

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWITTER, INC.,
Petitioner,

v.

VIDSTREAM, LLC,
Patent Owner.

IPR2017-00830
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 20–35 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 10 (“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 20–35 of the ’997 patent, and we instituted this *inter partes* review on August 11, 2017, as to all challenged claims. Paper 12 (“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 21. Youtoo filed a motion to stay this proceeding based on the automatic stay in the bankruptcy statute, and Petitioner opposed that motion. *See* Papers 23, 24, 29. 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 39, 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 39, 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 40.¹ 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 42), and the Board issued an order extending the time to administer this proceeding by up to six months (Paper 43).

During the course of trial, Patent Owner filed a Patent Owner Response (Paper 51, “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 20–35 of the ’997 patent. For the reasons discussed below, we hold that Petitioner has demonstrated by a preponderance of the evidence that claims 20–35 are unpatentable under § 103(a).

¹ Patent Owner subsequently updated its mandatory notices to identify additional real parties-in-interest. Paper 45.

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.

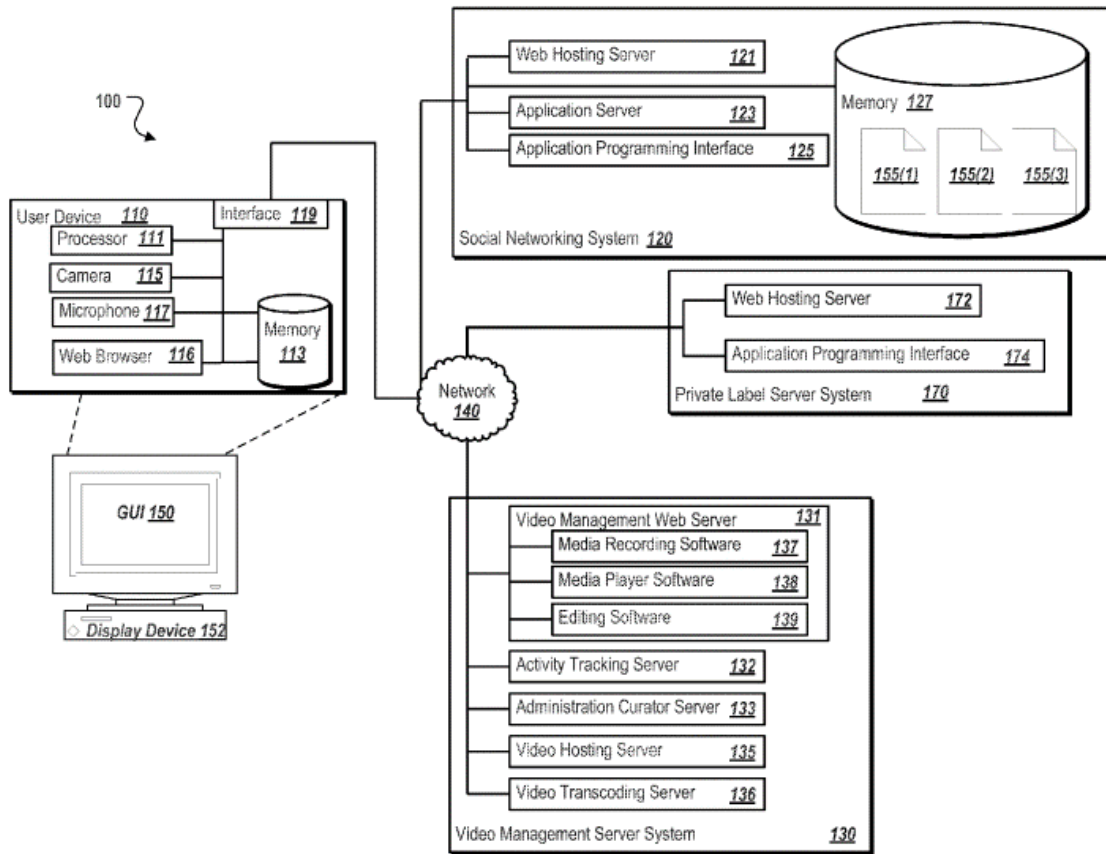


FIG. 1A

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 20 and 31 are independent claims and are reproduced below.

