

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWITTER, INC.,
Petitioner,

v.

VIDSTREAM, LLC,
Patent Owner.

IPR2017-00829
Patent 9,083,997 B2

Before SALLY C. MEDLEY, CHARLES J. BOUDREAU, and
JESSICA C. KAISER, *Administrative Patent Judges*.

KAISER, *Administrative Patent Judge*.

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

I. INTRODUCTION

Twitter, Inc. (“Petitioner”) filed a Petition pursuant to 35 U.S.C. §§ 311–319 requesting an *inter partes* review of claims 1–19 of U.S. Patent No. 9,083,997 B2 (Ex. 1001, “the ’997 patent”). Paper 1 (“Pet.”). Youtoo Technologies, LLC (“Youtoo”), the Patent Owner at that time, filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). Taking into account the arguments presented in Patent Owner’s Preliminary Response, we determined the information presented in the Petition established that there was a reasonable likelihood that Petitioner would prevail in challenging claims 1–19 of the ’997 patent, and we instituted this *inter partes* review on August 11, 2017, as to all challenged claims. Paper 10 (“Dec. on Inst.”).

On December 26, 2017, Youtoo filed a Notice of Bankruptcy Case Filing, indicating that on November 30, 2017, Youtoo had filed for bankruptcy in the United States Bankruptcy Court for the Western District of Oklahoma. Paper 19. Youtoo filed a motion to stay this proceeding based on the automatic stay in the bankruptcy statute, and Petitioner opposed that motion. *See* Papers 21, 22, 27. The bankruptcy court issued an order that any stay applicable to this proceeding was lifted no later than April 30, 2018 (Ex. 1033), and we dismissed the motion to stay as moot (Paper 38, 2). In addition, the bankruptcy trustee filed a report of sale, indicating that the challenged patent had been sold to STI-ACQ LLC, as assignee of Arundel Ventures, LLC. Paper 38, 2–3. On May 18, 2018, Patent Owner filed updated mandatory notices identifying VidStream LLC (“Patent Owner”) as

the Patent Owner and real party-in-interest. Paper 39.¹ On June 6, 2018, the Chief Judge determined that good cause existed to extend the one-year period for issuing a Final Written Decision in this proceeding (Paper 41), and the Board issued an order extending the time to administer this proceeding by up to six months (Paper 42).

During the course of trial, Patent Owner filed a Patent Owner Response (Paper 50, “PO Resp.”); Petitioner filed a Reply to the Patent Owner Response (Paper 53, “Pet. Reply”); and Patent Owner filed a Sur-Reply (Paper 59, “PO Sur-Reply”). In addition, Patent Owner filed a Motion to Exclude Evidence (Paper 58, “PO Mot. to Exclude”); Petitioner filed an Opposition to the Motion to Exclude (Paper 62, “Pet. Opp. to Mot. to Exclude”); and Patent Owner filed a Reply in Support of the Motion to Exclude (Paper 64, “PO Reply Mot. to Exclude”). An oral hearing was held on October 19, 2018, and a transcript of the hearing is included in the record. Paper 67 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of claims 1–19 of the ’997 patent. For the reasons discussed below, we hold that Petitioner has demonstrated by a preponderance of the evidence that claims 1–19 are unpatentable under § 103(a).

¹ Patent Owner subsequently updated its mandatory notices to identify additional real parties-in-interest. Paper 44.

II. BACKGROUND

A. The '997 Patent (Ex. 1001)

The '997 patent is titled "Recording and Publishing Content on Social Media Websites." The Abstract describes the subject matter as follows:

Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for recording and publishing content on social networking websites and other websites include providing an imbedded link on a social networking webpage to media recorder software stored on an external server system, invoking the media recorder software within a displayed instance of the social networking webpage through an application programming interface for the social networking webpage, receiving a video stream defining video captured using the media recorder software at the external video management server system, generating and storing a video file using the received video stream at the external server system, selecting the stored video file for distribution via one or more communication networks, and providing the stored video file for display within displayed instances of webpages hosted on external web server systems.

Ex. 1001, Abstract.

Figure 1A of the '997 patent is reproduced below.

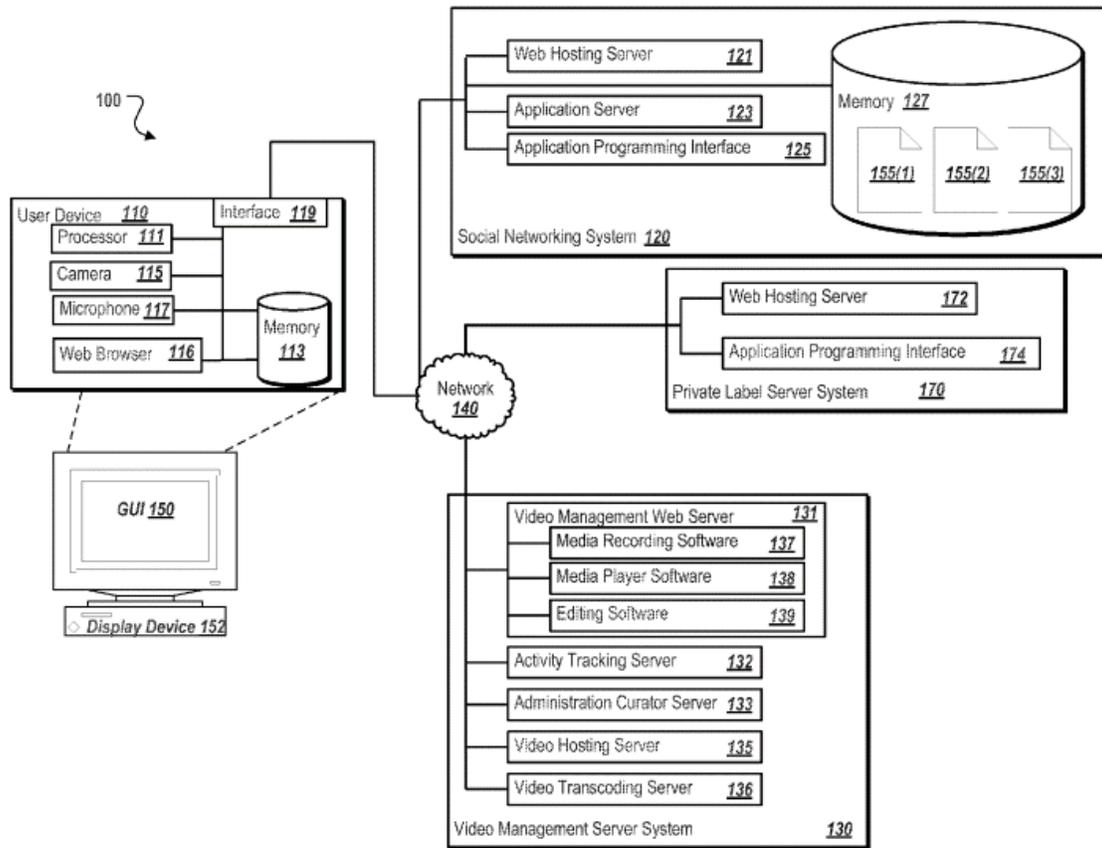


FIG. 1A

Figure 1A of the '997 patent illustrates a functional block diagram of an architecture “for embedding a media recorder in a social networking website,” including user device 110, social networking system 120, video management server system 130, and private label server system 170. *Id.* at 6:45–49. In particular, social networking system 120 provides one or more social networking webpages to the user device, and the social networking webpage may include a link to launch media recording software 137 stored on video management server system 130. *Id.* at 7:1–9. Using that software, users can record a video that is streamed to video management server system 130 and stored there. *Id.* at 7:9–14.

B. Challenged Claims

Of the challenged claims, claims 1 and 13 are independent claims and are reproduced below.

1. A method comprising:
providing, on a first webpage, a link to media recorder software stored on a video management server system;
receiving a request to invoke the media recorder software within a displayed instance of the first webpage;
providing, using the media recorder software executing on the video management server system, a video recorder interface in response to the request, wherein the video recorder interface is adapted to allow a user to record video from within the displayed instance of the first webpage to the video management server system as the video is captured;
receiving a video stream at the video management server system, wherein the video stream defines video captured using controls included in the video recorder interface and wherein the video stream is received as the video is captured using the media recorder software executing on the video management server system;
generating a video file using the received video stream;
storing the video file on the video management server system.

Id. at 21:12–32.

13. A method comprising:
providing, on a first webpage hosted on a web server system, an imbedded link to capture software stored on a user content management server system, wherein the software is adapted to capture user submissions using controls including within a frame displayed in the first webpage;
receiving a request to invoke the capture software within a frame included in a displayed instance of the first webpage;
providing, using capture software executing on the user content management server system, a content capture graphical user interface through a communication interface between the web server system and the user content management server

system, wherein the content capture graphical user interface is provided in response to the request to invoke the capture software, and wherein the content capture graphical user interface is adapted to allow a user to provide a user submission to the user content management server system;

receiving a user submission at the user content management server system, wherein the user submission defines content captured using the content capture graphical user interface;

generating a user submission content file using the received user submission; and

storing the user submission content file on the user content management server system.

Id. at 22:22–49.

C. Related Proceedings

Petitioner and Patent Owner identify a related litigation in the Northern District of Texas involving the '997 patent titled *Youtoo Technologies, LLC v. Twitter, Inc.*, Case No. 3:16-cv-00764-N (N.D. Tex.). Pet. 2–3; Paper 4, 2. Petitioner and Patent Owner also identify another *inter partes* review filed by Petitioner regarding the '997 patent: IPR2017-00830. Pet. 2–3; Paper 4, 2. Patent Owner also identifies a pending U.S. Patent Application that claims priority to the application leading to the '997 patent. Paper 4, 2.

