

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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UNIFIED PATENTS, LLC,  
Petitioner,

v.

SYNKLOUD TECHNOLOGIES, LLC,  
Patent Owner.

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IPR2019-01655  
Patent 9,098,526 B1

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Before SALLY C. MEDLEY, JESSICA C. KAISER, and  
SCOTT RAEVSKY, *Administrative Patent Judges*.

MEDLEY, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining All Challenged Claims Unpatentable  
*35 U.S.C. § 318(a)*

## I. INTRODUCTION

Unified Patents, LLC (“Petitioner”)<sup>1</sup> filed a Petition for *inter partes* review of claims 1–20 of U.S. Patent No. 9,098,526 B1 (Ex. 1001, “the ’526 patent”). Paper 1 (“Pet.”). Synkcloud Technologies, LLC (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, we instituted *inter partes* review, pursuant to 35 U.S.C. § 314, as to claims 1–20 based on the challenges set forth in the Petition. Paper 13 (“Decision to Institute” or “Dec.”).

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”), Petitioner filed a Reply to Patent Owner’s Response (Paper 30, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 32, “Sur-reply”).<sup>2</sup> On December 17, 2020, we held an oral hearing. A transcript of the hearing is of record. Paper 41 (“Tr.”).

For the reasons that follow, we conclude that Petitioner has proven by a preponderance of the evidence that claims 1–20 of the ’526 patent are unpatentable.

### A. *Related Matters*

Petitioner indicates that the ’526 patent is the subject of the following court proceeding: *Synkcloud Technologies, LLC v. HP Inc.*, No. 1-19-cv-

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<sup>1</sup> Petitioner filed an Updated Mandatory Notice indicating that the name of Petitioner has changed from Unified Patents Inc., to Unified Patents, LLC. Paper 12, 1.

<sup>2</sup> This Decision refers to the non-confidential versions of Petitioner’s Reply (Paper 30) and the non-confidential version of Patent Owner’s Sur-reply (Paper 32).

01360 (D. Del. filed July 22, 2019). Pet. 2 (Mandatory Notices).<sup>3</sup> In that case, the District Court held claims 1–10 invalid under 35 U.S.C. § 101. Paper 33 (citing Ex. 1024). Petitioner also indicates the following court proceedings as “asserting continuation patents sharing [a] common specification with the ’526 Patent”: *Synkcloud Technologies, LLC v. Dropbox, Inc.*, No. 6:19-cv-00526 (W.D. Tex. filed Sept. 6, 2019), and *Synkcloud Technologies, LLC v. Adobe Inc.*, No. 3:20-cv-07760 (N.D. Cal. filed Nov. 3, 2020). *Id.* at 1–2; Paper 36, 2.

The ’526 patent also is the subject of IPR2020-00316, for which institution was granted. *Microsoft Corp. v. Synkcloud Techs., LLC*, IPR2020-00316, Paper 21 (PTAB June 29, 2020).

#### *B. The ’526 Patent*

The Specification of the ’526 patent describes how a wireless device may use external storage provided by a storage server. Ex. 1001, 1:23–24. The ’526 patent aims to address the lack of storage capacity faced by users on their wireless devices by allowing a wireless device to use an external server for storing and retrieving data. *Id.* at 2:29–37, 5:1–41. The external storage system of the server may be partitioned by dividing it into multiple small volumes of storage space, each of which may be exclusively assigned to and used by a user of a specific wireless device. *Id.* at 4:1–31.

One embodiment describes a “wireless out-band download” approach for downloading data from a remote location to an assigned storage volume. *Id.* at 2:8–10, 2:50–53, 5:1–30, Fig. 3.

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<sup>3</sup> Petitioner also lists *Synkcloud Technologies, LLC v. BLU Products, Inc.*, No. 1-19-cv-00553 (D. Del. filed Mar. 22, 2019), which, according to Petitioner, asserted the ’526 patent and related patents and was dismissed without prejudice on June 19, 2019. Pet. 2 (Mandatory Notices).

Figure 3 is illustrative and is reproduced below.

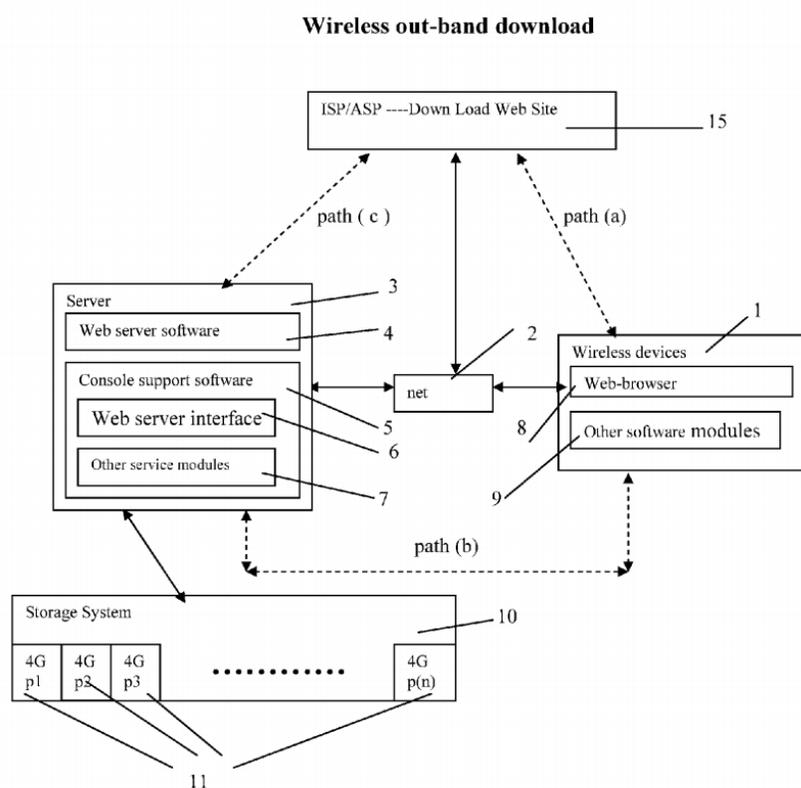


Fig. 3

Figure 3 shows a “wireless out-band download” approach, which includes a sequence of steps for downloading data from a remote web site server 15 into an assigned storage volume 11 of external storage system 10 on server 3. *See id.* at 2:8–10, 2:50–53, 5:1–30. First, the user of wireless device 1 may access remote web server site 15 via web-browser 8 to obtain information about the data for downloading (e.g., data name) via path (a). *Id.* at 5:8–12. Second, other software modules 9 of wireless device 1 may obtain the download information for the data, which becomes available in cached web-pages on wireless device 1. *Id.* at 5:13–17. Third, the other software modules 9 of wireless device 1 may send obtained download

information to other service modules 7 of storage server 3 via path (b). *Id.* at 5:18–20. Fourth, other service modules 7 may send a web download request to remote web site server 15 via path (c) based on the obtained download information and receive the downloaded data streams from remote web site server 15. *Id.* at 5:21–26. Lastly, other service modules 7 may write (i.e., store) the data streams to assigned storage volume 11 in server 3 for wireless device 1. *Id.* at 5:27–30.

The '526 patent also describes retrieving data from an assigned storage volume. *Id.* at 5:31–41. In one embodiment, the user may use the wireless device's web-browser (with embedded video or music functionality) to retrieve and play multimedia data files already stored in the assigned storage volume on the server. *Id.* at 5:33–37. In another embodiment, the wireless device may retrieve data from the file system of the assigned storage volume on the server. *Id.* at 5:38–41.

### *C. Illustrative Claim*

Petitioner challenges claims 1–20 of the '526 patent. Claims 1 and 11 are independent claims, and claims 2–10 and 12–20 depend therefrom, respectively. Claim 1 is reproduced below, which includes changes made per a Certificate of Correction.

1. A wireless device comprising:
  - at least one cache storage, one wireless interface, and program code configured to cause the wireless device to:
    - establish a wireless link for the wireless device access to a storage space of a predefined capacity assigned exclusively to a user of the wireless device by a storage server, and
    - couple with the storage server across the wireless link to carry out a requested operation for remote access to the assigned

storage space in response to the user from the wireless device performing the operation,

wherein the operation for the remote access to the assigned storage space comprises storing a data object therein or retrieving a data object therefrom, the storing of a data object including to download a file from a remote server across a network into the assigned storage space through utilizing download information for the file stored in said cache storage in response to the user from the wireless device performing the operation for downloading the file from the remote server into the assigned storage space.

