was published on February 10, 1998.

3. Antedating JP'551

For the reasons set forth above, Petitioner has produced *prima facie* evidence to establish that JP'551 is prior art to the '384 patent. Patent Owner contends, however, that the instruments recited in the challenged claims were conceived prior to the publication date of JP'551—namely, February 10, 1998 (*see* Ex. 1013, Certification). PO Resp. 9 n.1; 11–12. Patent Owner further contends, and Petitioner does not contest, that the recited instruments were reduced to practice constructively on May 1, 1998, the filing date of the patent application that issued as the '384 patent. *Id.* at 12; *see* Pet. Reply 3. In addition, Patent Owner contends that Dr. Nezhat, the named inventor, and Mr. Heslin, Dr. Nezhat's patent attorney, continually exercised reasonable diligence from at least February 10,

1998,⁷ through May 1, 1998 ("the critical period"). *See* PO Resp. 12, 15–17. As a consequence, Patent Owner contends that JP'551 does not qualify as prior art under 35 U.S.C. § 102(a). *Id.* at 11.

We begin our analysis with the principles of law that generally apply to antedating a reference, followed by a brief discussion of the parties' contentions regarding conception. We then turn to the parties' contentions regarding whether there is sufficient evidence on this record to conclude that Dr. Nezhat continually exercised reasonable diligence during the entire critical period.

a. Principles of Law

Petitioner bears the burden of persuasion that the challenged claims are unpatentable, which includes the burden of establishing that any reference upon which it relies constitutes prior art under 35 U.S.C. § 102. 35 U.S.C. § 316(e); *see Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1576 (Fed. Cir. 1996) (holding that the challenger "bore the burden of persuasion . . . on all issues relating to the status of [the asserted reference] as prior art"). However, because Petitioner offered into evidence JP'551, which was published before the '384 patent's filing date, Patent Owner bears a burden of producing evidence supporting a date of invention before JP'551's publication date. *Mahurkar*, 79 F.3d at 1576–77. An inventor may antedate a reference if the inventor was the first to conceive of a patentable invention, and then connects the conception of the invention with its constructive reduction to practice by reasonable diligence on the inventor's part, such that conception and diligence are substantially one continuous act. *Id.* at 1577.

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⁷ In view of Petitioner's erroneous reference to February 2, 1998, as JP'551's publication date (*see supra* 12 n.5), Patent Owner proposes to show conception prior to February 2, 1998, and reasonable diligence from February 1, 1998, until May 1, 1998. PO Resp. 12. We do not analyze Patent Owner's arguments based on Petitioner's admitted typographical error.

However, an inventor's testimony, standing alone, is insufficient to carry the inventor's burden of production with respect to conception and diligence, as some form of corroboration is required. *Id.*; *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993). A rule of reason applies to determine whether the inventor's testimony has been corroborated. *Price*, 988 F.2d at 1194.

During the period in which reasonable diligence must be shown, there must be continuous exercise of reasonable diligence. *In re McIntosh*, 230 F.2d 615, 619 (CCPA 1956); *see also Burns v. Curtis*, 172 F.2d 588, 591 (CCPA 1949) (referring to "reasonably continuous activity"). The party alleging diligence must account for the entire critical period. *Griffith v. Kanamaru*, 816 F.2d 624, 626 (Fed. Cir. 1987); *Gould v. Schawlow*, 363 F.2d 908, 919 (CCPA 1966). Even a short period of unexplained inactivity may be sufficient to defeat a claim of diligence. *Morway v. Bondi*, 203 F.2d 742, 749 (CCPA 1953); *Ireland v. Smith*, 97 F.2d 95, 99–100 (CCPA 1938). In *In re Mulder*, 716 F.2d 1542, 1542–46 (Fed. Cir. 1983), for example, the Federal Circuit affirmed a determination of lack of reasonable diligence, where evidence of record demonstrating any diligence was absent for a two-day critical period.

A party alleging diligence also must provide corroboration with evidence that is specific both as to facts and dates. *Gould*, 363 F.2d at 920; *Kendall v. Searles*, 173 F.2d 986, 993 (CCPA 1949). The rule of reason does not dispense with the need for corroboration of diligence that is specific as to dates and facts. *Gould*, 363 F.2d at 920; *Kendall*, 173 F.2d at 993; *see also Coleman v. Dines*, 754 F.2d 353, 360 (Fed. Cir. 1985) ("The rule of reason . . . does not dispense with the requirement for some evidence of independent corroboration."). Consequently, in order to antedate JP'551, Patent Owner must show conception prior to the publication date of JP'551 and continuous and corroborated diligence from prior to

JP'551's publication date, i.e., February 10, 1998, until the date of constructive reduction to practice of the '384 patent, i.e., May 1, 1998.

b. Conception

In the Patent Owner Response, Patent Owner contends that the Nezhat, Heslin, Leto, and Shin Declarations (*see supra* Section I.C.), as well as at least Dr. Nezhat's laboratory notebook (Ex. 2002, Ex. 2003, and Ex. 2016)⁸ and the cover letter and draft patent application, mailed January 28, 1998 (Ex. 2004 and Ex. 2008), collectively, demonstrate that Dr. Nezhat conceived of the instruments recited in the challenged claims of the '384 patent before the publication date of JP'551, namely, at least by February 10, 1998. PO Resp. 12–15. Patent Owner further contends that these documents independently corroborate Dr. Nezhat's testimony in his declaration and deposition that he conceived of the instruments recited in the challenged claims of the '384 patent prior to at least February 10, 1998. *Id*.

In the Reply, Petitioner argues that Patent Owner has not established that Dr. Nezhat conceived of the instruments recited in the challenged claims of the '384 patent before at least February 10, 1998, because Patent Owner does not demonstrate that the evidence relied upon shows conception of electrically isolated "electrode members" that are "laterally spaced-apart" on the jaws, as required by independent claims 1 and 38, prior to at least February 10, 1998. Pet. Reply 9.

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⁸ Because the laboratory notebook includes contributions from other persons, Petitioner disputes whether the laboratory noted book properly can be referred to as Dr. Nezhat's laboratory notebook. Tr. 21:16–25; 24:22–25:4. Because we do not rely on the laboratory notebook in this Decision, we need not decide this issue and, for simplicity, we will refer to these exhibits as partial and complete reproductions of "Dr. Nezhat's laboratory notebook."

