

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTUIT INC.,
Petitioner,

v.

SAMESURF, INC.,
Patent Owner.

IPR2023-00339
Patent 9,185,145 B2

Before KARL D. EASTHOM, BARBARA A. BENOIT, and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

BENOIT, *Administrative Patent Judge*.

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

I. INTRODUCTION

Intuit Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–18 (“the challenged claims”) of U.S. Patent No. 9,185,145 B2 (Ex. 1001, “the 145 patent”), supported by the Declaration of Henry A. Lieberman (Ex. 1003). Samesurf, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 9, “Prelim. Resp.”), supported by the Declaration of David S. Howell (Ex. 2003).

The Board’s authority to determine whether to institute an *inter partes* review is under 35 U.S.C. § 314. *See also* 37 C.F.R. § 42.4(a) (2020). To institute an *inter partes* review, the information presented in the Petition must show “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a).

For the reasons set forth below, the information presented in the Petition establishes a reasonable likelihood that Petitioner will prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review of claims 1–18 of the ’145 patent on all grounds of unpatentability presented.

A. *Real Parties in Interest*

The Petition indicates Intuit Inc. is the real party in interest. Pet. 3. Patent Owner identifies itself as the real party in interest. Paper 4 (Patent Owner’s Mandatory Notices), 2.

B. *Related Matters*

As required by 37 C.F.R. § 42.8(b)(2), each party identifies various judicial or administrative matters that would affect or be affected by a decision in this proceeding. Pet. 3; Paper 4, 2. The parties identify the

following district court case: *Samesurf, Inc. v. Intuit, Inc.*, No. 3:22-cv-00412 (S.D. Cal.). Pet. 3; Paper 4, 2. The parties also each identify two concurrently filed petitions challenging different patents: IPR2023–00341 (challenging U.S. Patent No. 9,483,448 B2) and IPR2023–00342 (challenging U.S. Patent No. 8,527,591 B2). Pet. 3; Paper 4, 2.

C. The '145 Patent

The '145 patent is titled “Method and Apparatus for the Implementation of a Real-Time Sharable Browsing Experience on a Guest Device.” Ex. 1001, code (54). The patent relates to a “sharable browsing experience” through “a synchronized browsing session on a guest device utilizing the transfer of URL [uniform resource locator], form data, script, and other information.” *Id.* at 1:15–19. In contrast with “desktop or screen sharing” approaches that “allow users to simply view the same internet content,” techniques described by the '145 patent address the need for “all users in a session to interact with, discuss, log in separately or together, and share internet browsing in real time for online activities.” *Id.* at 2:25–27, 2:47–50.

Figure 2(a), reproduced below, illustrates communication between various devices “to initialize a synchronized browsing session.” *Id.* at 4:18–21.

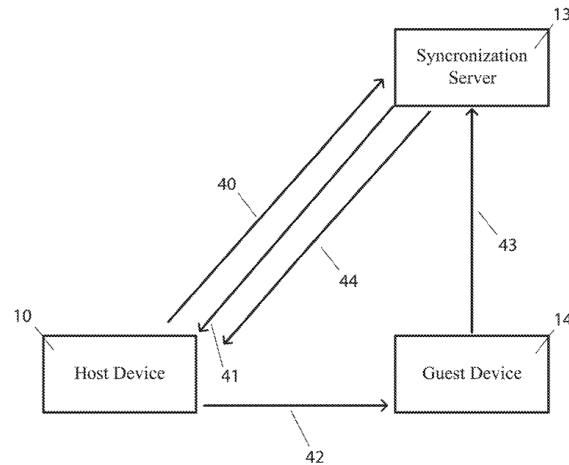


Figure 2(a) is a block diagram showing communication between host device 10, synchronization server 13, and guest device 14 to initialize a synchronized browsing session between host device 10 and guest device 14. *Id.* at 10:13–19; Fig. 2(a). Examples of host and guest devices include personal computers, mobile phones, and electronic tables with “a visual user interface and network connection.” *Id.* at 6:14–22 (identifying example host devices), 6:23–32 (identifying example guest devices). “Host device 10 transmits an initialization request 40 to synchronization server 13,” which responds by sending confirmation message 41 that includes session identifier 19 for the synchronized browsing session. *Id.* at 10:20–28. Host device 10 transmits session invitation 42 to guest device 14. *Id.* at 10: 29–32.

To join the synchronized browsing session with host device 10, guest device 14 transmits request to join 43, which includes session identifier 19, to synchronization server 13. *Id.* at 10:39–44. Synchronization server 13 “records identification and routing information of guest device 14” and, in some embodiments, sends “notification 44 to host device 10 [that] guest device 14 has joined the synchronized browsing session.” *Id.* at 10:50–53.

Figure 5(a), reproduced below, illustrates communication between various devices during a synchronized browsing session with a website server. *Id.* at 4:51–54.

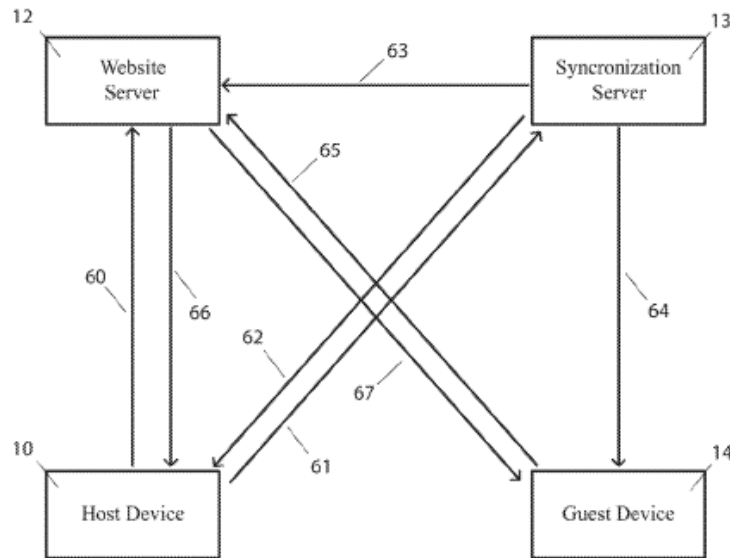


Figure 5(a) is a block diagram showing communication between website server 12, host device 10, synchronization server 13, and guest device 14 during a synchronized browsing session. *Id.* at 15:53–58. Host device 10 communicates with website server 12 to receive website content. *Id.* at 15:59–16:11. Host device 10 also transmits “website interaction information” to synchronization server 13. *Id.* at 16:12–23. Examples of website interaction information include the URL of website server 12, cookie information, form data, java script, other types of user inputted information, or attached files. *Id.* at 16:15–23. Synchronization server 13 then forwards the communication message to guest device 14. *Id.* at 16:42–51, 16:62–67. Guest device 14 uses the communication message to send website request 65 to website server 12. *Id.* at 16:67–17:4. “In exemplary embodiments, website request 65 should be similar to or identical to website

request 60.” *Id.* at 17:4–6. In one such exemplary embodiment, this enables synchronized browsing between host device 10 and guest device 14 because identical website content is provided by website server 12 to each device in response to identical requests sent by each device to the website server 12. *Id.* at 17:38–48.

Figure 5(d), reproduced below, illustrates steps used by a guest device during a synchronized browsing session with a host device. *Id.* at 19:8–10.

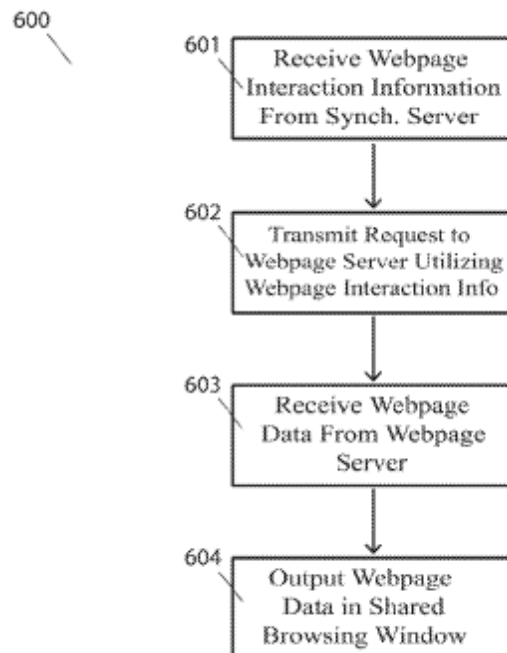


Figure 5(d) is “a flow chart of method 600 utilized by guest device 14 for the execution of a synchronized browsing session with host device 10.” *Id.* “In step 601, guest device 14 receives communication message 64 from synchronization server 13.” *Id.* at 19:16–18. As described previously, communication message 64 “is designed to be forwarded by synchronization server 13 to guests in the synchronized browsing session, such as guest 14, to perform the synchronized browsing session.” *Id.* at 16:42–45. “In

exemplary embodiments, communication message 64 may be a duplicate of [host device's] website request 60, or may comprise the URL address of the website server.” *Id.* at 16:45–47. “In other embodiments, communication message 64 may also include other transmitted data from [host device's] website request, such as cookie information, form data, java script, or other user inputted information, or attached files.” *Id.* at 16:47–51.

