

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

In the *Inter Partes* Review of:

U.S. Patent No. 9,483,448

For: METHOD AND APPARATUS
FOR THE IMPLEMENTATION OF A
REAL-TIME, SHARABLE BROWSING
EXPERIENCE ON A HOST DEVICE

Mail Stop Patent Board
Patent Trial and Appeal Board
P.O. Box 1450
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**DECLARATION OF HENRY A. LIEBERMAN
IN SUPPORT OF PETITION FOR *INTER PARTES*
REVIEW OF U.S. PATENT NO. 9,483,448**

I, Henry A. Lieberman, declare as follows:

I. INTRODUCTION

1. I have been asked by the party requesting this review, Intuit Inc. (“Petitioner”), to provide my expert opinions in support of the above-captioned petition for *inter partes* review of U.S. Patent No. 9,483,448 (the “’448 patent” or the “challenged patent”), challenging the patentability of the claims 1–16 of the ’448 patent.

2. I currently hold the opinions set forth in this declaration.

3. In summary, it is my opinion that the references cited and discussed below render obvious the challenged claims of the ’448 patent. My detailed opinions on the claim are set forth below.

II. BACKGROUND AND QUALIFICATIONS

4. I graduated from Massachusetts Institute of Technology (“MIT”) with a B.S. in Mathematics in 1975 and obtained a Ph.D. equivalent from the University of Paris VI (Sorbonne) in *Informatique*, which is the French word for “computer science,” in 1990.

5. After obtaining my B.S., I worked as a research scientist at various facilities between 1975 and 1987, including MIT’s Artificial Intelligence Laboratory (1973-1987), Xerox Palo Alto Research Center (1980), and MIT Media Laboratory (1987-2015).

6. I am currently a research scientist with MIT's Computer Science and Artificial Intelligence Laboratory, a position I have held since 2015. I was a visiting professor at the University of Paris VI (Sorbonne) from 1989-1991, where I taught courses in artificial intelligence and human computer interfaces.

7. I am known in the field as an expert in Artificial Intelligence and Human-Computer Interaction. My research has focused on using artificial intelligence, natural language processing and interactive graphical user interface techniques to make intelligent interfaces to help users solve problems. I have applied these techniques in a wide variety of applications, including using machine learning for the detection and prevention of cyber-bullying, creating software agents to intelligently assist with web browsing, and developing interfaces for contextual text-based software programming.

8. I have written more than 120 articles primarily focused on machine learning, natural language processing, and user interfaces, published in both peer-reviewed technical journals and other publications. In addition, I am a named inventor on three U.S. Patents generally relating to these topics.

III. COMPENSATION AND RELATIONSHIP WITH PARTIES

9. I am being compensated for my time. This compensation is not contingent upon my performance, the outcome of this matter, or any issues involved in or related to this matter.

10. I have no financial interest in Petitioner or any related parties. I have been informed that Samesurf, Inc. (“Samesurf”) owns the challenged patent. I have no financial interest in the outcome of this litigation. I similarly have no financial interest in the challenged patent.

IV. MATERIALS CONSIDERED

11. I have reviewed and considered, in the preparation of this declaration, the following documents related to the challenged patent:

- a. the '448 patent (Ex. 1001), and
- b. the prosecution file history for Application No. 14/830,710 (Ex. 1002).

12. I have also reviewed and understand various references as discussed herein, including the following:

- a. International Patent Pub. No. WO00/48110 to Lebrun et al. (Ex. 1005),
- b. U.S. Patent Pub. No. 2005/0033656 to Wang et al. (Ex. 1006),
and
- c. U.S. Patent Pub. No. 2005/0021626 to Prajapat et al. (Ex. 1007).

13. I understand that the paragraph immediately above lists references that form the basis for the grounds for invalidity set forth in the Petition for *Inter Partes* Review of the challenged patent.

14. I understand that, for purposes of determining whether a reference will qualify as prior art, the claims of the challenged patent are entitled to an effective filing date of no earlier than May 20, 2010.

15. Additionally, I am aware of prior and contemporary information relevant to the subject matter of the challenged patent and generally available to, and relied upon by, a person of ordinary skill in the art (a “POSITA”) to describe the state of the art as of the effective filing date of the challenged patent, including technical dictionaries, articles, and other technical reference materials (including, for example, textbooks, manuals, technical papers, articles, and relevant technical standards), such as:

- a. “NCSA Mosaic, Project Profile,” University of Illinois, National Center for Supercomputing Applications (available at: <https://www.ncsa.illinois.edu/research/project-highlights/ncsa-mosaic/>) (Ex. 1008);
- b. “Netscape Communications Corp.,” Henry R. Norr, August 28, 2017, Encyclopedia Britannica, Inc. (available at:

- <https://www.britannica.com/topic/Netscape-Communications-Corp>) (Ex. 1009);
- c. “50 Years of Email,” cloudHQ, April 6, 2021 (available at: <https://www.prnewswire.com/news-releases/50-years-of-email-301262676.html>) (Ex. 1010);
 - d. “The History of Email: Major Milestones from 50 Years,” Kasey Steinbrinck, January 28, 2021, Email on Acid Ina Fried, (available at: <https://www.emailonacid.com/blog/article/email-marketing/history-of-email/>) (Ex. 1011);
 - e. “10 Instant Messaging Services that Used to Be Popular,” Elise Moreau, May 3, 2021, Lifewire Tech for Humans (available at: <https://www.lifewire.com/once-popular-old-instant-messaging-services-3486135>) (Ex. 1012);
 - f. “Timeline of Social Media,” Wikipedia (available at: https://en.wikipedia.org/wiki/Timeline_of_social_media) (Ex. 1013);
 - g. “Hyperlink,” Wikipedia (available at: <https://en.wikipedia.org/wiki/Hyperlink>) (Ex. 1014);
 - h. U.S. Patent No. 5,708,780 to Levergood et al. (Ex. 1015);

- i. “Session Identification URI,” W3C Working Draft WD-session-id-960221, w3 Org (available at: <https://www.w3.org/TR/WD-session-id.html>) (Ex. 1016);
- j. “Giving Web a Memory Cost Its Users Privacy,” John Schartz, September 4, 2001, New York Times (available at: <https://www.nytimes.com/2001/09/04/business/giving-web-a-memory-cost-its-users-privacy.html>) (Ex. 1017);
- k. “GroupWeb: A WWW Browser as Real Time Groupware,” Saul Greenberg and Mark Roseman, CHI ’96 ACM Conference on Human Factors in Computing Systems, April 13-18, 1996 (available at: <https://dl.acm.org/doi/pdf/10.1145/257089.257317>) (Ex. 1018);
- l. “Let’s Browse: A Collaborative Web Browsing Agent,” IUI ’99: ACM Proceedings of the 4th International Conference on Intelligent User Interfaces, December 1998 (available at: <https://dl.acm.org/doi/10.1145/291080.291092>) (Ex. 1019);
- m. “Letizia: An Agent that Assists Web Browsing,” Henry Lieberman, *International Joint Conference on Artificial Intelligence*, 1995 (available at:

<https://web.media.mit.edu/~lieber/Lieberary/Letizia/Letizia-AAAI/Letizia.html>) (Ex. 1020);

- n. U.S. Patent No. 6,353,822 to Lieberman (Ex. 1021);
- o. “Google Docs,” Wikipedia (available at: https://en.wikipedia.org/wiki/Google_Docs) (Ex. 1022);
- p. “Google Announces Google Docs & Spreadsheets,” October 11, 2006, Google Press Release, (available at: http://googlepress.blogspot.com/2006/10/google-announces-google-docs_11.html) (Ex. 1023);
- q. “The History of JavaScript: Everything You Need to Know,” T.J. DeGroat, August 19, 2019, Springboard (available at: <https://www.springboard.com/blog/data-science/history-of-javascript/>) (Ex. 1024);
- r. “Adobe Flash,” Wikipedia (available at: https://en.wikipedia.org/wiki/Adobe_Flash) (Ex. 1025); and
- s. “What Does AJAX Even Stand For?,” Jay Hoffman, March 4, 2019, The History of The Web (available at: <https://thehistoryoftheweb.com/what-does-ajax-even-stand-for/>) (Ex. 1026).

16. I reserve the right to supplement my opinions to address any information obtained, or positions taken, based on any new information that comes to light throughout this proceeding.

V. BASIS OF OPINIONS FORMED

A. Level of Ordinary Skill in the Art

17. It is my understanding that the challenged patent is to be interpreted based on how it would be understood by a POSITA at the time of the effective filing date of the application. It is my understanding that factors such as the education level of those working in the field, the sophistication of the technology, the types of problems encountered in the art, the prior art solutions to those problems, and the speed at which innovations are made may help establish the level of skill in the art.

18. I am familiar with the technology at issue and the state of the art at the effective filing date of the challenged patent, May 20, 2010.

19. The level of ordinary skill in the art of the challenged patent at the time of the effective filing date is a person with a bachelor's degree in computer network security, computer science, computer engineering, or a related field, with at least two years of work experience in software development and/or web-based software. Additional education could have substituted for professional experience, and significant work experience could have substituted for formal education.

20. I consider myself to have at least such ordinary skill in the art with respect to the subject matter of the challenged patent at the time of the effective filing date.

VI. THE '448 PATENT

21. The '448 patent is entitled "Method and Apparatus for the Implementation of a Real-Time, Sharable Browsing Experience on a Host Device." The '448 patent includes claims 1-16, all of which are challenged in the Petition for *Inter Partes* Review.

A. Purported Invention of the '448 Patent

22. The '448 patent describes "a method for establishing a synchronized browsing session, comprising sending a request to establish the synchronized browsing session to a synchronization server, receiving a confirmation message from the synchronization server including a session identifier associated with the established synchronized browsing session, and sending an invitation to an invitee to join the synchronized browsing session, wherein the invitation includes the session identifier." Ex. 1001, Abstract, 2:62-3:3. The '448 patent also describes "an apparatus" for doing the same, and "a network interface adapted to communicate with a synchronization server, and a processor adapted to" perform the method. *Id.*, Abstract, 3:4-14.

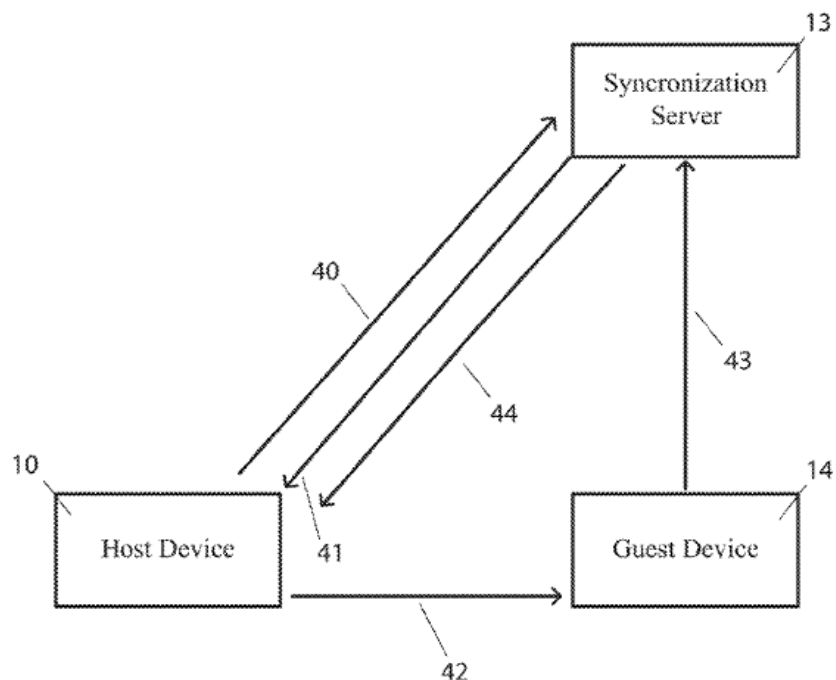
23. According to the '448 patent specification, the prior art at the time “lack[ed] technology that would simultaneously connect two or more users in a medium that would allow all of them to both interact with one another and with the content itself in real time and in a synchronized or shared fashion.” *Id.*, 2:8-12.

24. The specification asserts that prior art “chat software” and “desktop or screen sharing” software allowed users to send and receive messages between users and “view the same internet content” in real-time. *Id.*, 2:26-30.

25. The '448 patent specification further asserts that such prior art software did not permit multiple users to “share internet browsing in real time for online activities such as shopping together, booking travel together, watching or listening to media together, and browsing the internet together in a simultaneous fashion from different devices and/or locations.” *Id.*, 2:50-55.

26. One of the stated objectives of the '448 patent is to “enable users to communicate via (1) voice; (2) chat; (3) video conferencing; and (4) desktop sharing (via a small browser frame on each participant’s screen that monitors the host path) as they browse the internet together in real time.” *Id.*, 3:36-40.

27. Figure 2(a) of the '448 patent is a diagram illustrating the data communication between the components of “the present invention to initialize a synchronized browsing session.” *Id.*, 4:26-28, 10:28-30, Fig. 2(a).



28. As shown in Figure 2(a) above, the components of the '448 patent include a host device 10, a synchronization server 13, and a guest device 14. *Id.*, 10:30-33, Fig. 2(a).

29. The '448 patent specification describes both the host device 10 and guest device(s) 14 as “a personal computer, mobile phone, Smartphone, IPAD®, or other type of electronic device with a visual user interface and a network connection such that a user may access and view” a website on the internet. *Id.*, 6:22-26, 30-36.

30. The '448 patent specification distinguishes the host and guest devices by their function, explaining that the host device “may initialize and conduct a synchronized browsing session with guest device 14 via synchronization server

13,” and the guest device(s) “may join a synchronized browsing session to view internet browsing conducted by host device 10 via relay communication over synchronization server 13.” *Id.*, 6:19-20, 28-30.

31. The ’448 patent specification describes the synchronization server 13 as “comprising [a] processor 28, [a] network interface 29, [a] session identification database 30, and [an] affiliate database 31.” *Id.*, 9:45-47, Fig. 1(e). The specification explains the general function of the synchronization server “to establish and facilitate a synchronized browsing session between host device 10 and guest device 14.” *Id.*, 9:49-50.

32. The ’448 patent specification describes the process for establishing the synchronized browsing session. First, the host device sends an initialization request to the synchronization server to establish a synchronized browsing session. *Id.*, 10:34-36, 11:50-51.

33. The synchronization server responds to the request with a confirmation message that may include a session identifier for the synchronized browsing session. *Id.*, 10:36-37, 11:51-56. The ’448 patent specification explains that the “session identifier 19 may comprise an identification number, passkey, URL, MAC address, or other unique indicator” to identify and initiate the session. *Id.*, 10:39-41.

