Trials@uspto.gov
Tel: 571-272-7822

Paper 11
Entered: June 11, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

MOBILE DATA TECHNOLOGIES LLC,
Patent Owner.

IPR2024-00250
Patent 9,922,348 B2

Before CHRISTOPHER M. KAISER, KEVIN C. TROCK, and SCOTT B. HOWARD, *Administrative Patent Judges*.

TROCK, *Administrative Patent Judge.*

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Meta Platforms, Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1–20 (the "challenged claims") of U.S. Patent No. 9,922,348 B2 (Ex. 1001, "the '348 patent"). Mobile Data Technologies LLC ("Patent Owner") filed a Preliminary Response (Paper 6, "Prelim. Resp."). With our authorization, Petitioner filed a Preliminary Reply (Paper 8, "Prelim. Reply") and Patent Owner filed a Preliminary Sur-reply (Paper 10, "Prelim. Sur-reply").

The Board has authority to determine whether to institute *inter partes* review. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). Under 35 U.S.C. § 314(a), we may not authorize an *inter partes* review unless the information in the petition and the preliminary response "shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition."

For the reasons stated below, we determine that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one claim. We therefore institute *inter partes* review as to all of the challenged claims of the '348 patent and all of the asserted grounds of unpatentability in the Petition.

II. BACKGROUND

A. Related Matters

Petitioner identifies the following district court proceeding involving the '348 patent:

Mobile Data Technologies LLC v. Meta Platforms, Inc., Case No. 7:22-cv-00244-ADA-DTG (W.D. Tex.) (Petitioner served Dec. 6, 2022). Pet. 1.

Patent Owner identifies the same related matter. Paper 5, 2–3.

B. Real Parties-in-Interest

Petitioner identifies Meta Platforms, Inc. as the real party-in-interest. Pet. 1.

Patent Owner identifies Mobile Data Technologies LLC as the real party-in-interest. Paper 5, 2.

Based on the current record, we determine that Petitioner has established compliance with the statutory requirement under 35 U.S.C. § 312(a)(2) to identify all real parties in interest.

C. The '348 Patent

The '348 patent is entitled "Method, Apparatus and System for Management of Information Content for Enhanced Accessibility over Wireless Communication Networks." Ex. 1001, code (54) (capitalization and bold omitted). The '348 patent "relates generally to network-based communication systems, and more particularly to techniques for information content management in such systems." *Id.* at 1:29–31.

The '348 patent explains:

> Many users, for example, may wish to make specific personalized information content available via mobile devices to their friends, colleagues, subscribers or other entities. However, conventional techniques have been unable to meet this need in a satisfactory manner. . . . As a result, it is generally not possible for different mobile device users to link to and take further action on a persistent version of a given set of shared information content.

Id. at 1:45–66.

Figure 1A, reproduced below, is a block diagram of a network-based communication system configured in accordance with an embodiment of the '348 invention. *Id.* at 3:8–10.

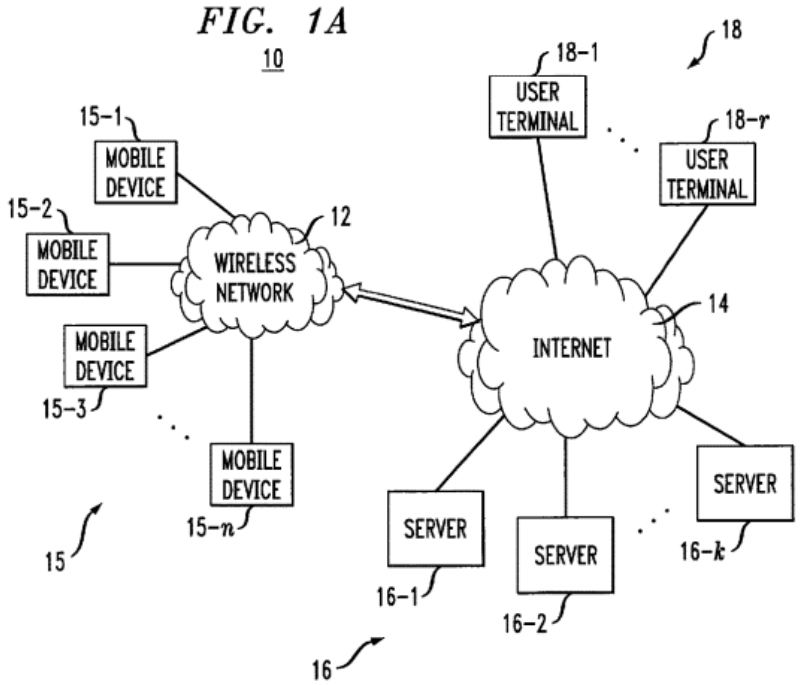


Figure 1A, above, shows a network-based communication system 10, including a wireless network 12 coupled to the Internet 14, mobile devices 15, set of servers 16, and set of user terminals 18. *Id.* at 3:60–4:10. The '348 patent states that "[t]he mobile devices 15 and user terminals 18 may be more generally referred to herein as user devices." *Id.*

System 10 provides a content management site accessible to a system user. *Id.* at 5:27–50. The content management site may be supported by server(s) 16 and may be accessed by a user over Internet 14 via user terminal(s) 18. *Id.* The '348 patent describes:

> The content management site permits the user to enter information in accordance with a specified format comprising a plurality of selectable mobile information channels each corresponding to an information category. The mobile information channels are also referred to as "M-channels" herein . . . The entered information is processed to generate a mobile web site comprising information content that is accessible via one or more of the mobile devices 15 over the wireless network 12 of the system 10. The information content

> of the mobile site is preferably configured such that a persistent version thereof is accessible via the one or more mobile devices 15 over the wireless network 12. . . . The content management site can also be accessed via one of the mobile devices 15, and used to create a mobile site also accessible via that mobile device and one or more other mobile devices.

Id.

The '348 patent describes the following advantages:

> [T]he M-channels allow unsophisticated users to easily and efficiently author message data or other types of information content to be made accessible via a collaborative workspace, a data mailbox, a collaborative community, or other type of mobile site or portion thereof generated or otherwise managed in the system 10.

Id. at 8:26–40.

D. Illustrative Claim

The '348 patent has 20 claims. Claims 1–20 are challenged in the Petition. Pet. 2–3. Claims 1, 13, and 17 of the challenged claims are independent. Claim 1 is illustrative of the claimed subject matter and is reproduced below, with bracketed annotations added for convenience.

> 1. [preamble] An apparatus comprising:
>
> [1[a]] a processing element comprising a processor coupled to a memory; and
>
> [1[b]] a network interface coupled to the processing element and configured to communicate with a plurality of mobile devices over at least one network;
>
> [1[c]] the processing element being configured:
>
> [1[c][1]] to receive first device-captured data from a first one of the mobile devices via the network interface;

[1[c][2]] to receive second device-captured data from a second one of the mobile devices via the network interface; and

[1[c][3]] to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices.

Ex. 1001, 19:27–44.

E. Prior Art References and Other Evidence

Petitioner relies on the following references:

1. *How to Do Everything with Yahoo!*, Alan Neibauer (Petitioner contends "Exhibit 1003 was published and accessible to the public on or shortly after October 11, 2000" (Ex. 1026 ¶ 45)) (Ex. 1003, "Neibauer").