20. A non-transitory computer storage medium encoded with a computer program, the program comprising instructions that when executed by data processing apparatus cause the data processing apparatus to perform operations comprising:

providing a content capture user interface within displayed instances of a first graphical user interface that includes display elements hosted on a web server system in response to a user selection of a link included in a graphical user interface that includes display elements hosted on the web server system, wherein the content capture user interface is provided within a frame displayed in the first graphical user interface and the content capture user interface is adapted to allow users to provide user submissions to a user content management server system using controls included within the frame that includes the content capture user interface, and the user submissions are captured using content capture software executing on the user content management server system through a communication interface between the web server system and the user content management server system;

receiving a plurality of user submissions, wherein each user submission defines content captured through the content capture user interface on a respective displayed instance of the first graphical user interface and each user submission is captured using the content capture software executing on the user content management server system;

generating a plurality of user submission content files based on the received user submissions; and

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

Id. at 23:19–51.

31. A system comprising:

one or more user content management servers operable to interact with a plurality of user devices and to:

provide a content capture user interface within displayed instances of a first graphical user interface that includes display elements hosted on a web server system in response to a user selection of a link included in a graphical user interface that includes display elements hosted on the web server system, wherein the content capture user interface is provided within a frame displayed in the first graphical user interface and the content capture user interface is adapted to allow users to provide user submissions using controls included within the frame that includes the content capture user interface, and the user submissions are captured using content capture software executing on one or more of the user content management servers through a communication interface between the web server system and the one or more user content management servers;

receive a plurality of user submissions, wherein each user submission defines content captured through the content capture user interface on a respective displayed instance of the first graphical user interface and each user submission is captured using the content capture software executing on the one or more user content management servers;

generate a plurality of user submission content files based on the received user submissions; and

store the user submission content files on the user content management server system.

Id. at 24:58–25:22.

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 6, 2. Petitioner and Patent Owner also identify another *inter partes* review filed by Petitioner regarding the '997 patent: IPR2017-00829.

Pet. 2–3; Paper 6, 2. Patent Owner also identifies a pending U.S. Patent Application that claims priority to the application leading to the '997 patent. Paper 6, 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. “Zhu” (US 2010/0180330 A1; published July 15, 2010) (Ex. 1013); and
4. “Tosh.o” (Brian Stelter, *Their Pain Is His Gain*, N.Y. TIMES, Aug. 22, 2010, at AR 15, 19) (Ex. 1017).

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. 21.

References	Basis	Claims
Nassiri, Bradford, and Zhu	35 U.S.C. § 103(a)	20–27, 29, 31, 32, 34, and 35
Nassiri, Bradford, Zhu, and Tosh.o	35 U.S.C. § 103(a)	28, 30, and 33

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.* (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.* at 5–6 (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 17–19 (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 18–19 (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.* at 19.

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 49), 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

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).

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 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 19.

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.

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.

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 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 (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 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. 7–10. 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, neither party raised additional claim construction issues. *See* PO Resp. 20. We determine we need not address the construction of any other terms to resolve the disputes before us.

C. Asserted Obviousness over Nassiri, Bradford, and Zhu

Petitioner contends that claims 20–27, 29, 31, 32, 34, and 35 would have been obvious over Nassiri, Bradford, and Zhu. Pet. 14–58. 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 ¶¶ 72–252. In its Patent Owner Response, Patent Owner argues the combined teachings of Nassiri, Bradford, and Zhu do not render the limitations of claim 1 obvious. PO Resp. 20–35. Patent Owner relies upon the Declaration of Dr. James Olivier to support its positions. Ex. 2008.⁴

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.

Petitioner relies on the Reply Declaration of Dr. Almeroth to support the positions in the Petitioner Reply Brief. 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.

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 ¶¶ 47–51). 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 ¶¶ 47–51). 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 ¶ 34). 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 ¶ 36. 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, Bradford, and Zhu

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).

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

4. Analysis

In its Petition, Petitioner contends that claims 20–27, 29, 31, 32, 34, and 35 would have been obvious over Nassiri, Bradford, and Zhu. Pet. 14–58. Claim 20 recites “providing a content capture user interface within displayed instances of a first graphical user interface that includes display elements hosted on a web server system in response to a user selection of a link included in a graphical user interface that includes display elements hosted on the web server system.” Ex. 1001, 23:24–29. Petitioner contends the combination of Nassiri and Bradford teaches this limitation. Pet. 24–30. In particular, Petitioner contends Nassiri teaches providing a video recording interface (i.e., content capture user interface) within a displayed instance of a webpage and that a person of ordinary skill in the art would have understood that Nassiri’s webpage is a graphical user interface. *Id.* at 24–26 (citing Ex. 1009 ¶¶ 17, 19, 21, 26, 38; Ex. 1007 ¶¶ 117–124). Petitioner further contends Nassiri’s webpage has display elements and is hosted on its enterprise computing system. *Id.* at 26–27 (citing Ex. 1009 ¶¶ 17, 19, 39, Fig. 3; Ex. 1007 ¶¶ 125–128). Petitioner also contends Nassiri teaches that its video recorder interface is provided in response to selection of a link on its webpage. *Id.* at 27–29 (citing Ex. 1009 ¶¶ 18, 19, 21, 26, 30, 31, Fig. 2; Ex. 1007 ¶¶ 129–135). Petitioner further contends Bradford teaches “how a