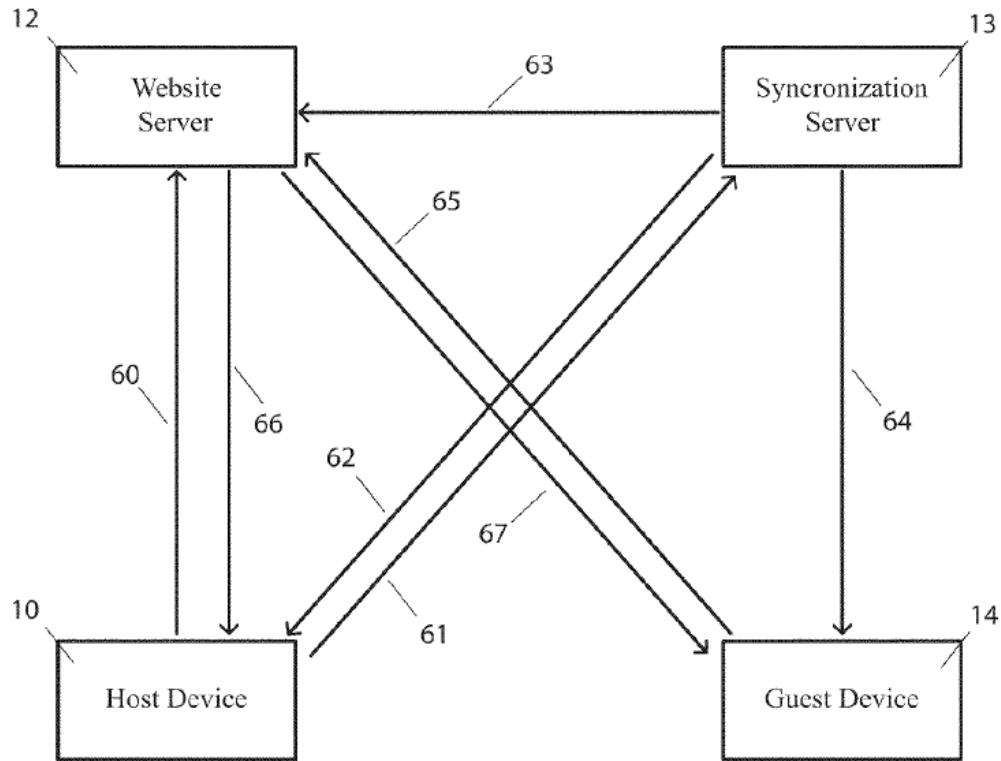
34. Once the confirmation message and session identifier have been received by the host device, the host device then sends a session invitation to prospective guest devices. *Id.*, 10:43-46, 11:57-59. The '448 patent specification explains that the session invitation “may comprise [the] session identifier 19, and [an] invitation hyperlink 52 to join the synchronized browsing session.” *Id.*, 11:60-62.

35. To join the synchronized browsing session, the invitee user of the guest device “need[s] to simply click invitation hyperlink 52 included in session invitation 42[.]” *Id.*, 11:62-64.

36. Once the invitation response has been received by the synchronization server, the synchronization server notifies the host device that a guest device has joined the synchronized browsing session. *Id.*, 12:31-42.

37. The '448 patent specification enumerates various forms that the synchronized browsing session invitation may take, including email, instant message or social network communication. *Id.*, 11:57-12:14, 12:15-30, Figs. 4(b)-4(e).

38. Figure 5(a) of the '448 patent illustrates the data communication between the system components once the synchronized browsing session has been established. *Id.*, 16:5-10, Fig. 5(a).



39. The '448 patent specification explains that during a synchronized browsing session, the host device transmits typical web requests (60) to website servers through the internet, which provide the requested website content (66). *Id.*, 16:13-30, Fig. 5(a).

40. Additionally, following each request to a website server, the host device sends a second communication message (61) to the synchronization server, and includes “webpage interaction information such as a URL address, form data, java script, cookies, or other data communication.” *Id.*, 18:58-60, Fig. 5(a), 16:34-37 (“Communication message 61 may comprise the URL address of website server

12, cookie information, form data, java script, or other user inputted information, or attached files.”).

41. The '448 patent specification explains that the synchronization server forwards the communication message (61) and webpage interaction information to the guest device. *Id.*, 16:62-17:4, 17:15-20, Fig. 5(a). The guest device uses the communication message (61) and webpage interaction data to make an identical website request (65) to the same website server as the original request (60) sent by the host device to the website server, which replies with similar or identical content (67) to the requested website content (66) sent to the host device. *Id.*, 8:22-34, 17:60-18:2, Fig. 5(a).

42. The '448 patent specification explains that the host device may indicate in the communication message to the synchronization server not to relay the webpage interaction information to the guest device with the communication message (61). *Id.*, 16:37-42. In this alternative, the unshared webpage interaction information is rendered and displayed in a separate, unshared browser window at the host device only. *Id.*, 20:30-43, 20:56-59.

43. I refer now to the claims of the '448 patent. The claims and the reference numerals used for each claim element are reproduced below.

Limitation	Claim Language
1[pre]	A method performed by a host device for establishing a synchronized browsing session between the host device and an

Limitation	Claim Language
	invitee device, comprising:
1[a]	sending a request to establish the synchronized browsing session to a synchronization server;
1[b]	receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session;
1[c]	sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;
1[d]	recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;
1[e]	sending a request for webpage content to a website server independent of the synchronization server;
1[f]	subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server,
1[g]	wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;
1[h]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device, and
1[i]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared

Limitation	Claim Language
	web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and
1[j]	receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.
2	The method of claim 1, further comprising receiving a notification message indicative of the invitee device joining the synchronized browsing session.
3	The method of claim 1, further comprising activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.
4	The method of claim 1, wherein the invitation comprises a hyperlink for joining the synchronized browsing session.
5	a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.
6	The method of claim 1, wherein information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.
7	The method of claim 1, wherein the session identifier associated with the established synchronized browsing session comprises: - an identification number; - a passkey - a URL; - MAC address; or - other unique indicator such that the synchronized browsing session may be identified for joining the session.

Limitation	Claim Language
8	The method of claim 1, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.
9	The method of claim 8, wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.
10	The method of claim 1, further comprising receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.
11[pre]	An apparatus for establishing a synchronized browsing session between a host device and an invitee device, comprising:
11[a]	a network interface adapted to communicate with a synchronization server; an
11[b]	a processor adapted to:
11[c]	send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface;
11[d]	receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session;
11[e]	send an invitation from the host device to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;
11[f]	record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;

Limitation	Claim Language
11[g]	send a request for webpage content to a website server independent of the synchronization server;
11[h]	transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server,
11[i]	wherein the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;
11[j]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device, and
11[k]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and
11[l]	receive, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.
12	The apparatus of claim 11, further comprising a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.
13	The apparatus of claim 11, wherein the session identifier associated with the established synchronized browsing session

Limitation	Claim Language
	comprises: an identification number; a passkey; URL; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.
14	The apparatus of claim 11, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.
15	The apparatus of claim 14, wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.
16	The apparatus of claim 11, wherein the processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.

See Ex. 1001.

44. The two independent claims of the '448 patent, claims 1 and 11, recite primarily the same basic elements:

- sending a request to establish the synchronized browsing session to a synchronization server;
- receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server,

wherein the session identifier is associated with the host device and the established synchronized browsing session;

- sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;
- recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;
- sending a request for webpage content to a website server independent of the synchronization server;
- subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server;
- wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;
- wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in

response to receiving the information related to the shared web browsing interaction from the host device;

- wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and
- responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, receiving the requested webpage content from the website server.

45. As explained, each of these functions was known before the priority date of the '448 patent. The claims thus add nothing novel and are not combined in any way that would be non-obvious to a POSITA.

B. Prosecution History

46. I reviewed the prosecution history of the '448 patent. I understand that statements made during prosecution of a patent may influence the meaning of terms in the claim of that patent, as well as terms in other claims in the same patent family.

47. The '448 patent was filed on August 19, 2015 as Application Serial No. 14/830,710 (“the '710 application”). The '710 application is a continuation of U.S. Application No. 12/783,735, filed on May 20, 2010. Ex. 1001, 1:6-11. Thus, the effective filing date of the '448 patent is no earlier than May 20, 2010. For the purposes of this Petition, Petitioner presumes the claims of the '448 patent are entitled to the earliest possible effective filing date and thus are subject to the pre-AIA provisions of the Patent Statute. All statutory references in this Petition are to the applicable pre-AIA provisions. I understand for the purposes of this *Inter Partes* Review proceeding that the challenged patent has an effective filing date no earlier than May 20, 2010.

48. The '710 application was originally filed with claims 1-20, including independent claims 1 and 13. *See* File History of U.S. Patent 9,483,448 (“Ex. 1002”) at 281-286. On November 20, 2015, the Office issued a non-final Office Action in the '710 application, rejecting all claims under 35 U.S.C. §103(a) as obvious in light of Bauer (U.S. 2005/0198162) in view of Rosen (U.S. 2008/0028323), “Why WebEx? Discover the benefits of real-time web collaboration in your organization” (“WebEx 2009”), and Hyndman (U.S. 2009/0241037). *Id.* at 175-184.

49. On December 10, 2015, the '710 application was published as U.S. Patent Publication No. 2015/0358386. *Id.* at 172. On February 22, 2016, the

Applicant attempted to traverse the Examiner's rejections. *Id.* at 155-168. On March 21, 2016, the Examiner issued a Final Rejection of all pending claims under §103(a) based on the same combination of Bauer, Rosen, WebEx 2009 and Hyndman. *Id.* at 131-142. In response, on July 22, 2016, the Applicant filed a Request for Continued Examination, corrected drawings, canceled claims 10 and 18, and amended several claims including independent claims 1 and 13. *Id.* at 74-80. Following an August 19, 2016 interview with the Examiner, the Applicant filed a terminal disclaimer to U.S. Application No. 12/783,716 on August 29, 2016. *Id.* at 64-65. On September 19, 2016, a Notice of Allowance was issued with Examiner amendments authorized in the interview, cancelling pending claims 11 and 19, and allowing the remaining amended claims as claims 1-16. *Id.* at 30-42.

50. The Examiner noted in the reasons for allowance, that pending claims 1 and 13 recited a specific “temporal ordering that is not specifically provided for in the prior art of record”—namely, “record the interaction, send a request for the webpage to a website server, then transmit the information to the synchronization server for the invitee device to generate its own request for the webpage to retrieve substantially the same content as the first device . . . where screen sharing would share the browsing sessions or it is apparent that the host retrieves the webpage [and] then shares the interaction or the interaction and

sharing information are sent together (such that the synchronization server retrieves the webpage and shares the interaction on behalf of the client).” *Id.* at 43. The Examiner further noted that the determination of whether “the web browsing interaction is a shareable web browsing interaction . . . is an active step that must be performed[.]” *Id.* Following an additional interview on September 30, 2016 to discuss changing the relative term “substantially the same webpage content” with the term “similar webpage content,” a corrected Notice of Allowability was issued on October 18, 2016 allowing claims 1-16. *Id.* at 9-22.

VII. CLAIM CONSTRUCTION

A. Legal Standard for Claim Construction

51. It is my understanding that “[i]n an *inter partes* review proceeding, a claim of a patent . . . shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b).

52. I am not a patent attorney and my opinions are limited to what I believe a POSITA would have understood the meaning of certain claim terms to be, based on the patent specifications and prosecution histories.

53. a POSITA would have no difficulty applying the plain and ordinary meanings of the terms used in the claim.

54. For purposes of this Petition, I have interpreted the terms of claims 1-16 of the '448 patent according to their plain and ordinary meaning.

VIII. OBVIOUSNESS STANDARD

55. It is my understanding that obviousness is a question of law based on underlying factual issues including (1) the scope and content of the prior art, (2) the differences between the prior art and the asserted claim, (3) the level of ordinary skill in the pertinent art, and (4) the existence of secondary considerations such as commercial success, long-felt but unresolved needs, failure of others, etc.

56. I understand that for a single reference or a combination of references to render obvious the claimed invention, a POSITA must have been able to arrive at the claim by altering or combining the applied references.

57. I understand that an obviousness evaluation can be based on a combination of multiple prior art references. I understand that the prior art references themselves may provide a suggestion, motivation, or reason to combine, but other times the nexus linking two or more prior art references is simple common sense. I further understand that obviousness analysis recognizes that market demand, rather than scientific literature, often drives innovation, and that a

motivation to combine references may be supplied by the direction of the marketplace.

58. I understand that if a technique has been used to improve one device or product, and a POSITA would recognize that it would improve similar devices or products in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

59. I also understand that practical and common-sense considerations should guide a proper obviousness analysis, because familiar items may have obvious uses beyond their primary purposes. I further understand that a POSITA looking to overcome a problem will often be able to fit together the teaching of multiple references. I understand that obviousness analysis therefore takes into account the inferences and creative steps that a POSITA would employ under the circumstances.

60. I understand that a particular combination may be proven obvious merely by showing that it was obvious to try the combination. For example, when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a POSITA has good reason to pursue the known options within his or her technical grasp because the result is likely the product not of innovation but of ordinary skill and common sense.

61. I also understand that the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. When a work is available in one field of endeavor, design incentives and other market forces can prompt variation of it, either in the same field or a different one. If a POSITA can implement a predictable variation, the patent claims are likely obvious.

62. It is further my understanding that a proper obviousness analysis focuses on what was known or obvious to a POSITA, not just the patentee. Accordingly, I understand that any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.

63. I understand that a claim can be obvious in light of a single reference, without the need to combine references, if the elements of the claim that are not found explicitly or inherently in the reference can be supplied by the common sense of one of skill in the art. In addition, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. Disclosed examples and preferred embodiments do not teach away from a broader disclosure or nonpreferred embodiments.

64. It is further my understanding that a statement by an applicant in the specification or made during prosecution identifying the work of another as “prior art” is an admission which can be relied upon as evidence for both anticipation and obvious determinations involving one or more prior art patents or printed publications, regardless of whether the applicant admitted prior art (“AAPA”) would otherwise qualify as prior art.

65. I understand that secondary indicia of non-obviousness may include (1) a long felt but unmet need in the prior art that was satisfied by the invention of the patent; (2) commercial success of processes covered by the patent; (3) unexpected results achieved by the invention; (4) praise of the invention by others skilled in the art; (5) taking of licenses under the patent by others; (6) deliberate copying of the invention; (7) failure of others to find a solution to the long felt need; and (8) skepticism by experts.

66. I also understand that there must be a relationship between any such secondary considerations and the invention. I further understand that contemporaneous and independent invention by others is a secondary consideration supporting an obviousness determination.

67. In sum, my understanding is that prior art teachings are properly combined or modified where a POSITA having the understanding and knowledge reflected in the prior art and motivated by the general problem facing the inventor,

would have been led to make the combination of elements recited in the claim. Under this analysis, the prior art references themselves, or any need or problem known in the field of endeavor at the time of the invention, can provide a reason for combining the elements of multiple prior art references in the claimed manner.

IX. ANALYSIS OF THE TECHNICAL BASIS UNDERLYING THE GROUNDS OF REJECTION SET FORTH IN THE PETITION FOR *INTER PARTES* REVIEW

A. State of the Art

68. As stated in the specification, the '448 patent is in the general field of “a sharable browsing experience, and more specifically, to a method and apparatus for the implementation of a synchronized browsing session on a host device utilizing the transfer of URL, form data, script, and other information.” Ex. 1001, 1:16-19.

69. The '448 patent essentially claims the features of requesting and receiving website data using a browser, clicking a hyperlink invitation sent via email, instant message or social network, identifying browsing sessions using a session identifier, collaborative web browsing using multiple devices and a synchronization server, and operating a browser or an application based on the received data. The claims implement these well-known functions with basic steps performed in common web browsing and collaborative systems. Each of these functions was known before the effective filing date of the '448 patent, and thus,

the claims add nothing new to the state of the art at the time of the purported invention.

1. Basic Web Browsing Communication

70. The concept of requesting and receiving website data using a web browser—the basic foundational mechanics of world-wide web browsing—was well-known by the time of the invention of the '448 patent.

71. In 1993, computer scientist Marc Andreessen created Mosaic, the first internet browser at the National Center for Supercomputing Applications (NCSA) at the University of Illinois Urbana-Champaign. Mosaic was available to all students at the College of Engineering at the University of Illinois Urbana-Champaign. Ex. 1008, <https://www.ncsa.illinois.edu/research/project-highlights/ncsa-mosaic/>. In 1994, Marc Andreessen founded Netscape and released Netscape Navigator, as the first publicly available web browser. Ex. 1009, <https://www.britannica.com/topic/Netscape-Communications-Corp>.