Ex. 1001, 5:61–6:15, p.11.

#### *D. Instituted Grounds of Unpatentability*

We instituted *inter partes* review based on the following grounds of unpatentability under 35 U.S.C. § 103(a)<sup>4</sup> as follows (Dec. 6, 40):

<b>Claims Challenged</b>	<b>35 U.S.C §</b>	<b>Reference(s)/Basis</b>
1–3, 5–11, 13–20	103(a)	Prust, <sup>5</sup> Major <sup>6</sup>
1–20	103(a)	Chaganti, <sup>7</sup> Major

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<sup>4</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended several provisions of 35 U.S.C., including § 103. Because the ’526 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre-AIA version of 35 U.S.C. § 103.

<sup>5</sup> U.S. Pat. No. 6,735,623 B1, issued May 11, 2004 (Ex. 1006, “Prust”).

<sup>6</sup> WO 02/052785 A2, published July 4, 2002 (Ex. 1007, “Major”).

<sup>7</sup> U.S. Pat. No. 8,117,644 B2, issued Feb. 14, 2012 (Ex. 1008, “Chaganti”). Petitioner asserts that Chaganti is a continuation of App. No. 09/634,725 (“the ’725 application”) (Ex. 1010) and is entitled to the ’725 application’s filing date of August 5, 2000, such that Chaganti qualifies as prior art under pre-AIA 35 U.S.C. § 102(e). Pet. 45–46 (citing Ex. 1008 (Certificate of Correction); Ex. 1011, 2–10, 346–48, 421–59). Patent Owner does not dispute this assertion. *See generally* PO Resp.

## II. DISCUSSION

### A. *Principles of Law*

To prevail in its challenges to Patent Owner's claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2019). A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

### B. *Level of Ordinary Skill*

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). Petitioner relies on the testimony of Dr. Darrell Long, who testifies that a person having ordinary skill in the art would have had “a bachelor's degree in computer science, electrical engineering, or related discipline and two years of experience in the relevant technical field—remote storage solutions for computing devices, with related experience in

web-enabled wireless devices, such as portable digital assistants (PDAs)—or the equivalent.” Pet. 8 (citing Ex. 1004 ¶¶ 43–46). Patent Owner does not propose an alternative assessment. *See generally* PO Resp.; Ex. 2007 ¶ 21.

We accept the assessment offered by Petitioner as it is consistent with the ’526 patent and the asserted prior art. We further note that the prior art of record in the instant proceeding reflects the appropriate level of ordinary skill in the art. *Cf. Okajima v. Bourdeau*, 261 F.3d 1350, 1354–55 (Fed. Cir. 2001) (holding the Board may omit specific findings as to the level of ordinary skill in the art “where the prior art itself reflects an appropriate level and a need for testimony is not shown”).

### *C. Claim Construction*

In an *inter partes* review for a petition filed on or after November 13, 2018, “[claims] of a patent . . . shall be construed using the same claim construction standard that would be used to construe the [claims] in a civil action under 35 U.S.C. § 282(b), including construing the [claims] in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *See* 37 C.F.R. § 42.100(b) (2019); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

*“storing a data object . . . or retrieving a data object”*

Petitioner proposes that the claim term “comprises storing a data object therein or retrieving a data object therefrom” (claims 1, 11) “should be construed to mean the operation includes at least one of (i) storing a data object therein *or* (ii) retrieving a data object therefrom.” Pet. 6. Petitioner explains that “[t]he plain and ordinary meaning of ‘comprising A or B’ is that A and B are alternatives.” *Id.* at 7 (citing Ex. 1004 ¶ 41; *Brown v. 3M*,

265 F.3d 1349, 1352 (Fed. Cir. 2001)). Petitioner contends, nonetheless, that each challenge “satisfies both alternatives [showing A (storing) and B (retrieving)].” *Id.* at 7–8.

Patent Owner disputes Petitioner’s construction and proposes the term means both storing *and* retrieving. PO Resp. 7–9. Patent Owner further argues that “[t]he plain and ordinary meaning of this limitation, therefore, requires either storing a data object or both storing and later retrieving a data object.” Sur-reply 7.

For reasons discussed in more detail below, we determine, based on the record before us, that Petitioner has demonstrated by a preponderance of the evidence that the challenged claims are unpatentable under either construction. As our reviewing court has held, “only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.” *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *see also Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs.* in the context of an *inter partes* review). Accordingly, we need not construe this term.

*“predefined capacity”*

Claim 1 recites “a storage space of a predefined capacity assigned exclusively to a user of the wireless device by a storage server.” Ex. 1001, 5:64–67. Independent claim 11 recites a similar phrase. *Id.* at 6:61–63. Patent Owner argues that “predefined capacity” in the context of the claims means “the server assigns an amount of storage, storage to be assigned exclusively for one user, that amount having been set in advance of any interaction or negotiation between the server and the user.” PO Resp. 11. Patent Owner further argues that “the ’526 patent confirms the plain and

ordinary meaning “that storage **capacity is predefined** (i.e., defined, decided, or set out **in advance**) by the server (**not by the user**) for users **before allocating storage** to users.” Sur-reply 3–4 (citing Ex. 1001, 2:39–44, 4:12–16; Ex. 2007 ¶ 164); Tr. 31:9–10 (Patent Owner’s counsel arguing that “the claims require the server to predefine the capacity and not the user”).

It is necessary for us to resolve this issue because there is a dispute about whether the prior art (Chaganti) describes “a predefined capacity” as claimed. In particular, Patent Owner apparently agrees that Chaganti describes a storage space of a predefined capacity, but argues that the claim requires that “only the user predefines the capacity.” PO Resp. 43. For the following reasons, we determine that “a predefined capacity” does not require the capacity be defined prior to “any interaction or negotiation between the server and the user” or that the capacity must be predefined by the server.

We begin with the claim language. Claim 1 recites “a storage space of a predefined capacity assigned exclusively to a user of the wireless device by a storage server.” Claim 11 recites a similar phrase. Patent Owner focuses on the language of claim 1 as representative, as do we. *See, e.g.*, PO Resp. 9–11. We agree with Petitioner that the plain language of claim 1 requires that the space be assigned by the server, but the claim “do[es] not require that the server be the entity that defines the capacity of the storage space.” Pet. Reply 13. We further agree with Petitioner that there is nothing in claim 1 that requires the capacity to be defined prior to “any interaction or negotiation with the user.” *Id.* at 5. While we agree with Patent Owner that “‘predefined’ means ‘before’” (PO Sur-reply 3), it does not follow that claim 1 requires only the server to perform the predefining or that the

“capacity” be defined prior to “any interaction or negotiation between the server and the user.” PO Resp. 11.

Patent Owner directs attention to the second declaration of Mr. Jawadi in support of its proposed construction. PO Resp. 10 (citing Ex. 2007 ¶¶ 163–164); PO Sur-reply 3–4. Mr. Jawadi testifies that the Specification of the ’526 patent “describes that storage **capacity is predefined** (i.e., defined, decided, or set **in advance**) **by the server (not by the user)** for users **before allocating storage** to users.” Ex. 2007 ¶ 164 (citing Ex. 1001, 2:39–56, 4:2–25). Even Mr. Jawadi, however, does not contend that such descriptions from the ’526 patent require that the storage capacity must be predefined prior to “any interaction or negotiation between the server and the user” as Patent Owner argues. *Id.* ¶¶ 163–164.

As Petitioner points out, the ’526 patent describes that “a user of each of the wireless devices can be assigned with a storage Volume having a desired size.” Pet. Reply 6 (citing Ex. 1001, 3:38–40, 4:3–5 (“suitable size of volumes (11) such as 4GB”)). Moreover, the ’526 patent describes an administrator partitioning volumes of the storage on a server. Ex. 1001, 3:31–41, 4:14–18. Patent Owner fails to direct us to anything in the ’526 patent that would preclude a “user” from partitioning volumes of storage on the server or a user interacting or negotiating with the server (or administrator) prior to partitioning volumes of the storage on the server “having a desired size.” In other words, we agree with Petitioner that Patent Owner “does not point to any restrictive language or rationale that establishes the preferred embodiment precludes a ‘desired’ or ‘suitable’

storage size being defined as part of user interaction prior to assignment or access being granted.” Pet. Reply 6–7.