“Guest device 14 formulates website request 65 by processing communication message 64.” *Id.* at 19:23–25. “In step 602, guest device 14 transmits website request 65 to website server 12.” *Id.* at 19:18–19. “In step 603, guest device 14 receives content reply 67 from website server 12.” *Id.* at 19:28–29. “Finally, in step 604, guest device 14 outputs content reply 67” through a user interface of guest device 14. *Id.* at 19:29–30. As shown, Figure 5(d) describes “content reply 67” as “webpage data.” The user interface may be part of specialized synchronization browsing software or may be output using a standard internet browser window. *Id.* at 19:30–36.

D. Challenged Claims

All eighteen claims of the '145 patent are challenged, of which claims 1 and 9 are independent. Illustrative claim 1 follows, with bracketed annotations added for reference:

1. A method performed by a guest device for joining asynchronous browsing session administered by a synchronization server, comprising:

[1a] receiving from the synchronization server a session invitation including a session identifier associated with a host device;

[1b] activating the session invitation to send a request to join said synchronized browsing session to said synchronization server;

[1c] receiving web browsing interaction data from said synchronization server, wherein said web browsing interaction data is associated with:

a website server that is independent of the synchronization server, and

the host device that has initiated the session invitation and

[1d] operating an application based on said web browsing interaction data received from said synchronization server to access a website server¹ independent of the synchronization server subsequent to the activation of the session invitation.

Ex. 1001, 22:62–23:15.

E. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of the challenged claims on the following grounds:

¹ Claim 1 recites “a website server” twice. *See* Ex. 1001, 23:7, 13; *but see* Ex. 1001, 24:7, 13 (claim 9 reciting “a website server” and “the website server”). Neither party has raised this antecedent basis issue. In any event, we are able to discern the meaning of the claim as interpreted by Petitioner and Patent Owner and as reflected by claim 9, which Petitioner argues on the same basis as claim 1. *See generally* Pet. 34–37, 59–62; *see also* Prelim. Resp. 51 (Patent Owner indicating claims 1 and 9 have “analogous limitations”), 59 (same).

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–18	103 ²	Lebrun ³ and Wang ⁴
1–18	103	Prajapat ⁵ and Wang

Pet. 3.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

The level of ordinary skill in the art at the time of the invention is a factual determination that provides a primary guarantee of objectivity in an obviousness analysis. *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308, 1324 (Fed. Cir. 1999) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991)).

Petitioner asserts that a person of ordinary skill in the art “would have had a bachelor’s degree in computer science, computer engineering, or electrical engineering, or the equivalent and at least two years of work

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amending 35 U.S.C. § 103, was effective on March 16, 2013. The ’145 patent claims the filing benefit of a patent that issued from an application filed on May 20, 2010, which is before the effective date of the applicable AIA amendment. Ex. 1001, code (63), 1:15–19. We, therefore, apply the pre-AIA version of § 103 for purposes of institution. *See also* Pet. 6 n.2 (noting Petition references are to the pre-AIA version of the statute).

³ WIPO International Publication No. WO 00/48110, published August 17, 2000 (Ex. 1005). *See* Pet. 5 (asserting the reference is prior art under pre-AIA 35 U.S.C. § 102(a), § 102(b)).

⁴ U.S. Patent Appl. Pub. No. US 2005/0033656 A1, published February 10, 2005 (Ex. 1006). *See* Pet. 5 (asserting the reference is prior art under pre-AIA 35 U.S.C. § 102(b), § 102(e)).

⁵ U.S. Patent Appl. Pub. No. US 2005/0021626 A1, published January 27, 2005 (Ex. 1007). *See* Pet. 5 (asserting the reference is prior art under pre-AIA 35 U.S.C. § 102(b), § 102(e)).

experience in software development and/or web-based software.” Pet. 11 (citing Ex. 1003 ¶¶ 17–20). Petitioner also indicates that “[a]dditional education could have substituted for professional experience, and significant work experience could have substituted for formal education.” *Id.*

Patent Owner asserts that a person of ordinary skill “would have had at least a bachelor’s degree in computer science, computer engineering, electrical engineering, or a similar field, and at least two years of professional experience or significant work experience in internet web browsing software development, web connectivity software development, or networking software development.” Prelim. Resp. 32 (citing Ex. 2003 ¶ 19).

The two proposals are materially similar in the education requirement and the time requirement (at least two years) of work experience. Petitioner’s proposal, however, requires work experience in “software development and/or web-based software,” whereas Patent Owner’s proposal requires more specific work experience in “internet web browsing software development, web connectivity software development, or networking software development.” Pet. 11; Prelim. Resp. 32.

Determining the level of ordinary skill in the art involves various factors, 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). The prior art of record also reflects the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

The asserted prior art, like the challenged patent, presents high-level functional descriptions of web-based software with flow charts and diagrams between server components. The asserted prior art relates to functional

descriptions of internet messages sent between software devices but does not have much discussion of the particulars of lower level communication protocols, such as cellular communication protocols or specific details of Internet protocols. For example, LeBrun's technology relates to providing "access to personalized web sites" and describes messages sent over a network between web clients, a web site, and a personalization server.

Ex. 1005, code (57), Figs. 1, 3. Wang describes a "collaboration system that includes a plurality of client devices individually connected to a network, and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a common collaboration environment among the client devices." Ex. 1006, code (57), Fig. 3.

Prajapat relates to "peer-to-peer dynamic web page sharing" and describes web browsers submitting requests for and receiving web pages, web servers providing web pages, and a web media server communicating shared web page information. Ex. 1007, codes (54, 57), Figs. 1-3.

Accordingly, based on this preliminary record, we find Patent Owner's assessment of "internet web browsing software development, web connectivity software development, or networking software development" to be overly narrow in view of the asserted prior art that describes in large measure requesting and receiving web pages from web servers. Thus, we find that Petitioner's assessment of "software development and/or web-based software" more appropriate for purposes of institution on this limited record. We also agree with Petitioner that additional education could have substituted for professional experience, and significant work experience could have substituted for formal education.

For the purpose of this decision, for these reasons, we find that a person of ordinary skill in the art would have had (1) at least a bachelor's

degree in computer science, computer engineering, electrical engineering, or a similar field, and (2) at least two years of work experience in software development and/or web-based software. We apply that level of ordinary skill in this decision. Our decision, however, would not change, however, if we had applied Patent Owner's proposed level of ordinary skill.

B. Claim Construction

In *inter partes* reviews, the Board construes claims using the same claim construction standard employed in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b) (2020). Under the principles set forth by our reviewing court, the “words of a claim ‘are generally given their ordinary and customary meaning,’” as would have been 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 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “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). We construe claim terms only as relevant to the parties’ contentions and only to the extent necessary to resolve the issues in dispute. See *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Neither Petitioner nor Patent Owner propose express constructions for any claim terms. Pet. 12; Prelim. Resp. 32. For purposes of this decision, we agree that no claim terms need be expressly construed. Patent Owner

arguments regarding the asserted grounds of unpatentability, however, raise particular claim scope contentions regarding “web browsing interaction data” recited in each of the independent claims. We preliminarily address those issues of claim scope in our later discussion of the asserted grounds of unpatentability.

C. Principles of Law

A patent claim is unpatentable 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 (2011); *accord KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting similar language in pre-AIA version of 35 U.S.C. § 103). The question of obviousness involves resolving 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) objective indicia of nonobviousness when in evidence (none on this preliminary record). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

D. Asserted Obviousness of Claims 1–18 over Lebrun and Wang

Petitioner asserts that claims 1–18 would have been obvious under 35 U.S.C. § 103 based on the combined teachings of Lebrun and Wang.

1. Lebrun’s Disclosure

Lebrun is a WIPO (World Intellectual Property Organization) international application published under the PCT (Patent Cooperation

Treaty) and titled “Personalized Access to Web Sites.” Ex. 1005, code (54). Among other features, Lebrun indicates “multiple related users can simultaneously access a sequence of web sites (web surfing), such that each of the related users has substantially the same content presented at the same times.” *Id.* at 4:6–9.⁶

Figure 3⁷, reproduced below, illustrates a system for group access to web sites. *Id.* at 29:25.