Even if we were to agree with Patent Owner that there is sufficient evidence to show conception, and to corroborate Dr. Nezhat's testimony that he conceived of the instruments recited in the challenged claims of the '384 patent before at least February 10, 1998, as we discuss below, Patent Owner does not provide sufficient evidence to demonstrate (or corroborate Dr. Nezhat's testimony) that Dr. Nezhat continuously exercised reasonable diligence during the entire critical period. Consequently, we need not reach and, therefore, do not address conception further in this Decision.

c. Diligence

To demonstrate diligence during the entire critical period, Patent Owner relies upon the declarations and depositions of the following individuals:

(1) Dr. Nezhat (Ex. 2010 and Ex. 2023); (2) Mr. Heslin (Ex. 2012 and Ex. 2024), a former partner at Townsend, Townsend, and Crew, LLP ("Townsend"), who was hired by Dr. Nezhat to draft and file the patent application that issued as the '384 patent; and (3) Ms. Leto (Ex. 2005), a Financial Systems Manager at Kilpatrick Townsend & Stockton LLP ("Kilpatrick Townsend"), successor to Townsend, Townsend, and Crew, LLP. PO Resp. 16–17. Of particular significance to our evaluation of the alleged diligence is Dr. Nezhat's testimony regarding his actions in revising the draft patent application, prepared by Mr. Heslin, which ultimately issued as the '384 patent, and Mr. Heslin's testimony regarding his actions in the drafting and filing of that patent application, as well as the testimony of Ms. Leto, concerning the Townsend billings records retained by Kilpatrick Townsend. *Id*.

In the Patent Owner Response, Patent Owner contends that this testimony is evidence that Dr. Nezhat worked diligently over the critical period to prepare the application for filing. *Id.* at 16. In the Reply, Petitioner argues that Patent Owner does not provide sufficient evidence to show the dates of Dr. Nezhat's activities in

preparing the application for filing or the dates and facts explaining any periods of inactivity during the critical period or to corroborate Dr. Nezhat's testimony that he was reasonably diligent during the entire critical period with respect to constructively reducing the claimed invention to practice. Pet. Reply 4–5 (citing *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, Case IPR2012-00001, slip op. at 25 (PTAB Nov. 13, 2013) (Paper 59), *aff'd, In re Cuozzo Speed Techs. LLC*, 778 F.3d 1271 (Fed. Cir. 2015)).

In our analysis below, we discuss how the evidence, taken as a whole, does not support Patent Owner's contention that there was a continuous exercise of reasonable diligence during the entire critical period. In particular, we address how this evidence does not demonstrate that Dr. Nezhat was diligent with respect to constructive reduction to practice.

As we explained previously, the claimed invention was reduced to practice constructively on May 1, 1998, when the patent application that issued as the '384 patent was filed. The publication date of JP'551 is February 10, 1998. Ex. 1013, Certification. To show diligence with respect to constructive reduction to practice during the entire critical period, Dr. Nezhat testified that, "[a]fter conception, I diligently worked in the United States toward reducing to practice the claimed inventions, as evidenced by the filing of [U.S. Patent] Application No. 09/071,689 on May 1, 1998." Ex. 2010 ¶ 6.

According to his testimony, "Dr. Nezhat worked 80-hour weeks, during which he performed multiple surgeries a week, and sometimes in a given day, and taught medical students daily." PO Resp. 16 (citing Ex. 1020 ¶ 12); Ex. 2023, 76:5–14. With respect to the period from his receipt of the initial draft patent application sent by Mr. Heslin on January 28, 1998, and until the submission of his comments on that initial draft patent application on March 2, 1998, however,

Dr. Nezhat is unable to identify any single date on which he worked on preparing the application for filing, or on which he was scheduled for a surgery or had another specific conflict that would have prevented him from working on preparing the application for filing. See Ex. 2023, 70:9–71.23; 74:19–75:25; 77:21–78:5. Dr. Nezhat testifies only that, "[t]hough I do not recall all of my specific daily activities from 1998, I diligently worked with Mr. Heslin between February 1, 1998 and May 1, 1998, within the reasonable limits of my busy medical practice and teaching schedule to finalize the patent application by May 1, 1998." Ex. 2010 ¶ 13 (emphasis added). Although Dr. Nezhat need not have worked exclusively during the critical period to reduce the invention constructively to practice, Dr. Nezhat must account for his actions during the entire critical period, so that we may access the reasonableness of any gaps in his activity and explanations for any such periods of inactivity. See Rieser v. Williams, 255 F.2d 419, 424 (CCPA 1958) (finding no showing of diligence where no activity was shown during the first thirteen days of the critical period). Here, Dr. Nezhat provides no testimony regarding his actions relating to the constructive reduction of the invention to practice during the first nineteen days of the critical period, i.e., from February 10, 1998, until March 1, 1998.

Based on his review of correspondence and billing statements received from Kilpatrick Townsend, Dr. Nezhat is able to identify only two dates on which he took specific actions with respect to the preparation of the patent application for filing between March 2, 1998, and May 1, 1998. *Id.* ¶¶ 14, 15. First, on March 2, 1998, Dr. Nezhat submitted comments, to Mr. Heslin, on the initial draft patent application which Mr. Heslin mailed to him on January 28, 1998 – over a month earlier. *Id.* ¶ 14. No evidence is presented as to the nature of those comments. *See* Ex. 2023, 29:20–30:6. Second, on March 16, 1998, Dr. Nezhat participated in a

conference regarding the draft patent application with Mr. Heslin. Ex. 2010 ¶ 15. No evidence is presented as to the nature of this conference. *See* Ex. 2024, 21:1–17. Although Dr. Nezhat testifies that he received a series of questions from Mr. Heslin "on or around March 4 and 12, 1998," he does not recall when or how he responded to those questions. Ex. 2023, 83:23–85:2: *see* Ex. 2020, 1 (facsimile transmission from Mr. Heslin to Dr. Nezhat dated March 12, 1998, suggesting conference with Mr. Heslin, Dr. Nezhat, and Mr. Truckai). After the March 16, 1998, conference, and until receiving a second draft of the patent application on April 13, 1998, Dr. Nezhat does not identify any specific activities undertaken or the dates of those activities, in furtherance of the filing of the patent application. Ex. 2010 ¶ 16. Moreover, Dr. Nezhat does not identify when, or if, he reviewed the second draft of the patent application or whether and, if so, how he provided comments to Mr. Heslin prior to the filing of the application on May 1, 1998. Ex. 2023, 86:8–87:9.

The testimony offered by Dr. Nezhat, to the extent that it is corroborated by Mr. Heslin, concerning the preparation and review of the draft patent application is not sufficiently specific as to facts and dates for the entire critical period during which diligence is required. Ex. 2023, 87:25–88:19; *see Gould*, 363 F.2d at 920; *Kendall*, 173 F.2d at 993. Given the absence of specific details concerning the work that was done on the draft patent application, the testimony from Dr. Nezhat is insufficient to establish reasonable diligence with respect to constructive reduction to practice during this time period. *See In re Harry*, 333 F.2d 920, 923 (CCPA 1964) (holding that statements unsupported by evidence or a showing of facts essentially amount to mere pleadings).

Based on the record before us, the testimony from Dr. Nezhat and Mr. Heslin regarding constructive reduction to practice is not sufficiently specific as to

facts and dates for at least the portions of the critical period between February 10, 1998, and March 1, 1998; March 12, 1998, and March 15, 1998; and April 13, 1998, and May 1, 1998, and, therefore, does not satisfy Patent Owner's burden of coming forward with evidence to establish that Dr. Nezhat was reasonably diligent during the entire critical period. Because Patent Owner does not provide sufficient evidence to demonstrate Dr. Nezhat's continuous exercise of reasonable diligence for the entire critical period, we also need not reach and, therefore, do not address whether Patent Owner provides sufficient evidence to demonstrate Mr. Heslin's continuous exercise of reasonable diligence for the entire critical period.