In any event, even if the embodiment to which Patent Owner directs attention is so restrictive, which we find that it is not, our reviewing court has explained, “each claim does not necessarily cover every feature disclosed in the specification,” and “it is improper to limit the claim to other, unclaimed features.” *Ventana Med. Sys., Inc. v. BioGenex Labs., Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006). Furthermore, our reviewing court “has repeatedly cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346–47 (Fed. Cir. 2015); *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (noting that “it is important not to import into a claim limitations that are not a part of the claim”). “[I]t is the *claims*, not the written description, which define the scope of the patent right.” *Williamson*, 792 F.3d at 1346–47; *see also Phillips*, 415 F.3d at 1312 (noting that “[i]t is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude”). We decline Patent Owner’s invitation to limit the claims to unclaimed features.

For all of the above reasons, we determine that “predefined capacity” as claimed does not require the capacity to be “set in advance of any interaction or negotiation between the server and the user” or that the capacity must be predefined by the server. We need not otherwise construe

this phrase or any other terms in the '526 patent.<sup>8</sup> *See Nidec Motor Corp.*, 868 F.3d at 1017.

*D. Asserted Obviousness of Claims 1–20 over Chaganti and Major*

*1. Chaganti (Ex. 1008)*

Chaganti describes a method and system that allows a user computer (e.g., a wireless device) to communicate over a network with a server to create and access an online personal library storing digital information. *See, e.g., Ex. 1008*, 2:20–27, 3:9–11, 7:60–8:12, 17:19–24, 18:13–21, Fig. 1. In a disclosed embodiment, a user may store a webpage in a user’s library on the server for future access using methods such as drag and drop, cut-and-paste, copy-and-paste, or email. *Id.* at 3:65–4:3, 18:46–51, 20:11–20.

Figure 6 of Chaganti is illustrative and reproduced below.

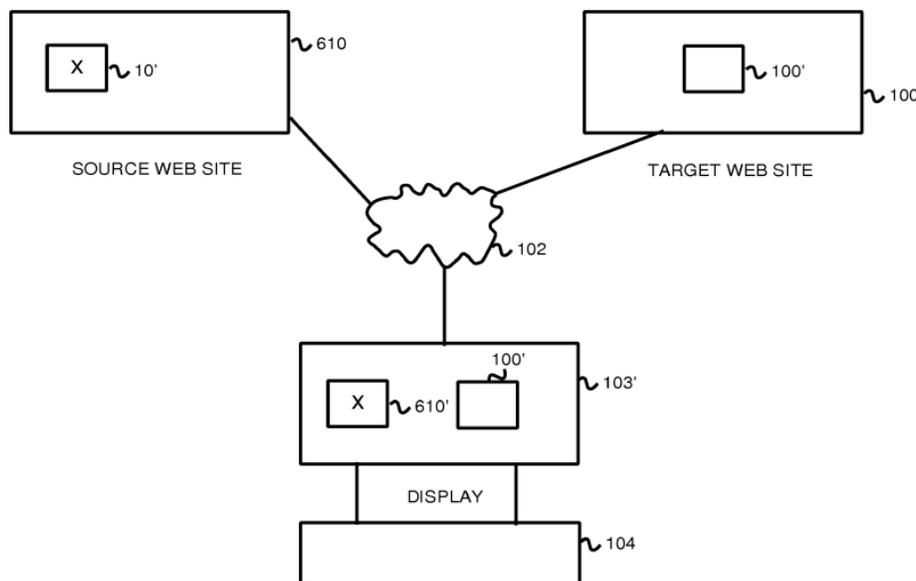


Fig. 6

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<sup>8</sup> Patent Owner proposes a construction for “coupling.” PO Resp. 11–12. It is not necessary to construe the term for purposes of this Decision, which focuses on “Ground 2.” Pet. 1; Tr. 8:20–22, 33:7–13.

Figure 6 shows an architecture for dragging and dropping a digital item from a source computer 610 to a target server 100 over a network 102. *Id.* at 19:12–20:49. More specifically, user 103 browsing web page X 10' (of source computer 610) on user computer 104 may wish to copy the web page and store it in library 100 of the target server for future access. *Id.* at 19:27–31. With web page X 10' (or a link thereto) being displayed on browser window 610' of user computer 104 (and stored in its cache), the user may open another window 100' and identify an area in library 100 to store a copy of web page X. *Id.* at 20:3–10. The user may then execute an appropriate sequence of selections to drag and drop, cut-and-paste, or copy-and-paste web page X 10' from window 610' to window 100'. *Id.* at 20:11–17. Accordingly, web page X 10' may be copied from the cache of user computer 104 to target server 100. *Id.* at 20:38–40. Alternatively, the user may specify the address of the target server 100 and transmit a copy of web page X 10' via email. *Id.* at 20:17–20.

## 2. *Major (Ex. 1007)*

Major describes a system and method for browsing content on the World Wide Web (WWW) using a wireless device. Ex. 1007, 1:6–7, 15:16–22, 34:5–7.<sup>9</sup> In a disclosed embodiment, the memory of the wireless device includes a page cache for storing rendered page objects. *Id.* at 6:1–4, 16:1–5, 24:9–11, Fig. 5. If a page object corresponding to a requested URL is in the page cache, it can be loaded from the page cache and displayed by the browser very quickly (e.g., upon start-up or following a subsequent user request). *Id.* at 10:7–10, 11:12–14, 18:8–15.

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<sup>9</sup> Citations are to original page numbers.

### 3. Discussion

Petitioner contends claims 1–20 are unpatentable under 35 U.S.C. § 103(a) as obvious over Chaganti and Major. Pet. 44–70. In support of its showing, Petitioner relies upon the declaration of Dr. Darrell Long. *Id.* (citing Ex. 1004). Patent Owner relies upon the Second Declaration of Mr. Zaydoon Jawadi (Ex. 2007). PO Resp.<sup>10</sup> Patent Owner argues that several limitations are not taught by the prior art and that it would not have been obvious to combine Chaganti and Major. Patent Owner also presents evidence of nonobviousness.

We arrange our analysis the same as the parties. First, we focus on the terms of each of the claims. Then, we evaluate Petitioner’s reasons to combine Chaganti and Major, and Patent Owner’s arguments to that end, along with Patent Owner’s nonobviousness contentions. For the reasons that follow, weighing the totality of the evidence of record and the strength of the parties’ showings on the inquiries underlying the question of obviousness, we conclude that Petitioner has met its burden of proving by a preponderance of the evidence that each of the challenged claims would have been obvious in view of the asserted prior art.

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<sup>10</sup> Patent Owner argues “PO’s Preliminary Response relied on Exhibits 2001–2006. PO renews its reliance thereon and further relies on” Exhibits 2007–2012. PO Resp. 6. Any arguments for patentability not raised in the Patent Owner Response are deemed waived. *See* Paper 14, 7. Thus, we only consider those specific exhibit citations referenced in Patent Owner’s Response and Sur-reply in support of the arguments made. *See also* Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019), <https://www.uspto.gov/TrialPracticeGuideConsolidated>, 66 (“[T]he response should include any affidavits or additional factual evidence sought to be relied upon and explain the relevance of such evidence.”).

*a. Claim 1: “a wireless device” (preamble)<sup>11</sup>*

Petitioner contends, and we agree, that Chaganti teaches “[a] wireless device,” as recited in claim 1, because Chaganti discloses that a “Palm Pilot<sup>TM</sup>” or other “wireless handset devices” may function in place of a user computer 104 for accessing remote storage. Pet. 51 (citing Ex. 1008, 6:61–7:4, 7:60–8:12, 8:13–36, Fig. 1; Ex. 1004 ¶¶ 165–166). We give substantial weight to Dr. Long’s testimony that although Chaganti occasionally refers to details more common to a desktop computer, “a POSA [person of ordinary skill in the art] understood how to adapt such details when following Chaganti’s express teaching to use a wireless device such as a PDA.” Ex. 1004 ¶ 166. Patent Owner does not dispute Petitioner’s showing with respect to the preamble. *See generally* PO Resp.

*b. Claim 1: “at least one cache storage, one wireless interface, and program code configured to cause the wireless device to”*

Petitioner contends Chaganti’s description that “the digital item may be downloaded to a *cache area* on the user computer 104” taught the wireless device had at least one cache storage. Pet. 52 (citing Ex. 1008, 20:36–37). As explained above, Chaganti describes that computer 104 may be a wireless device, and therefore, we agree with Petitioner that Chaganti’s description that the computer 104 with a cache area also applies when the computer is a wireless device and meets the “at least one cache storage” limitation. Ex. 1008, 20:36–37 (“with respect to the HTTP protocol, the digital item may be downloaded to a cache area on the user computer 104”).