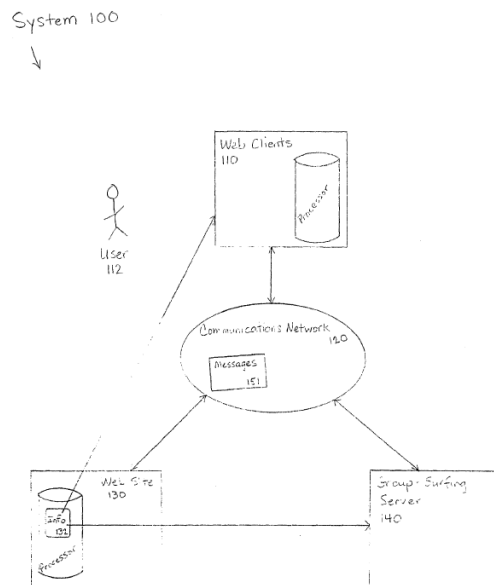


Figure 3 is a block diagram of “system 100 that includes a set of web clients 110, a communication network 120, at least one web site 130, and a group surfing server 140.” *Id.* at 29:27–28. Lebrun describes creating a “group-surfing session” in which “a first web client 110 sends a session-creation message 151 to the group-surfing server” 140 to create a group-

⁶ Page numbers refer to the original page numbers in the lower center of the document pages (i.e., not the page numbers added by Petitioner in the lower left of the document pages). This is consistent with Petitioner’s citations. *See, e.g.*, Pet. 25 (citing Ex. 1005, 33:2–3; quoting “add[s] itself to the session”).

⁷ Best available quality from Ex. 1005.

surfing session. *Id.* at 32:9–11. The message is sent in response “to an action by the user of the web client software 111, such as by selecting a web page or a link to a web page.” *Id.* at 32:5–7; Fig. 1 (showing web client software 111 of web client 110). Session-creation message 151 may include “an identifier for the group-surfing session, so that other web clients 110 can add themselves to the session.” *Id.* at 32:11–12. Lebrun further indicates that “group-surfing server 140 can also assign the identifier in a reply to the session-creation message 151.” *Id.* at 32:12–14.

“The group-surfing server 140 receives the session-creation message 151 and responds by (1) creating a group-surfing session and (2) “informing” the other web clients 110 participating in the group-surfing session. *Id.* at 32:26–31. “To add itself to the session, a second (or further) web client 110 sends a session-join message 151, which may include the identifier for the group-surfing session, to the group-surfing server 140. *Id.* at 33:2–4.

Lebrun also describes group surfing server 140 adding web clients 110 to a group-surfing session in relation to steps in a flow chart shown in Figure 4. *Id.* at 44:18–26. After receiving the session-join message 151 from “the new web client 110,” the group-surfing server 140 sends, among other steps, “a program fragment” to the new web client 110 that is used to process web pages received as part of the group-surfing session. *Id.* at 44:29–31. In general, in response to a link on a web page being selected to request another web page, the program fragment intercepts the request before it is sent to the web site 130 and redirects the request to the group-surfing server 140. *Id.* at 44:31–33. The group-surfing server 140 is then able to “assure” that the next web page selected is “presented to all participating web clients 110.” *Id.* at 44:1–2.

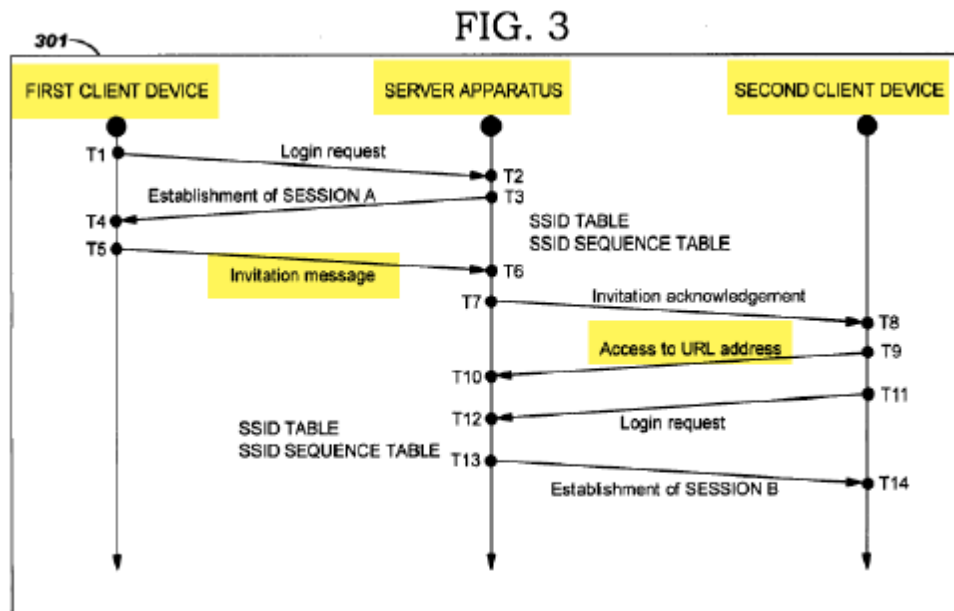
Lebrun describes a more particular example of group-surfing server, web clients, and web site communication during a group-surfing session in which web page selections from first web client 110 (or “controlling web client 110”) are presented at each of the other web clients participating in the group-surfing session. *Id.* at 45:6–46:15. First web client 110 receives a web page 153 from group-surfing server 140 (which in turn had received that page from the web site 130)). *Id.* at 45:13–14. First web client 110 selects a link 152 on web page 153, and the program fragment receives and sends the selection including “a next-page message 151 to the group-surfing server 140, indicating next page 153 in the progression of pages in the session.” *Id.* at 45:21–23. Group-surfing server 140 adds “proper cookie or other identity information” and “directs the target web site 130 to deliver the next page 153 to the group-surfing server 140 itself.” *Id.* at 45:25–28. “The group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session.” *Id.* at 45:28–29.

Lebrun continues, “[i]n a preferred embodiment, in order to reduce load on the group-surfing server 140, the group-surfing server 140 sends only the page 153 itself without any multimedia elements (such as embedded sound, images, or program fragments).” *Id.* at 45:29–46:1. “Each participating web client 110 requests those multimedia elements directly from the web site 130.” *Id.* at 46:1–2.

2. Wang’s Disclosure

Wang is a published patent application titled “Collaboration System Suitable for On-Line Shopping.” Ex. 1006, code (54). Wang’s server receives and responds to requests from multiple client devices and synchronizes the displays on each of the client devices. *Id.*, code (57). A

client device receives an invitation to join a group shopping session. *Id.* ¶¶ 46–48, Fig. 3. The invitation includes “URL address to be used” to access the shopping session. *Id.* ¶ 48. Figure 3, reproduced below as annotated by Petitioner, illustrates a process to establish a group session. Pet. 27; Ex. 1006 ¶ 27.



Wang’s Figure 3 is a “timing diagram for a process” that illustrates messages sent between two client devices and a server to establish “a group session,” which refers to “a session which enables client devices including in a group designated by a fixed identification value to access a common application service.” Ex. 1006 ¶¶ 27, 46. Wang indicates an example of a common application service may be “a virtual shopping system,” in which case the group session “may be referred to as a shopping session.” *Id.* ¶ 46.

More specifically, Figure 3 shows various messages sent between a first client device and a server apparatus and between the server apparatus and a second client device. *See id.* ¶¶ 47–49, Fig. 3. Among the messages exchanged, is an “invitation message” that the first client device sends to the

server apparatus to invite “other client devices to the shopping session.” *Id.* ¶ 47. In response, the server apparatus sends to the second device a message, such as an email, that includes “a URL address to be used” to join the shopping session. *Id.* ¶¶ 48–49, Fig. 3. The second client then “accesses the designated URL address,” and the server apparatus receives an access notice and login request from the second client. *Id.* ¶ 49. The server apparatus subsequently “completes the establishment of the group session.” *Id.*

3. Claim 1

a. Claim 1 Preamble and Limitations [1a]–[1b]

Claim 1’s preamble recites “[a] method performed by a guest device for joining a synchronized browsing session administered by a synchronization server.” Petitioner relies on Lebrun’s group surfing session created by group surfing server 140 for teaching a synchronized browsing session administered by a synchronization server recited in claim 1. *See* Pet. 22–23 (citing Ex. 1005, 32:9–11, 11–12). Petitioner relies on Lebrun’s web client that adds itself to the group-surfing session for teaching a guest device that joins the browsing session as required by the claim. *See* Pet. 23 (citing Ex. 1005, 32:9–11, 11–12, 26–31; 33:2–4; 30:19–24; 44:21–27; Fig. 4 (step 212)). Regardless of whether the preamble is limiting, Petitioner’s showing for the preamble is sufficient for purposes of institution because Petitioner relies on plain reading of the cited passages discussed above with respect to Lebrun’s disclosure. Patent Owner does not address Petitioner’s showing. *See generally* Prelim. Resp.

For “receiving from the synchronization server a session invitation including a session identifier associated with a host device” (Limitation [1a]

or “the receiving limitation”), Petitioner relies on Lebrun’s description of group-surfing server informing the web client participants in the group-surfing session for teaching the guest device receives a session invitation from the synchronization server. *See* Pet. 24 (citing Ex. 1005, 32:26–28); *see also* Pet. 23 (citing Ex. 1005, 32:3–7). For the recited host device, Petitioner relies on Lebrun’s first web client 110 that sends the session-creation message 151 to the group surfing server 140. *See* Pet. 24 (citing Ex. 1005, 32:9–11). For the “session invitation associated with a host device,” Petitioner notes that session-creation message 151 sent to the group-surfing server 140 to request the creation of the session “includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session” and the group-surfing server assigns the identifier in a reply message to session-creation message 151. Pet. 24 (citing Ex. 1005, 32:9–14). According to Petitioner, the action of the group-surfing server assigning the identifier teaches including an identifier associated with the host device in the session invitation. Pet. 25.