72. Both Mosaic and Netscape Navigator operated on the same basic principle of a user requesting web content from a web server using a Uniform Resource Locator or URL, receiving the requested content from the web server, and displaying the received content within the browser on the user's computer.

73. The key innovation of the World Wide Web was to allow a document (“Web page”) to contain a URL, referencing another page on the same, or a

different server. The URL was displayed in the document using some text (the link) informing the user of the content of the referenced document. When the user clicked on the link, the displayed page was replaced by the page referred to by the link. In that way, a network of documents connected by links was created across a set of server computers that could be anywhere in the world. The process of exploring links on this network was termed “browsing.” Browsing was originally conceived as an individual activity, by a single person on a single computer. But eventually, groups of people collaborating in different locations wished to share their browsing sessions in real time. That concept became known as collaborative browsing, co-browsing, or shared browsing. It was an extension of the already popular concept of “groupware,” software intended to be used by multiple users, in distributed locations, collaborating on a project.

74. The client-server architecture of the Web was also designed to allow the maximum in flexibility of configuration of sources of information and their consumption by users. The responsibility of a server to deliver pages helps a server manage requests emanating from multiple, independent users; the responsibility of a client to display pages from the user facilitates multiple points of view on the same information. Thus, browsing by a set of coordinated, rather than independent users, can be best managed by a server whose responsibility it is to coordinate the

session. That server coordinates the process of invitation to the group, acceptance/decline, and synchronization of actions across multiple users.

75. This foundational concept of web browsing—requesting and receiving website data using a web browser—as well as groupware, and specifically, collaborative browsing, were many years old by the time of the effective filing date of the '448 patent.

2. Hyperlink Invitations

76. Sending a hyperlink invitation via email, instant message or social network, and clicking the hyperlink to initiate a web request was also widely in use prior to the effective filing date of the '448 patent.

77. Email and email delivery systems using local area and wide area networks was introduced as early as the 1970s, with the ability to send messages between computers connected within the ARPANET system. Ex. 1010, <https://www.prnewswire.com/news-releases/50-years-of-email-301262676.html>.

78. Email protocols Simple Mail Transfer Protocol (SMTP), Post Office Protocol (POP3) and Internet Message Access Protocol (IMAP) were designed and in wide use by the mid-1980s. Ex. 1011, <https://www.emailonacid.com/blog/article/email-marketing/history-of-email/>.

79. Internet messaging, providing the ability to send messages and links between users, was ubiquitous by the late 1990s, with the launch of ICQ in 1996,

AOL Instant Messenger (AIM) in 1997, Yahoo! Messenger in 1998, and MSN Messenger in 1999. Ex. 1012, <https://www.lifewire.com/once-popular-old-instant-messaging-services-3486135>.

80. With the introduction of social networking platforms MySpace (2003), Facebook (2004), and Twitter (2006), communication via social network also became universally available as a core element connecting users together in MySpace's, Facebook's and Twitter's expanding subscriber base. Ex. 1013, https://en.wikipedia.org/wiki/Timeline_of_social_media.

81. Hyperlinks, which could be clicked to deliver the user to an internet destination via a Universal Resource Locator or URL, were a core feature of Mosaic, Netscape Navigator, and all subsequent web browsers from their earliest introduction in 1993. Ex. 1014, <https://en.wikipedia.org/wiki/Hyperlink>.

82. After the advent of the Web, each internet communication method discussed above—email, messaging, and social network communication—included clickable hyperlinks, often in the form of an invitation to browse to a webpage or initiate a browser application.

83. Because HTTP/HTTPS requests containing a URL can also invoke functions on the server (typically, by naming the function after a “?” character in the URL), a URL can be used, not only for simply reading and displaying a page, but also for additional functions involving that URL. In particular, the functions of

joining a group browsing session, or transmitting information to be used by other users, can be requested from the group browsing server by an HTTPS request containing a URL. Invoking server functions via HTTPS request and is a standard technique well known to POSITAs at the time.

84. Moreover, because URLs provided a way to reference a Web page that was valid no matter where on the Web the referencing page was located, they became a standard means of providing invitations. Since the issuer of the invitation could not necessarily tell where the invitee was located, invitations via URLs provided a foolproof method.

85. The combination of sending a hyperlink invitation via email, messenger or social network, which can be clicked to initiate a web request, was well-known and in wide use years before the '448 patent's effective filing date.

3. Web Session Identifiers

86. Web session identifiers were also well-known and widely used before the effective filing date of the '448 patent.

87. U.S. Patent No. 5,708,780, filed on June 7, 1995, discloses the concept of creating and appending session identifiers to web requests and responses to enable a webserver to recognize a requesting device during a series of requests and responses. Ex. 1015 (U.S. Patent No. 5,708,780 to Levergood et al.), 3:11-16 ("One aspect of the invention involves forwarding a service request from

the client to the server and appending a session identification (SID) to the request and to subsequent service requests from the client to the server within a session of requests.”)

88. A session identifier, session ID, or session token was a widely used method for providing a state function within the stateless HTTP protocol used by internet web servers by the early 2000s. Commercial websites could track an individual user’s browsing habits, product interests, and intentions to purchase products in the user’s online shopping cart using a session identifier.

89. By 2000, it was common for commercial websites to employ some form of a session identifier, including an identification number, an electronic passkey, a URL, a device MAC address, device serial number, hashcode, or other unique indicator, to track a user’s online behavior and interests. Ex. 1016, <https://www.w3.org/TR/WD-session-id.html>; Ex. 1017, <https://www.nytimes.com/2001/09/04/business/giving-web-a-memory-cost-its-users-privacy.html>. Internet browsers Netscape Navigator and Microsoft Explorer allowed a user to view and place products into their shopping cart (e.g., DVDs and books) in an ongoing communication session with well-known commercial web sites (e.g., BestBuy.com, Amazon.com, and BarnesAndNoble.com) by exchanging a time-limited session identifier with each webpage request and response.

90. One important characteristic of the HTTP/HTTPS (HyperText Transfer Protocol) software that is used by Web servers to respond to URLs that request Web pages, is that it is “stateless” – normally, two users request the same page with identical URLs that do not carry the user’s identity or identify the interactive session in which the user made the request. Because of that, if an e-commerce site wishes to have a “cart” to hold potential user purchases, it must have an additional mechanism to identify that user and that session. One such mechanism is the so-called “cookie.” The server asks the user for permission to store an identifying cookie on the user’s computer, and if granted, future requests from that user to that server carry an identifier that can be used by the server to access the cart unique to that user (and that session).

91. Thus, the concept of a session identifier to identify a unique browsing session was not novel at the purported time of invention.

4. Collaborative Web Browsing and Collaborative Systems

92. The concept of collaborative web browsing using multiple devices and a synchronization server was also well-known and widely used before the effective filing date of the ’448 patent.

93. For example, collaborative web browsers, such as GroupWeb, developed in 1996, allowed multiple users to browse together real-time in a shared visual browsing session with each user viewing a separate browser that provided

independent web access that was synchronized across all users in the session. Ex.

1018 (GroupWeb: A WWW Browser as Real Time Groupware) at 1-2

(“GroupWeb is a browser that allows group members to visually share and navigate World Wide Web pages in real time.”), Fig. 1.

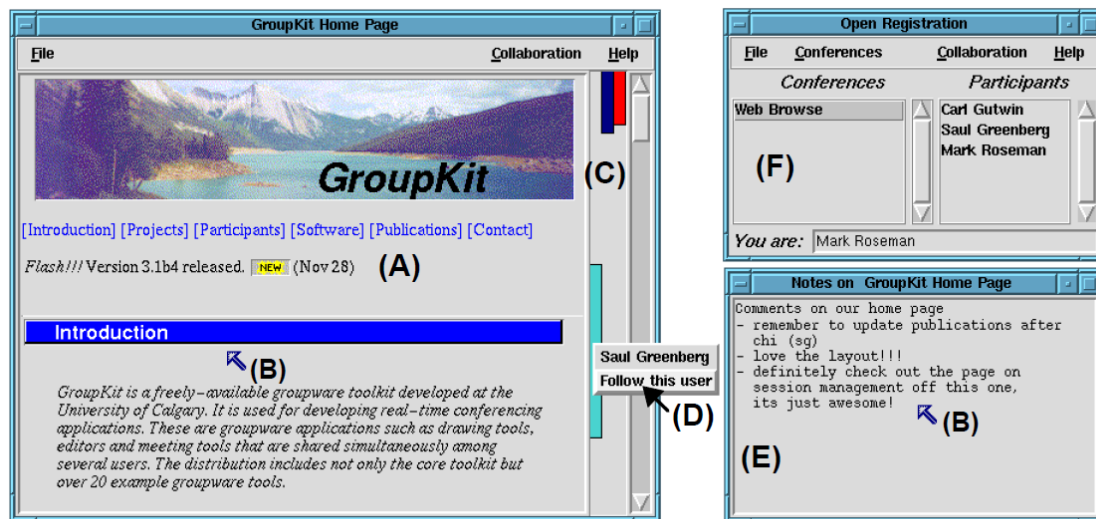


Figure 1. GroupWeb, showing (a) a shared web page, (b) telepointers, (c) multi-user scrollbars, (d) view-slaving controls, (e) a group annotation tool, and (f) a session manager for joining the GroupWeb conference.

94. Collaborative web browsing was known to me personally in 1999; I am co-author of a paper titled “Let’s Browse: A Collaborative Web Browsing Agent,” dated December 1998, available at <https://dl.acm.org/doi/10.1145/291080.291092>. Ex. 1019.

95. In particular, Let’s Browse was “an experiment in building an agent to assist a group of people in browsing, by suggesting new material likely to be of common interest.” *Id.*, Abstract. Let’s Browse was a further extension of the authors’ Web agent Letizia (Lieberman, Henry. “Letizia: An Agent That Assists Web Browsing.” *International Joint Conference on Artificial Intelligence* (1995)

<https://web.media.mit.edu/~lieber/Lieberary/Letizia/Letizia-AAAI/Letizia.html>

(Ex. 1020); U.S. Patent No. 6,353,822 to Lieberman (“Method and Apparatus for Document Browsing Based on Real-time Analysis of User Preferences”) (Ex. 1021), whose job it was to “look ahead” to the content of the links on a users’ screen, filtering the content to suggest the next page most relevant to a user’s interest. Let’s Browse extended this idea to use a filtering profile that came from more than one user. Let’s Browse had several different ways of configuring multi-user browsing sessions. One, intended for use in a stand-up “kiosk” setting, automatically detected the presence of users walking up to it to automatically join the browsing session. Another allowed multiple users with independent browsing sessions, synchronously or asynchronously, to browse “with someone else’s eyes”. That is, to browse using the interest profile of one or more other users to anticipate which of the currently displayed links might be of most interest. The Let’s Browse client also acted as a server for coordinating the group browsing session.

96. Collaborative user interfaces and collaborative work systems, or groupware, were also well-known and widely in use before the effective filing date of the ’448 patent. For example, in August 2005, the software company Upstartle released Writely, one of the first collaborative cloud-based word processors. Ex. 1022, https://en.wikipedia.org/wiki/Google_Docs.

97. Google acquired Writely in 2006, which was incorporated into Google's widely available collaborative cloud-based word processor, Google Docs and Spreadsheets. Ex. 1023 (Press Release, Google Announces Google Docs & Spreadsheets, 10/11/2006, http://googlepress.blogspot.com/2006/10/google-announces-google-docs_11.html). Google released Google Docs and Spreadsheets on October 11, 2006.

98. It was well-known to a POSITA at the time that collaborative web browsing, collaborative user interfaces, and collaborative work systems typically involved multiple user computers (guest and host devices) and a separate server or set of servers (e.g., Google Doc & Spreadsheet servers) to synchronize the users' devices and user interfaces with one another.

99. Further, at the time, there were also troubleshooting systems that allowed a customer service support person to "take over" a customer's computer (see what the user saw on their screen, and optionally, provide input directly to the customer's computer) in order to resolve a problem. Such systems could be used for a synchronized browsing session between the helper and the customer by running a browser on the customer's computer. Co-browsing between a helper and a customer was typically used for the customer to demonstrate to the helper what was wrong; and for the helper to show the customer how to browse for information useful in solving the customer's problem, such as documentation; or for the helper

to show the user how to perform a procedure by interacting with a Web site. They included all of the same steps of invitation, accept/decline, establishing a shared connection, and synchronizing input and output data.

100. Moreover, all collaborative groupware systems, whether text editors, spreadsheets or Web browser, use the same basic elements to establish a shared user interface that shows a common display (perhaps with minor variations) to multiple users at the same time, and can potentially accept input from any of the users in the group. First of all, users must receive an invitation that contains information that allows each user to access the shared interface. The user must declare their acceptance of the invitation to join the group in response to the invitation. The software on each user's computer must be able to communicate both input from its own user to other users, typically through a common server, and also display output that is the result of other user's actions. In that sense, the operation of a groupware system is similar to many other kinds of multiple-user interfaces, such as a shared database that can be read or written by multiple users. The principles of synchronization of actions of multiple users were not novel, and well-known to POSITAs at the time of the effective filing date.

101. Thus, the concept of collaborative web browsing using multiple devices and a synchronization server was not novel as of the effective filing date.

5. Operating a Browser or Application Based on Received Web Data

102. The final concept of operating a browser or an application based on web data received by a guest device was similarly well-known and in wide use prior to the effective filing date of the '448 patent.

103. Operating a client-side browser or application based on received web data was decades old by the purported time of invention. For instance, Netscape introduced JavaScript in 1995 as a client-side scripting language to provide dynamic application elements capable of executing within the user's browser. Shortly after its introduction, JavaScript quickly became a standard programming language for internet websites. Ex. 1024, <https://www.springboard.com/blog/data-science/history-of-javascript/>.

104. In 1996, Macromedia released Flash as a multimedia software application run within a user's browser to add animation, audio, and video elements to web pages requested by a user device and served by a webserver. Ex. 1025, https://en.wikipedia.org/wiki/Adobe_Flash.

105. Flash was an early example of how the client-server architecture of the Web could be used to implement additional user interaction functionality, beyond simple display of static Web pages. In later developments, this enabled such additional functionality as group browsing, while still adhering to the standard Web HTTP protocols and functionality.

106. Flash, and other extensions to Web protocols, effectively allowed a much richer graphical vocabulary for constructing user interfaces than was previously available. They allowed more dynamic interfaces in response to user interaction. Developers realized that they now had all the elements necessary to implement, with Web technology, user interfaces that had previously required native applications designed for a single computer and user. This paved the way for Web- and cloud- based groupware.

107. In 2005, Asynchronous JavaScript And XML (Ajax) was introduced to enable website developers to create asynchronous web applications, including today's well-known Google's Gmail and Google Maps web applications, all of which operate based on web data received by a user's computer or handheld device from a webserver or web application server. Ex. 1026, <https://thehistoryoftheweb.com/what-does-ajax-even-stand-for/>.

108. Javascript and Ajax took us further down the road of enabling the Web to reproduce responsive user interaction techniques in a manner similar to that of applications natively programmed on a single-user machine. This helped open the door to multiple-user groupware applications for the Web, similar to what had previously been accomplished on single-user and time-shared systems.

109. Flash, and systems like it, were introduced in order to reduce the amount of display refresh required for interactive interfaces. The original Web

architecture was designed to display one complete Web page at a time. If only part of the page changed, it still required redisplay of the entire page, which was slow and sometimes resulted in visual artifacts. Flash and Ajax allowed for incremental redisplay of individual graphic elements within a page.

110. It was well-known to a POSITA as of the effective filing date of the '448 patent that then-contemporary browser and web applications operated based on web data received by a guest (user) device.

111. The claimed invention of the '448 is the combination of the above known concepts to perform known methods used in collaborative systems and collaborative web browsing. The background provided above shows that each of the individual concepts were well-known and in use by the time of the invention.