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<sup>11</sup> We need not resolve the issue of whether the preamble is limiting because, regardless of whether the preamble is limiting, Petitioner shows that Chaganti meets the preamble.

Patent Owner does not dispute that Chaganti alone teaches “at least one cache storage.” *See generally* PO Resp.

Petitioner further contends that to the extent Chaganti does not explicitly teach a *wireless device* comprising “at least one cache storage,” as recited in claim 1, it would have been obvious to implement the PDA taught by Chaganti with Major’s web-cache functionality for wireless devices. Pet. 52 (citing Ex. 1007, 10:6–10, 11:12–16, Fig. 5). Petitioner asserts, and we agree, that Major teaches a wireless device 300 that uses “page cache 114” (cache storage) in memory 308. *Id.* We determine that Chaganti in view of Major teaches “at least one cache storage” for a wireless device. Although Patent Owner argues that a person having ordinary skill in the art would not have combined Chaganti and Major, which we address below, Patent Owner does not dispute that Chaganti in view of Major teaches “at least one cache storage” as claimed. *See generally* PO Resp.

Petitioner further contends, and we agree, that Chaganti teaches “one wireless interface,” as recited in claim 1, because Chaganti’s user computer, which may be a wireless device, was “equipped with suitable devices and programs to connect to the network 102,” and a person having ordinary skill in the art would have known that Chaganti’s wireless device would have had a wireless interface. Pet. 53 (citing Ex. 1007, 7:60–8:12; Ex. 1008, 7:66–8:4; Ex. 1004 ¶ 169). Petitioner contends, and we agree, that Chaganti’s user computer has “program code configured to cause” the claimed operations. *Id.* (citing Ex. 1004 ¶¶ 170–71; Ex. 1008, 7:42–61, 8:13–36, 8:66, 8:37–48). Patent Owner does not dispute Petitioner’s showing that Chaganti teaches the “one wireless interface” and the “program code configured to cause” limitations. *See generally* PO Resp.

*c. Claim 1: “establish a wireless link for the wireless device access to a storage space of a predefined capacity assigned exclusively to a user of the wireless device by a storage server”*

Petitioner contends Chaganti teaches the above term. Pet. 54–55 (citing Ex. 1004 ¶¶ 172–77). First, Petitioner asserts, and we agree, that Chaganti teaches “establishing a wireless link” because Chaganti discloses (1) a user accessing a remote online personal library on a server connected to a data communications network such as the Internet, and (2) establishing a communication link to support multiple access operations between the user computer and the online personal library. *Id.* (citing Ex. 1008, 3:9–11, 17:21–24, 21:64–65; Ex. 1004 ¶ 173). Second, Petitioner asserts, and we agree, that Chaganti teaches “storage space . . . assigned exclusively to a user” because Chaganti discloses an “online *personal* library,” on or coupled to a storage “server,” that was “owned” and “controlled” by the user, who paid for the storage space and controlled access by any other “requestors.” *Id.* at 55 (citing Ex. 1008, 3:9–11, 3:18–19, 17:4, 17:60–64, Figs. 1, 6).

Third, Petitioner asserts that Chaganti’s online personal library is a predefined capacity assigned by a storage server because Chaganti discloses that “the user *allocates a pre-determined amount of storage space on a storage device such as a hard disk,*” and “[t]he server is preprogrammed to automatically increase the *allocated space* as the need arises, or after the *user pays a subscription fee or a one-time fee for the space.*” *Id.* (citing Ex. 1008, 3:9–19, 17:45–48; Ex. 1004 ¶ 175); *see also id.* at 55–56 (citing Ex. 1008, 17:8–11, 20:66–21:7, 21:11–13; Ex. 1004 ¶ 176). Petitioner contends that a person having ordinary skill in the art would have understood that the server ultimately controls assignment of space for the user. *Id.* at 55 (citing Ex. 1008, 17:8–11, 20:66–21:7, 21:11–13; Ex. 1004 ¶ 176).

Patent Owner argues that Petitioner has failed to show that Chaganti, as modified by Major, teaches “a storage space of a predefined capacity assigned exclusively to a user.” PO Resp. 42–43. Patent Owner argues that Chaganti describes that the user “defines or predefines capacity” and that the user may *use the server* to create, maintain, or operate their personal library. *Id.* at 42 (citing Ex. 2007 ¶¶ 338–351). Patent Owner argues, however, that “none of these equates with predefining the amount of storage space an individual user has exclusive control over” because it is the user, not the server, that predefines the capacity. *Id.* at 43 (citing Ex. 2007 ¶¶ 349–352).<sup>12</sup>

Chaganti describes a service provider that establishes a server computer and *allows users to use the server* to create, maintain, and operate the personal library. Ex. 1008, 17:8–11. In doing so, a user can create or allocate a *pre-determined amount of storage space* on database 108 or a storage device coupled to server 100. *Id.* at 17:45–48; *see id.* at 3:9–19. Moreover, Chaganti describes that “the server is preprogrammed to automatically increase the allocated space as the need arises, *or after the user pays a subscription fee or a one-time fee for the space.*” *Id.* at 3:16–19 (emphasis added). We agree with Petitioner that together, these passages describe that the “pre-determined amount of storage” is a “predefined capacity” as claimed. Pet. 55; Pet. Reply 20. Moreover, while Chaganti describes that the user can create or allocate a pre-determined amount of storage space on the server, we give substantial weight to Dr. Long’s

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<sup>12</sup> Patent Owner also references its arguments with respect to the Prust and Major challenge. PO Resp. 42. Mr. Jawadi does the same. *See, e.g.*, Ex. 2007 ¶ 380. We have considered Patent Owner’s arguments and Mr. Jawadi’s testimony to the extent relevant to the Chaganti and Major challenge.

testimony that a person having ordinary skill in the art would have understood that even though the user uses the server, the server ultimately controls assignment of space for the user. Ex. 1004 ¶ 176 (citing Ex. 1008, 17:8–11, 20:66–21:7, 21:11–13); *see also* Ex. 1008, 7:5–41.

Patent Owner’s arguments are based on a proposed construction that we do not adopt. PO Resp. 9–11, 42–43. As explained above, we determine that “predefined capacity” as claimed does not require the capacity to be “set in advance of any interaction or negotiation between the server and the user,” or that the capacity must be predefined by the server. We have considered Mr. Jawadi’s testimony in support of Patent Owner’s arguments but do not find his testimony to be particularly helpful. Mr. Jawadi testifies that in Chaganti there is no indication that the server predefines the capacity, but that “a POSITA may surmise that, in *using the server* to create the personal library, the user may predefine the capacity.” Ex. 2007 ¶ 342 (citing Ex. 1008, 17:8–11) (emphasis added); *see also id.* ¶ 350 (testifying the same). In other words, Mr. Jawadi argues that in Chaganti, it is the user, in using the server, who predefines the capacity. As explained above, there is nothing in the claim language that requires the server alone to predefine the capacity.<sup>13</sup> Stated another way, there is nothing in the claim language that precludes a user from using a server to predefine the capacity. Mr. Jawadi’s testimony is based on an improper construction of the disputed phrase.

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<sup>13</sup> Both Patent Owner and Mr. Jawadi often refer to the disputed claim language as “predefining a capacity,” but the claim requires a “predefined capacity.” PO Resp. 42–43; Ex. 2007 ¶¶ 160–162, 344–347. The former is a verb, while the latter is an adjective, resulting in potentially two different meanings.

In any event, even if the claims required the server to predefine the capacity, which we determine they do not, Chaganti describes an embodiment in which “the server is preprogrammed to automatically increase the allocated space as the need arises, *or after the user pays a subscription fee or a one-time fee for the space.*” Ex. 1008, 3:16–19 (emphasis added). Thus, after a user pays a subscription fee or a one-time fee for the space, the *server* may predefine the capacity, after which the user can create or allocate a *pre-determined amount of storage space* (predefined by the server) on database 108 or a storage device coupled to server 100. *Id.* at 17:45–50; *see id.* at 3:9–19. Mr. Jawadi focuses only on the portion of Chaganti that describes “the server is preprogrammed to automatically increase the allocated space as the need arises” while ignoring the rest to arrive at his conclusion that that description “does not disclose that the server predefines the capacity.” Ex. 2007 ¶ 342. As such, we do not give substantial weight to Mr. Jawadi’s conclusion in that regard because he fails to consider the entire Chaganti description relied on by Petitioner.