Petitioner’s showing for the receiving limitation is sufficient for purposes of institution. As discussed above, Lebrun describes a message sent from the group-surfing server to a web client to join the group-surfing session, which sufficiently teaches or suggests a session invitation received by the guest device from the synchronization server as required by claim 1. Lebrun’s message includes an identifier for the group session that was initially provided by the first web client, which at this preliminary juncture is sufficient to teach or suggest a session invitation including a session identifier associated with the host device. Patent Owner does not address Petitioner’s showing as to this limitation. *See generally* Prelim. Resp.

For “activating the session invitation to send a request to join said synchronized browsing session to said synchronization server” (Limitation [1b] or “the activating limitation”), Petitioner relies on Lebrun’s description of second or other client device (corresponding to the recited guest device) that “add[s] itself to the session” by sending a session-join message 151 to the group-surfing server 140. Ex. 1005, 33:2–7; *see* Pet. 25–26 (citing Ex. 1005, 33:2–3, 44:21–27, 32:13–14, 32:3–7, 32:21–24). Petitioner additionally contends, relying on Lebrun’s descriptions of the identifier, that one of ordinary skill would understand that Lebrun’s “session-creation message (and relayed invitation) comprises a hyperlink or URL that the ‘second client device’ acts upon.” Pet. 26 (citing Ex. 1005, 32:3–7, 32:21–24).

Petitioner’s showing for the activating limitation is sufficient for purposes of institution. Patent Owner does not address Petitioner’s showing as to this limitation. *See generally* Prelim. Resp. Lebrun describes the identifier included in the session-creation message 151 as including “an identifier for the group-surfing session, so that other web clients can add themselves to that session” and that the session-creation message 151 can include “an identifier for an initial page for the group-surfing session,” such as a home page for the selected web site. Ex. 1005, 32:11–12, 32:21–24. On this preliminary record, the plain language of claim 1 does not require a particular type of “activating,” such as by using a hyperlink or a URL.

Petitioner alternatively relies on Wang’s description of a second client device accessing a URL address provided by the server apparatus as disclosing “activating the session invitation,” as recited in claim 1. Pet. 26–27 (citing Ex. 1006 ¶¶ 47–49). On this preliminary record, we agree with Petitioner that Wang discloses activating the session invitation as required in

claim 1. Wang’s unambiguous description of messages between the server apparatus and second client device shown in Figure 3 (as summarized above in Section II.D.2) discloses the second device sending an access notice and login request to the server apparatus, which subsequently establishes the group session.

Petitioner contends that one of ordinary skill would have been motivated to combine Wang’s activating a session invitation with Lebrun’s invitation to join a group-surfing session. Pet. 28. Specifically, Petitioner contends that “activating an invitation via a designated URL address would further enable” Lebrun’s group-surfing server “to coordinate and manage the group-surfing session, which would further Lebrun’s objective of providing an ‘improved technique for group access to web sites.’” Pet. 28 (citing Ex. 1005, 7:1). On this preliminary record, we agree with Petitioner that activating an invitation via a designated URL address would be a technique that helps coordinate a group-surfing session and would enable multiple related users being able to access “substantially the same content presented at the same time,” one of the stated benefits of Lebrun’s techniques. Ex. 1005, 7:1–3. We also agree, based on this preliminary record and in light of on the level of ordinary skill discussed above and the high-level function description of using URL addresses in Wang, that including a URL address in a message reflects “a combination of prior art elements according to known methods to yield predictable results,” as Petitioner contends. *See* Pet. 28.

For these reasons, we find Petitioner’s showing sufficient for institution.

b. Claim 1 Limitations [1c]–[1d]

Claim 1 recites “receiving web browsing interaction data from said synchronization server, wherein said web browsing interaction data is associated with: a website server that is independent of the synchronization server, and the host device that has initiated the session invitation” (Limitation [1c] or “the receiving web browsing interaction data limitation”). Claim 1 also recites “operating an application based on said web browsing interaction data received from said synchronization server to access a website server independent of the synchronization server subsequent to the activation of the session invitation” (Limitation [1d]).

(i) Petitioner’s contentions regarding Claim 1 Limitations [1c]–[1d]

Petitioner relies on web pages delivered to web clients participating in the group-surfing session and the program fragment used to present the web pages as corresponding to the recited web browsing interaction data. Pet. 29–30 (indicating “that the web pages delivered in the group-surfing session to the web clients for display, the web clients using a program fragment to present web pages and HTML form information meets” the limitation “receiving web browsing interaction data from said synchronization server”); Pet. 31 (indicating “the web interaction data identified above—the web pages displayed on the web clients that come from the web site”).

As for “receiving web browsing interaction data from said synchronization server” required by claim 1, Petitioner relies on Lebrun describing (i) the group-surfing server “causing the web site 130 to deliver the initial page 153 to the web clients 110 participating in the session,” (ii) group-surfing server determining a “progression of pages 153 in the session” based on user input, and (iii) “for each selected page, the server

‘contacts the web site 130 having that next page . . . so it can be presented to those web clients 110 participating.’” Pet. 29 (citing Ex. 1005, 32:28–31, 35:24–25, 35:5–8). Petitioner indicates that web pages are received at the web clients and directed for display by a “program fragment loaded at each web client.” Pet. 29–30 (citing Ex. 36:21–25, 37:5–10, 39:4–8).

Petitioner indicates the web pages are from a web site that is separate from the group-surfing server (as shown on Lebrun’s Figure 3 discussed above in Section II.D.1) so the web pages are associated with a website server that is independent of the synchronization server, as required by claim 1. Pet. 30–31 (citing Ex. 1005, 31:27–30; Fig. 3). Petitioner also indicates that Lebrun’s first web client (corresponding to the recited host device) initiates the progression of web pages displayed on each participating web client so the web page is associated with “the host device that has initiated the session invitation,” as recited by claim 1. Pet. 31–32 (citing Ex. 1005, 35:26–28).

Regarding the required “operating an application based on said web browsing interaction data received from said synchronization server,” Petitioner points to Lebrun’s description that, after the web client joins the group-surfing session, “the web client is able to operate a web browser and access a website based on the data received from the group-surfing server.” Pet. 32 (citing Ex. 1005, 66:9–12). Petitioner’s position is that Lebrun’s web browser on the web client corresponds to the recited application operated by the guest device. Pet. 32–34. Petitioner relies on Lebrun’s description of browsing session activities being divided into (i) receiving from the group-surfing server the web pages without multimedia elements and (ii) browsing session activities that involve the web client device directly requesting multimedia elements from web site, rather than through

the group-surfing server. Pet. 33–34 (citing Ex. 1005, 45:31–32, 46:1–2). Petitioner’s position is that, subsequent to joining the group-surfing session, the web browser on the web client device is operating based on the partial web page data (without multimedia data elements) received from the group-surfing server (corresponding to the recited synchronization server) and so discloses “operating an application based on said web browsing interaction data received from said synchronization server.” Pet. 33–34 (citing Ex. 1005, 45:31–32, 46:1–2). Petitioner’s position is that the web browser on the web client device operates after joining the group-surfing session to use the partial web page data to access the web site to retrieve and display the multimedia elements on the web pages. Pet. 33–34 (citing Ex. 1005, 45:31–32, 46:1–2). The aspect of the web client’s browser retrieving multimedia media elements from the web server for display with the partial web page received from the group-surfing server discloses, according to Petitioner, “operating an application . . . to access a website server independent of the synchronization server subsequent to the activation of the session invitation.” Pet. 33–34. Thus, according to Petitioner, the web browser on the web client uses the web page data received from the group-surfing server to access multimedia data elements directly from the web server. *Id.* Petitioner’s position is that this manner of operating described in Lebrun collectively discloses “operating an application based on said web browsing interaction data received from said synchronization server to access a website server independent of the synchronization server subsequent to the activation of the session invitation,” as recited in Limitation [1d].

(ii) Patent Owner's contentions regarding Claim 1 Limitations [1c]–[1d]

Patent Owner contends that the recited “web browsing interaction data” does not encompass Lebrun’s web pages and “program fragment.” Prelim. Resp. 37–44. Patent Owner points to the inclusion of “interaction” in the phrase and contends that “the data must be ‘interaction’ data related to web browsing.” Prelim. Resp. 37. Patent Owner indicates that “[w]eb browsing interaction data is a key element of the invention” and “data related to each interaction (‘web browsing interaction data’)” enables a guest device to “independently replicate actions performed by the host device to access the same web content data from the website servers.” Prelim. Resp. 37–38.