- 4. Anticipation by and/or Obviousness over JP'551
 - a. Overview

Petitioner argues that JP'551 anticipates and/or renders obvious claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987) (citation omitted). A patent claim is obvious under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are "such that the subject matter[,] as a whole[,] would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness 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. Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966).

b. Person of Ordinary Skill in the Art

Neither Petitioner nor its declarant proposes a definition for a person of ordinary skill in the art. *See* Pet. Reply 15. Further, Petitioner argues that no express statement of or expert testimony regarding the level of ordinary skill is necessary unless the level of ordinary skill in the art is material to the determination of obviousness. *Id.* Nevertheless, Petitioner's declarant provides testimony as to what a person of ordinary skill would understand the terms of the challenged claims to mean. *See, e.g.*, Ex. 1018 ¶¶ 19, 44.

Patent Owner contends that a person of ordinary skill in the art possesses:

a Bachelor's Degree in either Physics, Electrical Engineering, or Mechanical Engineering and two to three years' experience working in the field of electrosurgery. A person of ordinary skill in the art would be familiar with electrode designs and heating biological tissue through the application of various forms of electromagnetic energy, including RF energy.

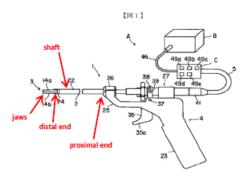
PO Resp. 33 (citing Ex. 2014 ¶¶ 14–17). For purposes of the Decision on Institution, we determined that the prior art adequately reflects a level of ordinary skill in the art. Dec. on Inst. 20 (citing *Litton Indust. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163–64 (Fed. Cir. 1985)). Petitioner's declarant meets or exceeds the qualifications set forth in Patent Owner's definition of a person of ordinary skill in the art. *See* Ex. 1018 ¶ 7; Ex. 2022, 42:18–24. Further, Mr. Odell, as a person of equal or greater skill in the art, may testify as to what a person of

⁹ Patent Owner does not contend in the Patent Owner Response that secondary considerations are present, which would render the challenged claims patentable over JP'551, alone or in combination with FR'149.

ordinary skill in the art would know or understand. *See* Ex. 2022, 41:12–42:11. Therefore, to the extent that it is necessary, for purposes of this Decision, we adopt Patent Owner's definition of a person of ordinary skill in the art.

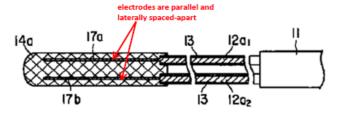
c. Claim 1

Petitioner argues that JP'551 anticipates claim 1 and claims 4–6, 8, 9, 11, and 12 depending therefrom. Annotated Figure 1 of JP'551 is reproduced below.¹⁰



Annotated Figure 1 of JP'551 depicts an actuating mechanism, such as trigger 35, for moving the jaws between an opened and closed configuration. Ex. 1013 ¶¶ 19–20. Referring to claim 1, JP'551 teaches a bipolar surgical instrument comprising a shaft having a proximal end and a distal end and a pair of opposed jaws at the distal end of the shaft. *Id.* ¶ 9. Figures 1–9(D) depict a first embodiment of the bipolar forceps of JP'551. *Id.* ¶ 45.

Annotated Figure 5B of JP'551 is reproduced below.¹¹



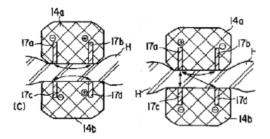
Annotated Figure 5B of JP'551 depicts a first electrode member and a second

¹⁰ Petitioner provided this annotated figure. Pet. 19.

¹¹ Petitioner provided this annotated figure. Pet. 21.

electrode member on one of the jaws, wherein the first and second electrode members are disconnected electrically, i.e., isolated, from each other. *Id.* ¶ 12.

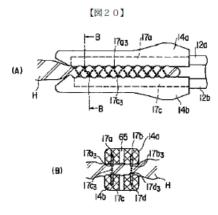
Figures 8C and 9A of JP'551 are reproduced below from left to right.



Referring to Figures 8C and 9A, electrode members 17a and 17b and 17c and 17d may be disposed on opposing jaws 14a and 14b, respectively. Further, as depicted in Figure 5B (above), each of first and second electrode members 17a and 17b extends in an axial direction, and the members lie parallel to and laterally spacedapart from each other, when the jaws are closed.

With regard to its "seventh embodiment," JP'551 teaches a plurality of tissue penetrating elements as its electrodes, which are parallel and laterally spaced-apart. Pet. 21–23 (citing Ex. 1013 ¶¶ 71–73). Referring to Figures 19(A), 19(B), 20(A), and 20(B), this embodiment teaches changing the constitution of treatment portion 3 of bipolar forceps 1 to have a cutting function, similar to that of the second embodiment. See Ex. 1013 ¶ 71; Figs. 10–14(C). Specifically, in the seventh embodiment, a plurality of substantially serrated projecting portions 17a₃, 17b₃, 17c₃, 17d₃ are formed on outer end portions (i.e., the portions contacting the living tissue H) of electrodes 17a, 17b, 17c, 17d of respective clamping members 14a, 14b of the second embodiment. Id. ¶ 71.

Figures 20(A) and (B) are reproduced below.



In Figures 20(A) and 20(B), serrated portions $17a_3$, $17b_3$, $17c_3$, $17d_3$ "bite into" the tissue to improve coagulation of tissue H. Ex. $1013 \, \P \, 73$. Thus, Petitioner argues that JP'551 also teaches that "at least one of the electrode members comprises a plurality of tissue penetrating elements which project toward the opposed jaw." Pet. 21.

Petitioner refers to the first, second, and seventh embodiments of JP'551 in support of this ground for unpatentability of claim 1. Pet. 21–22. Nevertheless, JP'551 states that

Fig. 19(A), Fig. 19(B) and Fig. 20(A), Fig. 20(B) show the seventh embodiment of the present invention. This embodiment is characterized by changing the constitution of the treatment portion 3 of the bipolar forceps 1 having a cutting function of the second embodiment (see Fig. 10 to Fig.14(C))

Ex. 1013 ¶ 71 (emphasis added). Moreover, referring to Figure 20(B), the combination of the elements of the *second* embodiment (e.g., passage 65) and the *seventh* embodiment (e.g., serrated projecting portions 17 a_3 , 17 b_3 , 17 c_3 , and 17 d_3) is depicted. Further, this combination is described as changing the constitution of forceps 1 of the *first* embodiment. *Id.* Therefore, the seventh embodiment incorporates the structural characteristics of both the first and second

embodiments, and Petitioner bases its anticipation ground on, essentially, a single embodiment.