In its Sur-reply, Patent Owner argues that Chaganti describes “allocating storage by the user (not the server as required by the claims) and allocating additional storage as the need arises (not a predefined capacity as required by the claims).” Sur-reply 17. The thrust of Patent Owner’s arguments made in connection with the Patent Owner Response focuses on the term “predefined capacity.” PO Resp. at 43. In connection with the Patent Owner Response, neither Patent Owner nor Mr. Jawadi sets forth that the “assigned” portion of claim 1 is not met, only that the “predefined capacity” portion of claim 1 is not met. *Id.*; Ex. 2007 ¶¶ 338–351. Thus, Patent Owner’s new argument regarding the “assigned” portion of claim 1, made in the Sur-reply is improper. In any event, even Patent Owner’s expert

appears to agree with Dr. Long that despite human interaction (user interaction) with Chaganti's sever, a person having ordinary skill in the art would have understood that *the server* ultimately controls *assignment* of space for the user. Compare Ex. 2007 ¶ 347, with Ex. 1004 ¶ 176; see also Pet. Reply 14 (explaining that, despite human interaction, it is the server that necessarily operates on the storage devices). For all of the above reasons, we determine Chaganti in view of Major teaches "establish a wireless link for the wireless device access to a storage space of a predefined capacity assigned exclusively to a user of the wireless device by a storage server."

*d. Claim 1: "couple with the storage server across the wireless link to carry out a requested operation for remote access to the assigned storage space in response to the user from the wireless device performing the operation"*

Petitioner contends, and we agree, that Chaganti discloses "to carry out a requested operation for remote access to the assigned storage space" because, in Chaganti, the user may access the online personal library over the network and store data items in the library or retrieve data items therefrom. Pet. 56 (citing Ex. 1008, 2:29–31, 2:40–41, 15:4–6, 18:13–21, 18:39–51, 19:1–10, 19:12–20:49, 21:53–22:18, Figs. 5, 6; Ex. 1004 ¶¶ 179–180). Second, Petitioner asserts, and we agree, that Chaganti teaches "couple with the storage server across the wireless link" because Chaganti teaches establishing a wireless link between the user's device and the storage server to allow access to the online library for storing or retrieving data items. *Id.* at 57 (citing Ex. 1004 ¶ 181). We also agree with Petitioner's assertion that the coupling and carrying-out of access operations in Chaganti are performed "in response to the user from the wireless device perform[ing] the operation." *Id.* at 57–58 (citing Ex. 1004 ¶¶ 182–83). Petitioner explains that, in Chaganti, coupling to and accessing the online personal

library occurs in response to a user action such as sending an email, executing an input method (e.g., drag-and-drop), submitting a request for a digital item, or searching the library. *Id.* (citing Ex. 1008, 18:46–51, 20:11–16, 21:63–22:9). Patent Owner does not dispute Petitioner’s showing with respect to the above limitation. *See generally* PO Resp.

*e. Claim 1: the wherein phrase*

Claim 1 further recites

wherein the operation for the remote access to the assigned storage space comprises storing a data object therein or retrieving a data object therefrom, the storing of a data object including to download a file from a remote server across a network into the assigned storage space through utilizing download information for the file stored in said cache storage in response to the user from the wireless device performing the operation for downloading the file from the remote server into the assigned storage space.

Ex. 1001, 6:5–14, p.11. Petitioner contends, and we agree, that Chaganti teaches that the user may retrieve items from the user’s online personal library. Pet. 58–59 (citing Ex. 1008, 2:40–41, 15:4–6, 18:17–19, 19:29–32, 21:63–22:9; Ex. 1004 ¶¶ 185–89).

Petitioner also contends, and we agree, that Chaganti teaches storing a data object as claimed. *Id.* at 59–65 (citing Ex. 1004 ¶¶ 190–200). First, Petitioner asserts that Chaganti teaches “storing a data object therein” because “*Chaganti* taught a user initiating an out-of-band download (*storing*) of ‘digital item X’ (*a data object*) from ‘source computer 610’ (*a remote server*) across ‘network 102’ e.g. ‘the Internet’ (*across a network*) into a specific area of the online library of ‘target computer 100,’ ‘the server computer that has the library’ (*i.e. into the assigned storage space*).” *Id.* at

59–60 (citing Ex. 1008, 19:23–36, 19:64–20:49); *see also id.* at 60–61 (citing Ex. 1008, 19:34–36, 20:2–10, Fig. 6; Ex. 1004 ¶ 191).

Second, Petitioner asserts, and we agree, that Chaganti teaches storing the data object “in response to the user from the wireless device perform[ing] the operation for downloading the file from the remote server into the assigned storage space.” *Id.* at 61–62 (citing Ex. 1004 ¶¶ 191–93). Petitioner explains that in Chaganti, “digital item X was downloaded from the remote server (server 610 of ISP) into the assigned storage space (area of library 100) in response to a drag-and-drop, copy-and-paste or similar operation” made by the user. *Id.* (citing Ex. 1004 ¶ 192; Ex. 1008, 20:5–10, 20:44–49).

Third, Petitioner asserts that Chaganti alone or in view of Major satisfies storing the data object “through utilizing download information for the file stored in said cache storage.” *Id.* at 62–65. Petitioner cites Chaganti’s disclosure that “in some cases, . . . the digital item may be downloaded to a *cache area* on the user computer 104,” and “the act of dragging and dropping may advantageously copy the item from the user computer’s 104 cache to the target 100.” *Id.* at 62 (citing Ex. 1008, 20:35–40; Ex. 1004 ¶ 194). Petitioner explains that, “[w]hile in these ‘cases’ the digital item X was downloaded to web-cache, *in other cases* where window 610’ only showed a *link* to digital item X, only the link information—not the item itself—would be stored in cache.” *Id.* at 62–63 (citing Ex. 1004 ¶ 194). According to Petitioner, “the link would include download information for item X in the form of a URL, all of which was stored in cache.” *Id.* at 63. Petitioner further explains that

[w]hen *Chaganti* taught triggering the out-of-band download using a specially-designated user selection . . . or a “drag-and-drop” or “copy-and-paste” . . . , user computer 104 copied . . . download information (pointing to digital item X) from the “link” that was resident in web-cache into a buffer on the user computer and transmitted that to the storage server of the user’s online library.

*Id.* at 63–64 (citing Ex. 1004 ¶ 196; Ex. 1008, 19:60–62, 19:66–20:2, 20:11–16, 20:21–30). Alternatively, Petitioner asserts that Chaganti in view of Major taught the term, reasoning that “it would have been obvious to use Major’s web-cache teachings in the wireless versions of *Chaganti*’s user computer to speed the user experience and avoid unnecessary network traffic.” *Id.* at 64–65 (citing Ex. 1007, 22:4–6, 11:15; Ex. 1008, 18:59–62, 20:21–30; Ex. 1004 ¶ 198).

Patent Owner argues that “utilizing download information for the file stored in said cache storage in response to the user from the wireless device performing the operation for downloading the file from the remote server into the assigned storage space” requires a “URL, a very specific hypertext link that points to a file or data object of interest, be sent from the user to the server.” PO Resp. 37 (citing Ex. 2007 ¶ 256). Patent Owner further argues that while Chaganti does identify “a link referring to a URL pointing to a digital item,” the “URL itself is never sent to the server – instead, the digital item pointed to by the URL is sent.” *Id.* at 38 (citing Ex. 1008, 19:65–20:10; Ex. 2007 ¶¶ 261–262); *see also id.* at 39–42. Patent Owner contends that “[a]lthough Chaganti refers to ‘information’ at 19:58–63, it is not referring to a URL or out-of-band downloads.” *Id.* at 39.

We disagree with Patent Owner. The parties’ arguments focus on the following Chaganti passage:

When the user 103 accesses the source, the user computer 104 may display a web page 610' or a link to the web page 610' on the user computer 104. The user 103 may make a selection—such as clicking a designated mouse button—to indicate that he wishes to transmit the information pointed by the browser to the library created on server 100.

Ex. 1008, 19:64–20:2. As pointed out by Petitioner, Chaganti describes that the user computer 104 may display web page 610' *or a link* to the web page 610' on the user computer, and then the user can make a selection to indicate that the user wishes to transmit the information pointed by the browser to the library created on server 100. Pet. 62–64. As further demonstrated in the Petition, Chaganti describes that the event handler 104 residing on the user computer copies information into a buffer, allowing the information to be pasted or transmitted to a destination such as the server 100. *Id.* (citing Ex. 1008 19:58–63, 20:21–40). Thus, Chaganti describes utilizing download information (the described link) when storing a download file from a remote server 610.