Patent Owner does not identify any claim language—nor are we aware of any—requiring a guest device to “independently replicate actions performed by the host device to access the same web content data from the website servers.” Instead, Patent Owner points to various descriptions from the challenged patent to support Patent Owner’s contention that “web browsing interaction data” requires a guest device to be able to “independently replicate the actions performed by the host device to access the same content data from website servers.” Prelim. Resp. 38. For example, Patent Owner quotes the specification describing “receiving information related to a shared web browsing interaction performed by a host device from a synchronization server, and performing the shared browsing interaction based on the information received from the synchronization server.” Prelim. Resp. 38 (quoting Ex. 1001, 3:10–16). In another example, Patent Owner points to an express disclosure in the specification that “webpage interactions performed by any controlling party will be forwarded to the other attendees in the synchronized browsing

session.” Prelim. Resp. 38 (quoting Ex. 1001, 6:64–66). In yet another example, Patent Owner quotes the specification stating that “webpage interactions performing by any controlling party will be forwarded to the other attendees in the synchronized browsing session.” Prelim. Resp. 38 (quoting Ex. 1001, 6:64–66). Patent Owner also points to the specification statement that “[a] following device, such as guest device 14, may be defined as any device that receives relayed webpage interactions from synchronization server 13.” Prelim. Resp. 38 (quoting Ex. 1001, 7:8–10).

The plain language of claim 1, however, does not recite replicating actions of the host, receiving information about webpage interactions performed by the host or a controlling party, or receiving relayed webpage interactions. Rather, claim 1 broadly recites “receiving web browsing interaction data” that “is associated with a website server . . . and the host device that has initiated the session invitation” and uses that data “to access a website server independent of the synchronization server.”

Lebrun’s method of using some web page components received from the group-surfing server and some web page components accessed directly from the web site is a sufficient showing for institution. To be sure, on this preliminary record, Lebrun’s method of doing so does not involve replicating all actions performed by the host device in the manner described in the portions of the challenged patent identified by Patent Owner. *See* Prelim. Resp. 38–39 (indicating identical requests sent to website server 12 from guest device 14 and from host device 10 such that the data content sent to each from website server is similar or identical) (quoting Ex. 1001, 17:38–45; annotating Ex. 1001, Fig. 5(a)). As we explained above, replicating all actions performed by the host device is not a requirement of claim 1.

Furthermore, Patent Owner does not identify any descriptions in the challenged patent that uses the claim term “web browsing interaction data.” *See, e.g.*, Prelim. Resp. 38. Nor are we aware of any use of the term “web browsing interaction data” in the challenged patent other than in the claims. Patent Owner contends that “webpage interaction information” is “i.e. the claimed ‘web browsing interaction data’” but does not sufficiently address, at this preliminary juncture, the differences in the term used in the written description and the claim term itself. Prelim. Resp. 14; *see also* Prelim. Resp. 19.

Dependent claims indicate web browsing interaction data further comprises “cookie information associated with the website server” (claim 4), “information related to shared user input web browsing interactions depicted in a first web browser window” (claim 5), “form data associated with the website server” (claim 7), and “a log-in into a restricted access webpage” (claim 8). On this preliminary record, these claim terms narrow the “web browsing interaction data” recited in claim 1, but do not require “web browsing interaction data” to be information that allows the guest device to replicate actions performed by the host. Nor has Patent Owner argued that any dependent claims provide such support. *See generally* Prelim. Resp.

Furthermore, we do not agree with Patent Owner that Lebrun’s “webpage contents cannot constitute ‘web browsing interaction data’” because, as Patent Owner contends, “Lebrun’s webpage does not amount to data related to an *interaction* that may be performed by the guest device.” Prelim. Resp. 40. As explained above, based on this preliminary record, “web browsing interaction data” encompasses web pages or portions thereof related to a browsing interaction and is not limited to data related to enabling a host interaction being replicated by the guest device.

We also do not agree with Patent Owner that “since the group-surfing server has already retrieved the contents of the webpage from the website server and delivered the contents to the guest web client, there is no need for the guest web client to access this data in ‘operating an application....to access a website server independent of the synchronization server.’” Prelim. Resp. 40. We do not agree on this preliminary record because, as noted above, Petitioner relies on Lebrun’s webpage data received from the group-surfing server (corresponding to the synchronization server) that is used to retrieve from the web server the multimedia elements for a web page. Contrary to Patent Owner’s assertion, retrieving multimedia elements for a web page that was delivered without such elements would be needed in Lebrun’s process to display properly a complete rendering of the retrieved web page.

On this preliminary record, particularly in light of the broad language used in claim 1 that does not recite the specific operations that Patent Owner contends are required, the scope of “web browsing interaction data” encompasses web page data used for browsing and interacting with a web site.

Patent Owner further contends that Lebrun’s web pages are not received from the synchronization server and for this additional reason Petitioner’s contentions fail. Prelim. Resp. 41–45. Patent Owner is correct that Lebrun describes Lebrun’s group-surfing server as interacting with the web site that provides web pages to the web clients. *See* Prelim. Resp. 41–43 (discussing Ex. 1005, 35:6–8, 34:19–22, 39:4–8). Petitioner’s argument seems to be, however, that directly receiving web browsing interaction data from the synchronization server is not necessary because, as Petitioner interprets, the claim encompasses a synchronization server that causes a

website server to deliver web browsing interaction data to the guest device joining a synchronized browsing session. *See* Pet. 29 (citing Ex. 1005, 32:28–31, 35:24–25, 35:5–8). In other words, Petitioner argues that Lebrun discloses the required receiving from the synchronization server because Lebrun’s web client receives web pages that the group-surfing server causes to be sent from the website server. *See, e.g.,* Pet. 29 (“Lebrun explains that the group-surfing server ‘begin[s] operation of the group-surfing session,’ by ‘causing the web site 130 to deliver the initial page 153 to the web clients 110 participating in the session,’ as indicated by the identifier in the session-creation message. Ex. 1005, 32:28-31, 35:24-25.”).

For the receiving from the synchronization server limitation (Limitation [1c]), Petitioner also points to Lebrun’s “program fragment loaded at each web client” to reduce the load on the group-surfing server. Pet. 29 (citing Ex. 1005, 36:21–25). Lebrun describes the “program fragment” as using “techniques for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140.” Ex. 1005, 36:22–25; Pet. 29 (citing Ex. 1005, 36:21–25). Petitioner argues that the web client receives web browsing interaction data from the synchronization server because the “program fragment” received from the group-surfing server is used to present web pages and forms at the web client. Pet. 29–30.

Petitioner argues, in the context of the “operating an application” limitation, that the web browser on the web client device is operating based on the partial web page data (without multimedia elements) received from the group-surfing server. Pet. 33–34 (citing Ex. 1005, 45:31–32, 46:1–2); Ex. 1005, 45:31–46:2 (“In a preferred embodiment, in order to reduce load on the group-surfing server 140, the group-surfing server 140 sends only the

page 153 itself without any multimedia elements (such as embedded sound, images, or program fragments). Each participating web client 110 requests those multimedia elements directly from the web site 130.”). Patent Owner acknowledges this but argues that “the stripped down webpage” does not “include[] any web browsing interaction data.” Prelim. Resp. 50 (noting that “Lebrun specifically states that the group-surfing server sends ‘only the page 153 itself’ to the web clients”). For the reasons discussed above, on this preliminary record, we do not agree with Patent Owner’s interpretation of “web browsing interaction data” recited in claim 1 precludes Lebrun’s web pages.

Accordingly, based on this preliminary record, Petitioner’s showing for the “receiving web browsing interaction data from said synchronization server” is sufficient for institution.

Patent Owner additionally contends that Lebrun does not teach the “operating the application” limitation. Prelim. Resp. 47–51; *see also* Prelim. Resp. 45–46 (contending “Lebrun’s architecture does not permit independent content retrieval in the manner that is claimed” in that Lebrun does not operate an application as claimed). Patent Owner contends that claim 1 requires “the guest device utilizes the web browsing interaction data received from the synchronization server to access the website server ‘independent of the synchronization server,’ i.e. without mediation from the synchronization server.” Prelim. Resp. 48. Patent Owner contends that claim 1 requires operating as described in selected portions of the specification, particularly the steps shown in Figure 5(d) discussed above in Section I.C. Prelim. Resp. 48–49 (citing Ex. 1001, 18:34–38, 19:2–5, 19:16–23, 19:23–25, 19:28–32, Fig. 5(d)). The claim language, however, recites “operating an application based on said web browsing interaction

data received from said synchronization server to access a website server independent of the synchronization server subsequent to the activation of the session invitation” and does not recite the particular steps identified by Patent Owner. *See* Prelim. Resp. 48–49.