2. Ausems et al., U.S. Patent No. 6,434,403 B1 (August 13, 2002) (Ex. 1006, "Ausems").

3. Cheng et al., U.S. Patent No. 7,574,486 B1 (August 11, 2009) (Ex. 1005, "Cheng").

4. Squibbs, U.S. Patent Application Publication No. 2001/0015759 A1 (August 23, 2001) (Ex. 1011, "Squibbs").

5. McElfresh et al., U.S. Patent No. 6,907,566 B1 (June 14, 2005) (Ex. 1014, "McElfresh").

6. Harvey et al., U.S. Patent No. 6,487,583 B1 (November 26, 2002) (Ex. 1010, "Harvey").

In addition to these references, Petitioner relies on a Declaration of Vijay K. Madisetti, Ph.D. (Ex. 1002, "Madisetti Decl.") and a Declaration of Sylvia D. Hall-Ellis, Ph.D. (Ex. 1026, "Hall-Ellis Decl.").

Patent Owner relies on a Declaration of Kevin C. Almeroth, Ph.D. (Ex. 2001, "Almeroth Decl.").

F. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability. Pet. 2–3, 10.

Ground	Claim(s) Challenged	Basis 35 U.S.C. §	Reference(s)
1	1–3, 6–9, 12–14, 17–18	103(a)[1]	Neibauer, Ausems, Cheng
2	4–5	103(a)	Neibauer, Ausems, Cheng, Squibbs
3	10–11, 15–16, 19–20	103(a)	Neibauer, Ausems, Cheng, McElfresh
4	1–3, 6–9, 12–14, 17–18	103(a)	Neibauer, Ausems, Cheng, Harvey
5	4–5	103(a)	Neibauer, Ausems, Cheng, Squibbs, Harvey
6	10–11, 15–16, 19–20	103(a)	Neibauer, Ausems, Cheng, McElfresh, Harvey

III. ANALYSIS OF THE CHALLENGED CLAIMS

A. Applicable Legal Standards

A claim is unpatentable as obvious under 35 U.S.C. § 103 "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." 35 U.S.C. § 103(a) (2006). The

[1] The '348 patent claims priority to several applications filed before the March 16, 2013 effective date of the §§ 102, 103 provisions in the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29. Ex. 1001, codes (60), (63). Petitioner contends pre-AIA law applies to the challenged claims. Pet. 10. Patent Owner does not dispute Petitioner's contention that pre-AIA law applies. *See* Prelim. Resp. Accordingly, we cite to pre-AIA § 103(a).

question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) so-called "secondary considerations," including commercial success, long-felt but unsolved needs, failure of others, and unexpected results. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). At this stage, neither party has presented any evidence on the fourth *Graham* factor.

B. Level of Ordinary Skill in the Art

According to Petitioner, a person of ordinary skill in the pertinent art:

> would have possessed a bachelor's degree in electrical engineering, computer science, or similar field, with two years of experience in developing and implementing network-based computer systems that interact with mobile devices, such as systems for storing and retrieving information over the Internet or communicating using the Web using wireless mobile devices.

Pet. 5–6 (citing Madisetti Decl. ¶¶ 14–18).

Patent Owner states "[f]or purposes of this Response, [Patent Owner] applies Petitioner's characterization of a POSITA [("person having ordinary skill in the art)]." Prelim. Resp. 16.

We regard Petitioner's definition as consistent with the '348 patent and the prior art before us and supported by testimonial evidence. Therefore, for the purpose of this Decision, we adopt Petitioner's formulation.

C. Claim Construction

For this *inter partes* review, the Board applies the same claim construction standard as that applied in federal courts. *See* 37 C.F.R. § 42.100(b) (2023). Under this standard, claim terms "are generally given

their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (citations omitted). "In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). Extrinsic evidence is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (citation omitted).

Petitioner "does not believe express claim construction is necessary at this time." Pet. 8.

Patent Owner states "[f]or purposes of this Response, [Patent Owner] submits no express constructions are required." Prelim. Resp. 17.

Only those terms that are in controversy need be construed, and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). For purposes of this Decision and based on this preliminary record, we determine that no claim terms require express construction at this stage of the proceeding.

D. Discretionary Denial – 325(d)

Patent Owner argues that we should exercise our discretion to deny institution of trial under 35 U.S.C. § 325(d). Prelim. Resp. 4–14. Patent Owner asserts that "the Petition is grounded in art that was already before

the Examiner, and thus institution should be denied under § 325(d)." Prelim. Resp. 4 (bold and capitalization omitted); *see also id.* at 4–6. Patent Owner also asserts that "all petitioned art was previously presented, substantially similar, or cumulative." Prelim. Resp. 7 (bold and capitalization omitted); *see also id.* at 7–12.

1. Legal Standard

Under § 325(d), we have discretion to deny a petition that presents the same or substantially the same prior art or arguments as previously presented to the Office. In evaluating whether the factual predicate under § 325(d) is met, we consider a number of non-exclusive factors, as set forth in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (Institution Decision) (precedential as to Section III.C.5, first paragraph) ("*Becton Dickinson* factors"):

> (a) the similarities and material differences between the asserted art and the prior art involved during examination;
>
> (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
>
> (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
>
> (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
>
> (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
>
> (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson, IPR2017-01586, Paper 8 at 17–18.

In performing an analysis under § 325(d), the Board uses the following two-part framework:

> (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. . . . If, after review of [*Becton Dickinson*] factors (a), (b), and (d), it is determined that the same or substantially the same art or arguments previously were presented to the Office, then factors (c), (e), and (f) relate to whether the petitioner has demonstrated a material error by the Office.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8, 10 (PTAB Feb. 13, 2020) (Institution Decision) (precedential) (footnote omitted). Consequently, we first turn to an analysis of *Becton Dickinson* factors (a), (b), and (d) to determine whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office.

2. Advanced Bionics – Part One

Becton Dickinson factors (a), (b), and (d) require us to determine, respectively: (a) "the similarities and material differences between the asserted art and the prior art involved during examination;" (b) "the cumulative nature of the asserted art and the prior art evaluated during examination," and (d) "the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art." *Becton, Dickinson*, IPR2017-01586, Paper 8 at 17.

Patent Owner asserts that "Petitioner correctly acknowledges that [Neibauer and Cheng][2] were considered and made of record by the Examiner." Prelim. Resp. 7. Patent Owner argues that "[t]he rest of the references [Ausems, McElfresh, Harvey] play minor and/or provisional roles in the claims," and "[n]otwithstanding their passing appearance in Petitioner's grounds, even these secondary references are substantially similar to art previously before the Examiner." *Id.* at 8, 9.

In particular, Patent Owner asserts that "Petitioner relies on Ausems for a combination Personal Digital Assistant ('PDA') and mobile phone with a digital camera," arguing "[t]hat functionality is disclosed in US 7,277,927 to Rensin, which was before the Examiner." *Id.* at 9 (citing Pet. 24–25; Ex. 1022, 175). Patent Owner also asserts that McElfresh is substantially similar to prior art the Office previously considered. S*ee* PO Resp. 11–12. Patent Owner further argues that we "need not consider Petitioner's parallel Grounds 4-6 relying on Harvey" because Harvey is added "solely to account for a potential construction of 'web-based shared information channel' proposed by Petitioner in the pending litigation," and "Patent Owner agrees [with Petitioner] that express constructions are not required at this stage." *Id.* at 10–11.