B. Specific References that Render the Claims Obvious

1. International Application Publication WO 00/48110 to Lebrun et al.

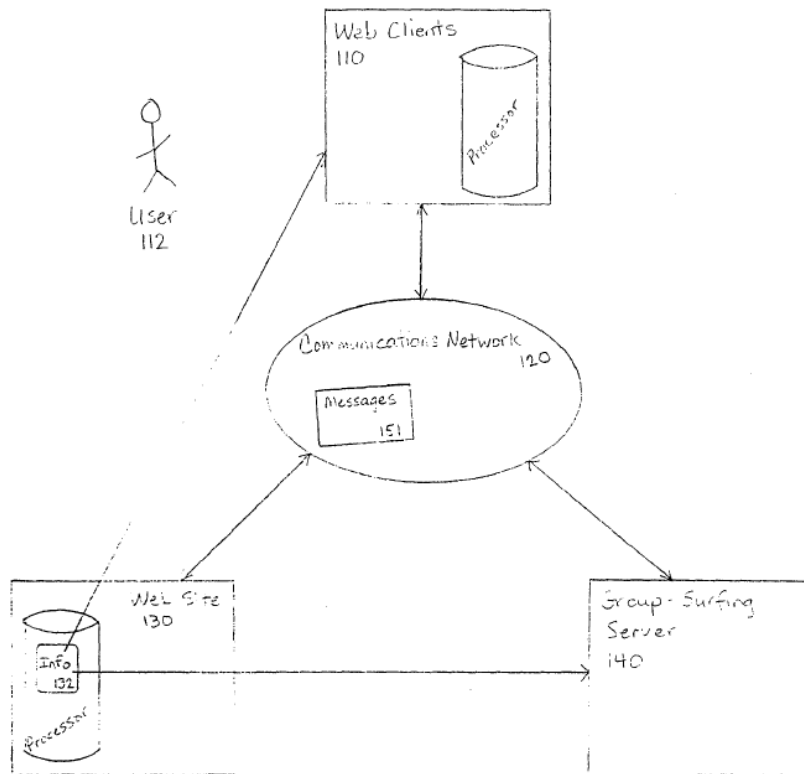
112. International Application Publication WO 00/48110, titled "Personalized Access to Web Sites" to Lebrun et al. ("Lebrun") has an international filing date of February 11, 2000, and a publication date of August 17, 2000. Ex. 1005, Title. Lebrun is therefore prior art to the '448 patent under pre-AIA §102(a) and 102(b). Lebrun was not cited by the applicant or examiner during prosecution of the '448 patent. Ex. 1001, References Cited.

113. Lebrun identified problems in the art, much like the '448 patent, that “there is no convenient and simple technique in the known art for those users to coordinate following links to other and further web sites. Similarly, there is no convenient and simple technique in the known art for providing, for a group of related users, simultaneous access to a sequence of web sites.” Ex. 1005, 4:1-4.

114. Lebrun further noted a need in the art for “an improved technique for group access to web sites” and disclosed an embodiment “in which 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 time.” Lebrun further discloses that one of the users or a selected plurality of the users may control the group web surfing process. *Id.*, 4:6-11; *see also id.*, 4:14-20 (describing general web browsing, web site requests, web links).

115. Figure 3 of Lebrun depicts “a system for group access to web sites” that includes “a set of web client 110, a communication network 120, at least one web site 130, and a group surfing server 140.” *Id.*, 29:25-28, Fig. 3.

System 100



116. Lebrun describes the web clients 110 including a web browser or related software running on “a general-purpose computer, such as a laptop or workstation” or a variety of handheld user devices including “a Palm Pilot” and “cellular telephone or other telephonic device” independent of location. *Id.*, 30:14-28. The communication network 120 includes any packet-switched network, including the internet, to enable communication between the components of the Lebrun system. *Id.*, 30:30-31:2.

117. Lebrun discloses a sequence to create and participate within a group surfing session, in which a first web client 110 sends a group session creation request to the group surfing server 140 via the communication network 120. A group session identifier may be included with the web client's request message or the group surfing server 140 can also assign the group session identifier in its reply. *Id.*, 32:1-14. The group surfing server responds to the group session request "by (1) creating a group-surfing session, and (2) informing the participants [web clients] in the group-surfing session" and delivering the web clients to an online destination provided by web site 130. *Id.*, 32:26-31. *See also id.*, 44:5-13, Fig. 4.

118. Additional web clients may join the group surfing session by sending "a session-join message" that includes the group session identifier. *Id.*, 33:1-4. The group session server receives the join session message, responds by adding the web client to the group surfing session, and notifies the web clients in the session of the web client new to the session. *Id.*, 33:6-10. *See also id.*, 44:16-45:7, Fig. 4.

119. Lebrun thus describes a system of collaborative web browsing and components in virtually the same manner as that offered by the system of the '448 patent, described below.

2. U.S. Patent Application Publication No. 2005/0033656 to Wang et al.

120. U.S. Patent Application Publication No. 2005/0033656, titled "Collaboration System Suitable for On-Line Shopping" to Wang et al. ("Wang")

has a filing date of April 21, 2004, and a publication date of February 10, 2005. Ex. 1006, Title. Wang is therefore prior art to the '448 patent under pre-AIA 35 U.S.C. §102(b) and 102(e). Wang was not cited by the applicant or examiner during prosecution of the '448 patent. Ex. 1001, References Cited.

121. Wang, like the '448 patent and Lebrun, is directed to a collaboration system that includes multiple client devices, a communication network, and a server providing “a group session” to the connected client devices and “means for synchronizing the client devices in the collaboration environment.” Ex. 1006, Abstract.

122. Wang, also like the '448 patent and Lebrun, identifies problems in the art related to collaborative browsing, and in particular, to group virtual shopping sessions which suffer synchronization issues when individual web clients attempt to browse web pages or process online purchase requests. *Id.*, ¶¶[0009-10] (describing synchronization problems using conventional methods for an “on-line shopping system” and explaining that such “problems may be solved if web pages are shared using the collaborative technology” described therein).

123. To resolve such problems, Wang provides a “collaboration system” enabling a plurality of users to initiate a group browsing session via a synchronization server, to communicate with other users and invite them to follow an URL link to the group browsing session, and virtually shop together in a

synchronized manner through the server apparatus. *Id.*, ¶¶[0013-0017], [0046] (defining “the term ‘group session’ [a]s a session which enables client devices included in a group designated by a fixed identification value to access a common application service. In a virtual shopping system, this group session may be referred to as a shopping session.”).

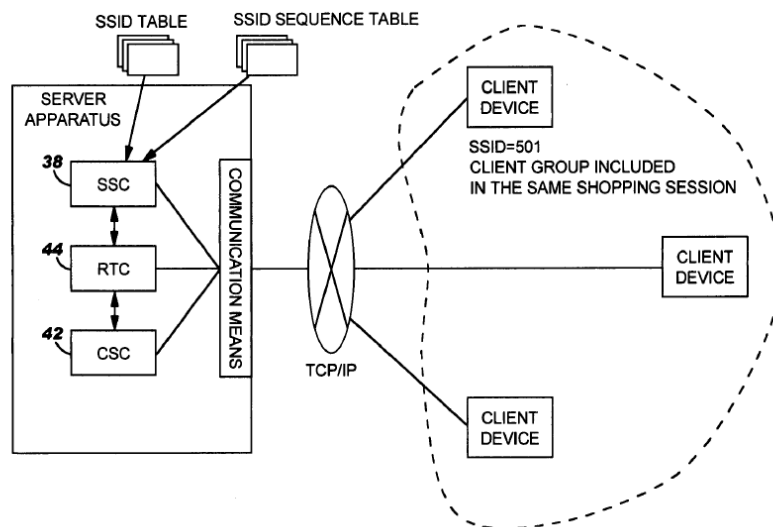
124. Wang describes the group browsing process in which a first user initiates a collaborative browsing session by sending a request to the synchronization server, which responds by creating the group browsing session and sending invitations to one or more users to join the session. *Id.*, ¶¶[0046-48]. Wang explains that the group session invitation includes “a dedicated URL address” enabling the invitee user to join the group session. *Id.*, ¶¶[0015], [0047-48].

125. Wang’s synchronization server apparatus enables the client devices to collaborate by creating a group session, transmitting a group session invitation and a URL address for the group session, storing group session identifiers and dedicated URL addresses in a database, and synchronizing web pages browsed by client devices within the group session using the session identifiers and received web server page data. *Id.*, ¶¶[0018-19], [0045-49], [0054-55].

126. Figure 11 is a diagram showing multiple client devices engaged in a group shopping session using the collaboration system of Wang, including multiple

client devices engaged in a group shopping session with a session identifier 501, a TCP/IP communication network, and a server apparatus responsible for storing the group session information, for managing the group session, and synchronizing the requested web page data across the client devices within the group session. *Id.*, [0063], Fig. 11.

FIG. 11



127. Wang thus discloses a collaborative browsing system and components, group session initiation sequence, and group session operation in much the same manner and operation as the '448 patent.

3. U.S. Patent Application Publication No. 2005/0021626 to Prajapat et al.

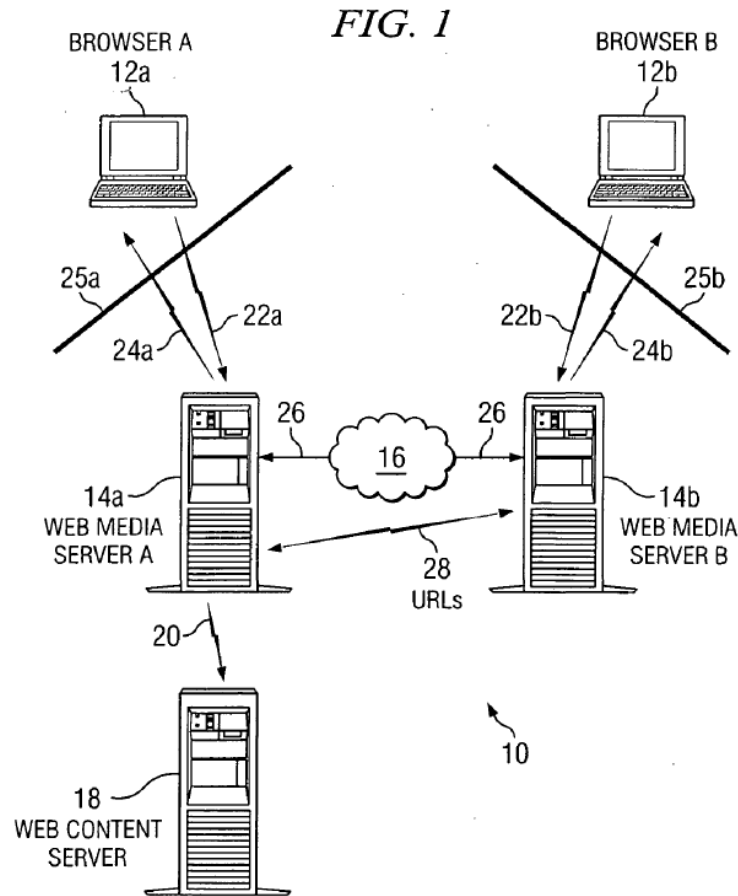
128. U.S. Patent Application Publication No. 2005/0021626, titled “Peer-to-Peer Dynamic Web Page Sharing” to Prajapat et al. (“Prajapat”) has a filing date

of May 22, 2003, and a publication date of January 27, 2005. Ex. 1007, Title.

Prajapat is therefore prior art to the '448 patent under pre-AIA 35 U.S.C. §102(b) and 102(e). Prajapat was not cited by the applicant or examiner during prosecution of the '448 patent. Ex. 1001, References Cited.

129. Prajapat, like the '448 patent, Lebrun and Wang, discloses a collaborative browsing system that is directed to solving problems in the art regarding “efficiency in a communication system when sharing web pages.” Ex. 1007, ¶¶[0009-10], [0013].

130. Figure 1 of Prajapat depicts the communication system, including multiple client browsers, web media servers and web content servers, connected by a communication network. *Id.*, ¶[0012], Fig. 1.



131. In Prajapat’s system, web media servers act as the synchronizing service, allowing multiple client browsers to “co-browse on or more webpages” together, in which to “co-browse” includes “browser 12a and browser 12b display the same web pages at substantially the same time; browser 12a may alter web pages and browser 12b may view those alterations; browser 12b may alter web pages and browser 12a may view those alterations; or any other suitable situations.” *Id.*, ¶[0012].

132. Prajapat describes the process of initiating a co-browsing session similar to that of the ’448 patent, Lebrun and Wang, in which a client browser

sends a request to a web media server to co-browse with one or more client browsers identified by email address. *Id.*, ¶¶[0016-17], [0034-35]. In response, the web media server establishes the co-browsing session with the requesting client browser, web media content servers, and invitee client browsers via their associated web media servers. *Id.*, ¶¶[0019-21], [0035].

133. Upon establishing a co-browsing session, any of the participating client browsers may submit web page requests to their respective web media servers, which synchronize the retrieval of the requested web content from web media content servers, for display on each co-browsing client browser via its associated web media server. *Id.*, ¶¶[0022-26], [0036-39].

134. Thus, Prajapat also discloses a collaborative browsing system that is formed and operates in the same or similar manner as the '448 patent.

4. Motivation to Combine Lebrun and Wang

135. A POSITA would have been motivated to combine Lebrun with Wang. Both are directed to solving problems in the art regarding collaborative browsing of web pages by multiple users in a synchronized manner. *See* Ex. 1005, 4:1-4 (stating that “there is no convenient and simple technique in the known art for providing, for a group of related users, simultaneous access to a sequence of web sites”); Ex. 1006, ¶¶[0009-10] (describing synchronization problems using conventional methods and explaining that such “problems may be solved if web

pages are shared using the collaborative technology” described therein); *see also*, Ex. 1005, 4:6-10 (describing an “embodiment of the invention in which 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”); Ex. 1006, ¶[0013] (“The present invention provides a collaboration environment that enables a plurality of users to access the same web page through their browsers while communicating with each other.”).

136. Furthermore, both Lebrun and Wang describe a process in which a first user initiates a collaborative browsing session by sending a request to a server to create a group browsing session and to send invitations to other users to join the session. Ex. 1005, 32:3-28; Ex. 1006, ¶¶[0047-48]. A POSITA would have recognized that the “identifier” in the group surfing invitation of Lebrun (Ex. 1005, 32:21-24) could incorporate the hyperlink “URL address” disclosed in Wang (Ex. 1006, ¶[0048]) using conventional web programming techniques. The result would be a combination of prior art elements according to known methods to yield predictable results.

137. A POSITA attempting to solve problems in collaborative web browsing and collaborative systems at the time of the effective filing date of the ’448 patent would have sought out various available solutions for enabling multiple users to browse web pages together in a collaborative, synchronized

manner, and considered combining the “group surfing” concepts disclosed in Lebrun with the hyperlink invitation concept disclosed in Wang.

138. A POSITA attempting to implement Lebrun’s “identifier in the group surfing invitation” would have realized that the most natural way to represent the invitation would be as a URL constructed by the group surfing server. Web servers are already equipped, through the HTTPS protocol, with software to understand URLs, and have provision to accommodate additional functions in the HTTPS request which could be used for identification of the particular user and other information relevant to the group browsing session.

5. Motivation to Combine Prajapat and Wang

139. A POSITA would also have been motivated to combine Prajapat with Wang. Prajapat, like Wang, is directed to solving problems related to collaborative browsing via multiple web media servers and user devices to “improve efficiency in a communication system when sharing web pages.” Ex. 1007, ¶[0005], Fig. 2; Ex. 1006, ¶¶[0009-10], [0013].