link within a webpage can target an iframe within the same webpage.” *Id.* at 30 (citing Ex. 1010, 161; Ex. 1007 ¶¶ 136–137).

Claim 20 further recites:

wherein the content capture user interface is provided within a frame displayed in the first graphical user interface and the content capture user interface is adapted to allow users to provide user submissions to a user content management server system using controls included within the frame that includes the content capture user interface.

Ex. 1001, 23:29–35. Petitioner contends Nassiri teaches this limitation. Pet. 30–33. Specifically, Petitioner contends Nassiri’s video recorder can be provided in an iframe in a webpage. *Id.* at 31 (citing Ex. 1009 ¶¶ 19, 26, Fig. 3; Ex. 1007 ¶¶ 139–141). Petitioner further contends Nassiri’s video recorder is adapted to transmit user recorded videos to its video host computing system and that the submitted videos are captured using button controls in the video recorder iframe. *Id.* at 31–33 (citing Ex. 1009 ¶¶ 28, 33–35, 38, Figs. 2, 3; Ex. 1007 ¶¶ 142–145).

Claim 20 also recites “the user submissions are captured using content capture software executing on the user content management server system through a communication interface between the web server system and the user content management server system.” Ex. 1001, 23:35–40. Petitioner contends the combination of Nassiri and Zhu teaches this limitation. Pet. 34–37. Specifically, Petitioner contends Nassiri teaches videos are captured using executable instructions for video recording that are executing on the video host computing system. *Id.* at 34–35 (citing Ex. 1009 ¶¶ 15, 21, 38, Fig. 8; Ex. 1007 ¶¶ 146–150). Petitioner further contends Nassiri teaches “data may be transmitted between the video host computing system 120 and

the user's contributor computing system 130 'through 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 35–36 (emphasis omitted) (citing Ex. 1009 ¶¶ 16, 32, Fig. 8; Ex. 1007 ¶¶ 151–152). 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 36–37 (citing Ex. 1013 ¶¶ 1, 25, Fig. 2A; Ex. 1007 ¶ 153).

Claim 20 recites "receiving a plurality of user submissions, wherein each user submission defines content captured through the content capture user interface on a respective displayed instance of the first graphical user interface and each user submission is captured using the content capture software executing on the user content management server system." Ex. 1001, 23:41–47. Petitioner contends Nassiri teaches this limitation. Pet. 37–40. In particular, Petitioner contends Nassiri's video host computing system receives videos from users. *Id.* at 37–38 (citing Ex. 1009 ¶¶ 20, 35, 37, Fig. 2; Ex. 1007 ¶¶ 156–159). Petitioner also contends Nassiri teaches its videos are captured using button controls in its video recorder within a displayed instance of a webpage and its video recording executable instructions execute on the video host computing system. *See id.* at 38–40.

Claim 20 further recites "generating a plurality of user submission content files based on the received user submissions" and "storing the user submission content files on the user content management server system." Ex. 1001, 23:48–51. 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 received videos for the video hosting system to store the received videos in a file format. Pet. 40–41 (citing Ex. 1009 ¶¶ 15, 28, 35, 50, claim 1, Figs. 7, 8; Ex. 1007 ¶¶ 168–174).

Petitioner further provides analysis detailing where it contends each limitation of claims 21–27, 29, 31, 32, 34, and 35 is taught in Nassiri, Bradford, or Zhu. *Id.* at 41–58. Petitioner also provides an articulated rationale for combining the teachings of Nassiri, Bradford, and Zhu. Specifically, Petitioner contends that applying 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. 18–21 (citing Ex. 1007 ¶¶ 102–106). In addition, 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.” *Id.* at 21–22 (citing Ex. 1007 ¶¶ 107–109). 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 22–23.