D. References

Petitioner relies on the following references:

1. “Nassiri” (US 2012/0254925 A1; published Oct. 4, 2012) (Ex. 1009);
2. “Bradford” (Anselm Bradford et al., *HTML5 MASTERY: SEMANTICS, STANDARDS, AND STYLING* (2011)) (Ex. 1010);
3. “Tosh.o” (Brian Stelter, *Their Pain Is His Gain*, N.Y. TIMES, Aug. 22, 2010, at AR 15, 19) (Ex. 1017);

4. “Lerman” (US 2006/0259588 A1; published Nov. 16, 2006) (Ex. 1012); and
5. “Zhu” (US 2010/0180330 A1; published July 15, 2010) (Ex. 1013).

E. Instituted Grounds of Unpatentability

We instituted a trial based on the asserted grounds of unpatentability (“grounds”) set forth in the table below. Dec. on Inst. 24.

References	Basis	Claim(s)
Nassiri and Bradford	35 U.S.C. § 103(a)	1–8 and 11
Nassiri, Bradford, and Tosh.o	35 U.S.C. § 103(a)	9 and 12
Nassiri, Bradford, and Lerman	35 U.S.C. § 103(a)	10
Nassiri, Bradford, and Zhu	35 U.S.C. § 103(a)	13–19

III. ANALYSIS

A. Printed Publication Status of Bradford

As discussed above, all of the instituted grounds of unpatentability include Bradford. Bradford is a book titled “HTML5 Mastery Semantics, Standards, and Styling” with a copyright date of 2011. Ex. 1010, 2, 3. With its Petition, Petitioner provided an excerpt of Bradford as Exhibit 1010. The earliest date on the face of the ’997 patent is May 9, 2012. Ex. 1001, at [60]. Petitioner contends Bradford is prior art under 35 U.S.C. § 102(a). Pet. 5–6. In particular, Petitioner relies on evidence it contends shows Bradford was a printed publication as of 2011. *Id.* Patent Owner contends Petitioner has not shown Bradford qualifies as a printed publication prior to the May 9, 2012, priority date of the ’997 patent. PO Resp. 1.

Whether a reference qualifies as a “printed publication” is a legal conclusion based on underlying factual findings. *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1356 (Fed. Cir. 2018). The underlying factual findings include whether a reference was publicly accessible. *Id.* (citing *In re NTP, Inc.*, 654 F.3d 1279, 1296 (Fed. Cir. 2011)). In an *inter partes* review, the petitioner bears the burden of establishing that a particular document is a printed publication. *Id.* (citing *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018)).

The determination of whether a given reference qualifies as a prior art “printed publication” involves “a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004) (citation omitted). Public accessibility is a key question in determining whether a document is a printed publication and is determined on a case-by-case basis. *Suffolk Techs., LLC v. AOL Inc.*, 752 F.3d 1358, 1364 (Fed. Cir. 2014); *see also In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009) (To qualify as a printed publication, a document “must have been sufficiently accessible to the public interested in the art.”). “A reference will be considered publicly accessible if it was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence can locate it.” *Medtronic*, 891 F.3d at 1380 (internal quotation marks and citations omitted).

In the Petition, to support Bradford’s status as a printed publication, Petitioner relied on Bradford’s ISBN number (Ex. 1010, 3) and the copyright notice showing a date of publication of November 8, 2011. Pet. 5 (citing Ex. 1015 ¶ 2). Petitioner also relied on the testimony of its librarian expert Dr.

Ingrid Hsieh-Yee that Bradford was catalogued and searchable in WorldCat at least as early as August 8, 2011, but no later than December 4, 2011. *Id.* at 6 (citing Ex. 1011 ¶¶ 1–16). Petitioner further relied on “automatically captured internet snapshots by the Internet Archive” demonstrating Bradford was available on a publicly accessible website (<http://www.html5mastery.com/>) as of November 28, 2011, and was available for purchase in both an electronic “Kindle Edition” and paperback as of December 6, 2011. *Id.* (citing Ex. 1016, 1–8).

Patent Owner did not challenge the printed publication status of Bradford in the Preliminary Response. *See* Prelim. Resp. In the Patent Owner Response, Patent Owner contends Petitioner has not shown Bradford qualifies as a printed publication prior to the May 9, 2012, priority date of the ‘997 patent. PO Resp. 1. In particular, Patent Owner contends: (1) the version of Bradford in Exhibit 1010 was actually printed in 2015 (PO Resp. 2–4 (citing Ex. 2004, 324)); (2) the Library of Congress (“LOC”) Machine-Readable Cataloguing (“MARC”) record, and in particular, field 955, subfield w of that record, shows the LOC’s version of Bradford would not have been publicly available until at least June 22, 2012 (*id.* at 5–7 (citing Ex. 1011, 53; Ex. 2006, 18:4–11)); (3) the George Mason University MARC record does not suggest publication in August 2011 (*id.* at 7–9); (4) Dr. Hsieh-Yee’s testimony is unreliable (*id.* at 9–11); and (5) the copyright notice (Exhibit 1015) and the Internet Archive webpages (Exhibit 1016) are hearsay and not tied to any particular version of Bradford (PO Resp. 12–14).

In its Reply, Petitioner contends Patent Owner “ignores the clear evidence of Bradford’s publication,” and in support, relies on Bradford’s copyright registration and its evidence that Bradford was for sale on Amazon

in 2011. Pet. Reply 26–28 (citing Ex. 1015 ¶ 2; Ex. 1016; Ex. 1041). Petitioner also submitted an LOC copy of Bradford (Ex. 1042) and a declaration that the pages in the excerpt submitted with the Petition (Exhibit 1010) are identical to those pages in the LOC copy (Ex. 1042). Pet. Reply 28 (citing Ex. 1043). Petitioner contends that Patent Owner’s argument about the 2015 printing is unpersuasive because the “‘2015 Version’ is a later printing of Bradford, not a different version or edition of Bradford with different content.” *Id.*

In its Sur-Reply, Patent Owner contends we should disregard Petitioner’s Exhibits 1041–1043 submitted with the Reply as untimely supplemental information. PO Sur-Reply 2–3. Patent Owner also contends those exhibits do not show Bradford was a printed publication prior to the priority date for the ’997 patent. *Id.* at 3–7. Patent Owner further contends that any evidence of publication of Bradford is rebutted by Exhibit 1010’s later printing date and the LOC MARC record. *Id.* at 7–8 (citing Ex. 2004, 324; Ex. 2005, 24, 29; Ex. 2008 ¶ 16; Ex. 1011, 7 (¶ 14), 4 (¶ 8), 53; Ex. 2006, 18:4–11; Ex. 2007).

We have reviewed the evidence of record on which Petitioner relies to show that Bradford qualifies as a printed publication under 35 U.S.C. § 102(a) as well as Patent Owner’s arguments and evidence to the contrary. For the reasons discussed below, we determine Petitioner has adequately shown Bradford qualifies as a printed publication.

1. Bradford and the Copyright Registrations (Exs. 1010, 1015, 1041, 1042)

The excerpt of Bradford that Petitioner submitted with the Petition is Exhibit 1010. That exhibit contains the front matter of Bradford (i.e., cover, title page, and copyright page) as well as selected pages of the main text on

which Petitioner relies in its Petition. *See* Ex. 1010. On June 12, 2018, during a conference call with the Board, Petitioner agreed to make available to Patent Owner the entirety of that book (*see* Paper 48), and Patent Owner filed the entire book as Exhibit 2004. We find that the front matter of Exhibit 1010 provides some evidence of public accessibility of Bradford in 2011. In particular, Bradford has a 2011 copyright date (Ex. 1010, 3). *See Nobel Biocare Servs. AG v. Instradent USA, Inc.*, 903 F.3d 1365, 1376 (Fed. Cir. 2018) (finding that although the date on a catalog was not dispositive of the date of public accessibility, that date was relevant evidence that supported the Board’s finding of public accessibility).

Petitioner also filed the copyright registration for Bradford as Exhibit 1015, Appendix A (copyright.gov version of registration)² and Exhibit 1041 (certified registration). We find the copyright registration’s publication date of November 8, 2011, provides support for the copyright date in the front matter of Bradford and also is consistent with Bradford being for sale on Amazon in December 2011 as discussed below.

In addition, the front matter of Bradford indicates it was published by an established publisher. *See* Ex. 1010, 2–3 (identifying the publisher as friends of ED, an Apress Company, and stating that Apress and friends of ED books “may be purchased in bulk for academic, corporate, or promotional use” and providing credits to various staff including a copy

² Patent Owner contends the statement in the copyright.gov version of the registration is hearsay, but Patent Owner did not move to exclude Exhibit 1015. PO Resp. 12. We decline to consider evidentiary objections raised only in Patent Owner’s substantive paper. *See* 37 C.F.R. § 42.64 (setting forth the proper procedure for objecting to evidence and preserving such objections).

editor and coordinating editor). For established publishers, absent some indication that the reference was not publicly available, demonstrating a date of publication supports a showing of accessibility to the public. *See Giora George Angres, Ltd. v. Tinny Beauty & Figure, Inc.*, No. 96-1507, 1997 WL 355479, at *7 (Fed. Cir. June 26, 1997) (unpublished) (finding “no reason to suspect that [a reference published by an established publisher] was not publicly available, including to one skilled in the art” when “no evidence was presented that it was not”); *Coriant (USA) Inc. v. Oyster Optics, LLC*, No. IPR2018-00258, 2018 WL 2761411, at *4 (PTAB June 6, 2018).

Patent Owner attempts to undermine Exhibits 1010 and 1015 by pointing to the printing date of Exhibit 2004, which is the entirety of the copy of Bradford excerpted in Exhibit 1010. *See* PO Resp. 2–4; PO Sur-Reply 7–8. That printing date is shown below:

**Made in the USA
Middletown, DE
13 December 2015**

Ex. 2004, 324 (stating “Made in the USA Middletown, DE 13 December 2015”). The parties appear to agree that this date shows the actual copy of Bradford, which is excerpted in Exhibit 1010, was not printed until 2015. PO Resp. 2–4; PO Sur-Reply 7–8; Pet. Reply 28.