Patent Owner contends that JP'551 does not disclose the tissue penetrating elements recited in claim 1 of the '384 patent. PO Resp. 20. In particular, Patent Owner contends that JP'551's clamping members do not "damage" the living tissue. *Id.* (citing Ex. 1013 ¶ 78). Thus, Patent Owner contends that a person of ordinary skill in the art would not understand the clamping members of JP'551 to disclose or suggest the "tissue penetrating elements" recited in claim 1 of the '384 patent. *Id.* (citing Ex. 2014 ¶ 22). As noted above, however, Petitioner relies upon JP'551's *seventh* embodiment of invention to disclose the "tissue penetrating elements" recited in claim 1 of the '384 patent. Pet. 21–23 (citing Ex. 1013 ¶¶ 71–73). JP'551's prohibitions regarding tissue damage relate to the *eighth* embodiment of the invention. Pet. Reply 12.

Unlike the seventh embodiment which is intended for use with thick tissue, the eighth embodiment is intended for use with thin tissue. *Id.*; *compare* Ex. 1013 ¶ 73 ("[T]he treatment portion unit 6 can also sufficiently coagulate the living tissue H *having a large thickness*."; emphasis added), *with* Ex. 1013 ¶ 77 ("[W]hen a particularly thin living tissue H is clamped between the respective clamping members 14a, 14b, only the projecting portions 17a₃, 17b₃, 17c₃, 17d₃ of the respective electrodes 17a, 17b, 17c, 17d are brought into contact with the living tissue H and hence, there is no possibility that the living tissue H is damaged."; emphasis added). Therefore, we are persuaded that, despite JP'551's teaching that the clamping members of the eighth embodiment would not damage *thin* tissue H,

¹² In the Patent Owner Response, Patent Owner incorrectly cites to expunged Exhibit 1003, instead of Exhibit 1013. We have attempted to correct these citations.

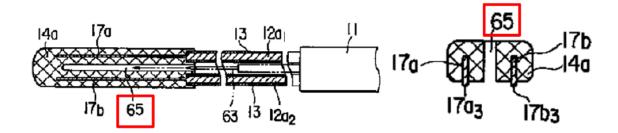
JP'551 discloses that the clamping members of the seventh embodiment are different from those of the eighth embodiment and may penetrate *thick* tissue H. Pet. Reply 12; *see* Ex. 1013 ¶ 73 ("[T]he projecting portions 17a₃, 17b₃, 17c₃, 17d₃ of the respective electrodes 17a, 17b, 17c, 17d *bite into* the living tissue H . . ."; emphasis added). The challenged claims of the '384 patent do not recite a tissue thickness. *See* Ex. 1011, col. 7, ll. 20–34; col. 9, l. 36–col. 10, l. 4.

For the reasons set forth above, we are persuaded that Petitioner demonstrates by a preponderance of the evidence that claim 1 is anticipated by JP'551. Pet. 21–23. Further, a disclosure that anticipates under 35 U.S.C. § 102 also may render the claim unpatentable under 35 U.S.C. § 103, because anticipation is the epitome of obviousness. *See In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002) ("It is well settled that 'anticipation is the epitome of obviousness.") (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). Consequently, we also are persuaded that Petitioner demonstrates by a preponderance of the evidence that claim 1 would have been rendered obvious over JP'551. Pet. 28.

d. Claims 11 and 38

Claim 38 includes substantially the same limitations as claim 1, except that claim 38 recites that "at least one of the jaws is perforated to permit the release of steam during use," and does not recite that "at least one of the electrode members comprises a plurality of tissue penetrating elements which project toward the opposed jaw," as recited in claim 1. *Id.* at 23. Claim 11 depends directly from independent claim 1 and also recites the perforated-jaw limitation. Ex. 1011, col. 7, ll. 65–67. Petitioner argues that the foregoing discussion of claim 1 demonstrates that JP'551 discloses all of the shared elements of claims 1 and 38. *Id.*

Annotated Figures 14(A) and 19(B) of JP'551 are reproduced below. 13



Annotated Figures 14(A) and 19(B) of JP'551 depict passage 65 in the axial direction of jaw 14a through which knife member 63 passes. Ex. 1013 ¶ 47. Petitioner argues that passage 65 "would serve the purpose of permitting the release of steam." *See* Pet. 24 (citing Ex. 1018 ¶ 48). Moreover, as with Petitioner's arguments regarding claim 1, Petitioner's arguments regarding claim 38 are based on elements drawn from multiple embodiments, i.e., the first and second embodiment, of JP'551. Pet. 23-24; *see* Ex. 1013 ¶¶ 45–47. However, JP'551 specifically teaches that

Fig. 10 to Fig. 14(C) show the second embodiment of the present invention. This embodiment is characterized by providing a bipolar forceps 1 having a cutting function where a means for cutting a living tissue H and a cutting means manipulation part *are added to* the bipolar forceps 1 of the first embodiment (see Fig. 1 to Fig. 9(D)).

Ex. 1013 ¶ 45 (emphasis added). Thus, as with claim 1, Petitioner's argument that JP'551 anticipates claim 38 is based on a single embodiment disclosed in JP'551. Pet. 24.

Patent Owner contends that "JP'551 does not teach a perforated jaw, nor does JP'551 make any mention of permitting the release of steam during use." PO Resp. 21. With regard to whether JP'551 discloses that slit 65 would permit the

¹³ Petitioner provided these annotated figures. Pet. 24.

release of steam during use, referencing JP'551's Figure 17(C), Patent Owner contends that at least some steam formed between the clamping members 14a and 14b does not reach slit 65 and is not released via slit 65. PO Resp. 21–22.

Figures 17(A)–(C) of JP'551 are reproduced below:

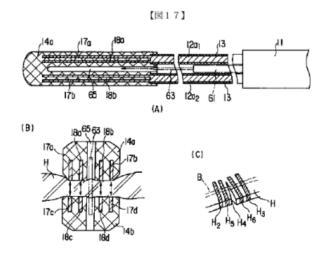


Figure 17(A) depicts a plan view of clamping member 14a including slit 65 bracketed by electrodes 17a and 18a and electrodes 17b and 18b. Ex. 1013 \P 67. Figure 17(B) depicts clamping members 14a and 14b clamping tissue H and the alignment of slits 65 and electrodes 17a–d and 18a–d across tissue H. *Id.* Figure 17(C) depicts cut portion H₄ made by knife member 63 in tissue H and the coagulated portions H₂, H₃, H₅, and H₆ of tissue H. *Id.* In view of the depiction in these figures, Patent Owner contends that steam formed (1) between coagulated portions H₂ and H₅ of tissue H between electrodes 17a and 17c and electrodes 18a and 18c, respectively, and (2) between coagulated portions H₃ and H₆ of tissue H between electrodes 17b and 17d and electrodes 18b and 18d, respectively, would not reach slit 65 for release. PO Resp. 22 (citing Ex. 2014 \P 23). Patent Owner, however, does not contend that steam formed between coagulated portions H₅ and H₆ of tissue H between electrodes 18a and 18c and electrodes 18b and 18d, respectively, would not reach slit 65 for release. *See* Ex. 2014 \P 24; *cf.* Ex. 1013,

Fig. 15(C) (depicting only H_2 and H_3 of tissue H formed by two pairs of electrodes 17a and 17c and 17b and 17d on either side of slit 65).