Petitioner argues that although Neibauer, Cheng, and Squibb "were considered during prosecution . . . the sole mention of these references was their inclusion on Information Disclosure Statements filed by the Applicants that were considered by the Examiner. Pet. 4 (citing Ex. 1022, 195, 212,

[2] Patent Owner also notes that "Petitioner relies on the published application of Squibbs (Ex. 1011), while the resulting patent (US 6,914,626) was considered by the Examiner." Prelim. Resp. 7, n.3 (citing Ex. 1022, 177).

174, 177). Petitioner argues that these references "were among hundreds of prior art references cited during prosecution." Pet. 4. Petitioner argues that "The record on Neibauer, Cheng and Squibbs is entirely 'silent' because the Examiner never addressed them." Prelim. Reply 1.

Petitioner also points out that during prosecution of the '348 patent, "the Examiner rejected the claims based on double-patenting grounds over U.S. Patent No. 9,619,578, an earlier patent in the same family." *Id.* According to Petitioner, "[t]he Examiner acknowledged that the '348 and '578 claims 'are not identical,' but found that 'they are not patentably distinct from each other.'" *Id.* at 1–2 (citing Ex. 1022, 157). Petitioner indicates that "the '578 patent was rejected on double-patenting grounds over U.S. Patent No. 8,135,801, an earlier patent whose claims were invalidated in reexamination based on Neibauer and Cheng." *Id.* at 2. According to Petitioner, the Office "cited and relied on both Neibauer and Cheng in the successful reexamination of [the '801 patent], an earlier patent in the same family with similar claims, which resulted in cancellation of all claims." Pet. 5 (citing Ex. 1024, 4, 18–19); Prelim. Reply, 2.

Petitioner further argues that "Ausems is materially different from Rensin." Prelim. Reply 2–3. According to Petitioner, Ausems was cited as:

> an example of a mobile communications device that, among other things, incorporated a digital camera for recording, storing, and transmitting digital images." (Petition, 24 (italics added).) The disclosures of Rensin cited by PO merely identify a camera as a "PDA expansion slot" device, and do not describe the camera's operation in any detail or state that captured images can be stored and transmitted. (POPR, 9-10.) Ausems was thus more relevant to the challenged claims and more applicable to a prior art reference (such as Neibauer) that disclosed the ability of the user to upload photos to a remote server.

Prelim. Reply 2–3.

In addition, Petitioner argues that "McElfresh was materially different from Dowling." Prelim. Reply 3. Petitioner asserts out that McElfresh is cited "for its disclosure of selecting and delivering advertisements ***and*** integrating those advertisements alongside other content on the ***same webpage***, to satisfy the claimed "**data feed**" limitations." *Id.* (citing Pet. 52–53, 57–60). Petitioner argues that "Dowling, on the other hand, does not state that the promotional information is presented on or integrated into the same webpage as other (non-advertising) content." *Id.* According to Petitioner, Dowling "appears to disclose the opposite, by stating that when a user drives along a mall, '***a web page comes*** up and provides directions to the shopping mall . . . [and] directions to the desired store.'" *Id.* (citing PO Prelim. Resp. 13[3] (quoting Dowling ¶ 64). Petitioner argues that "[t]he references are thus materially different." Prelim. Reply 3.

We disagree with Patent Owner that all of the references Petitioner is relying on are the same or substantially the same as references that were before the Office. There is no dispute that Ausems and McElfresh were not considered by the Office. *See* Prelim. Resp. 8–12; Ex. 1001, code (56). Moreover, we do not agree with Patent Owner that Ausems is substantially the same as Rensin and that McElfresh is substantially the same as Dowling.

For example, Petitioner relies on Ausems for a mobile communications device that incorporates a digital camera for recording, storing, and transmitting digital images. Pet. 24. The disclosures of Rensin

[3] Petitioner's citation to "POPR 13 (quoting Dowling, ¶0064)" on page 3 of Petitioner's Preliminary Reply appears to be an error. Patent Owner addresses Dowling on page 11 of its Preliminary Response.

cited by Patent Owner identify a camera as a PDA expansion slot device, but do not disclose expressly that captured images can be stored and transmitted as Ausems does. *Compare e.g.*, Ex. 1006, 2:5–11, 5:17–22 *with* Ex. 2003, 2:2–21. We agree with Petitioner that Ausems was thus more relevant to the challenged claims, and more applicable to a prior art reference such as Neibauer, that disclose the ability of the user to upload photos to a remote server.

Petitioner also relies on McElfresh for its teaching of selecting and delivering advertisements and integrating those advertisements with other content on the same webpage. *See* Pet. 52–60. For example, Petitioner describes how McElfresh's "ad server or Rad Server 112 'performs the overall function of gathering the necessary information regarding a particular ad (or set of ads) and the particular user and generating a set of ads which have been optimized for placement on a webpage,' based on (among other things) calculated click-through-percentage rates." Pet. 55 (quoting Ex. 1014, 6:42–48).

In contrast, Dowling's disclosure cited by Patent Owner[4] describes how a user may log into "a geographically controlled web site and configures the packet filter to display information related to a user's needs," such that that when the user drives along a mall, "a web page comes up and provides directions to the shopping mall and optionally provides an inside map of the mall to include directions to the desired store." Ex. 3001 ¶ 64;

[4] Patent Owner cites to Exhibit 2004 as Dowling (US 2005/0177645). Prelim. Resp. 11. However, Exhibit 2004 is U.S. Patent App. 2005/0171645, directed to a "Household Energy Management System," listing inventors as Oswald and Tamsett. *See* Ex. 2004, codes (10), (54), 76. Dowling appears to have been filed as Exhibit 1030, not Exhibit 2004.

Prelim. Resp. 11 (citing Ex. 2004 ¶ 64). Dowling's disclosure is substantially different from McElfresh's teaching of using a server to select and integrate particular advertisements onto a webpage.

We have reviewed the portions of Rensin and Dowling cited by Patent Owner and do not see substantially the same structures or functionality relied upon by Petitioner in Ausems or McElfresh.

3. Conclusion

Based on our consideration of *Becton Dickinson* factors (a), (b), and (d), we find that the same or substantially the same art or arguments were not previously presented to the Office. Thus, our analysis ends at this point, and we need not proceed to part two of the *Advanced Bionics* framework. *See Advanced Bionics*, IPR2019-01469, Paper 6 at 8. We therefore decline to exercise our discretion to deny institution based on 35 U.S.C. § 325(d).

E. Prior Art References

1. Neibauer (Ex. 1003)

Neibauer is a book titled "How to Do *Everything* with Yahoo!" Ex. 1003, 2.[5] Neibauer provides a description, tutorial, and reference guide for various Yahoo features. *Id.* at 17.

Neibauer describes Yahoo! Clubs, which is for Yahoo! members who share a common interest. *Id.* at 157. Yahoo! Clubs is accessed by clicking on Clubs on the Yahoo! home page or by entering an address. *Id.* Neibauer describes:

[5] We refer to the page numbering of Exhibit 1003 as opposed to the original page numbering in the book itself.

> Each club has its own message board and chat room, as well as places to share photographs, news, addresses, and links. You can create your own club and use it to share information about any topic that interests you or as a home page where friends and family can stay in touch.

Id.