In addition, although Patent Owner in its arguments uses the term “web browsing interaction data 64,” in the passages being discussed, the specification instead uses the term “communication message 64,” which undermines Patent Owner’s position at this preliminary juncture. *Compare* Prelim. Resp. 49 (“After the guest device 14 receives the web browsing interaction data 64 from the synchronization server 13 (element 64), the guest device 14 transmits a website request to the website server 12 (element 65). Ex. 1001, 19:16–23.”), *with* Ex. 1001, 18:63 (“transmits communication message 64”), 19:16 (“receives communication message 64”), 19:24–25 (“processing communication message 64”), 19:25–26 (“In exemplary embodiments, information in communication message 64, including URL, form data, cookies or other data, is transmitted in website request 65.”).

For these reasons, at this preliminary juncture, we do not agree that the broad language of claim 1 is limited to the specific architecture and the precise detailed process described in portions of the specification cited by Patent Owner.

Additionally, as discussed above, Petitioner relies on Lebrun’s description of the web client device that, after joining the group-surfing session, uses partial web page data received from the group-surfing server to access the web site to retrieve and display the multimedia elements on the web page. Pet. 33–34 (citing Ex. 1005, 45:31–32, 46:1–2). Petitioner relies on Lebrun’s description that the web client can use web browsers. Pet. 33

(citing Ex. 1005, 66:9–12). Lebrun’s description of operating a browser after joining a session and doing so based on a partial web page received from the group-surfing server and retrieving other web page elements from the website itself is a sufficient showing for institution. Based on this preliminary record, Petitioner’s showing for the “operating the application” limitation is sufficient for institution.

c. Conclusion regarding Claim 1

In sum, as discussed above, Petitioner’s showing regarding the limitations recited in claim 1 and reasons why one of ordinary skill would have combined Lebrun and Wang in the manner proposed by Petitioner is sufficient for institution.

Accordingly, having reviewed the Petition, Preliminary Response, and prior art evidence cited therein, we determine that Petitioner has established a reasonable likelihood that the combination of Lebrun and Wang renders the subject matter of claim 1 obvious. This showing is sufficient to institute an *inter partes* review on all challenged claims on all asserted grounds. See *SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); 37 C.F.R. § 42.108(a) (“When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”). Notwithstanding, we provide additional commentary as to the remaining challenged claims in this asserted ground and as to some of the challenged claims in the additional asserted ground of obviousness over Prajapat and Wang.

4. Independent Claim 9

Claim 9 recites a guest device comprising a network interface and a processor configured to perform various steps, which largely track with the

limitations recited in claim 1. *Compare* Ex. 1001, 22:62–23:15, *with id.* at 23:37–24:15. Relying generally on its showing with respect to claim 1, Petitioner provides a similar showing for independent claim 9. *See* Pet. 34–37 (claim 9). Patent Owner also recognizes that claim 9 has “analogous limitations” to claim 1 and relies on its arguments presented with respect to claim 1. Prelim. Resp. 51.

Accordingly, for the reasons discussed above with respect to claim 1, Petitioner also sufficiently establishes for purposes of institution a reasonable likelihood that the combination of Lebrun and Wang renders the subject matter of claim 9 obvious.

5. Dependent Claims 2–8 and 10–18

Dependent claims 2–8 depend directly or indirectly from independent claim 1, whereas dependent claims 10–18 depend directly or indirectly from independent claim 9. In its assertions that these claims would have been obvious over Lebrun and Wang, Petitioner maps the added limitations of the dependent claims to the asserted prior art and provides why one of ordinary skill would have combined the references with a reasonable expectation of success for purposes of institution. Pet. 37–50; *see also* Pet. 19–21 (discussing motivation to combine Lebrun and Wang). Patent Owner does not offer arguments against these assertions at this time. *See generally* Prelim. Resp.

More specifically, regarding additional limitations of the invitation recited in claims 2, 3, and 11, Petitioner further relies on Wang’s hyperlink discussed above with respect to claim 1. Pet. 37–40. Regarding additional limitations of the web browsing interaction data recited in claims 4, 5, and 17, Petitioner relies on Lebrun’s description of “cookies” as a type of

information related to web sites (Pet. 40–41 (citing Ex. 1005, 49:1–11)) and Lebrun’s descriptions of web client interactions and that web clients can use web browsers (Pet. 41–42 (citing Ex. 1005, 34:19–35:6, 35:5–8, 38:31–32, 39:4–10, 66:9–12)).

For “non-shared web browsing interactions are depicted in a second web browser window” recited in claim 6 and similarly recited in claim 18, Petitioner relies on Lebrun’s “web page look ahead feature” and “web page special access feature.” Pet. 43 (citing Ex. 1005, 37:29–31, 38:1–17, 38:21–25). Petitioner argues that Lebrun’s “web page special access feature” allows entry of “information required for special access privately, without presenting that information to other web clients 110 participating in the session.” Pet. 43 (citing Ex 1005, 38:21–25). Lebrun describes specifically that “the controlling web client 110 can choose to accept such special access (such as entering a password or credit card number) without presenting the acceptance to other web clients 110 participating in the session.” Ex. 1005, 38:15–17. We note the broad language of “non-shared web browsing interactions” recited in claims 6 and 18.

For “form data associated with the website server” recited in claim 7, Petitioner relies on Lebrun’s description of sharing HTML form data. Pet. 44 (citing Ex. 1005, 38:31–39:10). We note that claim 7 broadly recites “associated with.” For “a log-in into a restricted access” recited in claims 8 and 16, Petitioner relies on Lebrun’s “web page look ahead” feature involving password restrictions. Pet. 44–45 (citing Ex. 1005, 37:29–31, 38:1–12, 38:12–17). As noted above, Lebrun describes specifically that “the controlling web client 110 can choose to accept such special access (such as entering a password or credit card number) without presenting the

acceptance to other web clients 110 participating in the session.” Ex. 1005, 38:15–17.

For the memory recited in claim 10 and the user interface recited in claim 12, Petitioner points to Lebrun’s disclosure that the web client includes “a processor operating under control of the web client software, such as a web browser” and the web client “includes a general purpose computer,” for instance. Pet. 45 (citing Ex. 1005, 30:14–15); Pet. 46 (citing Ex. 1005, 12:30–32).

Claim 13 depends from independent claim 9 and additionally recites “wherein said user input comprises activation of said hyperlink for initializing sending of said request to join said synchronized browsing session.” Petitioner relies on its arguments regarding “activating the session invitation” limitation recited in claim 1. Pet. 47.

Relying on many of the passages discussed previously, Petitioner contends Lebrun discloses “a user interface adapted to depict shared user input web browsing interactions a shared web browsing window” that is additionally recited in claim 14, which depends from independent claim 9. Pet. 47–49. For example, Petitioner identifies Lebrun’s descriptions of the group-surfing server directing a web site to deliver web pages, HTML descriptions of form data interactions, and web browsers. *Id.* (citing Ex. 1005, 34:19–35:6, 35:5–8, 38:31–32, 38:32–39:1, 39:1–2, 39:4–10, 66:9–12).

Claim 15 depends indirectly from independent claim 9 and additionally recites “wherein information related to said shared user input web browsing interactions comprises web browsing interaction data.” Petitioner relies on its arguments discussed above concerning web browsing interaction data. Pet. 49–50.

Petitioner contends that, because Lebrun and Wang both “are directed to solving problems regarding collaborative browsing of web pages by multiple users in a synchronized manner,” an ordinarily skilled artisan “would have sought out various available solutions” for doing so. Pet. 19 (citing Ex. 1005, 4:1–4, 6–10; Ex. 1006 ¶¶ 9–10, 13). Petitioner further contends that the “result would be a combination of prior art elements according to known methods to yield predictable results.” Pet. 20.

In sum, regarding dependent claims 2–8 and 10–18, Petitioner relies on many of the same passages in Lebrun discussed above with respect to claim 1. Additionally, Petitioner’s relies on unambiguous passages in Lebrun, such as passages describing web clients as general-purpose computers and including web browsers and descriptions of Lebrun’s special access feature. Patent Owner does not present separate arguments regarding any of the dependent claims.

E. Asserted Obviousness of Claims 1–18 over Prajapat and Wang

Petitioner asserts that claims 1–18 would have been obvious under 35 U.S.C. § 103 based on the combined teachings of Prajapat and Wang. Pet. 6, 20–21.

1. Prajapat’s Disclosure

Prajapat relates to peer-to-peer web content sharing, such as may be used in a call center to share content with a customer. Ex. 1007 ¶¶ 1–2. Figure 1, reproduced below, illustrates an example of such a communication system. *Id.* ¶ 12.