Patent Owner appears to concede that Chaganti's link is “download information.” PO Resp. 38 (“a link referring to a URL pointing to a digital item appears in Chaganti at 19:65–20:10”); Sur-reply 16–17. Patent Owner argues, however, that Chaganti “describes sending ‘digital item X’” and not the link. PO Resp. 38 (citing Ex. 2007 ¶¶ 263–268). Patent Owner further argues that Chaganti's reference to “information” is not referring to the link. *Id.* at 39. These arguments are unavailing. We find that the most reasonable reading from the above passage is that “the information” is a reference to either the web page or the link to the web page. In the case of the link to the web page, the user clicks on that “information,” (the link) to indicate that that is the information that “he wishes to transmit . . . to the library on the

server.” We give substantial weight to Dr. Long’s testimony that “[w]hen *Chaganti* taught triggering the out-of-band download using a specially-designated user selection . . . , user computer 104 copied . . . download information (pointing to digital item X) from the ‘link’ that was resident in web-cache into a buffer on the user computer and transmitted that to the storage server of the user’s online library.” Ex. 1004 ¶ 196 (citing Ex. 1008, 19:60–62, 19:66–20:2, 20:11–16, 20:21–30).

We have considered Mr. Jawadi’s testimony that lines 3–10 of column 20 of *Chaganti* makes “[i]t clear that the user is copying a digital item X (not a hyperlink or URL) from the web page, because 610’ is defined in *Chaganti* as a web page, not a hyperlink.” Ex. 2005 ¶ 266. That passage in *Chaganti*, however, is with respect to “one embodiment” that is subsequently described after the more general description reproduced above. In other words, the subsequent discussion of the “one embodiment” is not restrictive of the more general description where “the user computer 104 may display a web page 610’ or a link to the web page 610’ on the user computer” and where the user “transmit[s] the information [(the link)] pointed by the browser to the library created on the server.” Ex. 1008, 19:64–20:2.

Mr. Jawadi further testifies that *Chaganti* teaches “clicking a designated mouse button,” which can mean clicking on the hyperlink and opening the webpage such that “the user transmits the webpage pointed to by the hyperlink to the server, but not the hyperlink itself.” Ex. 2007 ¶ 269; *see also id.* ¶ 270. Again, Mr. Jawadi erroneously focuses on the “one embodiment” beyond the more general description to support the assertion. *Id.* We agree with Petitioner that the passage reproduced above “expressly states that the designated mouse button ‘indicates that [the user] wishes to transmit the *information pointed by the browser* [the link] to the library.”

Pet. Reply 18 (citing Ex. 1008, 19:65–20:2). As a result, the information (the link) is transmitted to the library. Ex. 1004 ¶ 196. Moreover, we agree with Petitioner (Pet. Reply 18–19) that this understanding is in accord with the following Chaganti description:

[T]he request to add includes identification and classification information for the digital item. Further, if the item is *not included* as an attachment to the request to add message, *a source from where the item is to be copied is also specified, along with any required . . . information that is required to retrieve the digital item from the source and securely transmit and store it in the library.*

Ex. 1008, 19:3–10; *see also* Pet. 56 (“Chaganti taught initiating out-of-band storage of data items into the personal library over network 102”); Ex. 1004 ¶ 179. We agree with Petitioner that from the above description “the ‘source from where the item is to be copied’ and ‘the information required to retrieve it’ is ‘download information’ just like the ’526 Patent.” Pet. Reply 19. We further agree with Petitioner that a person having ordinary skill in the art would have understood “that to perform the out-of-band download of a digital item taught by Chaganti, one sends the information necessary for the library to retrieve that information.” *Id.* (citing Pet. 62–64; Ex. 1004 ¶¶ 179, 191–196).

In response, Patent Owner argues “[t]he mere mention of a link containing a URL is not nearly sufficient to show that the URL is retrieved from a cache and utilized to download a file from a remote server to an assigned storage space.” Sur-reply 16–17 (citing Ex. 2007 ¶¶ 310–333). This conclusory response is insufficient to rebut Petitioner’s showing. For example, Patent Owner does not address the entirety of the Chaganti passage reproduced directly above or Petitioner’s arguments and evidence with

respect to that passage. For all of the above reasons, we determine Chaganti alone or in combination with Major teaches the wherein phrase.

*f. Independent Claim 11 and  
Dependent Claims 2–10 and 12–20*

Independent claim 11 is similar to claim 1. Petitioner’s showing for claim 11 is nearly the same as that for claim 1, while sufficiently accounting for the differences between claim 11 and claim 1. Pet. 65–66. Patent Owner’s arguments for claim 11 are the same as its arguments for claim 1, which we have addressed. *See, e.g.*, PO Resp. 36.

Claim 3 depends directly from claim 1 and recites “[t]he wireless device as recited in claim 1, wherein the storage server controls a plurality of storage devices, one of the storage devices being configured with the storage space assigned exclusively to the user.” Ex. 1001, 6:20–23. Claim 20 depends directly from independent claim 11 and is similar to claim 3. Petitioner contends that server 100 couples to and controls the storage space allocated to a user and that the storage space may be contiguous space in one physical device, or it could be distributed over a large number of physically separate disks. Pet. 67 (citing Ex. 1008, 3:14–15, 17:46–48, 20:51–21:7, 21:14–16). Petitioner concludes that server 100, therefore, controls the storage devices, one or more of which may be configured with the storage area assigned exclusively to the user. *Id.* (citing Ex. 1004 ¶ 204).

Patent Owner argues that although Chaganti “suggests the possibility of a server controlling multiple storage devices,” there is no description “that the storage server assigns the storage space in one storage device exclusively to a user.” PO Resp. 44–45 (citing Ex. 2007 ¶¶ 353–357). Petitioner responds, and we agree, that “[n]othing in the claims prohibits, for example, exclusive storage space of multiple users on the same storage device. The

‘space’ is exclusive, not the ‘device.’” Pet. Reply 20. In response, Patent Owner argues that “no other user may be assigned the same storage space.” Sur-reply 17–18. As the Petition points out, and we agree, Chaganti teaches “storage space . . . assigned exclusively to a user” because Chaganti discloses an “online *personal* library,” on or coupled to a storage “server,” that was “owned” and “controlled” by the user, who paid for the storage space and controlled access by any other “requestors.” Pet. 55 (citing Ex. 1008, 3:9–11, 3:18–19, 17:4, 17:60–64, Figs. 1, 6). Accordingly, we disagree with Patent Owner’s arguments.

Claim 4 depends directly from claim 1 and recites:

The wireless device as recited in claim 1, wherein said downloading a file from a remote server further comprises:

obtaining downloading information for the file;

transmitting the downloading information cached in the wireless device to the storage server; and

causing the storage server in accordance with the downloading information to download the file into the assigned storage space.

Ex. 1001, 6:24–31. Claim 12 depends directly from claim 11 and is similar to claim 4. Petitioner contends, referencing back to the showing for elements of claim 1, that Chaganti teaches copying or dragging the address (link/URL) for a file linked/pointed to on a page in browser window 610' (“obtaining downloading information for the file”) from cache as exemplified by Major. Pet. 67–68. Petitioner further contends that the link/URL is sent to server 100' having the online personal library (transmitting the downloading information cached in the wireless device to the storage server). *Id.* Petitioner further contends that the target server fetches the file and stores it into the location in the library designated by the

user (causing the storage server in accordance with the downloading information to download the file into the assigned storage space). *Id.*

Patent Owner argues that Chaganti “nowhere suggests where one of skill in the art might obtain the URL for a digital object of interest, or how the user would employ that information to obtain the URL.” PO Resp. 45. This argument is related to the arguments made with respect to claim 1 regarding the link described in Chaganti. As explained above, we find these arguments unavailing.