Neibauer describes how photographs may be shared. *Id.* at 161. A list of albums that a club maintains can be seen by clicking Photos and a list of photos in an album can be seen by clicking the album name. *Id.* Neibauer further describes how to add a photograph to an album. *Id.* at 161–162.

Neibauer describes that Yahoo! Mobile lets you get many Yahoo! services on mobile devices, including cell phones, web phones, and personal digital assistants. *Id.* at 111.

2. Ausems (Ex. 1006)

Ausems is a U.S. patent titled "Personal Digital Assistant with Wireless Telephone." Ex. 1006, code (54) (capitalization and bold omitted). Ausems describes PDA (Personal Digital Assistant) telephone 100 that provides the combined functionality of a PDA and a wireless telephone and other features. *Id.* at 3:5–8.

Ausems describes PDA telephone 100 with camera 190. *Id.* at 5:11–23. The camera 190 records video images and stores them or transmits the video images from PDA telephone 100 in real time during a telephone call, thus allowing for video conferencing. *Id.*

3. Cheng (Ex. 1005)

Cheng is a U.S. patent titled "Web Page Content Translator." Ex. 1005, code (54) (capitalization and bold omitted). Cheng explains that "[b]ecause of the explosion of mobile enterprise solutions, users of wireless

devices now demand that businesses deliver web content for viewing on desktop, or mobile/portable (e.g., handheld) devices." *Id.* at 1:19–22.

Cheng describes "[a] system, method, and computer readable medium for reformatting web content into a format readable on one or more mobile devices." *Id.* at code (57).

Figure 1, reproduced below, is a block diagram of a mobile device, a proxy server, and a content server which illustrates an overview of a method according to the Cheng invention. *Id.* at 2:57–60.

FIG. 1

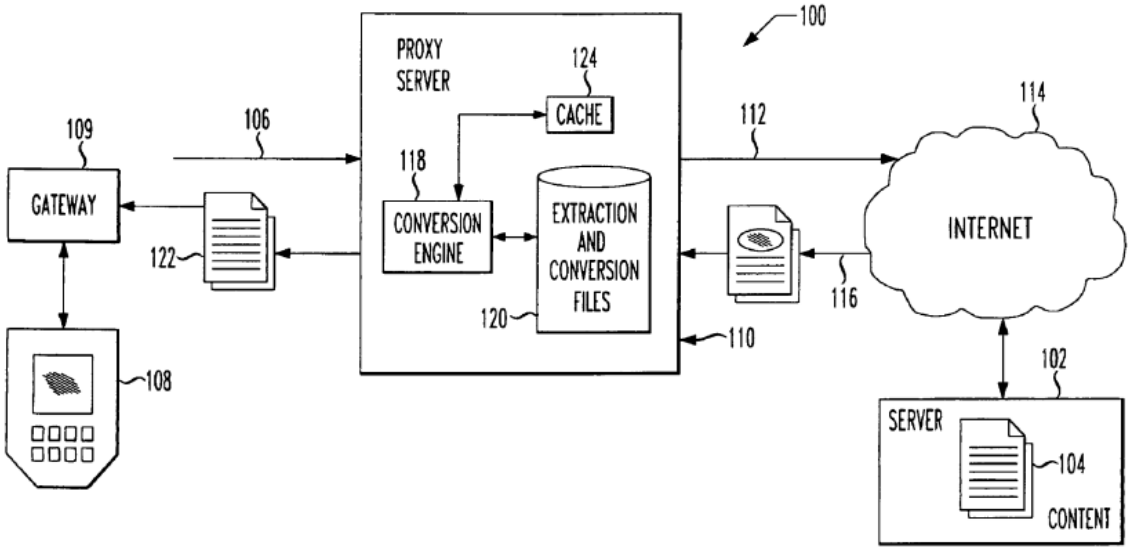


Figure 1, above, illustrates an architecture 100, including proxy server 110 which reformats/converts web content 104 on origin web server 102 into format 122 readable on mobile device 108 (which can be any number of different mobile device types). *Id.* at 3:21–30.

4. Squibbs (Ex. 1011)

Squibbs is a U.S. patent application publication titled "Location-informed Camera." Ex. 1011, code (54) (capitalization and bold omitted). Squibbs describes a photo system in which a digital camera is provided with

location determining means, such as a GPS receiver. *Id.* ¶ 31. Each photo is stamped with location data indicating where the photo was taken. *Id.* Squibbs further describes:

> Other data may also be associated with each photo, such as a timestamp, a camera ID, and a user ID; such associated data (including the location data) is herein referred to as photo meta data. The photos and their meta data are downloaded by any suitable means (USB connection, removable storage device, etc) into a PC 5 where an album program 50 serves to store the photos in a photo store 7 and the photo meta data in a meta-data database 9.

Id.

5. McElfresh (Ex. 1014)

McElfresh is a U.S. patent titled "Method and System for Optimum Placement of Advertisements on a Webpage." Ex. 1014, code (54) (capitalization and bold omitted). McElfresh describes a server which generates a set of ads which have been optimized for placement on a webpage based on a calculated click-through-percentage. *Id.* at 6:36–48. The website requests ads from the server and the server delivers a set of ads for display to the user which have been optimized for increased click-throughs, and/or increased revenue generation. *Id.* at 8:9–14. The optimizer system can be overridden and an advertiser can purchase the right to an entire section of a website without having to compete their way into a position on a page. *Id.* at 12:50–54.

6. Harvey (Ex. 1010)

Harvey is a U.S. patent titled "System and Method for Information and Application Distribution." Ex. 1010, code (54) (capitalization and bold omitted).

Figure 2, reproduced below, is a flowchart illustrating steps in creating a community according to an embodiment. *Id.* at 3:52–53.