140. Moreover, both Prajapat and Wang disclose synchronizing the retrieval and display of web pages to all client devices participating in a co-browsing session using a synchronization service comprised of a single server (Wang) or multiple web media servers (Prajapat). Ex. 1006, ¶¶[0018-19], [0045-49], [0054-55]; Ex. 1007, ¶¶[0022-26], [0036-39].

141. A POSITA attempting to solve problems in collaborative web browsing and collaborative systems at the time of the effective filing date of the '448 patent would have sought out various available solutions for enabling multiple users to browse web pages together in an efficient, collaborative manner such as Prajapat web page sharing with the hyperlink invitation concept disclosed in Wang.

142. Furthermore, a POSITA would have recognized that even if Prajapat did not explicitly disclose that an invitee user requests a web page independent of a “web media server,” it would have been obvious to incorporate the software functionality of Wang to permit the invited user’s web browser to request a web page independent of a “web media server.” *See* Ex. 1006, ¶¶[0021], [0041] (discussing “page navigation control” functionality). The resulting combination would be a combination of prior art elements according to known methods to yield predictable results (e.g., a web browser software plug-in allowing an invited user to request a web page independently).

143. It would have been obvious to a POSITA that a group browsing session requires access to different kinds of Web pages, including those that are initiated uniquely by a single user and those that are intended to be shared by multiple users in the session. Retrieval of pages by external Web servers is

independent of the group surfing server. Web pages to be shared must be communicated to the group surfing server.

6. Secondary Considerations

144. I am unaware of any secondary considerations that would render the claims of the challenged patent non-obvious. In addition, the challenged patent did not satisfy any long felt but unmet need because a review of the prior art, including the references cited herein, already met the same needs as the features of each claim. Similarly, the alleged invention(s) of the challenged patent did not achieve any unexpected results because the prior art, including those cited herein, disclose the same processes achieving the same results.

C. Ground 1: Claims 1-16 are Rendered Obvious by Lebrun in View of Wang

1. Independent Claim 1

a. Lebrun in View of Wang Discloses 1[pre] of Claim 1

145. To the extent the preamble of claim 1 is limiting, Lebrun discloses **a method performed by a host device for establishing a synchronized browsing session between the host device and an invitee device.**

146. Lebrun discloses **a synchronized browsing session.** The '448 patent explains that a “synchronized browsing session” allows for “two or more persons browsing the internet to share their internet browsing experience and have all users simultaneously browse and fully interact with web sites . . . or other online

applications in real time.” Ex. 1001, 5:22-26. Lebrun describes a “group-surfing session,” which is “an improved technique for group access to websites.”

Ex. 1005, 4:6-7. Lebrun explains that in a group-surfing session, “[m]ultiple 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.” Ex. 1005, 4:4-9. A POSITA would have understood that the group-surfing session described in Lebrun corresponds to a “synchronized browsing session.”

147. Lebrun further discloses **a host device for establishing a synchronized browsing session between the host device and an invitee device.**

The '448 patent explains that a host and guest devices may comprise a “personal computer, mobile phone, Smartphone, IPAD®” or other type of device with a “network connection.” Ex. 1001, 6:18-36. Lebrun discloses that a “web client” includes “a general-purpose computer, such as a laptop or workstation,” as well as “a hand-held calendar (such as a ‘Palm Pilot’ or other hand-held device), a portable computer, a special purpose computer, a cellular telephone or other telephonic device, a telephone system with interactive voice response, or a web server acting as the agent for a user.” Ex. 1005, 12:32-13:2; 30:19-24. A POSITA would have understood that the web client described in Lebrun corresponds to a “host device” or “guest device.” The '448 patent explains that a host device “may initialize and

conduct a synchronized browsing session with a guest device” via a “synchronization server.” Ex. 1001, 6:18-20. Lebrun explains that a “group-surfing session” is initiated when a “first web client” sends a “session-creation message” to a “group-surfing server.” Ex. 1005, 32:9-11. The “session-creation message” can also include information to invite “web clients” that are “participating in” or “permitted to participate in” the session. Ex. 1005, 32:14-16. A POSITA would have understood that a “first web client” establishing a “group-surfing session” administered by a “group-surfing server,” and inviting “other web clients” joining the session, meets this limitation.

148. In addition, even if Lebrun did not disclose this limitation, Wang discloses a “client device” via “browser means” with “synchronization control means for enabling the plurality of client devices to share the web page.” Ex. 1006, ¶[0020]. Wang discloses that the “first client device” sends a login request to the “server apparatus, followed by the establishment of “SESSION A.” Ex. 1006, Fig. 3; *see also id.*, ¶[0047] (“The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2.”). A POSITA would have been motivated to combine Wang’s teachings of including “synchronization control means” to Lebrun’s “first web client.” Incorporating standard web software functionality, as disclosed in Wang, such as synchronization between a web browser and server, into Lebrun’s disclosed “web

client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

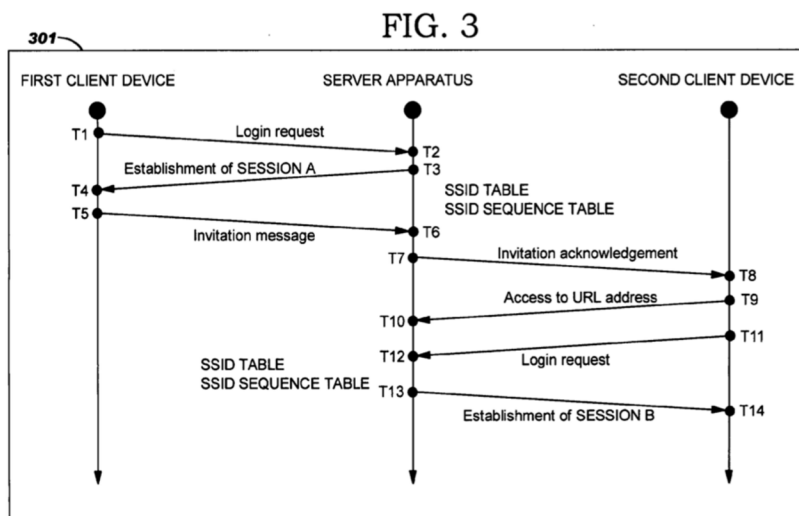
b. Lebrun in View of Wang Discloses 1[a] of Claim 1

149. Lebrun discloses **sending a request to establish the synchronized browsing session to a synchronization server**. As discussed above, Lebrun explains that a “group-surfing session” is initiated when a “first web client” sends a “session-creation message” to a “group-surfing server.” *See supra* Section IX.C.1.b; *see also* Ex. 1005, 32:9-12. The web client is “disposed for sending a message 151 to the group-surfing server 140, to request the group-surfing server,” where the “message 151 is responsive 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.” Ex. 1005, 32:3-7. Once the group-surfing server receives the session-creation message, it responds by “(1) creating a group-surfing session, and (2) informing the participants in the group-surfing session.” Ex. 1005, 32:26-31. A POSITA would have understood that a “first web client” establishing a “group-surfing session” administered by a “group-surfing server,” comprises sending a request to establish the synchronized browsing session to a synchronization server.

150. In addition, even if Lebrun did not disclose this limitation, Wang discloses “a server apparatus for use in a system enabling computer devices to collaborate with one another,” which may comprise a “a synchronization control

unit for notifying each of the individual session destinations that the web page is shared.” Ex. 1006, ¶¶[0018-19]. The “synchronization control unit” would receive the request to establish a session.

151. Figure 3, reproduced below, is a timing diagram showing the process wherein client devices and the “server apparatus” sets up a group session.



152. Wang discloses that the “first client device” sends a login request to the “server apparatus” (T1 > T2), followed by the establishment of “SESSION A” (T3>T4). Ex. 1006, Fig. 3; *see also id.*, ¶[0047] (“The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2.”). Figure 4A, reproduced below, shows an example of an SSID Table.

FIG. 4A

SSID TABLE

401

SSID	Session 1	Session 2	Session 3
SSID a	Session A	Session B	
b5543212	56890543	345890	

153. A POSITA would understand that the “server apparatus” with a “synchronization control unit” taught by Wang corresponds to a synchronization server. Further, that when a “first client device” sends a login request to the “server apparatus,” this corresponds to sending a request to establish a synchronized browsing session. A POSITA would have also been motivated to combine Wang’s teachings of a “server apparatus” with a “synchronization control unit” to Lebrun’s “group-surfing server.” Incorporating standard web software functionality, as disclosed in Wang, such as sending a notification to begin a session to a server, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

c. Lebrun Discloses 1[b] of Claim 1

154. Lebrun discloses **receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.**

155. Lebrun discloses **receiving a confirmation message from a synchronization server.** As discussed above, Lebrun explains that a “group-surfing session” is initiated when a “first web client” sends a “session-creation message” to a “group-surfing server.” *See supra* Section IX.C.1.a; *see also* Ex. 1005, 32:9-12. This message can include information to invite “web clients”

that are “participating in” or “permitted to participate in” the session. Ex. 1005, 32:14-16. A POSITA would have understood that the “group-surfing server” would necessarily confirm a session has been created, in order for the host device to later invite additional users. If the “group-surfing server” does not first confirm a session has been created, it would mean a session has not been created and no user can join.

156. Lebrun further discloses **including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.** This “session-creation message” sent by the “first web client” includes an “identifier for the group-surfing session.” Ex. 1005, 32:9-12. After creating the group-surfing session, additional web clients can send “a session-join message” to the group-surfing server to join. Ex. 1005, 33:1-4. Lebrun notes that “in a preferred embodiment, the message 151 includes the identifier for the group-surfing session.” Ex. 1005, 33:3-4. A POSITA have understood that the group-surfing server would have generated a session identifier, if one was not provided by the host device. Further, that this session identifier would necessarily be associated with the host device that established the session.

d. Lebrun in View of Wang Discloses 1[c] of Claim 1

157. Lebrun discloses **sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.**

158. Lebrun discloses **sending an invitation to an invitee device to join the synchronized browsing session.** As discussed above, Lebrun explains that the “session-creation message” includes an “identifier for the group-session session” and can include information to invite “web clients” that are “participating in” or “permitted to participate in” the session. *See supra* Section IX.C.1.c; *see also* Ex. 1005, 32:9-16.

159. Lebrun further discloses **wherein the invitation includes the session identifier.** As discussed above, Lebrun explains that the “session-creation message” includes an “identifier for the group-session session.” *See supra* Section IX.C.1.c; *see also* Ex. 1005, 32:9-12.

160. In addition, even if Lebrun did not disclose this limitation, Wang discloses a “client device” with “communication means for enabling the client device to display a message for other client devices.” Ex. 1006, ¶[0020]. The “client device” could send an invitation via the “communication means” to join the session. A POSITA would have been motivated to combine Wang’s teachings of including a “communications means” to Lebrun’s “first web client.” Incorporating

standard web software functionality, as disclosed in Wang, such as communication of information from one web browser to another web browser, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.

e. Lebrun Discloses 1[d] of Claim 1

161. Lebrun discloses **recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.**

162. Lebrun discloses **recording a shared web browsing interaction.** The '448 patent states that host and guest devices may have "synchronized browsing software" designed to allow a user to "participate in a synchronized browsing session." Ex. 1001, 7:52-55. This software may be integrated into "the native browser control components of commonly used web browsers" or may comprise a "an add-on or plug-in to commonly used internet browsing software." *Id.*, 7:58-65, 8:1-7. The "shared browsing window" is an "element of synchronized browsing software," "where in the webpage interactions of host device 10, or other leading device, are relayed to following devices in the synchronized browsing session." *Id.*, 8:8-12. Lebrun discloses a "program fragment" that is loaded at each "web client" and allows for the "group-surfing server" to interface and affect the operation of a "web client." Ex. 1005, 36:21-25.

A POSITA would have understood that the “program fragment” in Lebrun relates to the “synchronized browsing software.” Lebrun discloses that a “controlling web client” selects a “progression of pages” that is presented to other web clients the session. Ex. 1005, 34:15-17; 35:26-28. When a page is selected, the “program fragment” records this interaction and transmits it to the “group-surfing server.” Ex. 1005, 45:15-16. The user sends a “next-page message” to the “group-surfing server,” indicating the next page in the progression of web pages shared to other web clients. Ex. 1005, 45:21-29.

163. For example, Lebrun explains that “Web Page Look Ahead” is where a user can “allow a second user (or a set of such second users) temporary access to a set of web sites, possibly with the temporary access restricted to a subset of the information or services offered by those web sites.” Ex. 1005, 6:19-32, 37:27-38:17. Here, a “controlling web client” can select web pages for “look ahead” before designating them as next pages in the progression of web pages. Ex. 1005, 37:29-31. This determination of whether a “look ahead” web page will be shared to other users requires the “controlling web client” to record the user’s determination (i.e., an interaction) on whether to share the web page. Specifically, the interaction is a setting to determine if a “look ahead” page is shared or accessible by others participating in the session. Similarly, Lebrun also discloses “Web Page Special Access” where the “controlling web client” is able to designate

web pages as “special access,” which determines whether a web page is presented to “other web clients.” Ex. 1005, 38:19-27. Again, when a “controlling web client” determines if a “special access” page is displayed to “other web clients,” a user must necessarily interact with the “web client,” which then records this interaction. *Id.* 37:27-38:1. Lastly, Lebrun discloses “Web Page Automatic Form Completion,” which is “the when the controlling web client 110 enters information to complete the HTML form, and sends that information to the group-surfing server 140, the group-surfing server 140 may present that information on the HTML form at each participating web client 110, so that each participating web client 110 can see the HTML form being filled in.” *Id.* 39:4-8. Here, the “controlling web client” records the information being input into the HTML form (i.e., a web browsing interaction) is presented (i.e., shared) to “each participating web client.” Ex. 1005, 39:4-8.

164. Lebrun further discloses **determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction**. Before selecting the next page in a progression, web pages can be designated for “look ahead” or “special access.” Ex. 1005, 6:19-32, 37:27-38:17. This allows the user to first determine if a web page is accessible or appropriate, and therefore whether to present it as the next page in the progression. *Id.* For example, designating web pages as “special access” allows the “controlling

web client” to “enter information required for special access privately, without presenting that information to other web clients.” A POSITA would have understood that when a “controlling web client” chooses the next page in the progression of pages, as opposed to designating a web page for “look ahead” or “special access,” the user is determining to share a web page to others participating in the session. Ex. 1005, 37:27-38:27. Additionally, a POSITA would have understood that presenting HTML form information at each “participating web client” is a shareable web browsing interaction. Ex. 1005, 39:4-8.

f. Lebrun in View of Wang Discloses 1[e] of Claim 1

165. Lebrun discloses **sending a request for webpage content to a website server independent of the synchronization server**. As discussed above, the “session-creation message” includes an “identifier for the group-session session” *See supra* Section IX.C.1.c; *see also* Ex. 1005, 32:9-12. This “session-creation message” can also include an “identifier” for an “initial page,” such as a “home page for a selected web site” or “welcome page for a selected service” for the “group-surfing session.” Ex. 1005, 32:21-24. Thus, prior to sending a request to initiate a session, the user would necessarily need to independently enter the web page URL into the web client to first retrieve the page, prior to adding this information into the “session-creation message.” Furthermore, Lebrun explains that “each web client” is able to retrieve the next web page “directly from the web

site.” *Id.*, 35:17-19. A POSITA would have understood that when a user enters a URL into a web client and retrieves the corresponding web page, this discloses sending a request for webpage content to a website server independent of the synchronization server.