Dependent claims 6, 7, and 10 are similar in scope to claims 13, 14, and 15 respectively and recite “from the wireless device” performing certain tasks. For example, claim 6 recites “from the wireless device creating a folder structure in the assigned storage space.” Ex. 1001, 6:38–39. Claim 7 recites “from the wireless device deleting or moving or copying or renaming a folder in the assigned storage space.” *Id.* at 6:43–44. Claim 10 recites “from the wireless device creating a folder in the assigned storage space.” *Id.* at 6:56–57. For claims 6, 10, 14, and 15, Petitioner contends, and we agree, that in Chaganti the user, from the wireless device, creates folders and folder structures in the assigned storage space. Pet. 68–69 (citing Ex. 1008, 3:49–50, 17:21–24, 17:51–53; Ex. 1004 ¶¶ 207–208). We give substantial weight to Dr. Long’s testimony that Chaganti taught partitioning the library into “directories” and “sub-directories” and that a person having ordinary skill in the art would have understood the term “directory” to be interchangeable with “folder.” Ex. 1004 ¶ 208 (citing Ex. 1008, 3:49–50, 17:21–24, 17:51–53); *see also id.* ¶ 130.

For claims 7 and 13, Petitioner contends, and we agree, that in Chaganti the user, from the wireless device, creates, maintains and operates an online personal library. Pet. 69 (citing Ex. 1008, 2:29–31, 2:34–38,

17:21–24). Petitioner further contends, and we agree, that “[t]he right to create, maintain and operate the personal library organized in a ‘hierarchical file system’ or with ‘directories/sub-directories’ would include the ability to keep the library organized by at least one of deleting, moving, copying, and/or renaming” files and folders. *Id.* at 69–70 (citing Ex. 1008, 3:49–50, 17:51–53; Ex. 1004 ¶¶ 209–210). Petitioner argues, and we agree, that “[a]ny one of these operations would have been obvious to a POSA for the predictable benefit of allowing the user to maintain organization of the files and folders in their personal library.” *Id.*

Patent Owner argues that dependent claims 6, 7, 10, 13, 14, and 15 require that the “actor is the wireless device,” not the user, and that nowhere does Chaganti teach “that the wireless device create, delete, move, copy, etc.” PO Resp. 45–46 (citing Ex. 2007 ¶¶ 358–367). We disagree with Patent Owner’s implicit argument that the claims preclude a user from using the wireless device to perform the claimed functions. Chaganti describes that the user “is a person or a computer program that creates or effectively ‘owns’ the online personal library.” Ex. 1008, 2:28–31. The user utilizes computer 104 to initiate performing certain functions, like creating “an online personal library by utilizing a multi-level secure data storage and retrieval system.” *Id.* at 17:21–24. Chaganti describes that the library may be organized as a “hierarchically organized file system” (*id.* at 17:49–50) and that the library can be partitioned into directories and subdirectories (*id.* at 17:51–53). We agree with Petitioner that it is clear in Chaganti “that the user operates on the user’s library using their wireless device, user computer 104” and that “[t]he involvement of human activity does not negate activity by the user computer.” Pet. Reply 21 (citing Pet. 68–70).

Dependent claim 2 is similar in scope to claim 16 and recites “wherein the data object, being stored into or retrieved from the assigned storage space, comprises a message or multimedia data of video, digital music, or digital picture.” Ex. 1001, 6:16–19. Petitioner contends, and we agree, that Chaganti describes an online personal library for storage of digital items where such items may include a web page, a document, music, video, movie, or photograph. Pet. 66 (citing Ex. 1008, 2:20–27; Ex. 1004 ¶ 203). Patent Owner does not make separate arguments with respect to claims 2 and 16. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Dependent claim 5 is similar in scope to claim 19 and recites “wherein the wireless device further is one of a cell phone or a personal data assistant and management device (“PDA”).” Ex. 1001, 6:32–34. Petitioner contends, and we agree, that Chaganti describes a PDA as claimed. Pet. 68 (citing Pet. 51–52; Ex. 1004 ¶ 206). Patent Owner does not make separate arguments with respect to claims 5 and 19. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Dependent claim 8 depends from claim 6, is similar in scope with claim 17, and recites “from the wireless device deleting or moving or copying or renaming a file in the assigned storage space.” Ex. 1001, 6:45–47. Petitioner’s showing for claims 8 and 17 is similar to the showing for claims 7 and 13 discussed above. Pet. 69–70. Patent Owner does not make separate arguments with respect to claims 8 and 17. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Dependent claim 9 is similar in scope with claim 18 and recites “wherein wireless device further executes a web browser for the user access to the assigned storage space, access to the internet.” Ex. 1001, 6:50–52,

p.11. Petitioner contends, and we agree, that Chaganti's out-of-band download description is in the context of a user using a browser program running on user computer 104 to browse the Internet. Pet. 70 (citing Ex. 1008, 19:18–22, 20:2–10, Fig. 6; Ex. 1004 ¶ 211). Patent Owner does not make separate arguments with respect to claims 9 and 18. *See generally* PO Resp. We are persuaded by Petitioner's showing, which we adopt.

*g. Motivation and Rationale to Combine*

As explained above, Petitioner contends that to the extent Chaganti does not explicitly teach “cache storage” for a wireless device (as opposed to a “computer”) as recited in the claims, it would have been obvious to implement the PDA taught by Chaganti with Major's web-cache functionality for wireless devices. Pet. 52 (citing Ex. 1007, 10:6–10, 11:12–16, Fig. 5); *see also id.* at 48, 65–66. For example, Petitioner explains that “a POSA would recognize that *Major's* teachings would beneficially and predictably achieve the web-browsing and caching functionality described by *Chaganti* for its wireless implementations of user computer 104.” *Id.* at 49 (citing Ex. 1007, 4:9–11, 4:17–21, Figs. 2, 6, 8; Ex. 1008, 7:60–8:12; Ex. 1004 ¶ 162). Petitioner further explains that “a POSA would have been motivated to follow *Major's* express teaching that using web-cache allows the browser to display a previously downloaded page ‘very quickly’ and that ‘local operations . . . from the page cache . . . tend to take substantially less time than network information requests.’” *Id.* at 50. We agree with Petitioner.

Patent Owner argues that a person having ordinary skill in the art would not have combined Chaganti and Major. PO Resp. 46–48. Importantly, however, Patent Owner does not dispute Petitioner's showing that Chaganti's description that “the digital item may be downloaded to a

*cache area* on the user computer 104” taught the wireless device had at least one cache storage. Pet. 52 (citing Ex. 1008, 20:36–37). And while Patent Owner does dispute that Chaganti’s link to digital item X is utilized as discussed above, Patent Owner does not dispute Petitioner’s showing that a person having ordinary skill in the art would have understood Chaganti’s cache area (cache storage) to store a link to digital item X. *Id.* at 62–63 (citing Ex. 1008, 20:35–40; Ex. 1004 ¶ 194). In particular, Patent Owner does not dispute Petitioner’s assertion that “in other cases where window 610’ only showed a link to digital item X, only the link information—not the item itself—would be stored in cache.” *Id.* (citing Ex. 1004 ¶ 194). Patent Owner’s arguments concerning a lack of motivation to combine are with respect to Petitioner’s alternate showing that to the extent Chaganti does not explicitly teach “cache storage” for a wireless device (as opposed to a “computer”), it would have been obvious to implement the PDA taught by Chaganti with Major’s web-cache functionality for wireless devices. *Id.* at 52 (citing Ex. 1007, 10:6–10, 11:12–16, Fig. 5); *see also id.* at 48. We now address Patent Owner’s arguments concerning a lack of motivation to combine.

Patent Owner argues that although Chaganti describes a system where the user may be one who operates a PDA, the requester must be a computer. PO Resp. 46 (citing Ex. 2007 ¶¶ 370–373). Patent Owner argues that “[t]he issue is whether it makes sense to combine references where one is directed specifically to feature the cache of a handheld device and the other reference absolutely requires intervention by operation of a non-handheld computer.” *Id.* Patent Owner further argues that “Chaganti teaches one of skill in the art to employ the cache on the computer of the user.” *Id.* at 47. These arguments are unavailing because Chaganti describes that the user with a

wireless device and the requestor may be the same entity. Ex. 1008, 2:40–41, 15:4–6, 17:13–14. Moreover, Chaganti describes that the computer 104 may be a wireless device, and that computer 104 (wireless device) includes cache. *Id.* at 7:65–8:11, 20:35–37. We agree with Petitioner that the requester and user may be the same person in the first instance, and that a person having ordinary skill in the art would have understood that “the user may continue to use their wireless device when acting as a requester.” Pet. Reply 21 (citing Pet. 58).