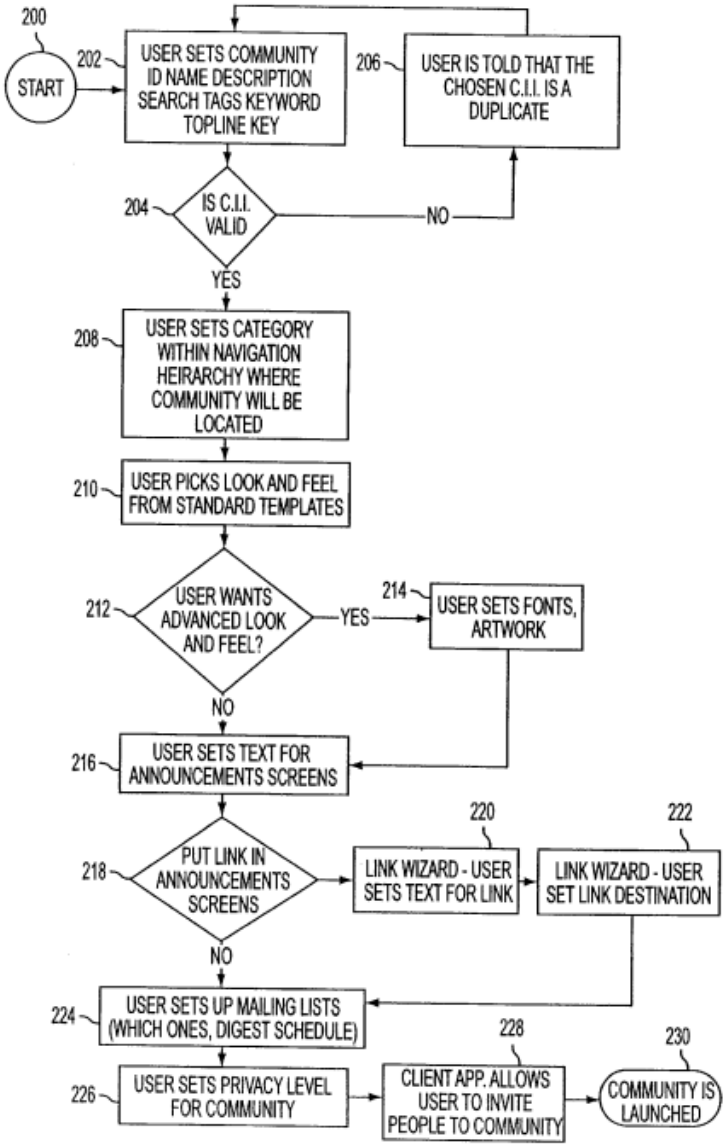


FIG. 2

In Figure 2 above, at step 200, a creator accesses community creating module 165 through central controller module 115. *Id.* at 7:49–66. At step 202, a creator provides community identification information (for example, a community name or description) to central controller module 115. *Id.* "At step 210, a configuration editor is presented to a creator. A configuration

editor may allow a user to build a community, designate content and application objects, subscribe to subscription objects, and add other information associated with the community." *Id.* at 8:63–67. "At step 230, a creator may launch a community." *Id.* at 12:67–13:1.

F. Obviousness Based on Neibauer, Ausems, and Cheng (Ground 1)

Petitioner contends that claims 1–3, 6–9, 12–14, and 17–18 are obvious over Neibauer in view of Ausems and Cheng. Pet. 11–44. Petitioner provides a claim-by-claim analysis, supported by the testimony of Dr. Madisetti. *See* Pet. 11–44; Ex. 1002 ¶¶ 38–152.

Patent Owner contends Petitioner's combination of Neibauer and Cheng does not disclose the claimed invention and Petitioner's motivation to combine Neibauer and Cheng is deficient. Prelim. Resp. 25–37; *see also* Prelim. Resp. 17–25. Patent Owner provides analysis, supported by the testimony of Dr. Almeroth. *See* Prelim. Resp. 17–37; Ex. 2001 ¶¶ 45–94.

In particular, Patent Owner contends that "Neibauer and Cheng do not satisfy the 'receiving . . . from a mobile device' claim limitations." Prelim. Resp. 26.

1. Rationale to Combine Neibauer, Ausems, and Cheng

Petitioner contends that "[i]t would have been obvious to combine Neibauer with Cheng, predictably resulting in the club features relied upon in Neibauer being made available to mobile devices over the Internet." Pet. 17. Petitioner explains that "[u]nder the proposed combination, the web pages in Neibauer . . . would have been translated and delivered to mobile devices using the techniques in Cheng." *Id.* (citing Ex. 1002 ¶ 101). Petitioner asserts that "[t]he proposed combination of Neibauer and Cheng would have been exceedingly straightforward as Cheng provides 'bolt-on'

functionality, with the proxy server capable of converting and reformatting any existing HTML-based web page into a format suitable for display on a mobile device." Pet. 20 (citing Ex. 1002 ¶¶ 102, 106–107; Ex. 1005, 2:30–32).

Petitioner asserts that "Neibauer itself expressly suggests the proposed combination by disclosing services such as 'Yahoo! Mobile' and 'Yahoo! To Go' that enabled content from Yahoo! services to be provided to mobile devices." Pet. 20 (citing Ex. 1003, 166–174). Petitioner argues that "[a] skilled artisan would also have been motivated to make the club features available to mobile devices to take advantage of growing popularity of mobile computing and mobile devices," and that "[m]arket forces would thus have motivated a skilled artisan to combine Neibauer with Cheng in order to provide the club functionalities to users of mobile devices." Pet. 20–21 (citing Ex. 1002 ¶¶ 105–106).

Petitioner also argues that "Cheng provides a further express motivation to combine by explaining that the proxy server conversion method provides a 'create-once, deliver anywhere approach' that eliminates the need to build and maintain separate web pages for different types of mobile devices and browsers." Pet. 21 (citing Ex. 1005, 2:8–19). Petitioner asserts that "[a] skilled artisan would also have had a reasonable expectation of success as Cheng relies on known and industry-standard technologies." Pet. 22 (citing Ex. 1002 ¶ 108).

With respect to Ausems, Petitioner contends that "[i]t would have been obvious to combine Neibauer and Cheng with Ausems, predictably resulting [in] the system under the proposed combination, further adapted such that the processing element would have received a photo captured by

the mobile device itself." Pet. 25 (citing Ex. 1002 ¶ 122). Petitioner asserts that "[a]n ordinarily skilled artisan would have been motivated to combine [these references], as the ability to share media data captured by the mobile device would have expanded the universe of image data that the club member could share with others." Pet. 26 (citing Ex. 1002 ¶ 124). Petitioner argues that "[a] skilled artisan would also have had a reasonable expectation of success, as mobile communications devices with digital cameras and the ability to transmit captured images were known." Pet. 26 (citing Ex. 1002 ¶ 125).

Patent Owner argues that "Petitioner's bare assertion that it would have been obvious to provide Clubs through Yahoo! Mobile and/or Yahoo! To Go is purely conclusory and unsupported by record evidence." Prelim. Resp. 31 (citing Ex. 2001 ¶¶ 77, 53–66) (internal citation omitted). Patent Owner asserts that "the primitive Yahoo! services available on a PDA via Yahoo! Mobile and Yahoo! To Go reflected the 'limited memory, slow data transmission, and small screens' the experts agree were available on mobile devices at the time," and that "Neibauer's Yahoo! Mobile and Yahoo! To Go examples do not show any comparable functionality" to the "desktop browser views of some of the Clubs functionality Petitioner relies on." Prelim. Resp. 29–31 (citing Ex. 2001 ¶¶ 64–70; Ex. 1002 ¶ 63; Ex. 1003, 171, 483, 478; Ex. 1012, 320). Patent Owner argues that "the story told by the record evidence is that Yahoo! did not already provide Clubs functionality through Yahoo! Mobile and Yahoo! To Go was because contemporaneous mobile devices were incapable of supporting it." Prelim. Resp. 31 (citing Ex. 2001 ¶¶ 58, 61–66).

With respect to the addition of Cheng, Patent Owner argues that "there is no record evidence if and how Cheng's translation tool could have been successfully applied to the Clubs webpages for any mobile devices available at the time, and, if so, whether the functionalities Petitioner relies on still would have worked." Prelim. Resp. 33 (citing Ex. 2001 ¶ 80). Patent Owner also argues that "[i]f such transcoding proxy servers were already in commercial use, there would have been no need and thus no motivation for a POSITA to start over with Cheng rather than just using an already available proxy—if indeed a POSITA would have seen a transcoding proxy server as a viable solution at all." Prelim. Resp. 33. Patent Owner points out that "Cheng acknowledges only two ways for a mobile device to route requests through its proxy server," and that "[e]ither possibility would be awkward for a mobile device user wanting to view a website of an enterprise that employed Petitioner's Neibauer-Cheng combination." *Id.* at 34. Patent Owner contends that "[t]hese unnecessary contortions would be unacceptable to a user, and would discourage a POSITA from designing a mobile-capable website by crudely 'bolting on' a Neibauer web server and Cheng proxy server as Petitioner suggests." *Id.*

Patent Owner also contends that a person of ordinary skill in the art "would have no idea whether [Cheng's] disclosed system would work at all to translate the Clubs web pages to [a] form viewable on a mobile device available at the time—much less with all of the functionality usable that Petitioner relies on—and would have to engage in undue experimentation to determine which of Cheng's SW-Transforms might work." Prelim. Resp. 35–36. Patent Owner argues that "Cheng's proxy server is only designed for downstream content delivery and Yahoo! Clubs requires two-way

interaction and transfer of content, and modifying Cheng to do so would be outside the capabilities" of a person of ordinary skill in the art. *Id.* at 36 (citing Ex. 2001 ¶ 94).