With its Reply, Petitioner submitted a different copy of Bradford from the LOC that does not have this 2015 designation. Ex. 1042, 1, 160. Petitioner also submitted a declaration from Mr. Raghav Bajaj, testifying that he compared the pages in the excerpt of Bradford submitted with the

Petition in Exhibit 1010 with the same pages in Exhibit 1042, and the content of those pages were identical. Ex. 1043 ¶¶ 3–5. We disagree with Patent Owner that these exhibits cannot be used to show publication of Exhibit 1010 before May 9, 2012, because the particular copy of Bradford in Exhibit 1010 was not printed until 2015 (PO Sur-Reply 3–5). Instead, we find that once Patent Owner called into question the date of the particular copy of Bradford, Petitioner submitted evidence to show a printing of Bradford without the later 2015 date that includes the same relevant content. Although Patent Owner faults Petitioner for not comparing every page of the two exhibits (Tr. 71:3–6), Patent Owner has not pointed us to any substantive differences between the two (other than the 2015 printing date for Exhibit 2004). For these reasons, we find the facts here are distinguishable from the cases on which Patent Owner relies. PO Resp. 3–4 (citing *Dropbox, Inc. v. Synchronoss Tech., Inc.*, IPR2016-00851, slip op. at 19 (PTAB Oct. 5, 2017) (Paper 40); *Intel Corp. v. Alacritech, Inc.*, IPR2017-01395, slip op. at 7 (PTAB Nov. 22, 2017) (Paper 8)).

Thus, we find the front matter of Exhibit 1010 and Exhibit 1042, as well as the copyright registration for Bradford (Exs. 1015, 1041), provides some evidence in support of Bradford being a printed publication in 2011.

2. Exhibit 1016

Petitioner also provides two webpages that were automatically captured by the Internet Archive, and a declaration from Mr. Christopher Butler to support the authenticity of the webpages. Ex. 1016. The first is the webpage www.html5mastery.com, which includes the title of Bradford, its authors, and an apparent link titled “Order on Amazon.” Ex. 1016, 4. We have reviewed this webpage as well as the supporting declaration from

Mr. Butler, and we find it provides some support for Bradford being on sale on Amazon at the relevant time. We give this webpage standing alone little weight, however, because Petitioner has not pointed to any credible evidence that clicking on the link actually directed a user to any version of Bradford.

Exhibit 1016 also includes a second webpage, www.amazon.com/HTML5-Mastery-Semantics-Standards-Styling/dp/1430238615. Based on its extended URL in Mr. Butler's declaration, that webpage was archived on December 6, 2011. Ex. 1016 ¶¶ 5, 6. That webpage depicts the same cover, ISBN numbers, and publisher as Exhibit 1010. *Compare* Ex. 1010, 1, *with* Ex. 1016, 5–6. It also shows Bradford as being “In Stock” and available for delivery on December 7 if one-day shipping was selected, as well as available electronically for Kindle in “under a minute.” Ex. 1016, 5. That webpage also provides an “Amazon Best Sellers Rank” for Bradford. *Id.* at 6. We find this webpage supports that Bradford was publicly accessible in 2011, and, in particular, that interested persons could order the book from Amazon either in hard copy or electronically.

Patent Owner contends the Amazon website is “unsupported hearsay.” PO Resp. 12. Patent Owner, however, has not moved to exclude Exhibit 1016, and we decline to consider evidentiary objections raised only in Patent Owner's substantive paper. *See* 37 C.F.R. § 42.64 (setting forth the proper procedure for objecting to evidence and preserving such objections). In addition, Patent Owner contends Petitioner's evidence does not establish a person could purchase any version of Bradford from Amazon in 2011, and that the evidence does not tie the Amazon webpage to any particular version of Bradford. *Id.* at 13. We disagree. As discussed above, the Amazon

webpage itself indicates a person could purchase Bradford both in paperback and in electronic Kindle format in December 2011. In addition, the evidence does not suggest there were different versions of Bradford with different content. Both the LOC copy of Bradford and the copy of Bradford submitted with the Petition have 20 numbered lowercase Roman numeral pages (i–xx) and 293 numbered pages (1–293). *Compare* Ex. 1042, 12, 159, *with* Ex. 2004, 24, 317. Patent Owner notes that the Amazon website lists the number of pages as 316 and that the version of Bradford submitted with the Petition includes blank unnumbered pages resulting in a total of 320 pages. PO Resp. 13–14. The record does not include evidence as to how the Amazon website counts pages of a book. We observe, however, that the LOC copy of Bradford appears to include fewer blank, unnumbered pages than the printing of Bradford submitted with the Petition. *Compare* Ex. 1042, 160, *with* Ex. 2004, 318–25. Given the lack of evidence in the record supporting that different versions of Bradford with different content existed during the relevant time, we find the most reasonable inference is that the different number of pages is a result of different numbers of blank pages in the copies, rather than different content that would undermine the printed publication status of Bradford.

Thus, we find the Amazon webpage in Exhibit 1016 provides strong evidence supporting the public accessibility of Bradford in 2011.

3. Exhibit 1011

Petitioner further relies on the testimony of Dr. Ingrid Hsieh-Yee. Ex. 1011. Dr. Hsieh-Yee earned an M.A. and Ph.D. in Library and Information Studies from the University of Wisconsin-Madison. *Id.* at 10. She has been a professor in the Department of Library and Information Science at the

Catholic University of America since 1990. *Id.* She has written books on library cataloging and classification, and teaches courses and conducts research on the subject. *Id.* ¶ 5. She testifies that she is familiar with MARC records. Two MARC records for Bradford are attached to her declaration: Dr. Hsieh-Yee identifies Appendix C as a MARC record for Bradford from the George Mason University online catalog, and Appendix D as a MARC record for Bradford from the LOC. *Id.* ¶¶ 13, 14.³ Dr. Hsieh-Yee testifies Field 008 of the George Mason MARC record shows the same ISBN numbers for Bradford as Exhibit 1010 and that the MARC record for Bradford was created on August 25, 2011, by the book vendor, Baker & Taylor Incorporated Technical Services & Product (“BTCTA”). *Id.* ¶ 13. She further testifies the LOC MARC record has the same ISBN numbers for Bradford and the same Online Computer Library Center (“OCLC”) system control number as the George Mason MARC record. *Id.* ¶ 14. She testifies that symbols in Field 40 of the LOC MARC record indicate that BTCTA created the MARC record for Bradford and LOC modified the record. *Id.* She testifies that Field 42 of the LOC MARC record shows that the “copy cataloged MARC record” was created by LOC on December 4, 2011. *Id.*

Regarding WorldCat, Dr. Hsieh-Yee testifies that MARC records are made available to the public on WorldCat, “which is a Web search portal maintained by OCLC that provides a user-friendly interface for the public to use data in MARC records.” *Id.* ¶ 7. She testifies that based on the MARC

³ Patent Owner contends these MARC records are hearsay. PO Resp. 11. Again, however, Patent Owner has not moved to exclude Exhibit 1011, and we decline to consider evidentiary objections raised only in Patent Owner’s substantive paper.

records discussed above, “the first available MARC record [for Bradford] was created on August 8, 2011, adopted by George Mason University, and modified by the Library of Congress on December 4, 2011.” *Id.* ¶ 15. Thus, she concludes “[i]t is my opinion that Bradford would have been searchable on WorldCat as early as August 8, 2011, but in any event no later than December 4, 2011, and therefore accessible to the public as of that time.”

Id.

Petitioner relies on this testimony to support that Bradford “was catalogued and searchable in WorldCat (a worldwide catalog system), and therefore accessible to the public, at least as early as August 8, 2011, but in any event no later than December 4, 2011.” Pet. 5–6 (citing Ex. 1011 ¶¶ 1–16). We determine that Petitioner has provided insufficient evidence to support such a finding. In particular, Dr. Hsieh-Yee does not clearly explain how the MARC records show Bradford would have been searchable on WorldCat. In addition, Dr. Hsieh-Yee does not provide testimony about what it means for a reference to be searchable on WorldCat. Accordingly, we give her testimony on this point little weight. Nevertheless, we find Dr. Hsieh-Yee’s testimony discussed above provides further support for Bradford’s public accessibility because the MARC records on which she relies (and her testimony about the dates those records were created and modified) are consistent with the 2011 copyright date in the front matter of Bradford (and its copyright registration) as well as with Bradford being available on Amazon in December 2011.

Patent Owner contends Dr. Hsieh-Yee’s testimony “does not establish when either GMU or the Library of Congress (LOC) actually received, indexed, or shelved any version of Bradford.” PO Resp. 5. Although we

agree with Patent Owner on this point, we do not understand Petitioner to rely on Dr. Hsieh-Yee's testimony to establish Bradford's availability at a particular library. Dr. Hsieh-Yee testifies that "[a]fter a MARC record is searchable on a library catalog, it is customary library practice to have the physical volume processed for public access soon after, usually within a couple of weeks." Ex. 1011 ¶ 11. Dr. Hsieh-Yee, however, does not testify that either MARC record establishes GMU or LOC follow that customary practice or that either MARC record shows when Bradford was cataloged, indexed, or shelved at either library. Thus, we do not consider Dr. Hsieh-Yee's testimony about general practice on this point to be helpful on the issue before us.

Patent Owner also contends the LOC MARC record establishes the LOC version of Bradford was not indexed or shelved until June 22, 2012, and that this shows Bradford does not qualify as a printed publication prior to the '997 patent's critical date. PO Resp. 6–7; PO Sur-Reply 8. As discussed above, Dr. Hsieh-Yee's testimony does not establish Bradford was actually indexed or shelved at either library prior to the priority date of the challenged patent. However, we do not agree that the evidence establishes the LOC copy of Bradford (or any copy of Bradford) was not available until June 22, 2012.