Nevertheless, the claim language only requires that "at least one of the jaws is perforated to permit the release of steam during use." Ex. 1011, col. 7, ll. 65–67 (claim 11); col. 9, ll. 44–45 (claim 38) (emphasis added). Thus, the claim language is sufficiently broad such the steam produced on only one side of the clamped tissue is released during use. As Patent Owner's declarant, Dr. Tucker, acknowledged, JP'551's slit 65 would allow some steam formed between clamping members 14a and 14b to be released. Ex. 2022, 149:2–13; see Pet. Reply 13. Claims 11 and 38 do not require that all steam formed between the jaws is released, but only that "steam" is released through a perforation or perforations in the at least one jaw. Thus, we are persuaded that the release via slit 65 of any steam formed between clamping members 14a and 14b during use is sufficient to satisfy the recited claim limitation. Further, it is not necessary for the reference to mention this recited function expressly in order for us to conclude that the disclosed structure performs the function. See Ex. 1018 ¶ 42. In view of our construction of the limitation: "wherein at least one of the jaws is perforated to permit the release of steam during use," we are persuaded that slit 65 of JP'551 discloses the recited, perforated jaw of claims 11 and 38. See also Ex. 1018 ¶ 42 ("I believe it is appropriate to assume that any jaw with perforation would 'permit the release of steam during use' and that this phrase does not impart any further structural limitation.").

We are persuaded that Petitioner demonstrates by a preponderance of the evidence that claims 11 and 38 are anticipated by JP'551. Pet. 23–24. Further, as noted above, a disclosure that anticipates under 35 U.S.C. § 102 also may render the claim unpatentable under 35 U.S.C. § 103. *See McDaniel*, 293 F.3d at 1385.

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Consequently, we also are persuaded that Petitioner demonstrates by a preponderance of the evidence that claims 11 and 38 would have been rendered obvious over JP'551. Pet. 28.

e. Claims 4–6, 8, 9, 12, 41–44, 46, 47, and 49

Petitioner argues that the limitations of each of the challenged, dependent claims are disclosed by JP'551. *Id.* at 28 (citing Ex. 1018 ¶¶ 45–50; Ex. 1018C). Patent Owner does not argue specifically that any of the limitations of the challenged, dependent claims are not disclosed or suggested by JP'551. *See* PO Resp. 19, 22, 37. Having reviewed JP'551 alongside the challenged dependent claims, we are persuaded that Petitioner demonstrates by a preponderance of the evidence that claims 4–6, 8, 9, 12, 41–44, 46, 47, and 49 of the '384 patent are anticipated by, or, in the alternative, rendered obvious over JP'551. *See* Pet. 24–28 (discussion of dependent claims 4–6, 8, 9, 12, 41–44, 46, 47, and 49); *McDaniel*, 293 F.3d at 1385.

5. Obviousness over JP'551 and FR'149

a. Claim 1

To the extent that JP'551 does not teach or suggest that "at least one of the electrode members comprises a plurality of tissue penetrating elements which project toward the opposed jaw," Petitioner argues that FR'149 teaches or suggests this limitation and that a person of ordinary skill in the art would have had reason to modify the teachings of JP'551 to include penetrating elements as taught by FR'149. Pet. 29–31. Figure 1 of FR'149 is reproduced below:

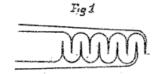


Figure 1 depicts five tissue penetrating elements (unlabeled) on each electrode jaw that project toward the opposing jaw. *Id.* at 29. FR'149 explains that the "recommended device consists of giving both electrodes a form *such that they limit the action of the coagulation to as narrow a section as possible.*" Ex. 1014, 1 (emphasis added). Further, FR'149 shows the effect of coagulation with a variety of bipolar electrodes in Figures 2–5, and describes how in "the case of two combs; the destruction is more limited." *Id.* Given the desirability of limiting destruction and narrowing the action of the coagulation, an objective shared by both FR'149 and JP'551, Petitioner argues that a person of ordinary skill in the art would have had reason to modify the teachings of JP'551. Pet. 30–31 (citing Ex. 1018 ¶ 53).

Petitioner does not apply the combined teachings of JP'551 and FR'149 to independent claim 38, from which claims 43, 44, 46, and 47 depend; but, instead, relies upon the application of JP'551 alone to claim 38 in the asserted ground discussed above. Petitioner argues that FR'149 teaches the tissue-penetrating-element limitations of claims 1, 6, 8, 9, 43, 44, 46, and 47 (*see* Ex. 1014, 1) and that a person of ordinary skill in the art would have had reason to modify the teachings of JP'551 (*see* Ex. 1013 ¶ 27) to include the tissue penetrating elements taught by FR'149. Pet. 31–32 (citing Ex. 1018 ¶¶ 54, 55, 59).

Petitioner does not present arguments with respect to claims 4, 5, 11, and 12, based on the combined teachings of JP'551 and FR'149. Consequently, with respect to claims 4, 5, 11, and 12, Petitioner relies on JP'551 to teach the additional limitations of these dependent claims, but, for this proposed ground, relies on FP'149 to teach the tissue-penetrating element of claim 1, from which these claims depend.

Patent Owner contends that a person of ordinary skill in the art would not have reason to combine the teachings of FR'149 with those of JP'551 because the combination would change the principle of operation of JP'551 (PO Resp. 23–26); because JP'551 and FR'149 target coagulation in areas different from that targeted by the bipolar surgical instrument of the '384 patent (*id.* at 26–27); and because a device combining the teachings of JP'551 and FR'149 would not function (*id.* at 27–30). We are not persuaded by these contentions.

With regard to Patent Owner's contention that a person of ordinary skill in the art would not have reason to combine the teachings of FR'149 with those of JP'551 because the combination would change the principle of operation of JP'551 (id. at 23–26), we note that this contention is based on the description of the eighth embodiment of JP'551 (id. at 24 (citing Ex. 1013 ¶ 78)¹⁴). In particular, FR'149 depicts tissue penetrating elements "in the shape of knives" or "in the form of combs with sharp teeth fitting into each other." *Id.* at 25 (citing Ex. 1014, 1). 15 Patent Owner contends that, because the eighth embodiment of JP'551 teaches that "[t]here is no possibility that the living tissue is damaged before coagulation" (id. at 24; Ex. 1013 ¶ 77)), a person of ordinary skill in the art would not combine the tissue penetrating elements of FR'149 with the bipolar forceps of the eighth embodiment of JP'551. PO Resp. 25–26. As discussed above, however, Petitioner relies on the combination of the teachings of the first, second, and seventh embodiments of JP'551, rather than those of the eighth embodiment of JP'551, with the teachings of FR'149 to achieve the device recited in the challenged claims. Pet. 21–22 (quoting Ex. 1013 ¶ 72); see supra Sec. II.B.c.3.

¹⁴ See supra 27 n.12.

¹⁵ Patent Owner incorrectly cites to expunged Exhibit 1004, instead of Exhibit 1014.