An obviousness determination "does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention." *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004). Oftentimes, the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. *In re Sernaker,* 702 F.2d 989, 994–995 (Fed. Cir. 1983). Indeed, the Federal Circuit has repeatedly held that

> an implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the "improvement" is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient. Because the desire to enhance commercial opportunities by improving a product or process is universal—and even common-sensical—we have held that there exists in these situations a motivation to combine prior art references even absent any hint of suggestion in the references themselves. In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him capable of combining the prior art references.

Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick, 464 F.3d 1356, 1368 (Fed. Cir. 2006).

Dr. Madisetti articulates this very rationale by testifying that

> [t]he techniques of Cheng would have provided a distinct technological advantage by allowing the club system described in Neibauer to be delivered to mobile devices by converting web pages provided via Neibauer, thus obviating the need for the Yahoo! server to generate multiple different versions of those web pages (including potentially multiple mobile versions based on different mobile device and browser types), thus making it considerably simpler to provide club functionality to the web browsers of mobile devices.

Ex. 1002 ¶ 106.

Dr. Almeroth, however, testifies that "Yahoo! Clubs requires two-way interaction and transfer of content . . . while Cheng's proxy server is only configured to handle content delivery in a single, downstream direction." Ex. 2001 ¶ 94. But, as Dr. Madisetti explains, and as Cheng makes clear, there is *two-way* communication occurring between mobile device 108 and proxy server 110 in Cheng. As shown in Cheng's Figure 1, mobile device 108 can issue a request 106 to proxy server 110 for an original web page 104 using standard HyperText Transport Protocol (HTTP), as was well-known in the art, with the request 106 being received by proxy server 110. Pet. 16–17 (citing Ex. 1005, Fig. 1, 2:19–21, 3:58–67, 7:65–8:2; Ex. 1002 ¶¶ 65, 99). Proxy server 110 then converts and/or reformats original web page 104 into reformatted web page 122 (shown in Figure 1), which is transmitted to mobile device 108. Pet. 17 (citing Ex. 1005, 2:24–29, 5:46–49, 4:56–60). As Cheng explains, "[t]he designated HTML content of the retrieved web page 104 is extracted, subsequently and/or converted, and transmitted as a reformatted web page 122 to the mobile device 108." Ex. 1005, 5:46–49; *see also id.*, 3:22–26.

Dr. Almeroth also testifies that a person of ordinary skill in the art "would have had to engage in an undue level of experimentation to

determine whether . . . Neibauer's web pages might be converted through some combination of Cheng's SW-Transforms . . . in a way that the web pages could be viewed on the mobile device at all." Ex. 2001 ¶ 93. Yet, Cheng teaches just such a methodology for converting web pages so that they may be viewed on mobile devices. Cheng explains that "[b]ecause of the explosion of mobile enterprise solutions, users of wireless devices now demand that businesses deliver web content for viewing on desktop, or mobile/portable (e.g., handheld) devices." Ex. 1005, 1:19–22.

As Patent Owner acknowledges, Cheng accomplishes this by using "SW-Transforms" to alter the content of an original website to make the remainder viewable on a given mobile device. Patent Owner acknowledges that Cheng discloses SW-Transforms that can be applied on a device-specific basis (to conform all web pages to some specific constraint of a certain mobile device) and a site-specific basis (to adapt the contents of a certain web page or group of pages on a web site for all mobile devices). Ex. 2001 ¶ 74 (citing Ex. Ex. 1005, 11:45–62; 12:25–31). In addition, Cheng discloses "global conversions" that "change or format web content on all web pages . . . for either one type of device or all devices." Ex. 1005 12:32–35; Fig. 2.

On this preliminary record, we credit Dr. Madisetti's testimony, which aligns with the purpose and the methodology described in Cheng. Here, Dr. Madisetti testifies that combining the Yahoo! Clubs features of Neibauer with the teachings of Cheng, would

> involve nothing more than straightforward web programming techniques relying on standard technologies such as HTTP, HTML, and could have been implemented using off-the-shelf web browser and web server software. With respect to Cheng, it

> discloses known techniques for converting HTML documents into formats suitable for wireless mobile devices. Wireless web browsing was well-known as evidenced by the existence of industry standard technologies such as Wireless Application Protocol (WAP) and the Wireless Markup Language (WML), an XML-based markup language for describing pages for viewing on mobile devices. Proxy server techniques, as explained previously, were also well-known and commercially available. An ordinarily skilled artisan would have found the disclosures of Neibauer and Cheng sufficiently detailed to implement the techniques on which I rely, without undue experimentation.

Ex. 1002 ¶ 108.

The web programming techniques described by Dr. Madisetti would have been well within the command of a person of ordinary skill in the art given the qualifications agreed upon by the parties in this proceeding, which include "a bachelor's degree in electrical engineering, computer science, or similar field, with two years of experience in developing and implementing network-based computer systems that interact with mobile devices, such as systems for storing and retrieving information over the Internet or communicating using the Web using wireless mobile devices." *See* Pet. 5–6 (citing Ex. 1002 ¶¶ 14–18); Prelim. Resp. 16.

Based upon the present record, we determine that Petitioner has made a sufficient showing that one of ordinary skill in the art would have had a reason to combine the asserted art in the manner described by Petitioner. We, therefore, find that Petitioner has shown sufficiently for purposes of institution that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine the teachings Neibauer, Cheng, and Ausems in the manner described, and would have had a reasonable expectation of success in so doing.

2. Independent Claim 1- Contested Limitations

Patent Owner contends that Petitioner's proposed combination of asserted art does not satisfy the "receiving . . . from a mobile device" limitations of claim 1. *See* Prelim. Resp. 25–27. The relevant portions of claim 1 read as follows:

[1[c]] *the processing element being configured:*

[1[c][1]] *to receive first device-captured data from a first one of the mobile devices via the network interface*;

[1[c][2]] *to receive second device-captured data from a second one of the mobile devices via the network interface*. Ex. 1001, 19:33–37.