Patent Owner contends field 955, subfield w, supports a publication date no earlier than June 22, 2012. PO Resp. 6. In support, Patent Owner points to the deposition testimony of Scott Bennett, a librarian expert for Petitioner in IPR2017-01131 and IPR2017-01133, who Patent Owner says testified that "if there was a date associated with [MARC] field 955, subfield W, it is unlikely that material associated with that record was available to

review at the library prior to that date.” *Id.* (citing Ex. 2006, 18:4–11). From this testimony and the LOC MARC record, Patent Owner draws the inference that “the LOC’s version of Bradford would not have been publicly available until at least June 22, 2012.” *Id.* Patent Owner further contends the date in field 955, subfield w, is “the only evidence of record suggesting a time at which any version of Bradford was actually indexed and shelved for public access in a library, and that this sole piece of evidence suggests Bradford *does not qualify* as a printed publication because the LOC’s version of Bradford was not indexed and shelved for public access until *after* the critical date.” *Id.* at 7.

We find Dr. Bennett’s testimony does not support Patent Owner’s contention. First, in his deposition, Dr. Bennett was asked whether he was familiar with the MARC field on which Patent Owner relies (i.e., field 955), and he responded: “I would have to check whether I have worked with MARC field 955.” Ex. 2006, 14:11–13. In addition, his testimony indicates he was not familiar with the subfield on which Patent Owner relies:

Q. Are you familiar with subfield W of MARC field 955?

A. If -- I am familiar with the Dewey Decimal Classification System.

Q. Okay. Are you aware of what subfield W -- what information can be found in subfield W of MARC field 955?

A. I presume that a local library could use MARC field 955, subfield W to provide that library’s Dewey Decimal classification number.

Id. at 17:11–20. The testimony on which Patent Owner relies follows that background and is reproduced below:

Q. Okay. So just to make sure I understand, if there was a date associated with MARC field 955, subfield W, it is unlikely that

material associated with that record was available to review at the library prior to that date; is that accurate?

A. That is accurate with the proviso that we're talking about a particular library, not about all libraries.

Id. at 18:4–11. When viewed in context, Dr. Bennett was not providing an opinion about the meaning of field 955, subfield w of the LOC MARC record for Bradford, and it appears that he did not have adequate knowledge to form such an opinion. In particular, Dr. Bennett presumed a local library could use that field “to provide that library’s Dewey Decimal classification number,” but that subfield in the LOC MARC record for Bradford does not appear to contain a Dewey Decimal classification number. Instead it reads “w rd07 2012-06-22.” Ex. 1011, 53. There is no credible evidence in the record that ties the date in subfield w to the LOC assigning a Dewey Decimal classification number to Bradford. Indeed, neither party has pointed us to evidence explaining the meaning of rd07 in that subfield. We note this not to shift any burden of proof on this issue to Patent Owner, but only in the context of weighing what the evidence of record establishes. In evaluating that, we fully acknowledge Petitioner has the burden to prove that Bradford is available as a reference in this case. *E.g.*, *Medtronic*, 891 F.3d at 1380.

For the reasons above, we find Dr. Hsieh-Yee’s testimony provides further support for Bradford’s public accessibility because the MARC records on which she relies are consistent with the 2011 copyright date in the front matter of Bradford as well as with Bradford being available on Amazon in December 2011. We, however, do not give weight to Dr. Hsieh-Yee’s testimony that Bradford would have been searchable on WorldCat in

2011 or any suggestion from her testimony that Bradford was indexed and shelved at either GMU or LOC prior to the priority date of Bradford.

4. Summary

In sum, we find Petitioner has shown by a preponderance of the evidence that Bradford qualifies as a printed publication prior to the earliest priority date of the '997 patent. Although no one piece of evidence definitively establishes Bradford's public accessibility prior to May 9, 2012, we find that the evidence, viewed as a whole, sufficiently does so. In particular, we find the following evidence supports this finding: (1) Bradford's front matter, including its copyright date and indicia that it was published by an established publisher (Exs. 1010, 1042, 2004); (2) the copyright registration for Bradford (Exs. 1015, 1041); (3) the archived Amazon webpage showing Bradford could be purchased on that website in December 2011 (Ex. 1016); and (4) Dr. Hsieh-Yee's testimony showing creation and modification of MARC records for Bradford in 2011. Because we find Bradford qualifies as a printed publication under 35 U.S.C. § 102(a), we analyze Petitioner's challenges based on Bradford below.

B. Claim Construction

In this *inter partes* review based on a petition filed before November 13, 2018, we construe claim terms according to their broadest reasonable interpretation in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b) (2016); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under that standard, claim terms are generally 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). There are, however, two exceptions to that rule: “1) when a patentee sets out a definition and acts as his own lexicographer,” and “2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *See Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

In our Decision on Institution, we determined we needed only address the construction of “communication interface” and only to the extent necessary to resolve whether the grounds asserted by Petitioner properly accounted for that term. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that “only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”). Upon reviewing the parties’ preliminary arguments and evidence, we determined that the broadest reasonable interpretation of “communication interface” in the context of the challenged claims is not limited to programmatic interfaces. Dec. on Inst. 8–10. We determined that we did not need to further construe that term at that stage of the proceeding. *Id.* at 10. Following institution, neither party addresses our preliminary construction of “communication interface.” Upon review of the record developed during trial, we see no reason to modify that construction. Accordingly, we determine that the broadest reasonable interpretation of “communication interface” in the context of the challenged claims is not limited to programmatic interfaces.

During the trial, Patent Owner contended that two additional terms need construction: (1) “video stream” and (2) “providing, on a first webpage, a link” (claim 1) / “providing, on a first webpage . . . , an imbedded link” (claim 13). Regarding the latter, Patent Owner contends the broadest

reasonable interpretation is “displaying a[n imbedded] link that is visible to and selectable by a user of the first web page.” PO Resp. 25. Petitioner contends that we need not construe this term “because even under Patent Owner’s construction, the prior art teaches these limitations.” Pet. Reply 8. We determine we need not definitively construe this term to resolve the dispute before us. Instead, we apply Patent Owner’s proposed construction for the purpose of analyzing Petitioner’s challenges.

Patent Owner contends the broadest reasonable interpretation of “video stream” is “sequential video data that is independent of and not associated with a file container.” PO Resp. 20 (citing Ex. 2008 ¶ 49). Petitioner agrees that a “‘video stream’ should be construed as including ‘sequential video data’”; however, Petitioner contends we should reject the remainder of Patent Owner’s proposed construction (i.e., “independent of and not associated with a file container”). Pet. Reply 2–8. The parties’ dispute regarding construction of this term centers around whether the recited “video stream” encompasses “segmenting” (i.e., “saving a video file as a set of smaller files (themselves each an individually playable video file with its own file container), which would enable an end user to start watching as soon as the first smaller file downloaded” (PO Resp. 21)). *See* PO Resp. 21–22; Pet. Reply 6–8; PO Sur-Reply 12–16.

We determine we need not explicitly construe “video stream” because, as discussed below, it is not necessary to resolve the disputes before us (i.e., we determine Nassiri discloses receiving a video stream that is not segmenting as Patent Owner contends).

C. Asserted Obviousness over Nassiri and Bradford

Petitioner contends that claims 1–8 and 11 of the '997 patent are unpatentable as obvious over the combined teachings of Nassiri and Bradford. Pet. 14–53. Petitioner explains how it alleges this proffered combination teaches or suggests the subject matter of each challenged claim, and provides reasoning as to why one of ordinary skill in the art would have been prompted to modify or combine the references' respective teachings. *Id.* Petitioner also relies upon the Declaration of Dr. Kevin Almeroth to support its positions. Ex. 1007 ¶¶ 77–243. In its Patent Owner Response, Patent Owner presents a number of arguments as to why the combined teachings of Nassiri and Bradford do not render the limitations of claim 1 obvious. PO Resp. 26–54. Patent Owner relies upon the Declaration of Dr. James Olivier to support its positions. Ex. 2008.⁴ Petitioner relies on the Reply Declaration of Dr. Almeroth to support the positions in the Reply. Ex. 1036.

We begin our analysis with the principles of law that generally apply to a ground based on obviousness, followed by an assessment of the level of skill in the art, as well as brief overviews of Nassiri and Bradford, and then we address the parties' contentions with respect to the claims at issue in this asserted ground.

⁴ Patent Owner relied on the Declaration of Dr. Michael Shamos in support of its claim construction argument in the Preliminary Response. Ex. 2001. As discussed above, Patent Owner did not raise that argument during the trial, and Patent Owner does not rely on Dr. Shamos' testimony in either the Patent Owner Response or Sur-Reply.

1. Legal Principles

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *See 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 ordinary skill in the art; and (4) when in the record, objective evidence of nonobviousness. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). In that regard, an obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

2. Level of Skill in the Art

There is evidence in the record before us that enables us to determine the knowledge level of a person of ordinary skill in the art. Relying on the testimony of its declarant, Dr. Almeroth, Petitioner asserts that a person of ordinary skill in the art at the time of the alleged invention of the ’997 patent “would have had (i) a Bachelor’s degree in Computer Science, Electrical and/or Computer Engineering, or equivalent training, and (ii) approximately three years of experience in network architecture and website design, including the design of Internet applications.” Pet. 11–12 (citing Ex. 1007 ¶¶ 48–52). Again relying on the testimony of Dr. Almeroth, Petitioner contends “[a]dditional education could substitute for work experience, and

additional work experience/training could substitute for formal education.” *Id.* at 12 (citing Ex. 1007 ¶¶ 48–52). In the Preliminary Response, Patent Owner did not address Dr. Almeroth’s testimony on this point. *See* Prelim. Resp. In the Patent Owner Response, relying on Dr. Olivier’s testimony, Patent Owner contends a person of ordinary skill in the art “would have had a bachelor’s degree in Electrical Engineering, Computer Engineering, or Computer Science, and about two years of technical experience with networked video, or equivalent experience and education.” PO Resp. 18 (citing Ex. 2008 ¶ 37). Thus, the difference between the two definitions is the field of experience: network architecture and website design, including the design of Internet applications, in Petitioner’s definition, and technical experience with networked video in Patent Owner’s. Dr. Olivier testifies that his definition and Dr. Almeroth’s are “very similar,” and Dr. Olivier testifies that his opinions would not change under Dr. Almeroth’s definition. Ex. 2008 ¶ 39. Dr. Almeroth testifies that he disagrees with Dr. Olivier’s definition because experience with networked video might not provide sufficient experience with website design. Ex. 1036 ¶ 7.