166. In addition, even if Lebrun did not disclose this limitation, Wang discloses a “computer-executable program” which may comprise a “a step of forming a page navigation control unit for providing a web page common to each of the individual sessions.” Ex. 1006, ¶[0021]. The “page navigation means” allows 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.” *Id.*, ¶[0041]. A client device with ownership of the initiative of the web page operation is synonymous with the “controlling web client” disclosed in Lebrun. Once the client device has ownership, it can now request web pages independently (and share them with others), rather than only viewing web pages that have been shared. *See supra* ¶163. A POSITA would have been motivated to combine Wang’s teachings of “page navigation control” software functionality to Lebrun’s “web client.” Incorporating standard web software functionality, as disclosed in Wang, such as retrieving a web page by a web browser, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

g. Lebrun in View of Wang Discloses 1[f] of Claim 1

167. Lebrun discloses that **subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server.**

168. Lebrun discloses **subsequent to sending the request for webpage content to the website server.** As discussed above, the “session-creation message” includes an “identifier for the group-session session” (*see supra* Section IX.C.1.c; *see also* Ex. 1005, 32:9-12) and that a user would necessarily need to enter the web page URL into the web client to first retrieve the page independent of the “group-surfing server.” *See supra* Section IX.C.1.f; *see also* Ex. 1005, 32:21-24, 35:17-19; Ex. 1006, ¶¶[0021], [0041].

169. Lebrun further discloses **transmitting information related to the shared web browsing interaction to the synchronization server.** As discussed above, each web client has a “program fragment,” that affects the operations of a web client and is controlled by the group-surfing server. *See supra* Section IX.C.1.e; Ex. 1005, 36:21-25. Once other users have joined the session, the “controlling web client” can then select “a progression of pages,” which is “presented at each of the web clients” that is participating in the session. Ex. 1005, 35:26-28. Specifically, “the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the

progression of pages 153 in the session” (*id.*, 45:21-29) and “thus able to determine which next pages 153 are selected, and to assure that such next pages 153 are presented to all participating web clients 110.” *Id.*, 44:33-45:2. A POSITA would have understood that a group-surfing server would need to receive information from the host device relating to the shared browsing interaction in order to deliver web pages selected by the host device to others in participating in the session.

170. In addition, even if Lebrun did not disclose this limitation, Wang discloses a “synchronization control unit” capable of “notifying each of the individual session destinations of the shared status of the web page.” Ex. 1006, ¶[0021]. Each client device sharing the web page “access[es] the server through its own individual session,” so that the client devices “can access an application execution unit through a dedicated URL address to engage in a group session.” *Id.*, ¶[0015]. A POSITA would have been motivated to combine Wang’s teachings of a notification to “individual session destinations” to Lebrun’s “web client.” Incorporating standard web software functionality, as disclosed in Wang, such as requesting a web page by a web browser and transmitting that information (i.e., a notification) to a server, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

h. Lebrun in View of Wang Discloses 1[g] of Claim 1

171. Lebrun discloses **wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.**

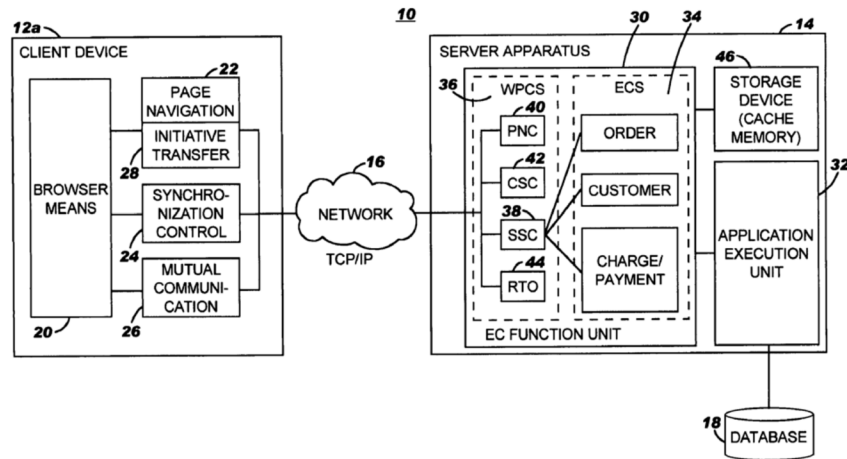
172. Lebrun discloses **wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device.** As discussed above, The “controlling web client” can select the “next page” in a “progression of pages,” which is “presented at each of the web clients” participating in the session. *See supra* Section IX.C.1.e; Ex. 1005, 36:26-28. For example, a “next-page message” is sent to the “group-surfing server,” which then communicates to the “program fragment” in the other web clients to cause the “next page” to be presented to the other web clients in the session. *See supra* Section IX.C.1.e; *see also* Ex. 1005, 45:21-46:5.

173. Lebrun further discloses an **invitee device enabled to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.** As discussed above, each web client has a “program fragment” that affects the operations of a web client. *See supra* Section IX.C.1.g; Ex. 1005, 36:21-25. Lebrun discloses that “each web client” is

able to retrieve the next web page “directly from the web site.” Ex. 1005, 35:17-19. When the “controlling web client” chooses the “next page,” the “program fragment” on the other web clients can use this information to request the web page the web client will view. *Id.*, 36:21-25, 45:21-46:5.

174. In addition, even if Lebrun did not disclose this limitation, Wang discloses that the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. The “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” *Id.*, ¶¶[0042-43], Fig. 2.

FIG. 2



For example, “when one customer changes the web page, this causes the other customers’ browsers to follow suit.” Ex. 1006, ¶[0014]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Lebrun’s “group-surfing server” to allow a “controlling web client” to share web pages with other users participating in the session.

i. Lebrun in View of Wang Discloses 1[h] of Claim 1

175. Lebrun discloses **wherein a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.**

176. Lebrun discloses **wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee**

device. As discussed above, each web client has a “program fragment,” that affects the operations of a web client and is controlled by the group-surfing server. *See supra* Section IX.C.1.e; Ex. 1005, 36:21-25. When the “controlling web client” chooses the “next page,” this information is captured by the “program fragment” and sent to the “group-surfing server,” which then causes the “next page” to be presented to the other web clients in the session. *See supra* Section IX.C.1.e; *see also* Ex. 1005, 45:13-17; 45:21-46:5.

177. Lebrun further discloses transmitting the information **in response to receiving the information related to the shared web browsing interaction from the host device.** As discussed above, the user sends a “next-page message” to the “group-surfing server,” which indicates the next page in the progression can be shared to other web clients. *See supra* Section IX.C.1.g; Ex. 1005, 45:21-29.

178. In addition, even if Lebrun did not disclose this limitation, Wang discloses the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. As discussed above, the page navigation means “includes initiative transfer means 28, and allows 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.”

See supra Section IX.C.1.f; Ex. 1006, ¶[0041]. Wang discloses that in response to an instruction from a customer, “the initiative transfer means” can transmit a request to the server “to transfer ownership of the initiative of the web page operation to another client device.” *Id.*, ¶[0041]. Once ownership is transferred, a “snapshot data of the web page changed by the other client device is transmitted from the server apparatus 14 to the client device which has lost the initiative, thus making it possible to share the web page.” *Id.* A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Lebrun’s “group-surfing server.” Incorporating standard web software functionality, as disclosed in Wang, such as transmitting information from a server (i.e., a URL) to a web browser that would receive and process that information to request a web page, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

j. Lebrun in View of Wang Discloses 1[i] of Claim 1

179. Lebrun discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.**

180. Lebrun discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server.** As discussed above, each web client has a “program fragment,” that affects the operations of a web client and is controlled by the group-surfing server (*see supra* Section IX.C.1.e; Ex. 1005, 36:21-25), which includes determining which “web page” to retrieve. *See supra* Sections IX.C.1.g-h; *see also* Ex. 1005, 32:21-24, 36:21-25. Also discussed above, the information received by the other web clients from the “group-sharing server” is related to the “controlling web client” determining the “next page” to present. *See supra* Sections IX.C.1.g-h; *see also* Ex. 1005, 35:26-28; 45:21-29.

181. Lebrun further discloses that **the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.** As discussed above, once other users have joined the session, the “controlling web client” can then select “a progression of pages,” which is “presented at each of the web clients” that is participating in the session via the “program fragment.” *See supra* Section IX.C.1.e; Ex. 1005, 35:26-28. A POSITA would have understood that when a “controlling web client” presents a web page, via a “group-surfing server,” that is independently retrieved from “other web clients” participating in the “session,” and displays that page to the “other web

clients” in response, this comprises the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.

182. In addition, even if Lebrun did not disclose this limitation, Wang discloses that the “server apparatus” comprises a means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. The “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” *Id.*, ¶¶[0042-43]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Lebrun’s “group-surfing server.” Incorporating standard web software functionality, as disclosed in Wang, such as transmitting information from a server (i.e., a URL) to a web browser or server that would receive and process that information to request a web page, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

k. Lebrun in View of Wang Discloses 1[j] of Claim 1

183. Lebrun discloses **receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.** As discussed above, each web client has a “program fragment,” that affects the operations of a web client and is controlled by the group-surfing server (*see supra* Section IX.C.1.e; Ex. 1005, 36:21-25), which includes determining which “web page” to retrieve. *See supra* Sections IX.C.1.g-h; *see also* Ex. 1005, 32:21-24, 36:21-25.

184. In addition, even if Lebrun did not disclose this limitation, Wang discloses the “server apparatus” comprises means that “receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0054]. As discussed above, the “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” *See supra* Section IX.C.1.g; Ex. 1006, ¶¶[0042-43]. Wang further discloses that the

“page navigation means 22, synchronization control means 24, and mutual communication means 26” that each “individually receive information from the respective control units” of the “server apparatus 14, extract an applicable URL address and a command from the received HTTP response, and allow the address and the command to be displayed on the client devices by use of the browser means 20.” Ex. 1006, ¶[0044]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with synchronization functionality between a “first client device” and “second client device,” to Lebrun’s “group-surfing server.” Incorporating standard web software functionality, as disclosed in Wang, such as receiving and processing information to request a web page, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.

2. Independent Claim 11

a. Lebrun in View of Wang Discloses 11[pre] of Claim 11

185. As explained above for claim 1[pre], Lebrun in view of Wang discloses **an apparatus for establishing a synchronized browsing session between a host device and an invitee device**. *See supra* Section IX.C.1.a; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16.

186. Lebrun discloses **an apparatus**. Lebrun discloses that a “web client” can include “any combination of devices or software taking on the role of a client

in a client-server environment in the internet, the world wide web, or an equivalent or extension thereof.” Ex. 1005, 30:1-3. This can take the form of “a single device, a set of cooperating devices, a portion of a device, or some combination thereof (such as for example a device providing web server services that acts as an agent of the user).” *Id.*, 30:4-6.

187. In addition, even if Lebrun did not disclose this limitation, Wang discloses **an apparatus**. Wang discloses that “a system enabling computer devices to collaborate with one another through a network.” Ex. 1006, ¶[0018]. A POSITA would have understood that the “computer devices” disclosed in Wang comprise an apparatus.

b. Lebrun Discloses 11[a] of Claim 11

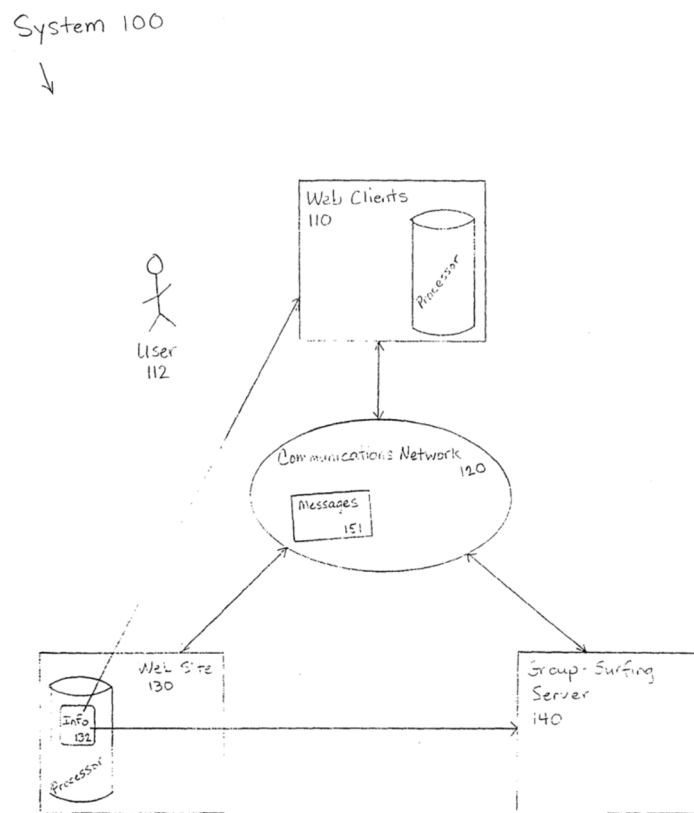
188. As explained above for claim 1[pre], Lebrun discloses **a network interface adapted to communicate with a synchronization server**. *See supra* Section IX.C.1.a; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:3-7; 32:9-16; 32:26-31. Lebrun further discloses a “communication network” for “transporting messages” between the “web clients,” “the web site,” “and the group-surfing server.” Ex. 1005, 31:4-5. The messages are “formatted in the communication protocol recognized” by the “web clients,” “the web site,” and the “group-surfing server.” *Id.*, 31:6-7.

c. Lebrun Discloses 11[b] of Claim 11

189. Lebrun discloses **a processor**. Lebrun discloses that the “web clients” will “each include a processor operating under control of the web client software,” such as a “web browser,” which is under control by “an operator or user.”

Ex. 1005, 30:14-15; *see also id.*, 33:1-4.

190. Further, Figure 4 of Lebrun, reproduced below, shows the “web clients” with a “Processor.”



Ex. 1005, Fig. 4.

d. Lebrun in View of Wang Discloses 11[c] of Claim 11

191. As explained above for claim 1[a], Lebrun discloses a processor adapted to **send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface.** *See supra* Sections IX.C.1.a-b; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:3-7, 32:9-16, 32:26-31; Ex. 1006, ¶¶[0018-20].

e. Lebrun Discloses 11[d] of Claim 11

192. As explained above for claim 1[b], Lebrun discloses a processor adapted to **receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.** *See supra* Sections IX.C.1.a, c; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16, 33:1-4.

f. Lebrun in View of Wang Discloses 11[e] of Claim 11

193. As explained above for claim 1[c], Lebrun in view of Wang discloses a processor adapted to **send an invitation from the host device to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.** *See supra* Section IX.C.1.a, d; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16, 32:14-16, 35:17-19, 44:12-14; Ex. 1006, ¶¶[0020], [0047], Fig. 3.

g. Lebrun in Discloses 11[f] of Claim 11

194. As explained above for claim 1[d], Lebrun discloses a processor adapted to **record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.** *See supra* Section IX.C.1.e; *see also* Ex. 1005, 6:19-32, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 39:4-8, 45:15-16; 45:21-29.

h. Lebrun in View of Wang Discloses 11[g] of Claim 11

195. As explained above for claim 1[e], Lebrun in view of Wang discloses a processor adapted to **send a request for webpage content to a website server independent of the synchronization server.** *See supra* Section IX.C.1.f; *see also* Ex. 1005, 4:6-7, 7:7-9, 32:9-16, 32:21-24, 35:17-19, 44:12-14; Ex. 1006, ¶¶[0021], [0041], [0047], Fig. 3.

i. Lebrun in View of Wang Discloses 11[h] of Claim 11

196. As explained above for claim 1[f], Lebrun in view of Wang discloses a processor adapted to **transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server.** *See supra* Sections IX.C.1.e-g; *see also* Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-12, 32:14-16, 32:21-24, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 39:4-8, 45:1-2, 45:15-16; 45:21-29; Ex. 1006, ¶¶[0015], [0021], [0041].

j. Lebrun in View of Wang Discloses 11[i] of Claim 11

197. As explained above for claim 1[g], Lebrun in view of Wang discloses **wherein the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.** *See supra* Sections IX.C.1.e, h; *see also* Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 39:4-8, 45:1-2, 45:15-16; 45:21-46:5; Ex. 1006, ¶¶[0015], [0021], [0041].

k. Lebrun in View of Wang Discloses 11[j] of Claim 11

198. As explained above for claim 1[h], Lebrun in view of Wang discloses **wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.** *See supra* Sections IX.C.1.e-g, i; *see also* Ex. 1005, 6:19-32, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 39:4-8, 45:1-2, 45:15-16; 45:21-29; Ex. 1006, ¶¶[0015], [0021], [0023], [0041].

l. Lebrun in View of Wang Discloses 11[k] of Claim 11

199. As explained above for claim 1[i], Lebrun in view of Wang discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction**

from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction. *See supra* Sections IX.C.1.e, g-h, j; *see also* Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:17, 39:4-8, 45:1-2, 45:15-16; 45:21-46:5; Ex. 1006, ¶¶[0014], [0023], [0041], [0043-44], [0054].

m. Lebrun in View of Wang Discloses 11[l] of Claim 11

200. As explained above for claim 1[j], Lebrun in view of Wang discloses a processor adapted to **receive, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.** *See supra* Sections IX.C.1.e, g-h, k; *see also* Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 35:17-19, 35:26-28, 36:21-25, 37:27-38:17, 39:4-8, 45:1-2, 45:21-23; Ex. 1006, ¶¶[0043-44], [0054].