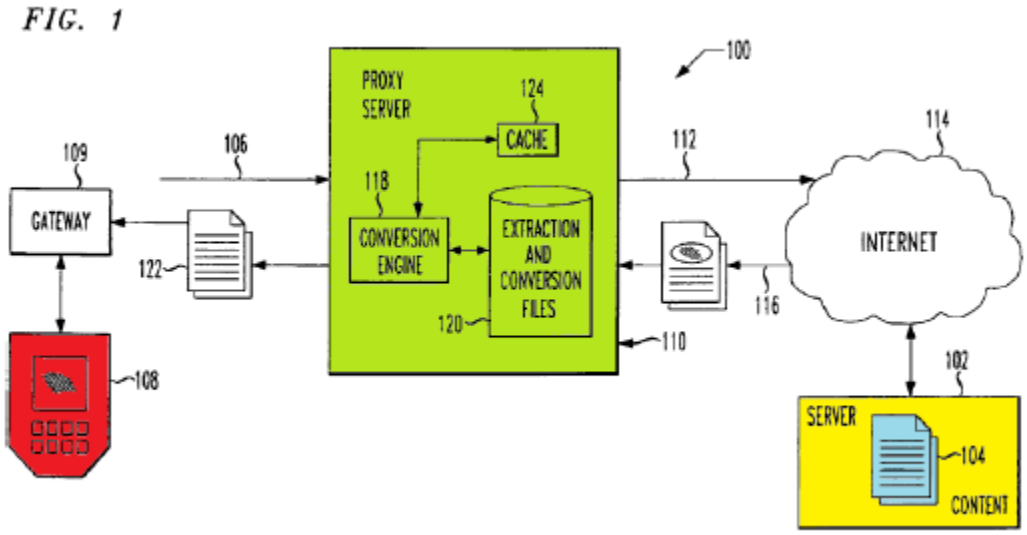
For these limitations, Petitioner asserts that "Neibauer discloses features of a Yahoo! service known as Yahoo! Clubs." Pet. 11 (citing Ex. 1003, 473–483). According to Petitioner, "Neibauer explains that '[a] *club* is a group of Yahoo! members who share a common interest. Each club has its own message board, chat room, as well as places to share photographs, news, addresses, and links." Pet. 11 (citing Ex. 1003, 473) (italics in original). With respect to the photo sharing feature, Neibauer explains that "[t]he Photos option in the Our Pages section lets members share photographs and other graphics. Each club is given 5 MB of space to store photographs. The photos are organized into up to 30 albums." Ex. 1003, 477. Petitioner explains that "[i]n order to add a photograph to an album, the user identifies the location of the photo and enters a name and description of the photo that will be uploaded." Pet. 12 (citing Ex. 1003, 478).

Petitioner contends that

> [c]ommunicating with a plurality of "mobile devices" would also have been obvious over Neibauer and in further view of Cheng

> (EX1005). Cheng relies on an already-established technology known as "proxy servers," which were commonly used to provide security and interoperability between devices. (EX1002, ¶63.) Cheng relies on this proxy server concept to convert non-mobile webpages into a format accessible by mobile devices.

Pet. 15. Cheng's Figure 1, annotated by Petitioner, is shown below.



Petitioner explains that "[t]he right side of Figure 1 above shows an origin web server 102 [in yellow] that contains original web page 104[6]," and "[t]he left shows a mobile device 108 [in red] connected to proxy server 110 [in green], optionally through gateway 109." Pet. 15 (citing Ex. 1005, 3:32–37). According to Petitioner

> mobile device 108 can issue a request 106 for an original web page 104 using standard HyperText Transport Protocol (HTTP), as was well-known in the art, with the request 106 being received by proxy server 110. (Cheng, Fig. 1, 2:19-21, 3:58-67, 7:65-8:2; EX1002, ¶¶65, 99.) "Upon determining that the requested page

[6] Cheng explains that "web page 104 is typically an HTML file with references to any component .wav, .mov, and/or Joint Photographic Experts Group (JPEG) files, which together comprise the web page 104." Pet. 15 (citing Ex. 14005, 4:10–13).

> 104 resides at the server 102, the proxy server 110 makes a request 112 for the page. As shown, the proxy server 110 and the server 102 are connected via a network 114 such as the Internet." (Cheng, 3:65-4:2; *see also id.*, 2:21-24.) Proxy server 110 then converts and/or reformats original web page 104 into reformatted web page 122 (shown in Figure 1), which is transmitted to mobile device 108. (Cheng, *e.g.*, 2:24-29, 5:46-49, 4:56-60.) "The designated HTML content of the retrieved web page 104 is extracted, subsequently and/or converted, and transmitted as a reformatted web page 122 to the mobile device 108." (Cheng, 5:46-49; *see also id.*, 3:22-26.) The proxy server can also perform conversion on images on the web page to enable viewing on a mobile device, for example, by scaling and reducing colors and resolution. (Cheng, Fig. 7 (704, 706, 708), 10:60-11:8.)

Pet. 17.

Petitioner argues that "Neibauer, alone and in combination with Cheng, therefore renders obvious the processing element being configured '**to receive first device-captured data from a first one of the mobile devices via the network interface**,' by allowing the user to upload a photo over the Internet using its mobile device." Pet. 23. Petitioner asserts that "[i]t would have been obvious that the photo would have been '**first device-captured data**,'" such as a digital photograph. *Id.* (citing Ex. 1002 ¶ 117; Ex. 1003, 478, Fig. 21-10 (showing exemplary club photo album listing photos of Denise Richards and Famke Janssen).

Petitioner argues that

> The photo would have been received by the server from the mobile device, and more specifically under the proposed combination with Cheng, by the proxy server 110 and origin web server 102. The photo would also have been received "via the network interface," as explained in 1[b], because that interface would have facilitated communications between the mobile device and the processing element over the Internet. (Cheng,

> 3:67-4:2 ("As shown [in Figure 1], the proxy server 110 and the server 102 are connected via a network 114 such as the Internet.").)

Pet. 23.

Patent Owner argues that

> Neibauer and Cheng do not satisfy the 'receiving . . . from a mobile device' claim limitations even if combined. Even if the mobile device could have supported all of the Clubs website functionality such that it could have engaged in upstream data transfer as Petitioner relies on, that is only half the battle: the Cheng proxy server would have had to have been designed to support such upstream data transfer. EX2001 ¶86. Cheng is explicitly designed for one-way data transfer in response to a request from a mobile client.

Prelim. Resp. 26 (citing Ex. 2001 ¶¶ 75–76, 80).

Patent Owner also argues that

> [u]nlike downloading data to a client, which a server does in response to a specific request, uploading data to a server often implies a persistent connection between the two, which among other things requires the server to keep track of the client's state. *Id*. ¶86. An intermediary such a proxy server, which again presents itself to the content server as and plays the role of the client, would have to account for issues like persistent connections with and state tracking of the actual client using the proxy server.

Prelim. Resp. 26. Patent Owner argues that "Cheng's disclosure of a cache . . . would directly interfere with the sort of two-way communication scheme Petitioner advances." *Id*. at 27 (citing Ex. 2001 ¶ 87).

We disagree with Patent Owner. Patent Owner's arguments directed at Cheng, including the "Cheng proxy server would have had to have been designed to support . . . upstream data transfer," "keep track of the client's state," "account for issues like persistent connections," and "Cheng's

disclosure of a cache," do not demonstrate that Petitioner's proposed combination of Neibauer, Ausems, and Cheng in somehow untenable. *See* Prelim. Resp. 26. One cannot show non-obviousness by attacking references individually where, as here, the proposed rejections are based on combinations of references. *Id.* To justify combining reference teachings it is not necessary that a device shown in one reference can be physically inserted into the device shown in the other. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (citations omitted).