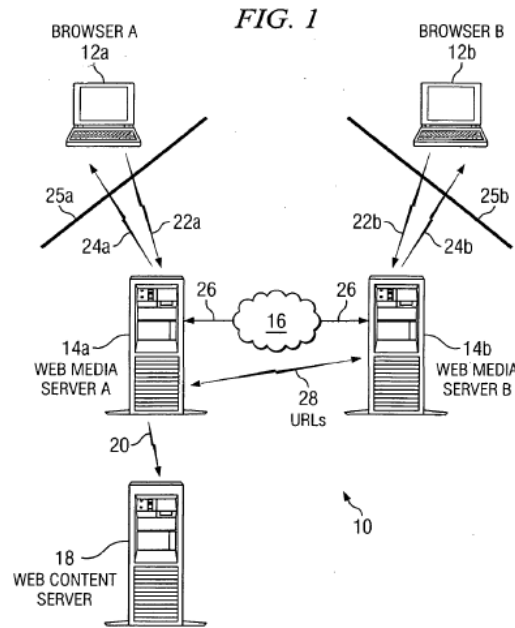


Figure 1 shows communication system 10 that includes browsers 12a and 12b, web media servers 14a and 14b, and web content server 18. *Id.*

¶ 12. Web media servers 14a and 14b are “coupled via network 16,” and web content server 18 is “coupled to web media server 14a via link 20.” *Id.*

A user associated with browser 12a may “desire to co-browse or share one or more web pages” with a user associated with browser 12b. *Id.* ¶ 16. Prajapat uses the term “co-browse” to describe a variety of situations, including (i) browsers 12a and 12b displaying “the same web pages at substantially the same time,” (ii) browser 12b viewing web pages alterations by browser 12a, and (iii) similarly, browser 12a viewing web pages alterations by browser 12b. *Id.* ¶ 12.

Prajapat describes an example of peer-to-peer dynamic web page sharing. *Id.* ¶ 34; Fig. 2. “[B]rowser 12a establishes a communication session with media server 14a” and submits a request to co-browse with browser 12b. *Id.* at ¶ 35. After receiving the request, web media server 14a locates and establishes a communication session with “web media server

14b with which browser 12b is associated.” *Id.* A communication session also is established between web media server 14b and browser 12b. *Id.*

In response to browser 12a request for a web page, web media server 14a requests the web page from web content server 18, which, in turn, provides the requested web page to the web media server 14a. *Id.* ¶ 36–37. Web media server 14a communicates the web page or a notification that the web page is available to browser 12a, which retrieves the web page from web media server 14a. *Id.* ¶ 38. Web media server 14a also communicates the web page in some form to web media server 14b. *Id.* ¶ 39. Web media server 14b communicates the web page or a notification that the web page is available to browser 12b. *Id.* Browser 12b retrieves the web page from web media server 14b. *Id.*

In another example, Prajapat describes “peer-to-peer simple web page sharing” using a web content server that returns the requested web page to a browser. *Id.* ¶ 43. Figure 3, reproduced below, illustrates an example of such a communication system. *Id.* ¶¶ 10, 41.

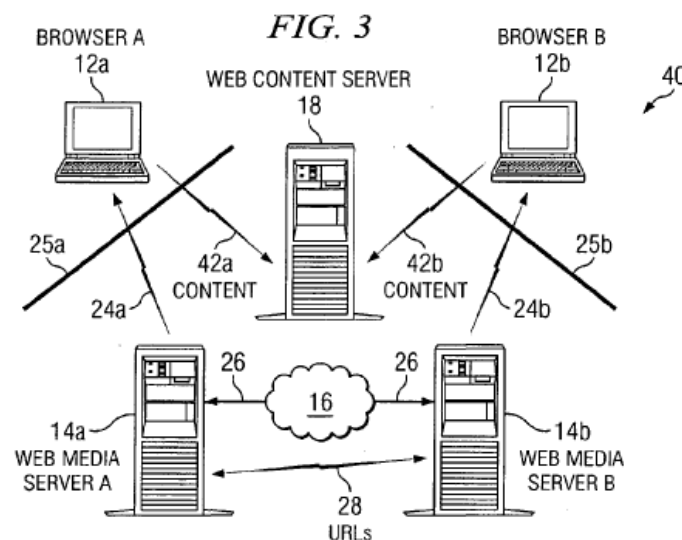


Figure 3 shows communication system 40 that, like Figure 1, includes browsers 12a and 12b, web media servers 14a and 14b, and web content

server 18. *Id.* ¶ 41. Similarly to described above, browser 12a submits to web media server 14a a request for a web page sharing session with browser 12b; web media server 14a locates the web media server 14b associated with browser 12b; and web media server 14a establishes a “media session” with web media server 14b that allows the web media servers to communicate “media between each other.” *Id.* ¶¶ 41–42.

In contrast to the process described above with respect to Figure 1, in this example, browser 12a submits a request for a web page to web content server 18, which returns the requested web page to requesting browser 12a. *Id.* ¶ 43. Browser 12a communicates “the URL or other suitable information regarding the requested web page to web media server 14a,” which, in turn, communicates that information to web media server 14b. *Id.* Web media server 14b then communicates “the URL or other suitable information to browser 12b.” *Id.* Browser 12b uses the information “to request from web content server 18 the web page that browser 12a requested.” *Id.*

2. Claim 1

a. Claim 1 Preamble and Limitations [1a]–[1b]

In asserting the subject matter of claim 1 would have been obvious over Prajapat and Wang, Petitioner relies on Prajapat’s browser 12b for the recited “guest device,” browser 12a for the recited “host device that initiated the session invitation,” web media servers 14a and 14b for the recited “synchronization server,” and the web content server 18 for the recited “website server independent of the synchronization server.” Pet. 50–59; *see, e.g.*, Pet. 52 (“guest device (‘browser 12b’)”); Pet. 52 (“host device (‘browser 12a’)”); Pet. 58 (“website server (‘web content server 18’)”); Pet. 58 (“synchronization server (‘media servers 14[a] and 14b’)”).

Petitioner identifies Prajapat's techniques discussed above for peer-to-peer dynamic web page sharing as disclosing the method "performed by a guest device for joining a synchronized browsing session administered by a synchronization server," recited in claim 1. Pet. 50–51 (citing Ex. 1007 ¶¶ 12, 34, Fig. 1). For the receiving limitation (Limitation [1a]), Petitioner relies on Prajapat's description discussed above of browser 12b being contacted by web media server 14b to establish a communication session for disclosing the guest device (corresponding to browser 12b) receiving from the synchronization server (corresponding to web media servers 14a and 14b) a session invitation. Pet. 52–53 (citing Ex. 1007 ¶¶ 15-17, 34, 35, 41). Petitioner points to Prajapat's description of communicating to browser 12b a URL associated with a web page selected by the host device (corresponding to browser 12a) as disclosing "a session invitation including a session identifier associated with a host device," as recited in claim 1. Pet. 52–53 (citing Ex. 1007 ¶ 43). Additionally, Petitioner relies on Prajapat's description in paragraph 43 of the browser 12b receiving the URL or other information received indirectly from browser 12a and subsequently using that information to request from web content server 18 the web page that browser 12a requested. Pet. 53 (citing Ex. 1007 ¶ 43); Ex. 1007 ¶ 43. Petitioner's position is that using the URL in the invitation discloses the requisite "activating a session invitation" (Limitation [1b]). Pet. 54.

Patent Owner does not address Petitioner's showing as to these limitations. *See generally* Prelim. Resp. Petitioner's showing maps the claim elements to straightforward descriptions in Prajapat as described above and is sufficient for institution.

b. Claim 1 Limitations [1c]–[1d]

Petitioner identifies web pages, content trees, or relayed information to update web page form content that browser 12b (corresponding to the guest device) receives from the web media servers as web browsing interaction data received from the synchronization server, as required by claim 1. Pet. 55–56 (citing Ex. 1007 ¶¶ 12, 23, 28–32, Fig. 1). Petitioner contends that Prajapat describes the browsers contacting the web content server through the web media servers to obtain that information. *Id.* Petitioner also indicates Prajapat’s web content server (corresponding to the recited website server) is independent from web media servers shown in Figure 1. Pet. 56. Petitioner contends that the web pages are chosen by the initiating web browser and so are associated with the host device that has initiated the session invitation, as required by claim 1. Pet. 57.

Regarding “operating an application” recited in claim 1, Petitioner relies in part on Prajapat’s description that browsers 12a and 12b “may include any suitable interface for submitting requests and displaying media such as web pages.” Pet. 58 (citing Ex. 1007 ¶ 15). This interface is a sufficient showing of “operating an application” for institution.