Patent Owner also contends that a person of ordinary skill in the art would not have reason to combine the teachings of FR'149 with those of JP'551 to achieve the devices recited in the challenged claims because JP'551 and FR'149 target coagulation in areas different from that targeted by the bipolar surgical instrument of the '384 patent. We note that this contention is based on Patent Owner's assertion that Figure 8 of the '384 patent depicts coagulation of the *entire* region R between the tissue penetrating elements 22. PO Resp. 26–27 (citing Ex. 1001, col. 6, l. 62–col. 7, l. 13). This, however, is only an embodiment of the bipolar surgical instruments of the '384 patent, and, absent more, we do not read limitations of this embodiment into the challenged claims. *Van Geuns*, 988 F.2d at 1184.

JP'551 describes a device which causes coagulation between the clamping members, but which achieves different depths and breadths of coagulation depending upon specific treatment requirements. *Id.* (citing Ex. 1013 ¶ 3). Similarly, FR'149 describes that "[t]he recommended device consists of giving both electrodes a form such that they limit the action of the coagulation to as narrow a section as possible." Ex. 1014, 1. In particular, FR'149 describes that, "[d]epending on the case, these electrodes will either be in the shape of knives, *placed on either side of the area to be destroyed*, or preferably in the form of combs with sharp teeth fitting into each other (fig. 1)." *Id.* (emphasis added). Thus, both devices teach limiting the extent of the coagulation generally to that necessary for the given treatment. While challenged claims 1 and 43, for example, recite that "at least one of the electrode members comprises a plurality of tissue penetrating elements which project toward the opposed jaw," the claims do not recite where the coagulation occurs or to what extent. Ex. 1011, col. 7, Il. 29–34 (claim 1); col. 10, Il. 17–20 (claim 43); *see also id.* at col. 10, Il. 21–23 (claim 44

recites a plurality of penetrating elements on both electrode members). Consequently, we are persuaded that the combination of the teachings of JP'551 and FR'149 are sufficient to teach or suggest the recited limitations of claim 1, 6, 8, 9, 43, 44, 46, or 47.

Finally, Patent Owner contends that because of the age of FR'149 and the differences in generator technology at the time of the filing of FR'149, i.e., May 8, 1925, "it would be impossible to determine how such a device would work with modern solid state, microprocessor controlled generators," such as those utilized in the devices described in JP'551. PO Resp. 28 (citing Ex. 2014 ¶¶ 33–34). Consequently, Patent Owner contends that the results of the combination of the teachings of JP'551 with those of FR'149 are not predictable. *Id.* at 29. Thus, if the results of the combination are not predictable, a person or ordinary skill in the art would not have reason to combine the teachings of FR'149 with those of JP'551. *Id.* We are not persuaded that, for these reasons, the results of the combination of the teachings of JP'551 and FR'149 are not predictable.

As Petitioner notes, both JP'551 and FR'149 "identify the objective of coagulation within a defined region of tissue being treated." Pet. Reply 14. Here, Petitioner relies on the FR'149 to teach tissue penetrating elements in view of the serrated portions of seventh embodiment of the devices of JP'551. *Id.*Specifically, Petitioner states that "FR'149 explains that the purpose of this structure is that the 'recommended device consists of giving both electrodes a form such that they limit the action of the coagulation to as narrow a section as possible." Pet. 30 (citing Ex. 1014, 1). As noted above, the coagulated tissue may be limited to the area between sharp knives or between interfitting teeth of combs. Ex. 1014, 1. Limiting the area of coagulation is a goal shared by JP'551 and FR'149. Ex. 1013 ¶¶ 3, 27, 33–43; Ex. 1014, 1; *see* Ex. 1018 ¶ 53 ("JP'551")

considers *the same problem* [as FR'149], namely, how to control the width and depth of coagulation."; emphasis added). Patent Owner's declarant acknowledged these shared goals. Ex. 2022, 189:23–190:4. Petitioner, however, does not rely on FR'149 to teach the use of generators in an electrosurgical device or to suggest that the devices of JP'551 and FR'149 could be combined physically. *Id.* Therefore, we are persuaded that Petitioner has shown sufficient reason to combine the teachings of JP'551 and FR'149 to achieve the recited instrument of the challenged claims. Pet. 28–32; *KSR*, 550 U.S. at 416 ("The Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result."; citations omitted).

For the reasons set forth above, we are persuaded that Petitioner demonstrates by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47 would have been rendered obvious over JP '551 and FR'149.

C. Motions to Exclude Evidence

Both Petitioner and Patent Owner filed Motions to Exclude Evidence. We address these motions sequentially.

1. Petitioner's Motion to Exclude Evidence

Petitioner filed a Motion to Exclude Evidence (Paper 41 ("Pet. Mot.")). In particular, Petitioner moves to exclude Patent Owner's exhibits, as follows:

Patent Owner's Exhibits	Proposed Grounds for Exclusion
Exhibits 2002, 2003, and 2016	FRE 106, 403, and 901
Exhibits 2004, 2006, 2007, 2008, and 2020	FRE 106, 403, 502, 802, 803, and 901

Patent Owner filed an Opposition to Petitioner's Motion to Exclude Evidence (Paper 47 ("PO Opp.")); and Petitioner filed a Reply to Patent Owner's Opposition to the Motion to Exclude Evidence (Paper 52 ("Pet. Reply to Opp.")).

a. Exhibits 2002, 2003, and 2016

Exhibits 2002 and 2003 are scans and photographs, respectively, of selected pages of Dr. Nezhat's laboratory notebook; Exhibit 2016 is a scan of all pages of Dr. Nezhat's laboratory notebook. Patent Owner relies upon these exhibits to support its arguments that Dr. Nezhat conceived of the instruments recited in the challenged claims of the '384 patent prior to the publication date of JP'551. PO Resp. 13; *see* Tr. 19:9–12. Nevertheless, because Patent Owner does not provide sufficient evidence to demonstrate (or corroborate Dr. Nezhat's testimony) that Dr. Nezhat continuously exercised reasonable diligence during the entire critical period, we do not reach and do not address the date of conception in this Decision. *See supra* Section II.B.3.b. Because we do not rely on Exhibit 2002, 2003, or 2016 in reaching the Decision here, with respect to these exhibits, we dismiss Petitioner's Motion to Exclude Evidence as moot.

b. Exhibits 2004, 2006–2008, and 2020

Exhibits 2004, 2006, and 2020 are copies of letters allegedly sent from Mr. Heslin to Dr. Nezhat. Pet. Mot. 12. Further, Exhibits 2004 and 2006 include copies of a draft patent application, allegedly prepared by Mr. Heslin and submitted to Dr. Nezhat, for his review. *Id.*; PO Resp. 13–14, 17. Exhibit 2007

includes a facsimile cover sheet and a confirmation of receipt, dated March 12, 1998. Pet. Mot. 12. Exhibit 2008 allegedly is a copy of the application, as filed with the U.S. Patent and Trademark Office, that issued as the '384 patent. *Id.*; *see* Ex. 2012 ¶ 11. Petitioner objects to each of these exhibits as lacking authentication (FRE 901), as inadmissible hearsay (FRE 802 and 803), and as incomplete (FRE 106). Pet. Mot. 12–15.