We adopt Dr. Almeroth’s assessment because it is consistent with the ’997 patent and the asserted prior art, and apply it to our obviousness evaluation below. We credit Dr. Almeroth’s testimony that a person of ordinary skill would have had experience with website design. As Dr. Almeroth points out (Ex. 1036 ¶ 7), the ’997 patent repeatedly refers to “websites” and includes claim language requiring a “link to media recorder software” and presentation of media recorder software “within a displayed instance of the first webpage.” Although we apply this assessment in our

analysis below, we note that our analysis would not change under either assessment.

3. Overview of Nassiri and Bradford

Nassiri is titled “Computer Systems and Methods for Video Capturing, Managing, and/or Sharing” and was filed on April 1, 2011. Ex. 1009, at [54], [22]. Petitioner contends Nassiri is prior art under 35 U.S.C. § 102(e). Pet. 5. Nassiri’s Abstract describes its subject matter as follows:

Examples are described for capturing, managing, and/ or sharing videos. The videos may be captured such that they are limited in time, such as 30 seconds or less in some examples. Enterprises may establish campaigns and capture videos associated with the campaigns. Captured videos may be displayed to users in an order selected based on the number of hits or conversions the video had previously generated. A host video system may provide embedded code for video capture and playback on an enterprise site.

Ex. 1009, at [57].

As discussed above, Bradford is a book titled “HTML5 Mastery: Semantics, Standards, and Styling” and has a copyright date of 2011. Ex. 1010. Petitioner contends Bradford is prior art under 35 U.S.C. § 102(a). Pet. 5–6 (citing Ex. 1011 ¶¶ 1–16; Ex. 1015 ¶ 2; Ex. 1016). As explained above, we find Bradford qualifies as a printed publication under 35 U.S.C. § 102(a).

4. Analysis

In its Petition, Petitioner contends that claims 1–8 and 11 would have been obvious over Nassiri and Bradford. Pet. 14–53. Claim 1 recites “providing, on a first webpage, a link to media recorder software stored on a video management server system.” Ex. 1001, 21:13–14. Petitioner contends

the combination of Nassiri and Bradford teaches this limitation. Pet. 20–23. In particular, Petitioner contends that Nassiri teaches providing a link on a webpage to executable instructions for video recording software that is stored on a video management server and that the video recorder is then embedded in an iframe within the webpage. *Id.* (citing Ex. 1009 ¶¶ 16–19, 21, Fig. 8; Ex. 1007 ¶¶ 117–121, 126–128). Petitioner further contends Bradford teaches “how a link within a webpage can target an iframe within the same webpage.” *Id.* at 21–22 (citing Ex. 1010, 161; Ex. 1007 ¶¶ 122–125).

Claim 1 further recites “receiving a request to invoke the media recorder software within a displayed instance of the first webpage.” Ex. 1001, 21:15–16. Petitioner contends the combination of Nassiri and Bradford teaches this limitation. Pet. 23–26. In particular, Petitioner contends in Nassiri, a request can be received to display or access a video recorder that is invoked within the displayed instance of a webpage. *Id.* at 24–25 (citing Ex. 1009 ¶¶ 18, 19, 26, 30, Fig. 2; Ex. 1007 ¶¶ 130–34). Petitioner further contends Bradford teaches that an iframe can enable content such as a video recorder to be displayed within an instance of a webpage. *Id.* at 25–26 (citing Ex. 1010, 161; Ex. 1007 ¶¶ 135, 137).

Claim 1 also recites “providing, using the media recorder software executing on the video management server system, a video recorder interface in response to the request.” Ex. 1001, 21:17–19. Petitioner contends Nassiri teaches its host computing system receives a request for the video recorder and provides the video recorder, which is executing on the host computing system, in response to the request. Pet. 26–29 (citing Ex. 1009 ¶¶ 18, 21, 30, 38, Figs. 2, 3; Ex. 1007 ¶¶ 139–147).

Claim 1 further recites “wherein the video recorder interface is adapted to allow a user to record video from within the displayed instance of the first webpage to the video management server system as the video is captured.” Ex. 1001, 21:19–23. Petitioner contends Nassiri teaches allowing a user to record video using a record button on its video recorder, performing such recording in an iframe within a displayed instance of a webpage, and transmitting the video to the video host computing system while it is being recording. Pet. 29–31 (citing Ex. 1009 ¶¶ 15, 19, 25, 28, 34, 35, 38, Fig. 3; Ex. 1007 ¶¶ 149–154).

Claim 1 recites “receiving a video stream at the video management server system.” Ex. 1001, 21:24–25. Petitioner contends Nassiri in combination with Bradford teaches this limitation. Pet. 31–34. In particular, Petitioner contends Nassiri teaches “the ‘video generated using the video recorder may be transmitted to the video host computing system 120’ ‘in part as it is being recorded’ and the ‘[r]eceived videos may be stored by the video host computing system 120.’” *Id.* at 31 (quoting Ex. 1009 ¶¶ 28, 35). Petitioner contends a person of ordinary skill would have understood that Nassiri’s description of transmitting a video “in part as it is being recorded” describes “a real time operation where part of the video is streamed,” and cites its expert’s testimony in support. *Id.* at 32 (emphasis omitted) (citing Ex. 1007 ¶¶ 155–56). Petitioner further contends Bradford teaches MPEG-4 streaming and that it would have been obvious to apply such streaming in Nassiri which teaches storing video in .mpeg files. *Id.* at 32–33 (citing Ex. 1010, 163, 284; Ex. 1009 ¶ 15; Ex. 1007 ¶ 157). Petitioner contends a person of ordinary skill would have recognized that transmitting parts of a video as a stream would be beneficial “because it would allow for the video

transmission to be completed at or near the time when recording ends” and “because it would obviate the need to save the video in multiple files before transmitting—which again is undesirable because it needlessly utilizes computer resources and time.” *Id.* at 33 (citing Ex. 1007 ¶ 158).

Claim 1 further recites “wherein the video stream defines video captured using controls included in the video recorder interface and wherein the video stream is received as the video is captured using the media recorder software executing on the video management server system.” Ex. 1001, 21:25–29. Petitioner contends Nassiri teaches that its video stream is captured using controls on its interface such as record and stop buttons, and that the video stream can be received by Nassiri’s video host computing system as it is being recorded. Pet. 34–36 (citing Ex. 1009 ¶¶ 15, 21, 28, 33, 34, 35, 38, Fig. 8; Ex. 1007 ¶¶ 160–67).

Claim 1 also recites “generating a video file using the received video stream” and “storing the video file on the video management server system.” Ex. 1001, 21:30–32. Petitioner contends Nassiri teaches that its video host computing system may store the received videos in any suitable file format, and that it would have been obvious that a file must be generated from the video stream for the video hosting system to store the received video stream in a file format. Pet. 36–37 (citing Ex-1009 ¶¶ 15, 28, 35, Figs. 2, 8; Ex. 1007 ¶¶ 168–174).

Petitioner further provides analysis detailing where it contends each limitation of claims 2–8 and 11 is taught in Nassiri and Bradford. *Id.* at 37–53. Petitioner also provides an articulated rationale for combining the teachings of Nassiri and Bradford. Specifically, Petitioner contends that using Bradford’s teachings about using a link to target an iframe in a

displayed webpage in Nassiri would save resources on the video host computing system because “the video recorder is not displayed if the link is not clicked” and because only a portion of a webpage (i.e., the iframe) would need to be loaded when the link is clicked. Pet. 17–20 (citing Ex. 1007 ¶¶ 106–110). As discussed above, Petitioner also contends a person of ordinary skill would have recognized that transmitting parts of a video as a stream such as MPEG-4 streaming taught in Bradford would be beneficial “because it would allow for the video transmission to be completed at or near the time when recording ends” and “because it would obviate the need to save the video in multiple files before transmitting—which again is undesirable because it needlessly utilizes computer resources and time.” *Id.* at 33 (citing Ex. 1007 ¶ 158).

We find Petitioner’s contentions for claims 1–8 and 11 persuasive, and we adopt Petitioner’s reasoning as our own. In its Patent Owner Response, Patent Owner presents the following arguments for claim 1⁵: (1) whether Petitioner has demonstrated that Nassiri and Bradford, either alone or in combination, teach or suggest receiving a video stream at a server; (2) whether Petitioner has demonstrated that Nassiri teaches or suggests generating a video file from the received video stream; and (3) whether Petitioner has demonstrated that Nassiri and Bradford, either alone or in combination, teach or suggest “providing, on a first webpage, a link to media recorder software stored on a video management server system.” PO Resp. 26–53. We address these arguments in turn.

⁵ Patent Owner does not present separate arguments as to claims 2–8 and 11.

a. “receiving a video stream at the video management server system”

Patent Owner argues neither Nassiri nor Bradford teaches “receiving a video stream.” PO Resp. 26. Patent Owner contends that Nassiri’s disclosure of transmitting video “in part as it is being recorded” does not include streaming or a data stream. Instead, relying on the testimony of its expert, Dr. Olivier, Patent Owner contends Nassiri’s failure to use the term “streaming” “strongly indicates that Nassiri was *not* streaming.” *Id.* at 27 (citing Ex. 2008 ¶ 69). Patent Owner also contends that nothing in Nassiri implies a real-time operation, but instead the video in Nassiri could be segmented or chunked (i.e., saved in smaller files and those files transmitted). *Id.* (citing Ex. 2008 ¶ 70; Ex. 2009, 80:17–81:12; Ex. 1007 ¶ 58). Patent Owner also points to Nassiri’s use of “in part” and its statement that “[t]he videos may generally be transmitted and stored in any suitable file format, including but not limited to, .mpeg files, or .avi files.” *Id.* at 28 (quoting Ex. 1009 ¶ 35, [15]; citing Ex. 2008 ¶¶ 51–60, 71). Patent Owner also relies on its expert’s testimony that transmitting a video stream rather than a file “would have increased the risk of errors being introduced to customer videos.” *Id.* at 28–29 (citing Ex. 2008 ¶¶ 72–73).