We find Petitioner’s contentions regarding claims 20–27, 29, 31, 32, 34, and 35 persuasive, and we adopt Petitioner’s reasoning as our own.

In its Patent Owner Response, Patent Owner argues Petitioner has not demonstrated that Nassiri and Bradford, either alone or in combination, teach or suggest “in response to a user selection of a link included in a graphical user interface that includes display elements hosted on the web server system” and “wherein the content capture user interface is provided within a frame displayed in the first graphical user interface,” as recited in claim 20 and similarly recited in claim 31. PO Resp. 20–34. For context, this limitation of claim 20 reads:

providing a content capture user interface within displayed instances of a first graphical user interface that includes display elements hosted on a web server system *in response to a user selection of a link included in a graphical user interface that includes display elements hosted on the web server system, wherein the content capture user interface is provided within a frame displayed in the first graphical user interface.*

Ex. 1001, 23:24–31 (emphasis added).

As discussed above, Petitioner relies on the combination of Nassiri and Bradford to teach these limitations. Pet. 24–33. Relevant to Patent Owner’s contentions, Petitioner contends Nassiri teaches providing a video recording interface (i.e., content capture user interface) within a displayed instance of a webpage, and that a person of ordinary skill in the art would have understood that Nassiri’s webpage is a graphical user interface. *Id.* at 24–26 (citing Ex. 1009 ¶¶ 17, 19, 21, 26, 38; Ex. 1007 ¶¶ 117–124). Petitioner also contends Nassiri teaches that its video recorder interface is provided in response to selection of a link on its webpage. *Id.* at 27–29 (citing Ex. 1009 ¶¶ 18, 19, 21, 26, 30, 31, Fig. 2; Ex. 1007 ¶¶ 129–135). Petitioner contends Nassiri’s video recorder can be provided in an iframe in a webpage. *Id.* at 31 (citing Ex. 1009 ¶¶ 19, 26, Fig. 3; Ex. 1007 ¶¶ 139–

141). Petitioner further contends Bradford teaches “how a link within a webpage can target an iframe within the same webpage.” *Id.* at 30 (citing Ex. 1010, 161; Ex. 1007 ¶¶ 136–137).

Patent Owner contends the combination of Nassiri and Bradford does not teach these limitations. 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. 22 (quoting Ex. 2008 ¶ 48). 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 23 (citing Ex. 2008 ¶ 48). 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 23–24 (citing Ex. 2008 ¶¶ 51–52). 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 24–25 (citing Ex. 1007 ¶ 137; Ex. 2008 ¶ 53).

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. 26 (citing Ex. 2008 ¶ 57). 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 27–29 (citing Ex. 2008 ¶¶ 59–79). 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 29–30 (citing Ex. 2008 ¶¶ 123–124).

Petitioner contends Patent Owner’s arguments regarding Nassiri are inapposite because they presume the claims require a link to an iframe, whereas the disputed limitations require only “that a ‘link’ is ‘included in a graphical user interface’ and that, in response to selection of the link, a ‘content capture user interface is provided within a frame displayed in the first graphical user interface.’” Pet. Reply 3. 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. 27–28; Ex. 1009 ¶¶ 18, 19, 26, 30). Petitioner contends that a person of ordinary skill in the art would have understood Nassiri teaches a link is included and displayed in its graphical user interface, and cites Dr. Almeroth’s and Dr. Olivier’s testimony in support. *Id.* at 3–4 (citing Ex. 1036 ¶¶ 12–18; 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 6–13 (citing Ex. 1036 ¶¶ 21–44). 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. 20–21 (citing Ex. 1007 ¶¶ 105, 106). 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 video 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 13–14.

We find Petitioner’s contentions persuasive. Dr. Almeroth, relying on Nassiri’s disclosure, testifies that Nassiri teaches that its video recorder interface is provided in response to user selection of a link. Ex. 1007 ¶ 132 (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 standalone link may be displayed on an input/output device 133. *A user may follow the embedded or standalone 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 in

response to selection of the link, a content capture user interface is provided to the user.

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. 30). 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 (i.e., graphical user interface) 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. 20–21 (citing Ex. 1007 ¶¶ 105, 106); Pet. Reply 13–14. 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. 27–29; Ex. 2008 ¶¶ 59–79), we find Dr. Almeroth's testimony (Ex. 1036 ¶¶ 21–44) 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 20–27, 29, 31, 32, 34, and 35 would have been obvious over Nassiri and Bradford.