3. Dependent Claims 2-10 and 12-16

a. Lebrun Discloses Claim 2

201. Lebrun discloses **“receiving a notification message indicative of the invitee device joining the synchronized browsing session.”** Lebrun explains that the “group-surfing server” can inform other participants to a “group-surfing session” of “newly added” web clients. Ex. 1005, 33:6-10.

b. Lebrun in View of Wang Discloses Claim 3

202. Lebrun discloses **activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.**

Lebrun explains that a “group-surfing session” is initiated when a “first web client” sends a “session-creation message” to a “group-surfing server.” Ex. 1005, 32:9-12. The “session-creation message” is “responsive to an action by the user of the web client software,” which includes “selecting a web page or a link to a web page.” *Id.*, 32:5-7.

203. In addition, even if Lebrun did not disclose this limitation, Wang discloses that upon receiving the “the Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.” Ex. 1006, ¶¶[0047-49]. A POSITA would have understood that accessing a URL relates to activating a hyperlink. A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.

c. Lebrun in View of Wang Discloses Claim 4

204. As explained above for claim 3, Lebrun discloses **wherein the invitation comprises a hyperlink for joining the synchronized browsing session.** *See supra* Section IX.C.3.b; *see also* Ex. 1005, 32:5-7, 32:9-11.

205. In addition, even if Lebrun did not disclose this limitation, Wang discloses the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.” Ex. 1006, ¶¶[0047-49]. A POSITA would have understood a URL relates to a hyperlink. A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises invitation comprises a hyperlink for joining the synchronized browsing session.

d. Lebrun Discloses Claim 5

206. Lebrun discloses **wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.** Lebrun explains that the “web clients” in a “session can also communicate between and among groups of users” via “telephone communication, voice over IP, Internet chat, electronic mail, ‘instant messaging,’ or other intra-user communication.” Ex. 1005, 41:16-22.

e. Lebrun Discloses Claim 6

207. Lebrun discloses **wherein information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.** Lebrun explains that the “controlling web client” is able to exchange “cookies.” Ex. 1005, 41:9-11. The “group-surfing server” can also receive a “cookie” that relates to “identify or session from the “group-surfing server” and the “session.” *Id.*, 46:7-11.

f. Lebrun Discloses Claim 7

208. Lebrun discloses **wherein the session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; a URL; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.** Lebrun explains that the “message” includes “the identifier for the group-surfing session.” Ex. 1005, 33:2-4.

g. Lebrun Discloses Claim 8

209. Lebrun discloses **wherein web browsing window is capable of accepting both shared and non-shared web browsing interactions.** Lebrun explains that the “controlling web client” is able to designate web pages as “special access,” which determines whether a web page is presented to “other web clients.” Ex. 1005, 38:21-27.

h. Lebrun Discloses Claim 9

210. Lebrun discloses **wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.** As discussed above, a “controlling web client” can decide whether to share a web page under the “Web Page Look Ahead” or “Web Page Special Access” functionality, as well as “Web Page Automatic Form Completion.” *See supra* Section IX.C.1.e; *see also* Ex. 1005, 6:19-32, 37:27-38:27, 38:21-27, 39:4-8. A POSITA would understand that when a “controlling web client” determines if a “look ahead” or “special access” page is displayed to “other web clients,” a user must necessarily first view that page in a non-shared browser in the “web client” prior to deciding to share that web page. *See also* Ex. 1005, 37:27-38:17.

i. Lebrun Discloses Claim 10

211. Lebrun discloses **receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.** Lebrun discloses “Web Page Automatic Form Completion” where a “controlling web client” enters information into an HTML form, which is then sent to the “group-surfing server.” Ex. 1005, 38:31-39:2. After the information is sent, the web site “replies with a

new page” forwarded by the “group-surfing server.” *Id.*, 38:32-39:2. A POSITA would understand that the web page retrieved after form information is sent represents a reply message, wherein the reply message includes form data.

j. Lebrun Discloses Claim 12

212. Lebrun discloses further **comprising a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.**

213. Lebrun **discloses a user interface adapted to initiate the processor to send the request in response to a user input.** Lebrun explains that “the group surfing process can be used in [] conjunction with functions that could otherwise occur on display before an in-person audience.” Ex. 1005, 7:14-16.

214. As discussed above, Lebrun discloses **“wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.** *See supra* Section IX.C.1.b; *see also* Ex. 1005, 32:5-7, 32:9-12; Ex. 1006, ¶¶[0018-19], [0047]. Lebrun explains that a “group-surfing session” is initiated when a “first web client” sends a “session-creation message” to a “group-surfing server.” Ex. 1005, 32:9-11. The “session-creation message” is “responsive to an

action by the user of the web client software,” which includes “selecting a web page or a link to a web page.” Ex. 1005, 32:5-7.

215. In addition, even if Lebrun did not explicitly disclose “wherein the invitation comprises a hyperlink,” Wang discloses that upon receiving the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.” Ex. 1006, ¶¶[0047-49]. A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.

k. Lebrun Discloses Claim 13

216. As explained above for claim 7, Lebrun discloses **the apparatus of claim 11, wherein the session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; URL; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.** *See supra* Section IX.C.3.f; Ex. 1005, 33:2-5.

l. Lebrun Discloses Claim 14

217. As explained above for claim 8, Lebrun discloses **the apparatus of claim 11, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.** *See supra* Section IX.C.3.g; Ex. 1005, 38:21-27.

m. Lebrun Discloses Claim 15

218. As explained above for claim 9, Lebrun discloses **the apparatus of claim 14, wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.** *See supra* Section IX.C.3.h; Ex. 1005, 37:27-38:17.

n. Lebrun Discloses Claim 16

219. As explained above for claim 10, Lebrun discloses **the apparatus of claim 11, wherein the processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.** *See supra* Section IX.D.1.i; Ex. 1005, 38:31-39:2.

D. Ground 2: Claims 1-16 are Rendered Obvious by Prajapat in View of Wang

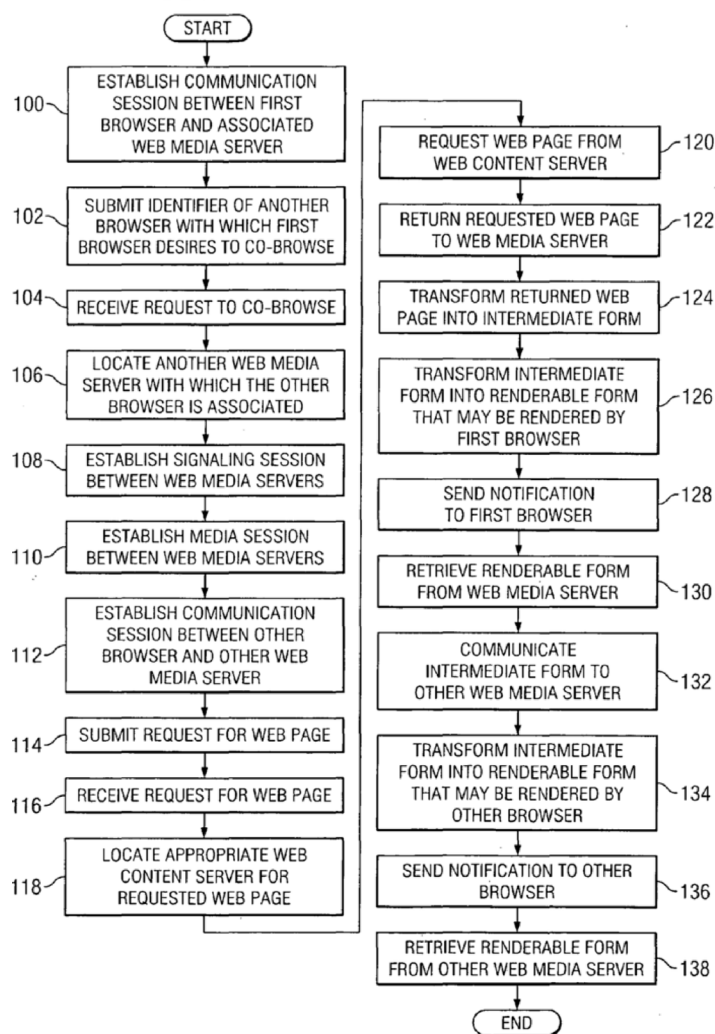
1. Independent Claim 1

a. Prajapat in View of Wang Discloses 1[pre] of Claim 1

220. To the extent the preamble of claim 1 is limiting, Prajapat discloses **a method performed by a host device for establishing a synchronized browsing session between the host device and an invitee device.**

221. Prajapat discloses **a synchronized browsing session.** The '448 patent explains that a “synchronized browsing session” allows for “two or more persons browsing the internet to share their internet browsing experience and have all users simultaneously browse and fully interact with web sites . . . or other online applications in real time.” Ex. 1001, 5:22-26. Prajapat discloses a system that provides “peer-to-peer dynamic web page sharing.” Ex. 1007, ¶[0012]. This system involves a “web media server” that allows a user (e.g., “browser 12a”) to “co-browse one or more web pages with browser 12b.” *Id.* Prajapat explains that the term “co-browse” may include browsers that “display the same web pages at substantially the same time,” or “alter web pages” and “view those alterations.” *Id.* Figure 2, reproduced below, shows an example flowchart demonstrating the steps taken to initiate a co-browsing session. *Id.*, Fig. 2.

FIG. 2



222. Prajapat further discloses **a host device that establishes a synchronized browsing session between a host device and an invitee device.** Prajapat describes a “user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b.” Ex. 1007, ¶[0016]. A POSITA would have understood that a “user with browser 12a” co-browsing with “browser 12b,” comprises a

method performed by a host device for establishing a synchronized browsing session between the host device and an invitee device.

223. In addition, even if Prajapat did not disclose this limitation, Wang discloses a “client device for use in a system that enables computer devices to collaborate with one another through a network.” Ex. 1006, ¶[0020]. The “client device” comprises “browser means for allowing the client device to display data received through the network,” as well as “synchronization control means for enabling the plurality of client devices to share the web page.” *Id.* Wang discloses that the “first client device” sends a login request to the “server apparatus,” followed by the establishment of “SESSION A.” *Id.*, Fig. 3; *see also id.*, ¶[0047] (“The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2.”). A POSITA would have been motivated to combine Wang’s teachings of including “synchronization control means” to Prajapat’s “browser,” because it would be a combination of prior art elements according to known methods to yield predictable results.

b. Prajapat in View of Wang Discloses 1[a] of Claim 1

224. Prajapat discloses **sending a request to establish the synchronized browsing session to a synchronization server**. As discussed above, Prajapat discloses a system that provides “peer-to-peer dynamic web page sharing.” *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶[0012]. Prajapat explains that to begin

a “co-browsing session,” the “user of browser 12a” can “click on a desktop icon” to “establish a communication session with web media server 14a.” Ex. 1007, ¶[0016]. A POSITA would have understood that a “user with browser 12a” co-browsing with “browser 12b,” via a “web media server,” comprises a host device sending a request and establishing a synchronized browsing session.

225. In addition, even if Prajapat did not disclose this limitation, Wang discloses a “server apparatus for use in a system enabling computer devices to collaborate with one another,” which may comprise “a synchronization control unit for notifying each of the individual session destinations that the web page is shared.” Ex. 1006, ¶¶[0018-19]. The “synchronization control unit” would receive the request to establish a session. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with a “synchronization control unit” to Prajapat’s “web media server.” Incorporating standard web software functionality, as disclosed in Wang, such as sending a notification to begin a session to a server, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

c. Prajapat Discloses 1[b] of Claim 1

226. Prajapat discloses **receiving a confirmation message from the synchronization server including a session identifier generated by the**

synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.

227. Prajapat discloses **receiving a confirmation message from a synchronization server**. As discussed above, Prajapat discloses a system that provides “peer-to-peer dynamic web page sharing.” *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶[0012]. Prajapat explains that a browser “may submit requests for one or more web pages by communicating a request to web media server,” where the request may “may specify the web page to retrieve and display,” and “include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server.” Ex. 1007, ¶[0022].

228. Prajapat further discloses **including a session identifier generated by the synchronization server, a session identifier associated with the host device and the established synchronized browsing session**. A POSITA would have understood that upon creating a “co-browsing session,” the “web media server” would send a confirmation message containing “session information” to a “browser,” and thus comprises a session identifier with information regarding the synchronized browsing session, which is generated by the synchronization server.

d. Prajapat in View of Wang Discloses 1[c] of Claim 1

229. Prajapat discloses **sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.**

230. Prajapat discloses **sending an invitation to an invitee device to join the synchronized browsing session.** Prajapat explains that a “request to co-browse” may “specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse.” Ex. 1007, ¶[0017].

231. Prajapat further discloses **an invitation that includes the session identifier.** A POSITA would have understood that when “browser 12a” communicates “the URL or other suitable information” to the “web media server” in a “request to co-browse” with “other browsers 12,” the invitation necessarily includes an identifier for other browsers to join the co-browsing session. Ex. 1007, ¶[0043].

232. In addition, even if Prajapat did not disclose this limitation, Wang discloses a “client device” with “communication means for enabling the client device to display a message for other client devices.” Ex. 1006, ¶[0020]. The “client device” could send an invitation via the “communication means” to join the session. A POSITA would have been motivated to combine Wang’s teachings of including a “communications means” to Prajapat’s “browser 12a.” Incorporating

standard web software functionality, as disclosed in Wang, such as communication of information from one web browser to another web browser, into Prajapat's disclosed "browser" would allow Prajapat to perform the functions described in Prajapat's disclosure.

e. Prajapat Discloses 1[d] of Claim 1

233. Prajapat discloses **recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.**

234. Prajapat discloses **recording a shared web browsing interaction.** Prajapat explains that a user may "desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b." Ex. 1007, ¶[0016]. Alternatively, "browser 12a" can register with a "web media server 14a," but "without actually sharing web pages with another browser 12." *Id.*, ¶[0034]. When a user desires to "co-browse or share" the web content, they are sharing their web browsing interactions. Specifically, the user's browser records these interactions, which are transmitted to a "web media server 14a" to present to other users. Ex. 1007, ¶[0016].