Here, Petitioner provides sufficient evidence of how a person of ordinary skill in the art would have combined the teachings of Neibauer, Ausems, and Cheng to meet the contested limitations of claim 1. Petitioner relies on Neibauer's explanation that the photo sharing feature of Yahoo! Clubs allows club members to upload photos into their group albums. Ex. 1003, 473–483. Dr. Madisetti testifies that with respect to the recited "*apparatus*" of claim 1, "it would have been obvious . . . to make the clubs features of Neibauer available to club members via mobile devices." Ex. 1002 ¶ 94.

Moreover, Petitioner points out that

> [t]he '348 patent itself expressly defines a "mobile device" as including, among other things, a laptop computer. ('348, 4:45-55.) It was well-known that conventional laptop computers provided the same functionality as desktop computers and could

> run web browser software and visit web pages on the Internet. (EX1002, ¶112.) It therefore would have been obvious that the Yahoo! website, including the club photo sharing feature discussed above, would have been accessible to a user of a mobile device such as a laptop computer. (*Id.*)

Pet. 13–14.

Dr. Madisetti also testifies that Cheng "provides mobile functionality by disclosing a system and method for dynamically reformatting or converting existing web content into a format suitable for mobile devices." *Id.* ¶ 95. Cheng describes how "proxy server 110 reformats/converts web content 104 on an origin web server 102 into a format 122 readable on any mobile device 108." Ex. 1005, 3:22–26. Dr. Madisetti testifies how Cheng's "proxy server can also perform conversion on images on the web page to enable viewing on the mobile device." Ex. 1002 ¶ 100 (citing Ex. 1005, Fig. 7, 10:60–11:8).

Given this evidence, and notwithstanding Patent Owner's evidence and arguments, including the testimony of Dr. Almeroth, we are persuaded that Petitioner has demonstrated sufficiently for purposes of institution that the teachings of Neibauer, Ausems, and Cheng meet limitation 1[c], "*to receive [first/second] device-captured data from a [first/second] one of the mobile devices via the network interface*, of independent claim 1.

3. Independent Claim 1 – Uncontested Portions

Patent Owner does not expressly contest the remaining portions of independent claim 1. *See* Prelim. Resp. 17–27. The uncontested portions of claim 1 include:

[preamble] *An apparatus comprising:*

[1[a]] *a processing element comprising a processor coupled to a memory; and*

[1[b]] *a network interface coupled to the processing element and configured to communicate with a plurality of mobile devices over at least one network;*

[1[c]] *the processing element being configured:*

[1[c][3]] *to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices.* Ex. 1001, 19:27–44.

Petitioner provides evidence and argument, supported by the testimony of Dr. Madisetti, that these uncontested portions of claim 1 are met by Petitioner's proposed combination of Neibauer, Ausems, and Cheng, and that at the time of the claimed invention, claim 1 would have been obvious to a person of ordinary skill in the art. *See* Pet. 11– 17, 27–34; Ex. 1002 ¶¶ 92–100, 109–113, 127–133.

After reviewing Petitioner's arguments and evidence concerning these portions of claim 1, which are not contested by Patent Owner at this stage of the proceeding (*see* Prelim. Resp.), we are persuaded that Petitioner has demonstrated sufficiently for purposes of institution that the combined teachings of Neibauer, Ausems, and Cheng meet the uncontested portions of claim 1.

4. Conclusion as to Independent Claim 1

We have considered Petitioner's evidence and arguments that the limitations of claim 1 are met by the combined teachings of Neibauer, Ausems, and Cheng. Based on this preliminary record, and for the reasons given by Petitioner and those summarized above, we are persuaded that

Petitioner has demonstrated sufficiently for purposes of institution that the combined teachings of Neibauer, Ausems, and Cheng meet the limitations of independent claim 1 and that a person of ordinary skill in the art at the time of the claimed invention would have had reason to combine their teachings in the manner described, and would have had a reasonable expectation of success in so doing.

5. Remaining Claims 2, 3, 6–9, 12–14, 17, and 18

Petitioner contends that remaining claims 2, 3, 6–9, 12–14, 17, and 18 would have been rendered obvious by the combined teachings of Neibauer, Ausems, and Cheng. Pet. 34–44. Petitioner provides a detailed claim analysis, supported by the testimony of Dr. Madisetti. *Id.*; *see also* Ex. 1002 ¶¶ 134–152.

Patent Owner does not specifically address Petitioner's evidence and arguments directed to these remaining claims at this stage of the proceeding. *See* Pet. 17–36; Ex. 2001 ¶¶ 77–94.

We have considered Petitioner's evidence and arguments with respect to these remaining claims. Because we determine that Petitioner demonstrates a reasonable likelihood of prevailing in its challenge to independent claim 1 under 35 U.S.C. § 103(a) as obvious over Neibauer, Ausems, and Cheng, we institute *inter partes* review as to all other challenges in the Petition, including Petitioner's challenges to remaining claims 2, 3, 6–9, 12–14, 17, and 18. *See PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018).

G. Remaining Grounds 2–6

Petitioner contends claims 4–5 are obvious over Neibauer, Ausems, Cheng, and Squibbs (Ground 2) (Pet. 44–52); claims 10–11, 15–16, and 19–

20 are obvious over Neibauer, Ausems, Cheng, and McElfresh (Ground 3) (Pet. 52–62); claims 1–3, 6–9, 12–14, and 17–18 are obvious over Neibauer, Ausems, Cheng, and Harvey (Ground 4) (Pet. 3, 62–66); claims 4–5 are obvious over Neibauer, Ausems, Cheng, Squibbs, and Harvey (Ground 5) (Pet. 3, 62–66); and claims 10–11, 15–16, and 19–20 are obvious over Neibauer, Ausems, Cheng, McElfresh, and Harvey (Ground 6) (Pet. 3, 62–66).

We have considered Petitioner's evidence and arguments with respect to these other grounds. Because we determine that Petitioner demonstrates a reasonable likelihood of prevailing in its challenge to independent claim 1 under 35 U.S.C. § 103(a) as obvious over Neibauer, Ausems, and Cheng (Ground 1), we institute *inter partes* review as to all other challenges in the Petition, including Petitioner's challenges under Grounds 2–6. *See PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018).

IV. CONCLUSION

For the foregoing reasons, we have determined that there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition. We therefore institute trial as to all challenged claims on all grounds asserted in the Petition.

At this preliminary stage of the proceeding, we have not made a final determination as to the patentability of any challenged claim or any factual or legal issue underlying the patentability inquiry. Any final determination will be based on the complete record developed during trial. We place Patent Owner on express notice that any argument not asserted in a timely-filed Response to the Petition, or in another manner permitted during trial,

shall be deemed waived, even if that argument was presented in the Preliminary Response.

V. ORDER

Upon consideration of the record before us, it is

ORDERED that *inter partes* review of claims 1–20 of the ’348 patent is instituted as to all challenged claims on all grounds raised in the Petition;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this Decision.

FOR PETITIONER:

Heidi Keefe
Phillip Morton
Andrew Mace
COOLEY LLP
hkeefe@cooley.com
pmorton@cooley.com
amace@cooley.com

FOR PATENT OWNER:

Kevin S. Tuttle
Brian G. Strand
Erick S. Robinson
Patrick M. Dunn
Kyle L. Elliott
Homayoon Rafatijo
SPENCER FANE LLP
ktuttle@spencerfane.com
bstrand@spencerfane.com
erobinson@spencerfane.com
pdunn@spencerfane.com
kelliott@spencerfane.com
hrafatijo@spencerfane.com