D. Asserted Obviousness over Nassiri, Bradford, Zhu, 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 28, 30, and 33 would have been obvious over Nassiri, Bradford, and Tosh.o. Pet. 58–63. Claim 28 depends indirectly from claim 20 and further recites “monitoring viewer response to the user submission content file; and using the viewer response in selecting user submission content defined in the user submission content file for inclusion in a linear television program.” Ex. 1001, 24:37–41. Petitioner relies on Nassiri as teaching “monitoring” and “using” viewer response. Pet. 48–51, 59–60. Petitioner further contends Nassiri describes that the user system on which videos are displayed “may [be a] set top box.” *Id.* at 60 (citing Ex. 1009 ¶ 16) (emphasis omitted). Petitioner relies on Tosh.o as describing using user-submitted video for display in a traditional television program. *Id.* at 61 (citing Ex. 1017, 2–3).

Claim 30 depends indirectly from claim 20 and further recites “transmitting content from a selected user submission content file received through the capture software executing on the external user content management server system for inclusion in a linear television program.” Ex. 1001, 24:54–57. Petitioner relies on Nassiri as teaching “transmitting content from a selected user submission content file received through the capture software executing on the external user content management server

system.” Pet. 61–62 (citing Ex. 1009 ¶ 65; Ex. 1007 ¶¶ 268–270). Petitioner relies on Tosh.o as teaching the video file is included in a linear television program. *Id.* at 62 (citing Ex. 1007 ¶ 271).

Claim 33 depends indirectly from claim 31 and further recites “wherein the one or more user content management servers are further operable to transmit content from a selected user submission content file received through the content capture user interface for inclusion in a linear television program.” Ex. 1001, 26:3–7. Petitioner relies on similar contentions for the additional limitations of claim 33 as it does for claim 30. Pet. 62–63 (citing Ex. 1009 ¶ 65; Ex. 1007 ¶¶ 272–276). We find Petitioner’s analysis about how the references teach the additional limitations of claims 28, 30, and 33 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 28, 30, and 33. Patent Owner asserts that its arguments as to the Nassiri-Bradford-Zhu ground, discussed above, also apply to this ground (i.e., because the dependent claims in this ground depend from claims 20 and 31 at issue in the Nassiri-Bradford-Zhu ground). PO Resp. 20, 34–35. We do not find those arguments persuasive for the reasons discussed in the Nassiri-Bradford-Zhu 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. 58–59. Patent Owner contends a person of ordinary skill in the art would not have been motivated to combine Tosh.o with Nassiri, Bradford, and Zhu. PO Resp. 35–37.

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 35–36 (citing Ex. 1017, 2; Ex. 2008 ¶ 95). 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.* at 36 (citing Ex. 2008 ¶ 95). 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 36 (citing Pet. 58–59). 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.* at 37(citing Ex. 1008 ¶ 99).

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 28, 30, and 33 are limited to automated selection. Pet. Reply 16 (citing Ex. 1035, 101:6–12, 103:9–13; Ex. 1036 ¶¶ 49–53). Petitioner also persuasively contends that Nassiri is not limited to its examples, and instead broadly discloses facilitating “video capture, management and/or sharing.” *Id.* (citing Ex. 1036 ¶ 53); *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. 58–59) 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 28, 30, and 33 would have been obvious over Nassiri, Bradford, Zhu, and Tosh.o.

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 1044, 1046, and 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 1044, 1046, and 1047.

Patent Owner also moves to exclude Exhibits 1041–1043. PO Mot. to Exclude 1–4; PO Reply Mot. to Exclude 2–4. Specifically, Patent Owner moves to exclude all three exhibits as untimely supplemental information and beyond the proper scope of reply. PO Mot. to Exclude 2–3. In addition, Patent Owner moves to exclude Exhibit 1042 as irrelevant. *Id.* at 4. Petitioner opposes the motion to exclude these exhibits. Pet. Opp. to Mot. to Exclude 3–7, 9–10.

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 3–6; 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 1–2. 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 3 (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 20–21.⁵

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 3. For the reasons discussed above, however, we are not persuaded these printings of Bradford include different substantive content,

⁵ *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 20–27, 29, 31, 32, 34, and 35 are unpatentable under § 103(a) over the combined teachings of Nassiri, Bradford, and Zhu; and claims 28, 30, and 33 are unpatentable under § 103(a) over the combined teachings of Nassiri, Bradford, Zhu, and Tosh.o.

VI. ORDER

Accordingly, it is

ORDERED that claims 20–35 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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