Patent Owner further argues that because Chaganti does not teach the use of cache for out-of-band downloading (utilizing) or the use of copy-and-paste for downloading and Major does not teach copy-and-paste at all, the “two references seem an odd sort of combination in the absence of the powerful force of hindsight.” PO Resp. 47. Petitioner does not rely on Major to teach copy-and-paste. Patent Owner’s arguments attacking each reference individually fail to undermine Petitioner’s persuasive showing because the challenge is based on the combined teachings of Chaganti and Major from the perspective of a person having ordinary skill in the art at the time of the invention. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.”).

Patent Owner argues that a person having ordinary skill in the art would have been discouraged from combining Chaganti with Major because “the thrust of Major is to discourage wireless access to external storage of any kind.” PO Resp. 47 (citing Ex. 2007 ¶¶ 379–381); Sur-reply 19 (citing Ex. 2007 ¶¶ 380–384). Patent Owner further argues that Chaganti and Major’s caches are different, such that “[c]ombining radically different cache systems, when the entire point is making cache more effective, seems

to be at minimum not the marriage of convergent technologies Petitioner urges.” *Id.* (citing Ex. 2007 ¶¶ 382–384).

Petitioner relies on Major for the limited purpose of “web-cache functionality.” Pet. 52. As explained in the Petition, Major itself teaches “the motivating benefit that using web-cache allows the browser to display a previously downloaded page ‘very quickly’ and that ‘local operations or page displays from the *page cache* . . . tend to take substantially less time than network information requests.” *Id.* (citing Ex. 1007, 11:15, 22:4–6). We agree with Petitioner that a person having ordinary skill in the art “would have been motivated to execute *Chaganti’s* copy/drag operations as ‘local operations’ pulling necessary address information for item X from cache at the wireless device because doing so would take ‘substantially less time than network information requests’ to get that information.” *Id.* at 50 (citing Ex. 1004 ¶ 163); *id.* at 64 (citing Ex. 1004 ¶¶ 197–198). A person having ordinary skill in the art would have recognized that “Major’s teachings would beneficially and predictably achieve the web-browsing and caching functionality described by Chaganti for its wireless implementations of user computer 104.” *Id.* at 49 (citing Ex. 1004 ¶ 162).

Mr. Jawadi’s testimony on the matter is based on bodily incorporating Major into Chaganti without considering what the combined teachings of Chaganti and Major would have suggested to a person having ordinary skill in the art. *See, e.g.,* Ex. 2007 ¶ 383 (discussing why features from Major not relied on, such as “raw data cache, browser object, browser daemon, stack manager, interface managers, converters, renderers, and other software components” are not compatible with Chaganti’s system). We agree with Petitioner that a person having ordinary skill in the art would not have been discouraged from combining Chaganti with Major. Pet. Reply 21 (citing

Petition §III.E). In particular, we agree with Petitioner that Patent Owner “conflates efficiency of wireless access, with consumption of services over wireless access” and that “[i]mproving efficiency of access, as Major’s web caching does, benefits as opposed to undermines, consumption of wireless services (e.g. web browsing from a PDA).” *Id.* at 16. For all of these reasons, Patent Owner’s arguments do not undermine Petitioner’s persuasive showing that a person having ordinary skill in the art would have combined Chaganti and Major.

*h. Secondary Considerations*

Before determining whether a claim is obvious in light of the prior art, we consider any relevant evidence of secondary considerations—objective indicia—of nonobviousness. *See Graham*, 383 U.S. at 17. Patent Owner contends that a license to the ’526 patent taken by a well-known licensee is a compelling secondary consideration of non-obviousness. PO Resp. 49–52.

“In order to accord substantial weight to secondary considerations in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims, i.e., there must be a legally and factually sufficient connection between the evidence and the patented invention.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (internal quotations omitted).

Patent Owner argues “[t]he secondary considerations are a license under the ’526 Patent and related patents” and that “valuable consideration (money) [was] paid for the license.” PO Resp. 50. Patent Owner argues that “there is no question of nexus between the patent and the secondary consideration” because “consideration was paid for the patent claims, no other factor induced the licensee.” *Id.* at 50–51. Lastly, Patent Owner argues that the license was entered into thirteen years after the patent was

filed, indicating that the claims of the '526 patent have “substantial value that has persisted over time.” *Id.* at 51–52.

Although Patent Owner submitted into evidence the license, we agree with Petitioner (Pet. Reply 22) that Patent Owner fails to provide key information regarding the license it relies on as evidence of non-obviousness. For instance, Patent Owner argues that because consideration was paid for the patent claims, no other factor induced the licensee. PO Resp. 50–51; Sur-reply 20–22. The license, however, is with respect to dozens of patents, not the '526 patent alone. No information is provided about critical details of the license—e.g., the relative contributions of each of the patents in the portfolio to the value of the license, whether the license also encompasses other unidentified patents, whether the license was taken to settle litigation—such that we could discern whether the licensee took the license “out of recognition and acceptance of the subject matter claimed” in the '526 patent. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995).

In the Sur-reply, Patent Owner argues that the licensee “took a license to the '526 patent and related patents for . . . substantially more than the cost of prosecuting an *inter partes* review.” Sur-reply 20. Again, the license is not just to the '526 patent, but includes dozens of patents. Patent Owner fails to account for the total cost of dozens of *inter partes* reviews (for all of the licensed patents) as opposed to the cost of one *inter partes* review. Patent Owner also argues that it is well-known that the licensee sells its wireless devices with a cloud storage service and that the claims of the '526 patent are directed to the very same combination of a wireless device and cloud storage. *Id.* at 22. Patent Owner provides no analysis regarding the claims of the '526 patent and the licensee’s wireless device with cloud storage, and again most importantly, that the license, which includes dozens

of patents, was a result of such technology. We find that Patent Owner has not provided sufficient evidence to establish the requisite nexus between the license and the '526 Patent.

For the above reasons, we conclude that Patent Owner's evidence of secondary considerations cannot be afforded substantial weight, and therefore constitutes weak evidence of non-obviousness. *See Fox Factory*, 944 F.3d at 1373.

*i. Conclusion as to Obviousness*

As discussed above, Petitioner has shown by a preponderance of the evidence that the asserted prior art teaches each limitation of the challenged claims. We further determine that Petitioner's showing that the claims are taught by the asserted art is strong, particularly in comparison to Patent Owner's weak showing with respect to the asserted secondary considerations of non-obviousness. As discussed above, we find that Patent Owner has not established the requisite nexus between the challenged claims and its evidence of licensing. As such, we do not accord this evidence any substantial weight. *See Fox Factory*, 944 F.3d at 1373. Thus, in weighing the totality of the evidence of record and the strength of the parties' showings on the inquiries underlying the question of obviousness, we conclude that Petitioner has met its overall burden of proving by a preponderance of the evidence that each of the challenged claims would have been obvious in view of the asserted prior art.

*E. Remaining Ground Challenging Claims 1–20*

For the reasons discussed above, Petitioner has shown, by a preponderance of the evidence, that claims 1–20 of the '526 patent are unpatentable as obvious over Chaganti and Major. In addressing this

ground, we have addressed all of the challenged claims. *See* 35 U.S.C. § 318(a) (requiring the Board to “issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 316(d)”); *see also SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2108) (holding that a petitioner “is entitled to a final written decision addressing all of the claims it has challenged”).

Accordingly, we need not and do not decide whether Petitioner has shown by a preponderance of the evidence that claims 1–3, 5–11, and 13–20 are unpatentable as obvious over Prust and Major. *Cf. In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009) (not reaching other grounds of unpatentability after affirming the anticipation ground); *see also Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (holding that once a dispositive issue is decided, there is no need to decide other issues).

### III. CONCLUSION<sup>14</sup>

For the foregoing reasons, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–20 of the ’526 patent are unpatentable, as summarized in the following table:

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<sup>14</sup> Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

<b>Claims</b>	<b>35 U.S.C. §</b>	<b>Reference(s) /Basis</b>	<b>Claims Shown Unpatentable</b>	<b>Claims Not Shown Unpatentable</b>
1–3, 5–11, 13–20	103(a) <sup>15</sup>	Prust, Major		
1–20	103(a)	Chaganti, Major	1–20	
<b>Overall Outcome</b>			1–20	

#### IV. ORDER

Accordingly, it is:

ORDERED that claims 1–20 of the '526 patent have been shown to be unpatentable; and

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

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<sup>15</sup> As explained immediately above, we need not and do not decide whether Petitioner has shown by a preponderance of the evidence that claims 1–3, 5–11, and 13–20 also would have been obvious based on the remaining ground not addressed in this Decision.

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