As an initial matter, we note that in order to file a motion to exclude evidence, the moving party must first demonstrate that it timely objected to the evidence that it seeks to exclude. 37 C.F.R. § 42.64(c). Here Petitioner fails to identify where in the record it objected to the filing of Exhibit 2020. Consequently, to the extent that there is no evidence of an objection to Exhibit 2020, Petitioner may not seek to exclude this exhibit in its Motion to Exclude Evidence. After considering Petitioner's objections to the remaining exhibits, for the reason's set forth below, we deny or dismiss as moot Petitioner's Motion to Exclude Evidence with respect to those exhibits.

i. Authentication

Petitioner argues that Patent Owner's declarant fails to identify the custodian or source of the Exhibits 2004 and 2006–2008. Pet. Mot. 12. As Patent Owner notes, however, "a document may be authenticated in a variety of ways, including by '[t]estimony of a [w]itness with [k]nowledge [] that an item is what it is claimed to be." PO Opp. 8 (quoting FRE 901(b)(1)). Here, Patent Owner provides direct testimony from Mr. Heslin, the author of the letters and the enclosures comprising Exhibits 2004 and 2006–2008, testifying that each of these items is what it is claimed to be. *Id.* at 9–10 (citing Ex. 2012 ¶¶ 7, 10, 11; Ex. 2024, 35:19–36:5). We are persuaded that these exhibits are authenticated adequately, and, with respect to these exhibits, we *deny* Petitioner's Motion to Exclude Evidence as

unauthenticated evidence.

ii. Hearsay

Petitioner further argues that Exhibits 2004 and 2006–2008 should be excluded as inadmissible hearsay. Pet. Mot. 13. In particular, Petitioner argues that the draft application, which is an enclosure to the letter dated January 28, 1998 (Ex. 2004), is relied upon by Patent Owner for the truth of what is asserted therein, namely conception of the instrument recited in the challenged claims as of January 28, 1998. *Id.* (citing Ex. 2010 ¶ 11). To the extent that the draft application is offered for the truth of what is asserted therein, we did not reach and do not address the date of conception in this Decision. *See supra* Section II.B.3.b. Consequently, we do not consider the truth of the content of the draft application.

Nevertheless, Patent Owner contends that the January 28, 1998, letter and enclosure (Ex. 2004), as well as the other challenged exhibits, are not offered for the truth of the matter asserted therein. PO Opp. 10. Instead, Patent Owner contends that the significance of these exhibits, especially, Ex. 2004, is "solely in the fact that it is made, no issue is raised as to the truth of anything asserted, and the statement is not hearsay." *Id.* (quoting FRE 801(c), Adv. Comm. Note). We consider Exhibit 2004 only to the extent that the date of the letter is relevant to our assessment of Dr. Nezhat's testimony regarding his diligence in constructively reducing the instruments recited in the challenged claims to practice. Therefore, to the extent that Patent Owner relies on these exhibits only for the purpose of demonstrating that an activity occurred on a particular date, we are not persuaded that these exhibits are inadmissible hearsay, and we *deny* Petitioner's Motion to Exclude Evidence as to inadmissible hearsay.

iii. Incomplete

Petitioner further argues that the record of communications between Mr.

Heslin and Dr. Nezhat is incomplete. Pet. Opp. 5. Generally, Petitioner argues that Patent Owner did not produce the complete file of prosecution correspondence between Mr. Heslin and Dr. Nezhat and that the correspondence that Patent Owner did produce was incomplete. In particular, Petitioner argues that Patent Owner did not file or produce a facsimile transmission of November 1997 from Dr. Nezhat to Mr. Heslin describing the invention. *Id*.

FRE 106 provides that "[i]f a party introduces all or part of a writing or recorded statement, an adverse party may require the introduction, at that time, of any other part —or any other writing or recorded statement —that *in fairness* ought to be considered at the same time" (emphasis added). *See* PO Opp. 13. FRE 106 does not require Patent Owner to produce all documents in a given file. *Id.*Regarding the facsimile transmission of November 1997, Petitioner argues that particular facsimile transmission is relevant to the conception of the instruments recited in the challenged claims prior to JP'551's publication date, i.e., February 10, 1998. Pet. Mot. 14. Nevertheless, we did not reach and do not address the date of conception in this Decision. *See supra* Section II.B.3.b. Therefore, the content of the facsimile transmission of November 1997 is not relevant to the Decision in this case.

Finally, to the extent that Petitioner argues that the lack of a complete correspondence file in the record is prejudicial to Petitioner (*see* Pet. Mot. 14–15), we note that, in this case, a "complete" record has not been shown to exist (*see* Ex. 2023, 42:18–43:24; Ex. 2024, 25:7–18). Consequently, the incompleteness of the file goes to the weight that we accord to Patent Owner's evidence and not to the admissibility of that evidence.

Therefore, for the reasons set forth above, we deny or dismiss as moot Petitioner's Motion to Exclude Evidence with respect to Exhibits 2002–2004,

2006–2008, 2016, and 2020.

2. Patent Owner's Motion to Exclude Evidence

Patent Owner filed a Motion to Exclude Evidence (Paper 43 ("PO Mot.")); Petitioner filed an Opposition to Patent Owner's Motion to Exclude Evidence (Paper 46 ("Pet. Opp.")); and Patent Owner filed a Reply to Petitioner's Opposition to the Motion to Exclude Evidence (Paper 48 ("PO Reply to Opp.")). As an initial matter, Petitioner argues that Patent Owner's Motion to Exclude Evidence, filed on January 20, 2015, was untimely filed. Pet. Opp. 1. For the reasons set forth below, we agree and deny Patent Owner's Motion to Exclude Evidence as untimely filed.

In our Scheduling Order, we set DUE DATE 4, the deadline for either party to file any motion to exclude evidence, as January 20, 2015. Paper 17, 5. This date was selected by us for DUE DATE 4 because January 19, 2015, was the date of the 2015 Martin Luther King, Jr. Day Federal Holiday. The Scheduling Order further stated that

This order sets due dates for the parties to take action after institution of the proceeding. The parties may stipulate to different dates for DUE DATES 1 through 5 (earlier or later, but no later than DUE DATE 6). A notice of the stipulation, specifically identifying the changed due dates, must be promptly filed. The parties may not stipulate to an extension of DUE DATES 6 and 7.

Id. at 1 (emphasis added). On August 21, 2014, the parties filed a Notice of Stipulation to Adjust Schedule Due Dates 1–4, which among other dates changed DUE DATE 4 from January 20, 2015, to January 19, 2015. Paper 24, 3. Counsel for each party signed the Notice of Stipulation. *Id.* at 4.