We have considered both Dr. Almeroth’s testimony and Dr. Olivier’s testimony on this point, and we find Dr. Almeroth’s testimony to be more credible. Specifically, Dr. Almeroth’s interpretation of “in part” in Nassiri is consistent with how streaming is used in the ’997 patent. *See* Pet. Reply 10–11. The ’997 patent states, “as video data is generated, the video data is cached and *a predetermined amount of video data is intermittently transmitted* from the client computing device to the one or more back-end servers.” Ex. 1001, 10:16–19 (emphasis added). Such intermittent

transmission in the '997 patent is consistent with transmission “in part” in Nassiri. We also credit Dr. Almeroth’s testimony because there are other indications in Nassiri that its process is near real-time as would be expected for a video stream. Nassiri teaches, without using the “in part” qualifier, that video “may be transmitted to the video host computing system while it is being recorded.” Ex. 1009 ¶ 28. In addition, Nassiri discusses a near real time mechanism for feedback to the video contributor:

The executable instructions for video recording 125 may in some examples provide feedback to the contributor computing system 130. Examples of feedback may include an indication of whether the audio *being recorded* is too loud or too soft, and an indication of whether the lighting *being used* is too bright or too dim. Accordingly, as the video host computing system 120 *receives video data* from the contributor computing system 130, the executable instructions for video recording 125 may include instructions for comparing the volume and/or the visual aspects of the data . . . with a threshold condition. . . . If the received video data quality does not meet the threshold, the executable instructions for video recording may transmit feedback data to the contributor computing system for display to a contributor. For example, a light or other indicator may be displayed prompting the contributor to use more or less lighting, or to speak louder or softer.

Id. ¶ 27 (emphasis added).

Based on the disclosures in Nassiri discussed above, we do not find persuasive Dr. Olivier’s testimony that “the fact that Nassiri makes *no mention* of streaming or a video stream strongly indicates that Nassiri was *not* streaming.” Ex. 2008 ¶ 69. We also find the '997 patent’s disclosure of intermittently transmitting a predetermined amount of video data (Ex. 1001, 10:16–19) undermines Dr. Olivier’s testimony that “in part” is “not a qualifier a [person of ordinary skill in the art] would have expected to see in

connection with streaming, indicating that Nassiri used segmenting instead of streaming.” Ex. 2008 ¶ 70.

Dr. Olivier points to a statement in Nassiri that “[t]he videos may generally be transmitted and stored in any suitable file format, including but not limited to, .mpeg files, or .avi files.” *Id.* ¶ 71 (citing Ex. 1009 ¶ 15). Dr. Olivier contends this statement shows Nassiri transmits video files instead of video streams. *Id.* Nassiri, however, uses the term “may” in this statement, and discloses other embodiments where the videos are not transmitted until after they are recorded. Ex. 1009 ¶ 28. We also agree with Dr. Almeroth (Ex. 1036 ¶ 41) that it is reasonable to read this statement with “in any suitable file format” modifying “stored” and not “transmitted.” Thus, we do not view the statement in Nassiri’s Paragraph 15 as limiting its disclosure of transmitting a video while it is being recorded to transmitting a video file. We also do not find persuasive Dr. Olivier’s testimony that a person of ordinary skill in the art would not have understood Nassiri to disclose streaming because of the possibility of introducing errors in the received and stored videos. Ex. 2008 ¶ 72. We credit Dr. Almeroth’s testimony that there were known techniques to detect errors in a received video stream. Ex. 1036 ¶ 43.

Thus, we determine Petitioner has shown, based on Nassiri’s teachings as supported by Dr. Almeroth’s testimony, that Nassiri teaches “receiving a video stream at the video management server system.”

b. “generating a video file using the received video stream”

Patent Owner contends Nassiri does not teach “generating a video file using the received video stream,” as recited in claim 1. PO Resp. 37–38. Patent Owner’s argument relies on its contention that Nassiri does not teach

“receiving a video stream,” “absent which ‘Nassiri could not generate a video file from a received video stream.’” *Id.* at 38. Because we find above that Petitioner has shown Nassiri teaches “receiving a video stream at the video management server system,” we do not find Patent Owner’s argument regarding this limitation persuasive. Instead, we find Petitioner has shown Nassiri teaches this limitation for the reasons stated in the Petition, which we adopt as our own. Pet. 36–37 (citing Ex. 1009 ¶¶ 15, 28, 35, Figs. 2, 8; Ex. 1007 ¶¶ 168–174).

c. *“providing, on a first webpage, a link to media recorder software stored on a video management server system”*

As discussed above, we apply Patent Owner’s proposed construction of “providing, on a first webpage, a link,” as recited in claim 1, as “displaying a link that is visible to and selectable by a user of the first web page.” *See* PO Resp. 25.⁶ We note that the complete limitation is “providing, on a first webpage, a link to media recorder software stored on a video management server system,” and, thus, the construction we apply for purposes of this decision requires “displaying a link that is visible to and selectable by a user of the first web page to media recorder software stored on a video management server system.”

As discussed above, Petitioner relies on the combination of Nassiri and Bradford to teach this limitation. Pet. 20–23. Petitioner contends that Nassiri teaches providing a link on a webpage to executable instructions for video recording software that is stored on a video management server and that the video recorder is then embedded in an iframe within the webpage.

⁶ As discussed above, Petitioner contends that we need not construe this term “because even under Patent Owner’s construction, the prior art teaches these limitations.” Pet. Reply 8.

Id. (citing Ex. 1009 ¶¶ 16–19, 21, Fig. 8; Ex. 1007 ¶¶ 117–121, 126–128). Petitioner further contends Bradford teaches “how a link within a webpage can target an iframe within the same webpage.” *Id.* at 21–22 (citing Ex. 1010, 161; Ex. 1007 ¶¶ 122–125).

Patent Owner contends the combination of Nassiri and Bradford does not teach this limitation. Specifically, Patent Owner contends Nassiri does not disclose a link to an iframe in a webpage; instead, relying on the testimony of Dr. Olivier, Patent Owner contends Nassiri teaches that its iframe “directly embeds the instructions for video capture into the current webpage, such that the video capture interface is automatically loaded into the iframe when the webpage is loaded.” PO Resp. 40–41 (quoting Ex. 2008 ¶ 91). Patent Owner contends that the “embedded link” in Nassiri is the web address for the video capture interface that is included as an “src” attribute in the iframe code, and that link is never displayed on the webpage or selected by a user. *Id.* at 41 (citing Ex. 2008 ¶¶ 91–93). Patent Owner further contends Nassiri’s iframe cannot be targeted by a link because Nassiri’s iframe does not include a “name” attribute. *Id.* at 42 (citing Ex. 2008 ¶¶ 94–95). Thus, Patent Owner argues Dr. Almeroth’s testimony that Nassiri teaches a link on a webpage that could be clicked to update the iframe is contrary to Nassiri’s disclosure, particularly its lack of a “name” attribute. *Id.* at 42–43 (citing Ex. 1007 ¶ 120; Ex. 2008 ¶ 96).

Patent Owner further contends Petitioner’s combination of Nassiri with Bradford does not cure these deficiencies. Specifically, Patent Owner contends that because Nassiri does not teach a link, adding Bradford’s “name” attribute would not result in the recited link. PO Resp. 44–45 (citing Ex. 2008 ¶ 100). Patent Owner further argues that even if Petitioner had

proposed adding such a link, adding Bradford’s “name” attribute to Nassiri’s iframe would result in a combination with numerous problems, such as having to re-load already loaded software, error messages, or a large blank space. *Id.* at 45–47 (citing Ex. 2008 ¶¶ 101–122). Patent Owner contends these problems are contrary to Nassiri’s purpose and thus a person of ordinary skill in the art would have been motivated not to make the combination. *Id.* at 48 (citing Ex. 2008 ¶¶ 123–124).

Petitioner contends Patent Owner’s arguments regarding Nassiri are inapposite because claim 1 recites a link to media recorder software, not an iframe. Pet. Reply 13. According to Petitioner, Nassiri discloses the recited link because it discloses a “video recorder accessible through the embedded or stand alone link,” that the “link may, in some examples, be provided in a page,” that the user may “follow the embedded . . . link and utilize the video recorder functionality,” and that users may request the video recorder by “clicking on a link displayed on another of the enterprise’s sites.” *Id.* (citing Pet. 20–21; Ex. 1009 ¶¶ 18, 19, 26, 30). Petitioner contends that a person of ordinary skill in the art would have understood Nassiri’s disclosure that a user can follow the embedded link to mean the link is displayed on the webpage, and cites Dr. Almeroth’s and Dr. Olivier’s testimony in support. *Id.* at 14 (citing Ex. 1036 ¶¶ 50–51; Ex. 1035, 97:9–18).

Petitioner acknowledges the examples Patent Owner provides of how Nassiri could have been combined with Bradford (and the problems in those examples), but, relying on the testimony of Dr. Almeroth, Petitioner contends that the modifications needed to solve those problems would have been trivial and easily resolved by a person of ordinary skill in the art. *Id.* at 16–22 (citing Ex. 1036 ¶¶ 58–79). In the Petition, Petitioner asserted a

person of ordinary skill in the art would have been motivated to use Bradford's "name" attribute in Nassiri to use a link to target an iframe in the currently displayed webpage to save computer resources because the video recorder is not displayed if the link is not clicked and because the video recorder is displayed within the current webpage, avoiding loading an entirely new webpage. Pet. 19–20 (citing Ex. 1007 ¶¶ 109, 110). In the Reply, Petitioner reiterates this reasoning, and notes that a person of ordinary skill in the art "would have understood that, in any event, a small percentage of users would actually submit a testimonial, and thus, reducing the number of times the video recorder is instantiated would markedly improve the performance of the video host computing system." Pet. Reply 22–23.