Regarding the other conditions of the “operating an application” limitation, Petitioner contends that “[a]fter the session is initiated, either browser ‘may submit new action requests such as request[s] for web pages’ and ‘requests to alter currently displayed web pages.’” Pet. 58 (quoting Ex. 1007 ¶ 28). Petitioner contends the browsers do this based on web browsing interaction data received from the media servers (corresponding to the recited synchronization server) and to access web content server 18 (corresponding to the recited website server). *Id.*

For the “operating an application” limitation, Petitioner alternatively relies on Wang’s description of a “computer-executable program” that performs various steps, including “forming a page navigation control unit for providing a web page common to each of the individual sessions.” Pet. 59 (citing Ex. 1006 ¶ 21). As Petitioner indicates, page navigation in Wang means to “allow the client device 12a to access the server apparatus 14 directly and to acquire a web page when the client device 12a has ownership of the initiative of web page operation.” Pet. 59 (citing Ex. 1006 ¶ 41). Petitioner contends that one of ordinary skill would have been motivated to combine Wang and Prajapat to “allow Prajapat to perform the functions described in Prajapat’s disclosure,” which Petitioner enumerates in Section VIII.E. Pet. 59 (citing Section VII.E “Motivation to Combine Prajapat with Wang”). Petitioner contends that one of ordinary skill would have combined Prajapat and Wang because both “are directed to solving problems related to collaborative browsing via multiple media servers and user devices to ‘improve efficiency in a communication system when sharing web pages.’” Pet. 20 (citing Ex. 1007 ¶ 5, Fig. 2; Ex. 1006 ¶¶ 9–10, 13). Because of this, Petitioner contends that one of ordinary skill would have “sought out various available solutions” for doing so. Pet. 21. Petitioner further contends that the “result would be a combination of prior art elements according to known methods to yield predictable results.” *Id.*

Patent Owner challenges Petitioner’s contentions regarding Prajapat and Wang, first by indicating Petitioner’s mapping of the recited web browsing interaction data to Prajapat is unclear. Prelim. Resp. 53. Patent Owner’s contention is based in large measure on its position that web browsing interaction data does not encompass webpage data. Prelim. Resp 53 (“Instead, Prajapat discloses that the web media servers ultimately deliver

only the webpage (i.e., webpage data—not the claimed web browsing *interaction* data) to the browser.”). For the reasons discussed previously, on this preliminary record, we do not agree with Patent Owner’s position.

Patent Owner also contends that Prajapat’s Figure 1 architecture shows “the media servers operate as the middleman server to mediate all traffic to and from the browser and the website server.” Prelim. Resp. 54; *see id.* 53–54 (citing Ex. 1007, Fig. 1, ¶¶ 23, 24). Patent Owner, however, does not address Petitioner’s arguments concerning Prajapat’s paragraph 43 description of an alternative architecture in which “[b]rowser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested.” *See also* Ex. 1007, Fig. 3. This alternative architecture of Prajapat undermines Patent Owner’s argument that Petitioner does not show a guest device accessing the website server independent from the synchronization server. Prelim. Resp. 56–60. As Patent Owner seems to argue, Petitioner’s discussion on pages 57–60 under the heading “Prajapat in view of Wang discloses 1[d]” does not cite Prajapat’s alternative embodiment in which the browser directly accesses the web content server 18 for the web pages (Ex. 1007, Fig. 3, ¶ 43). Petitioner’s combination, however, does so unambiguously elsewhere—indicating “browser 12b [uses] the URL and other and any other suitable information to request from web content server 18 the web page that browser 12a requested.” Pet. 53 (quoting and citing Ex. 1007 ¶ 43); *see* Pet. 53–54 (quoting and citing Ex. 1007 ¶ 43 a second time).

On this preliminary record, we agree with Patent Owner that Petitioner’s evidence that Wang discloses a guest device accessing the website server independent of the synchronization server seems to describe merely “how a computer-executable program enables a computer device

function as a server apparatus.” Prelim. Resp. 60–61 (citing Pet. 59; Ex. 1006 ¶¶ 21, 41–44, 54–56). For the reasons explained above, however, we are persuaded that at least Petitioner’s Prajapat showing is sufficient for institution.

3. Independent Claim 9

Relying generally on its showing with respect to claim 1, Petitioner provides a similar showing for independent claim 9. *See* Pet. 59–62 (claim 9). Patent Owner also recognizes that claim 9 has “analogous limitations” to claim 1 and relies on its arguments presented with respect to claim 1. Prelim. Resp. 61.

4. Dependent Claims 2–8 and 10–18

Petitioner cites various portions of Prajapat and Wang for the additional subject matter recited by dependent claims 2–8 and 10–18. Pet. 63–74. Patent Owner does not address the sufficiency of Petitioner’s showing regarding the dependent claims. *See generally* Prelim. Resp.

F. Qualifications of Petitioner’s Declarant

In its Preliminary Response, Patent Owner contends that Petitioner’s Declarant, Dr. Lieberman, does not have the requisite level of skill to testify from the perspective of one of ordinary skill either under Patent Owner’s proposed level of ordinary skill or under Petitioner’s proposed level of ordinary skill. Prelim. Resp. 34–37.

More specifically, Patent Owner contends that Dr. Lieberman’s Curriculum Vitae (“CV”) does not describe at least two years of experience in internet web browsing software development, web connectivity software development, or networking software developer as required under Patent

Owner’s proposed level of ordinary skill. *Id.* at 34–35 (citing Ex. 1004). Patent Owner further contends that Dr. Lieberman lacks “two years of work experience in software development and/or web-based software [development],” as Petitioner proposes. *Id.* at 35–36. Moreover, Dr. Lieberman identified an incorrect and later “effective filing date of the challenged patent, July 26, 2013” (instead of May 20, 2010). *Id.* at 36; *see* Ex. 1001, code (63). For these reasons, Patent Owner indicates Dr. Lieberman does not possess the requisite level of ordinary skill to testify from the perspective of one of ordinary skill and his opinions should be given little or no weight. *Id.* at 35, 36.

“To offer expert testimony from the perspective of a skilled artisan in a patent case—like for claim construction, validity, or infringement—a witness must at least have ordinary skill in the art.” *Kyocera Senco Indus. Tools Inc. v. Int’l Trade Comm’n*, 22 F.4th 1369, 1376–77 (Fed. Cir. 2022). Patent Owner is correct that Dr. Lieberman’s CV on its face does not include two years in a position titled as software developer, web-based developer, or the like. *See generally* Ex. 1004. Dr. Lieberman, however, has a degree in “*Informatique*” from the University of Paris VI (Sorbonne), as Patent Owner acknowledges (Prelim. Resp. 34), and this degree is in addition to Dr. Lieberman’s Bachelor of Science degree from the Massachusetts Institute of Technology (MIT). Ex. 1004, 12–13. This University of Paris VI (Sorbonne) degree is additional education beyond the required bachelor’s degree and could have substituted for some amount of professional experience, as we note in our determination of the level of ordinary skill for this institution decision in Section II.A.

We also note Dr. Lieberman’s extensive work experience, beginning in 1973 as a research scientist at MIT’s Artificial Intelligence Laboratory,

may include the requisite two years of work experience. *Id.* at 3–4.

Dr. Lieberman’s professional activities unequivocally demonstrate work experience related to web technology. He delivered an invited keynote speech at IEEE/ACM Conference on Web Intelligence and Intelligent Agent Technology in 2004. *Id.* at 9. Dr. Lieberman served as conference chair and program committee member for the American Association for Artificial Intelligence (AAAI) Special Track on AI and the Web in 2008 and for the World Wide Web Conference in 1999 and 2000. *Id.* at 10. Dr. Lieberman also presented a publication at the Workshop on the Social Mobile Web at the International AAAI Conference on Weblogs and Social Media, Barcelona, Catalonia, Spain in July 2011. *Id.* at 19. He co-wrote chapters in *No Code Required: Giving Users Tools to Transform the Web* in 2010—a nineteen-page chapter titled “A Goal-Oriented Web Browser” and a fifteen-page chapter titled “Knowing What You're Talking About: Natural Language Programming of an Multi-Player Online Game.” *Id.* at 21.

Accordingly, there is evidence to consider in making a determination whether Dr. Lieberman possesses the requisite ordinary level of skill. We, however, need not make such a determination for purposes of this decision because it has not been necessary for us to rely on Dr. Lieberman’s declaration in this decision.

“No rule requires a Petition to be accompanied by any declaration, let alone one from an expert guiding the Board as to how it should read prior art.” *Belden Inc. v. Berk–Tek LLC*, 805 F.3d 1064, 1079 (Fed. Cir. 2015). “[E]xpert testimony is not required when the references and the invention are easily understandable.” *Id.* (quoting *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1242 (Fed. Cir. 2010)). “Board members, because of expertise, may

more often find it easier to understand and soundly explain the teachings and suggestions of prior art without expert assistance.” *Id.*

Here, the invention and prior art are presented in high-level functional terms and are easily understandable, as we indicated previously in Section II.A and as shown by our discussion of the invention and prior art throughout this decision. To determine that the Petition met the institution threshold of showing “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition,” we have not relied on Dr. Lieberman’s declaration testimony. Patent Owner, of course, may raise the issue of Dr. Lieberman’s qualifications during trial.

III. CONCLUSION

For the foregoing reasons, we determine that the information presented in the Petition establishes a reasonable likelihood that Petitioner would prevail in showing at least one of claims 1–18 of the ’145 patent is unpatentable under 35 U.S.C. § 103. We institute an *inter partes* review of all challenged claims on all asserted grounds. 37 C.F.R. § 42.108(a); *see SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

IV. ORDER

Accordingly, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 1–18 of the ’145 patent on all the grounds set forth in the Petition; and,

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.

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Patent 9,185,145 B2

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