Petitioner timely filed its Motion to Exclude Evidence on January 19, 2015, i.e., stipulated DUE DATE 4; but Patent Owner did not. Instead, Patent Owner

filed its Motion to Exclude Evidence on January 20, 2015. Patent Owner now contends that, despite the parties' stipulation changing DUE DATE 4 to January 19, 2015, the DUE DATE for filing Patent Owner's Motion to Exclude Evidence *remained* January 20, 2015, because January 19, 2015, was a Federal holiday. PO Reply to Opp. 1.

Under 35 U.S.C. § 21(b),

[w]hen the day, or the last day, for taking any action or paying any fee in the United States Patent and Trademark Office falls on Saturday, Sunday, or a Federal holiday within the District of Columbia, the action may be taken, or the fee paid, on the next succeeding secular or business day.

We understand that the statute applies to deadlines set by statute, rule or order; not to *different* dates stipulated to by the parties. Similarly, under 37 C.F.R. § 1.7(a), when a deadline falls on a Federal holiday, action may be taken "on the next succeeding business day." Section 1.7, however, applies to deadlines "fixed by statute or by or under this part" of this chapter. See 37 C.F.R. § 42.1(a) ("[Section 1.7] of this chapter also appl[ies] to proceedings before the Board, as do other sections of part 1 of this chapter that are incorporated by reference into this part."). Although the Scheduling Order is an order made pursuant to 37 C.F.R. § 42.5(c), the Scheduling Order permits the parties to change the DUE DATES set therein to "different" dates by stipulation. Paper 17, 1. Moreover, given that filings with the Board may be made electronically (see 37 C.F.R. § 42.6(b)(1)) and the Patent Review Processing System accepts filings twenty-four hours a day and seven days a week, we only require that stipulated DUE DATES 1–5 may be

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¹⁶ S. Rept. No. 82-1979, at 2407 (1952) (With respect to 35 U.S.C. § 21, "'[f]ixed by statute' is omitted from the corresponding section of the existing statute *as unnecessary*. Saturday is added as a day on which action need not be taken."; emphasis added).

"earlier or later [than the date set in the Scheduling Order], but no later than DUE DATE 6." Paper 17, 1. Within these limits, the Board observes stipulated dates, and stipulated dates are binding on the parties by their agreement.

Here, the parties stipulated to January 19, 2015, as DUE DATE 4. As noted above, Patent Owner's Motion to Exclude Evidence was not filed on or before stipulated DUE DATE 4, and Patent Owner has provided no reason for its delay in filing its Motion to Exclude Evidence, which warrants our acceptance of its untimely Motion to Exclude Evidence. Therefore, we *deny* Patent Owner's untimely Motion to Exclude Evidence.

D. Improper Filing of Demonstrative Exhibits

The panel "may expunge any paper directed to a proceeding . . . that is not authorized under this part or in a Board order or that is filed contrary to a Board order." 37 C.F.R. § 42.7(a). After reviewing Exhibit 1024–1028, we determine that these exhibits are not authorized by this part or in a Board order or are contrary to a Board order.

According to Petitioner, "Exhibit 1024 contains a table and two calendars that [purport to] summarize all of the evidence (or lack thereof) related to Patent Owner's efforts to show conception and diligence towards constructive reduction to practice." Pet. Opp. 9. In particular, in Exhibit 1024, Petitioner characterizes certain periods as "UNEXPLAINED INACTIVITY." This issue is disputed. *See* PO Resp. 15–17; Pet. Reply 3–6. Similarly, Exhibit 1026 is a PowerPoint

¹⁷ Patent Owner contends that Petitioner is not prejudiced by Patent Owner's late filing of the Motion to Exclude Evidence. PO Reply to Opp. 1–2. Nevertheless, as a general matter, if we accepted Patent Owner's late filing, Petitioner would have one day less to prepare its opposition to Patent Owner's Motion to Exclude Evidence than Patent Owner would have to prepare its opposition to Petitioner's Motion to Exclude Evidence. Pet. Opp. 2.

presentation purporting to show a side-by-side comparison of the disclosures of the draft patent applications that Mr. Heslin sent to Dr. Nezhat on January 28, 1998, and April 13, 1998. However, on slides 2 and 3 of this presentation, Petitioner includes argument in the form of a large red X asserting that the draft patent application dated January 28, 1998, contained no disclosure corresponding to that included in the draft patent application dated April 13, 1998. This is not evidence, but, instead, is Petitioner's argument regarding how we should interpret the evidence presented by Patent Owner. *See* PO Resp. 16. Pursuant to 37 C.F.R. § 42.24(c)(1), a Reply to a Patent Owner Response to Petition is limited to fifteen pages. Consequently, we conclude that Exhibits 1024 and 1026 contain improper argument in excess of the page limit of Petitioner's Reply; and we expunge Exhibits 1024 and 1026. *See Medtronic, Inc. v. Robert Bosch Healthcare Systems, Inc.*, Case IPR2014-00488, slip op. at 3 (PTAB Jan. 14, 2015) (Paper 42).

Petitioner also contends that Exhibits 1024–1028 are "demonstrative exhibits." Pet. Opp. 12 (Ex. 1024 and Ex. 1025), 13 (Ex. 1026), 15 (Ex. 1027 and Ex. 1028). As indicated in the Board's Office Trial Practice Guide, demonstrative exhibits may be presented at the oral hearing. 77 Fed. Reg. 48756, 48768 (Aug. 14, 2012). However, the filing of demonstrative exhibits was not authorized by our rules or by any order in this case. Moreover, our order granting the parties' requests for an oral hearing expressly prohibits the filing of demonstrative exhibits without our prior authorization. Paper 45, 4 ("The parties shall not file any demonstrative exhibits in this case without prior authorization from the Board."); see PO Reply to Opp. 5. Because Petitioner did not request authorization to file and we did not authorize the filing of these demonstrative exhibits at DUE DATE 3, we also expunge Exhibits 1025–1028 for this reason. See C&D Zodiac, Inc. v.

B/E Aerospace, Inc., Case IPR2014-00727, slip op. at 3 (PTAB Mar. 3, 2015) (Paper 30).

III. CONCLUSION

Based on the foregoing discussion, we conclude that Petitioner has demonstrated by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent are unpatentable in view of JP'551, alone or in combination with FR'149.

IV. ORDER

In consideration of the foregoing, it is

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 38, 41–44, 46, 47, and 49 of the '384 patent are unpatentable under 35 U.S.C. § 102(b) or 103(a) over JP'551;

FURTHER ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1, 4–6, 8, 9, 11, 12, 43, 44, 46, and 47 of the '384 patent are unpatentable under 35 U.S.C. § 103(a) over JP'551 and FR'149;

FURTHER ORDERED that Petitioner's Motion to Exclude Evidence is dismissed as moot with respect to Exhibits 2003, 2004, and 2016 and denied or dismissed as moot with respect to Exhibits 2002, 2006–2008, and 2020;

FURTHER ORDERED that Patent Owner's Motion to Exclude Evidence is *denied* as untimely filed;

FURTHER ORDERED that Exhibits 1024–1028 are expunged; and FURTHER ORDERED that, because this is a final 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.

IPR2014-00233 Patent 6,030,384

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