We find Petitioner's contentions persuasive. Dr. Almeroth, relying on Nassiri's disclosure, testifies that Nassiri teaches a link is provided to executable instructions for video recording on a webpage. Ex. 1007 ¶ 117 (quoting Ex. 1009 ¶ 26). That paragraph of Nassiri states:

[T]he contributor computing system 130 may access a website or other content provided by the enterprise computing system 110, including the embedded or standalone link provided by the executable instructions for video capture 115. A video recorder accessible through the embedded or stand alone link may be displayed on an input/output device 133. *A user may follow the embedded or stand alone link and utilize the video recorder functionality provided by the executable instructions for video recording 125.*

Ex. 1009 ¶ 26 (emphasis added). We find this disclosure on which Dr. Almeroth relies supports Petitioner's contention that Nassiri teaches use of a link that is visible to and selectable by a user and that this link is to media recorder software stored on a video management server system.

We are not persuaded by Patent Owner's arguments regarding Nassiri's link. Patent Owner and Dr. Olivier focus on the alleged failure of Nassiri's link to target an iframe (*see* PO Resp. 40–43; Ex. 2008 ¶¶ 94–95), but as Patent Owner and Dr. Olivier acknowledge (PO Resp. 43; Ex. 2008 ¶ 98), Petitioner relies on Bradford's teachings in combination with Nassiri for how a link within a webpage can target an iframe within the same webpage (Pet. 20–21). In other words, Petitioner modifies Nassiri's link based on the teachings of Bradford such that Nassiri's link to the video recorder software would be on the same webpage as its iframe where that software is loaded.

We also find that Petitioner has provided a persuasive rationale for making this modification to Nassiri in light of Bradford's teachings, namely, to save computing resources both at the server and client sides by only loading the video recorder software when needed and only updating a portion of the webpage. *See* Pet. 19–20 (citing Ex. 1007 ¶¶ 109, 110); Pet. Reply 22–23. While Patent Owner and Dr. Olivier identify implementation details that would need to be resolved in a bodily incorporation of the references' teachings (PO Resp. 45–47; Ex. 2008 ¶¶ 101–122), we find Dr. Almeroth's testimony (Ex. 1036 ¶¶ 58–79) credible and persuasive that resolving these details would have been well within the skill of a person of ordinary skill in the art, who has ordinary creativity and is not an automaton. *See KSR*, 550 U.S. at 421.

For the reasons discussed above, we determine Petitioner has demonstrated by a preponderance of the evidence that claims 1–8 and 11 would have been obvious over Nassiri and Bradford.

D. Asserted Obviousness over Nassiri, Bradford, and Tosh.o

Tosh.o is a New York Times article titled “Their Pain Is His Gain” and is dated August 22, 2010. Ex. 1017. Tosh.o describes the Comedy Central show of the same name, which featured amateur internet videos. *Id.*

Petitioner contends that claims 9 and 12 would have been obvious over Nassiri, Bradford, and Tosh.o. Pet. 53–57. Claim 9 depends indirectly from claim 1 and further recites “monitoring viewer response to the video file using the media player software; and using the viewer response in selecting video defined in the video file for inclusion in a linear television program.” Ex. 1001, 22:5–8. Petitioner relies on Nassiri as teaching “monitoring” and “using” viewer response. Pet. 46–49, 55. Petitioner further contends Nassiri describes that the user system on which videos are displayed “may [be a] set top box.” *Id.* at 55 (citing Ex. 1009 ¶ 16). Petitioner relies on Tosh.o as describing using user-submitted video for display in a traditional television program. *Id.* at 55–56 (citing Ex. 1017, 2–3).

Claim 12 depends from claim 1 and further recites “selecting a video from a plurality of videos received through the media recorder software on the video management server system for inclusion in a television program.” Ex. 1001, 22:18–21. Petitioner relies on Nassiri as teaching “selecting a video from a plurality of videos received through the media recorder software on the video management server system.” Pet. 56–57. Petitioner further relies on the combination of Nassiri and Tosh.o for selecting the video “for inclusion in a television program.” *Id.* at 57. We find Petitioner’s analysis about how the references teach the additional limitations of claims 9 and 12 persuasive, and we adopt it as our own.

Patent Owner does not address Petitioner's contentions about how the references teach the additional limitations of claims 9 and 12. Patent Owner asserts that its arguments as to the Nassiri-Bradford ground, discussed above, also apply to this ground (i.e., because the dependent claims in this ground depend from claim 1 at issue in the Nassiri-Bradford ground). PO Resp. 26, 37, 39. We do not find those arguments persuasive for the reasons discussed in the Nassiri-Bradford ground.

Petitioner also provides a rationale for combining the teachings of Nassiri and Tosh.o. Specifically, Petitioner contends that using Tosh.o's teaching of using popular internet videos in a television show in Nassiri would broaden distribution of those videos. Pet. 53–54. Patent Owner contends a person of ordinary skill in the art would not have been motivated to combine Tosh.o with Nassiri and Bradford. PO Resp. 54–56. Patent Owner contends that Tosh.o does not receive submissions, but rather researchers for that show manually searched online (e.g., on YouTube) for video clips to include in the show. *Id.* at 55 (citing Ex. 1017, 2; Ex. 2008 ¶ 146). Patent Owner contends “Tosh.0 contains no suggestion of user submission to Comedy Central, no suggestion of automated selection, and no suggestion of any other automation that might in any way be compatible with Nassiri.” *Id.* (citing Ex. 2008 ¶ 146). Patent Owner cites Petitioner's statement that Nassiri's use of a set-top box supports the reason to combine, and contends this is inapposite because a set top box does not necessarily imply television programming. *Id.* at 55–56 (citing Pet. 54). In addition, Patent Owner contends a person of ordinary skill in the art would not have been motivated to combine Tosh.o's manual review to find weird and funny video clips with Nassiri's customer videos. *Id.* (citing Ex. 2008 ¶ 149).

We are persuaded Petitioner has provided a sufficient rationale for why a person of ordinary skill in the art would have been motivated to modify Nassiri based on Tosh.o’s teachings. As Petitioner points out in its Reply, neither Nassiri nor challenged claims 9 and 12 are limited to automated selection. Pet. Reply 24–25 (citing Ex. 1035, 101:6–12, 103:9–13; Ex. 1036 ¶¶ 85–88). Petitioner also persuasively contends that Nassiri is not limited to its examples, and instead broadly discloses facilitating “video capture, management and/or sharing.” *Id.* at 25 (citing Ex. 1036 ¶ 89)⁷; see Ex. 1009 ¶ 1. We find that Petitioner’s contention that Tosh.o’s teaching of using popular internet videos in a television show in Nassiri would have broadened distribution of Nassiri’s videos (Pet. 53–54) provides a sufficient reason why a person of ordinary skill in the art would have been motivated to combine the cited teachings of the references.

For the reasons discussed above, we determine Petitioner has demonstrated by a preponderance of the evidence that claims 9 and 12 would have been obvious over Nassiri, Bradford, and Tosh.o.

E. Asserted Obviousness over Nassiri, Bradford, and Lerman

Lerman is titled “Browser Enabled Video Manipulation” and was published on November 16, 2006. Ex. 1009, at [43], [54]. Petitioner contends Lerman is prior art under 35 U.S.C. § 102(b). Pet. 5.

Petitioner contends that claim 10 would have been obvious over Nassiri, Bradford, and Lerman. Pet. 57–60. Claim 10 depends indirectly from claim 1 and further recites “providing access to editing tools through the media player software, wherein the editing tools allow a user to edit the

⁷ We understand Petitioner’s citation to Ex. 1036 ¶ 9 to be a typographical error.

stored video file.” Ex. 1001, 22:9–12. Petitioner contends the combination of Nassiri and Lerman teaches the additional limitations of claim 10. Pet. 60. In particular, Petitioner contends Nassiri describes “executable instructions” to provide “video recorder functionality” and storing video files at the management server. *Id.* (citing Ex. 1009 ¶¶ 9, 21). Petitioner further contends Lerman describes software components that provide “video editing functions,” as well as editing a stored video. *Id.* (citing Ex. 1012 ¶¶ 5, 9, 26).

Petitioner also provides a rationale for combining the teachings of Nassiri and Lerman. Petitioner explains that Nassiri contemplates that captured videos may require editing and that combining Lerman’s video editing with Nassiri’s video management system would be merely the use of a known technique to improve similar devices in the same way. *Id.* at 59.

Patent Owner argues “[b]ecause Lerman does not disclose or suggest server-side editing, the proposed combination fails to disclose or suggest every feature of claim 10.” PO Resp. 57 (citing Ex. 2008 ¶¶ 151–158).⁸ Petitioner contends that Patent Owner attacks Lerman individually without considering the combination of teachings on which the Petitioner relies. Pet. Reply 25. In particular, Petitioner relies on Lerman’s teaching of editing a stored video with Nassiri’s teaching that video files are stored at a management server. *See* Pet. 57–60; Pet. Reply 25–26. Petitioner contends that in its combination, “the editing tools would be ‘server-side.’” Pet.

⁸ Patent Owner asserts that its arguments as to the Nassiri-Bradford ground, discussed above, also apply to this ground (i.e., because claim 10 depends indirectly from claim 1 at issue in the Nassiri-Bradford ground). PO Resp. 26, 37, 39. We do not find those arguments persuasive for the reasons discussed in the Nassiri-Bradford ground.

Reply 26. We agree with Petitioner’s reasoning, which is supported by its expert’s testimony (Ex. 1007 ¶¶ 271–84; Ex. 1036 ¶¶ 93–95).

For the reasons discussed above, we determine Petitioner has demonstrated by a preponderance of the evidence that claim 10 would have been obvious over Nassiri, Bradford, and Lerman.

F. Asserted Obviousness over Nassiri, Bradford, and Zhu

Zhu is titled “Securing Communications for Web Mashups” and was published on July 15, 2010. Ex. 1013, at [43], [54]. Petitioner contends Zhu is prior art under 35 U.S.C. § 102(b). Pet. 5.

Petitioner contends that claims 13–19 would have been obvious over Nassiri, Bradford, and Zhu. Pet. 61–74. For claim 13, Petitioner relies on and repeats its explanations for similar limitations of claim 1 discussed above. Pet. 63–70. In addition, claim 13 recites “providing, using capture software executing on the user content management server system, a content capture graphical user interface through a communication interface between the web server system and the user content management server system.” Ex. 1001, 22:32–36. Petitioner contends Nassiri teaches this limitation, except for the recited “communication interface,” for which Petitioner relies on the combination of Nassiri and Zhu. Pet. 66–68. Regarding the recited “communication interface,” Petitioner contends Nassiri teaches “the ‘data for display of a video recorder’ may be transmitted by the ‘video host computing system . . . to the contributor computing system’ with ‘the enterprise computing system 110 as an intermediary,’” as well as its different computing systems (i.e., video host computing system and enterprise computing system) having interconnects to communicate with each other through a network. *Id.* at 66–67 (citing Ex. 1009 ¶¶ 16, 32).

Petitioner further contends Zhu teaches that each of its application servers has an interface for enabling communication over a network and that APIs can be used to create its web mashups. *Id.* at 67–68 (citing Ex. 1013 ¶¶ 1, 25, Fig. 2A).

Petitioner further provides analysis detailing where it contends each limitation of claims 14–19 is taught in Nassiri, Bradford, and Zhu. *Id.* at 70–74. We have reviewed Petitioner’s evidence and argument, and find that Petitioner has shown Nassiri, Bradford, and Zhu teach each limitation of claims 13–19. We adopt Petitioner’s analysis (Pet. 61–74) as our own.

Petitioner also provides a sufficiently persuasive rationale for combining the teachings of Nassiri and Zhu. Specifically, Petitioner explains that Nassiri’s computing systems communicate with each other through a network, and a person of ordinary skill in the art would have recognized that Zhu’s network interface “provides an efficient way to allow communication through a network using standard protocols (e.g., Ethernet for wired and Wi-Fi for wireless) at the link layer.” Pet. 61–62 (citing Ex. 1007 ¶¶ 288–290). Petitioner further contends a person of ordinary skill in the art would have used APIs, as taught in Zhu, “to provide an efficient and standardized interface at the application level for communicating amongst the distinct computing systems.” *Id.* at 62–63. We find these rationales persuasive.

Claim 13 recites “providing, on a first webpage hosted on a web server system, an imbedded link to capture software stored on a user content management server system.” Ex. 1001, 22:23–25. Patent Owner asserts that its arguments as to the similar limitation in claim 1 discussed above in the Nassiri-Bradford ground, also apply to this ground. PO Resp. 39. We do

not find those arguments persuasive for the reasons discussed in the Nassiri-Bradford ground.

For the reasons discussed above, we determine Petitioner has demonstrated by a preponderance of the evidence that claims 13–19 would have been obvious over Nassiri, Bradford, and Zhu.

IV. MOTION TO EXCLUDE

Patent Owner moves to exclude a number of exhibits that Petitioner introduced with its Reply, as well as portions of Dr. Almeroth's Reply Declaration (Ex. 1036) that rely on those exhibits. As an initial matter, we do not rely on Exhibits 1037–1040 and 1044–1047 in this Decision. In addition, the portions of Exhibit 1036 that Patent Owner seeks to exclude rely only on those exhibits. *See* PO Mot. to Exclude 1. Because the outcome of this decision would not change based on whether we exclude those exhibits, we dismiss as moot Patent Owner's motion to exclude portions of Exhibit 1036 as well as Exhibits 1037–1040 and 1044–1047.

Patent Owner also moves to exclude Exhibits 1041–1043. PO Mot. to Exclude 6–8; PO Reply Mot. to Exclude 4–5. Specifically, Patent Owner moves to exclude all three exhibits as untimely supplemental information and beyond the proper scope of reply. PO Mot. to Exclude 6–8. In addition, Patent Owner moves to exclude Exhibit 1042 as irrelevant. *Id.* at 7–8. Petitioner opposes the motion to exclude these exhibits. Pet. Opp. to Mot. to Exclude 3–7, 10–12.

Having considered the parties' arguments, we deny the motion to exclude as to Exhibits 1041–1043. As an initial matter, we agree with Petitioner that Patent Owner's timeliness arguments are not properly the

subject of a motion to exclude, which should seek to exclude evidence as inadmissible, but rather should have been filed as a motion to strike because they seek to exclude belatedly presented evidence that Patent Owner contends exceeds the proper scope of reply. *See* Pet. Opp. to Mot. to Exclude 4–6; August 2018 Update to the Trial Practice Guide, 17, available at <https://go.usa.gov/xU7GP>. We also agree with Petitioner that Patent Owner requested and was granted a sur-reply to “address new evidence and new arguments first raised in Petitioner’s recent Replies.” Paper 56, 2. In addition to arguing these exhibits are untimely supplemental information, Patent Owner’s Sur-Reply substantively addressed the exhibits. PO Sur-Reply 2–8.

We are not persuaded that Exhibits 1041–1043 are untimely supplemental information. The Federal Circuit has stated “[t]he purpose of the trial in an *inter partes* review proceeding is to give the parties an opportunity to build a record by introducing evidence—not simply to weigh evidence of which the Board is already aware.” *E.g., Genzyme Therapeutic Prods. L.P. v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1367 (Fed. Cir. 2016) (finding consideration of evidence acceptable where patent owner had notice and opportunity to respond to it). As noted above, Patent Owner had notice and an opportunity to respond to Exhibits 1041–1043 in its Sur-Reply. In addition, Patent Owner raised the issue of Bradford’s printed publication status for the first time in its Patent Owner Response. We find Petitioner fairly submitted Exhibits 1041–1043 in response to that issue raised by Patent Owner. *See Belden, Inc. v. Berk-Tek LLC*, 805 F.3d 1064 (Fed. Cir. 2015) (holding that the Board did not err in declining to exclude a reply

declaration where that declaration fairly responded to issues raised in the response).

In support of its argument that these exhibits are untimely supplemental information, Patent Owner cites to 37 C.F.R. § 42.123(b). PO Mot. to Exclude 6–7. We find that regulation does not preclude evidence properly submitted with a reply. In addition, Patent Owner relies on a non-precedential Board opinion, *Dropbox, Inc. v. Synchronoss Tech., Inc.*, IPR2016-00851 (PTAB Oct. 5, 2017) (Paper 40). PO Sur-Reply 2–5; PO Reply Mot. to Exclude 4–5 (also citing *Toshiba Corp. v. Optical Devices, LLC*, IPR2014-01447 (PTAB Mar. 9, 2016) (Paper 34)). *Dropbox* is not binding on this panel, and we find that case distinguishable in any event.

In that case, the patent owner challenged the prior art status of the reference in the preliminary response. *Dropbox*, slip op. at 18. The Board treated that challenge as objections to evidence and granted the petitioner the opportunity to file supplemental evidence within 10 days of institution, and the petitioner filed an exhibit (a different copy of the article published in a different source) as supplemental evidence. *Id.* at 18–19. The patent owner contended that the petitioner did not address whether the article submitted as supplemental evidence was the same as the version submitted with its petition. *Id.* at 19–20. Then with its reply, the petitioner submitted additional evidence that the original version of the reference was published by the authors. *Id.* at 20. The Board agreed with the patent owner that this additional evidence was untimely because the petitioner already had an

opportunity to address this issue with its supplemental evidence, and thus the Board excluded the reply evidence. *Id.* at 20–21.⁹

We find that the present case is distinguishable from the facts in *Dropbox*. Here, Patent Owner did not object to the printed publication status of Bradford in the preliminary response, and no objections to evidence were filed as to Bradford. Thus, unlike in *Dropbox*, Petitioner here had no opportunity to submit supplemental evidence. We determine Petitioner was not obligated to seek to file Exhibits 1041–1043 as supplemental information. Again, Patent Owner did not raise the issue of Bradford’s printed publication status until the Patent Owner Response. Thus, we determine it was proper for Petitioner to fairly respond to that issue with reply evidence. For these reasons, we decline to exclude or disregard Exhibits 1041–1043 as untimely.

In addition, Patent Owner moves to exclude Exhibit 1042 as irrelevant. As discussed above, Exhibit 1042 is an LOC copy of Bradford, and we have considered Exhibit 1042 as relevant evidence in determining whether Bradford qualifies as a printed publication. In its Motion to Exclude, Patent Owner contends Petitioner must establish Exhibit 1010 (the excerpt of Bradford submitted with the Petition) is prior art, and Exhibit 1042, which is an earlier printing, is not relevant to that determination. PO Mot. to Exclude 7–8. For the reasons discussed above, however, we are not persuaded these printings of Bradford include different substantive content,

⁹ *Toshiba*, likewise, is a case where the patent owner challenged the printed publication status of the reference at the preliminary response stage and also filed objections to evidence. *See Toshiba*, slip op. at 46.

and, therefore, we consider Exhibit 1042 as relevant evidence in deciding the printed publication issue before us.

For the reasons discussed above, we deny Patent Owner's motion to exclude Exhibits 1041–1043.

V. CONCLUSIONS

Petitioner has demonstrated by a preponderance of the evidence that claims 1–8 and 11 are unpatentable under § 103(a) over the combined teachings of Nassiri and Bradford; claims 9 and 12 are unpatentable under § 103(a) over the combined teachings of Nassiri, Bradford, and Tosh.o; claim 10 is unpatentable under § 103(a) over the combined teachings of Nassiri, Bradford, and Lerman; and claims 13–19 are unpatentable under § 103(a) over the combined teachings of Nassiri, Bradford, and Zhu.

VI. ORDER

Accordingly, it is

ORDERED that claims 1–19 of the '997 patent are held to be *unpatentable*;

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

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

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Patent 9,083,997 B2

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