235. Prajapat further discloses **determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.** A POSITA would have understood that when "browser

12a” registers with a “web media server 14a,” and decides to share a web page, is a determination that a web browsing interaction within a web browsing window is a sharable web browsing interaction.

f. Prajapat in View of Wang Discloses 1[e] of Claim 1

236. Prajapat discloses **sending a request for webpage content to a website server independent of the synchronization server**. Prajapat explains that a user “may submit a request” for web pages directly from a “web content server,” where the request “may be submitted in any suitable format such as HTTP.” Ex. 1007, ¶[0043]. After the request, the “web content server” may “return the requested web page to browser 12a.” *Id.*, ¶[0043]. Prajapat explains that a “web content server” may include “any suitable server or other computer for storing and communicating web pages.” *Id.*, ¶[0024]. A POSITA would have understood that a requesting “a web page” from a “web content server,” as opposed to a “web media server,” comprises sending a request for webpage content to a website server independent of the synchronization server.

237. In addition, even if Prajapat did not disclose this limitation, Wang discloses “computer-executable program” that may comprise a “a step of forming a page navigation control unit for providing a web page common to each of the individual sessions.” Ex. 1006, ¶[0021]. The page navigation means “allows 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.” *Id.*, ¶[0041]. A POSITA would have been motivated to combine Wang’s teachings of “page navigation control” software functionality to Prajapat’s “browser 12a.” Incorporating standard web software functionality, as disclosed in Wang, such as retrieving a web page by a web browser, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

g. Prajapat in View of Wang Discloses 1[f] of Claim 1

238. Prajapat discloses that **subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server.**

239. Prajapat in view of Wang discloses **subsequent to sending the request for webpage content to the website server** for the same reasons discussed above in Section IX.D.1.f. *See also* Ex. 1003, ¶236; Ex. 1007, ¶[0043]; Ex. 1006, ¶¶[0021], [0041].

240. Prajapat discloses **transmitting information related to the shared web browsing interaction to the synchronization server.** As discussed above, Prajapat explains that a browser “may submit requests for one or more web pages by communicating a request to web media server,” where the request may “may specify the web page to retrieve and display,” and “include information that may

be required to properly render the web page such as session information, cookies, parameters to send to the web content server,” (*see supra* Section IX.D.1.c; *see also* Ex. 1007, ¶[0022]) and that request may “return the requested web page to browser 12a.” *See supra* Section IX.D.1.f; *see also* Ex. 1007, ¶[0043]. A POSITA would have understood that a “web media server” receiving a “request for a web page,” comprises a request for webpage content to the website server, which is related to the shared web browsing interaction to the synchronization server.

241. In addition, even if Prajapat did not disclose this limitation, Wang discloses a “synchronization control unit” capable of “notifying each of the individual session destinations of the shared status of the web page.” Ex. 1006, ¶[0021]. Each client device sharing the web page “access the server through its own individual session,” so that the client devices “can access an application execution unit through a dedicated URL address to engage in a group session.” Ex. 1006, ¶[0015]. A POSITA would have been motivated to combine Wang’s teachings of a notification to “individual session destinations” to Prajapat’s “browser.” Incorporating standard web software functionality, as disclosed in Wang, such as requesting a web page by a web browser and transmitting that information (i.e., a notification) to a server, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

h. Prajapat in View of Wang Discloses 1[g] of Claim 1

242. Prajapat discloses **wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.**

243. Prajapat discloses **wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device.** As discussed above, Prajapat explains that the term “co-browse” may include browsers that “display the same web pages at substantially the same time,” or “alter web pages” and “view those alterations.” *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶[0012]. A POSITA would understand that the ability to display or alter web pages, and to view those alterations, necessarily requires the browser to process shared interactions.

244. Prajapat further discloses an **invitee device enabled to generate a request to retrieve substantially the same webpage content as the request for the webpage content from the host device.** Prajapat explains that “browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages,” where the browser may include a “computer program or other suitable software for automatically communicating with one or more other users of

other browsers 12.” Ex. 1007, ¶[0015]. Specifically, “browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse.” *Id.*, ¶[0034]. A POSITA would have understood that when “browser 12a” registers with a “web media server 14a,” and shares a web page to “other browsers 12,” this comprises enabling an invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.

245. In addition, even if Prajapat did not disclose this limitation, Wang discloses that the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. The “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” Ex. 1006, ¶¶[0042-43]. For example, “when one customer changes the web page, this causes the other customers’ browsers to follow suit.” Ex. 1006, ¶[0014]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and

synchronization functionality to Prajapat's "web media server" to allow a "browser 12a" to share web pages with other users participating in the session, because it would be a combination of prior art elements according to known methods to yield predictable results.

i. Prajapat in View of Wang Discloses 1[h] of Claim 1

246. Prajapat discloses **wherein a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.**

247. Prajapat discloses **wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device.** As discussed above, the browser may include a "computer program or other suitable software for automatically communicating with one or more other users of other browsers 12." *See supra* Section IX.D.1.h; *see also* Ex. 1007, ¶[0015]. Specifically, "browser 12a" may communicate "suitable information regarding the requested web page to web media server 14a," which in turn may communicate to "browser 12b." Ex. 1007, ¶[0043].

248. Prajapat further discloses **transmitting the information in response to receiving the information related to the shared web browsing interaction from the host device.** Once "web content server 18" transmits the information,

“browser 12b” may then use this “suitable information to request from web content server 18 the web page that browser 12a requested.” Ex. 1007, ¶[0043]. A POSITA would have understood that a “communication session between web media server 14b and browser 12b” includes transmission of “suitable information regarding the requested web page.” This comprises a synchronization server that transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.

249. In addition, even if Prajapat did not disclose this limitation, Wang discloses that the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. As discussed above, the page navigation means “includes initiative transfer means 28, and allows 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.” *See supra* Section IX.D.1.f; Ex. 1006, ¶[0041]. Wang discloses that in response to an instruction from a customer, “the initiative transfer means” can transmit a request to the server “to transfer ownership of the initiative of the web page operation to another client device.” Ex. 1006, ¶[0041]. Once ownership is

transferred, a “snapshot data of the web page changed by the other client device is transmitted from the server apparatus 14 to the client device which has lost the initiative, thus making it possible to share the web page.” *Id.* A POSITA would have been motivated to combine Wang’s teachings of a “page navigation means” to Prajapat’s “group-surfing server.” Incorporating standard web software functionality, as disclosed in Wang, such as transmitting information from a server (i.e., a URL) to a web browser that would receive and process that information to request a web page, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

j. Prajapat in View of Wang Discloses 1[i] of Claim 1

250. Prajapat discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.**

251. Prajapat discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server.** As discussed above, “browser 12a” may communicate “suitable information regarding

the requested web page to web media server 14a,” which in turn may communicate to “browser 12b.” *See supra* Section IX.D.1.h; *see also* Ex. 1007, ¶[0043].

252. Prajapat discloses that **the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction**. As discussed above, “browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse,” thus establishing a co-browsing session. *See supra* Section IX.C.2.h; *see also* Ex. 1007, ¶[0034]. Furthermore, once the session has been initiated, the user “may submit requests for one or more web pages by communicating a request to web media server,” where the request may “may specify the web page to retrieve and display,” and “include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server,” (*see supra* Section IX.D.1.c; *see also* Ex. 1007, ¶[0022]) and that request may “return the requested web page to browser 12a.” *See supra* Section IX.D.1.f; *see also* Ex. 1007, ¶[0041]. A POSITA would have understood that when a “browser 12a” enters information into a presented web page, via a “web media server 14a,” that is retrieved from “other browsers 12,” this comprises an invitee device retrieving data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the

webpage content requested by the host device and the information related to the shared web browsing interaction.

253. In addition, even if Prajapat did not disclose this limitation, Wang discloses that the “server apparatus” comprises a means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006, ¶[0023]. As discussed above, the “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” *See supra* Section IX.D.1.i; *see also* Ex. 1006, ¶¶[0042-43]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Prajapat’s “server.” Incorporating standard web software functionality, as disclosed in Wang, such as transmitting information from a server (i.e., a URL) to a web browser or server that would receive and process that information to request a web page, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

k. Prajapat in View of Wang Discloses 1[j] of Claim 1

254. Prajapat discloses **receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.** As discussed above, “browser 12a” may communicate “suitable information regarding the requested web page to web media server 14a,” which in turn may communicate to “browser 12b.” Ex. 1007, ¶[0043]. Browser 12b may then use this “suitable information to request from web content server 18 the web page that browser 12a requested.” *See supra* Section IX.D.1.i; *see also* Ex. 1007, ¶[0043]. A POSITA would have understood that when “browser 12a” presents web pages to “browser 12b,” via the “web media server” this comprises receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.

255. In addition, even if Prajapat did not disclose this limitation, Wang discloses the “server apparatus” comprises means that “receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device,” as well as means for “synchronizing the client devices in the collaboration environment.” Ex. 1006,

¶[0054]. As discussed above, the “server apparatus” may include a “client synchronization control unit (CSC) 42 for enabling synchronization between the client devices,” wherein the CSC “gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices.” *See supra* Section IX.D.1.h; Ex. 1006, ¶¶[0042-43]. Wang further discloses that the “page navigation means 22, synchronization control means 24, and mutual communication means 26” that each “individually receive information from the respective control units” of the “server apparatus 14, extract an applicable URL address and a command from the received HTTP response, and allow the address and the command to be displayed on the client devices by use of the browser means 20.” Ex. 1006, ¶[0044]. A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with synchronization functionality between a “first client device” and “second client device,” to Prajapat’s “server.” Incorporating standard web software functionality, as disclosed in Wang, such as receiving and processing information to request a web page, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.

2. Independent Claim 11

a. Prajapat in View of Wang Discloses 11[pre] of Claim 11

256. As explained above for claim 1[pre], Prajapat discloses **an apparatus for establishing a synchronized browsing session between a host device and an invitee device**. *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶¶[0012], [0016], Fig. 2; Ex. 1006, ¶[0020].

257. Prajapat discloses **an apparatus**. Prajapat discloses that the “[b]rowsers 12, web media servers 14, and web content server 18 may each comprise an appropriate combination of hardware and software associated with one or more computers at one or more locations.” Ex. 1007, ¶[0014].

258. In addition, even if Prajapat did not disclose this limitation, Wang discloses **an apparatus**. Wang discloses that “a system enabling computer devices to collaborate with one another through a network.” Ex. 1006, ¶[0018]. A POSITA would have understood that the “computer devices” disclosed in Wang comprise an apparatus.

b. Prajapat Discloses 11[a] of Claim 11

259. As explained above for claim 1[pre], Prajapat discloses **a network interface adapted to communicate with a synchronization server**. *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶¶[0012], [0016], Fig. 2. Prajapat explains that browsers “may include analog, digital, or Internet protocol (IP) telephones,

personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application,” which “may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12.” Ex. 1007, [0015].

c. Prajapat Discloses 11[b] of Claim 11

260. Prajapat discloses **a processor**. Prajapat discloses “functionality described in connection with “browser 12a, web media server 14a, and web content server 18 may be provided using a single computer system,” wherein that computer system “may include one or more suitable input devices, output devices, mass storage media, processors, memory, or other components for receiving, processing, storing, and communicating information.” Ex. 1007, ¶[0014].

d. Prajapat in View of Wang Discloses 11[c] of Claim 11

261. As explained above for claim 1[a], Prajapat in view of Wang discloses a processor adapted to **send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface**. *See supra* Sections IX.D.1.a-b; *see also* Ex. 1007, ¶¶[0012], [0016], Fig. 2; Ex. 1006, ¶¶[0018-20].

e. Prajapat Discloses 11[d] of Claim 11

262. As explained above for claim 1[b], Prajapat discloses a processor adapted to **receive a confirmation message from the synchronization server**

including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session. See supra Sections IX.D.1.a, c; see also Ex. 1007, ¶¶[0012], [0016], [0022], Fig. 2.

f. Prajapat in View of Wang Discloses 11[e] of Claim 11

263. As explained above for claim 1[c], Prajapat in view of Wang discloses a processor adapted to **send an invitation from the host device to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier. See supra Section IX.D.1.d; see also Ex. 1007, ¶[0017]; Ex. 1006, ¶[0020].**

g. Prajapat Discloses 11[f] of Claim 11

264. As explained above for claim 1[d], Prajapat discloses a processor adapted to **record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction. See supra Section IX.D.1.e; see also Ex. 1007, ¶¶[0016], [0034].**

h. Prajapat in View of Wang Discloses 11[g] of Claim 11

265. As explained above for claim 1[e], Prajapat in view of Wang discloses a processor adapted to **send a request for webpage content to a website server independent of the synchronization server. See supra Section IX.D.1.f; see also Ex. 1007, ¶¶[0024], [0041]; Ex. 1006, ¶¶[0021], [0041].**

i. Prajapat in View of Wang Discloses 11[h] of Claim 11

266. As explained above for claim 1[f], Prajapat in view of Wang discloses a processor adapted to **transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server**. *See supra* Sections IX.D.1.c, f-g; *see also* Ex. 1007, ¶¶[0012], [0022], [0024], [0041]; Ex. 1006, ¶¶[0015], [0021], [0041].

j. Prajapat in View of Wang Discloses 11[i] of Claim 11

267. As explained above for claim 1[g], Prajapat in view of Wang discloses **wherein the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device**. *See supra* Sections IX.D.1.a, h; *see also* Ex. 1007, ¶¶[0012], [0015], [0034]; Ex. 1006, ¶¶[0014], [0018], [0021], [0041].

k. Prajapat in View of Wang Discloses 11[j] of Claim 1

268. As explained above for claim 1[h], Prajapat in view of Wang discloses **wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host**

device. *See supra* Sections IX.D.1.h-i; *see also* Ex. 1007, ¶¶[0012], [0015], [0034]; Ex. 1006, ¶¶[0018], [0023], [0041].

l. Prajapat in View of Wang Discloses 11[k] of Claim 11

269. As explained above for claim 1[i], Prajapat in view of Wang discloses **wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.** *See supra* Sections IX.D.1.a, c, f, h, j; *see also* Ex. 1007, ¶¶[0012], [0016], [0022], [0024], [0034], [0041], Fig. 2; Ex. 1006, ¶¶[0018], [0023], [0042-43].

m. Prajapat in View of Wang Discloses 11[l] of Claim 11”

270. As explained above for claim 1[j], Prajapat in view of Wang discloses a processor adapted to **receive, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.** *See supra* Sections IX.D.1.i, k; *see also* Ex. 1007, ¶¶[0015], [0043]; Ex. 1006, ¶¶[0018], [0021], [0023], [0054].

3. Dependent Claims 2-10 and 12-16

a. Prajapat Discloses Claim 2

271. Prajapat discloses **receiving a notification message indicative of the invitee device joining the synchronized browsing session.** As discussed above, “browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse,” thus establishing a co-browsing session. *See supra* Section IX.D.1.h; *see also* Ex. 1007, ¶[0034]. A POSITA would have understood that a “other browser 12” joining a co-browsing session in response to “a request to co-browse” comprises receiving a notification message indicative of the invitee device joining the synchronized browsing session.

b. Prajapat in View of Wang Discloses Claim 3

272. Prajapat discloses **activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.** Prajapat explains that “browser 12a” can start a communication session with its associated web media server 14a” via “clicking on an icon on a desktop of browser 12a.” Ex. 1007, ¶[0034].

273. In addition, even if Prajapat did not explicitly disclose “activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session,” Wang discloses an invitation that comprises a

hyperlink associated with the request to establish synchronized browsing session.

Wang discloses that upon receiving the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.”

Ex. 1006, ¶¶[0047-49]. A POSITA would also have understood that Prajapat’s disclosure of a desktop “icon” that initiates a “communication session” could be modified to include the “myURL address” of Wang, which comprises activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.

c. Prajapat in View of Wang Discloses Claim 4

274. For the reasons stated above in Ground II element 1[d], Prajapat in view of Wang discloses **wherein the invitation comprises a hyperlink for joining the synchronized browsing session.** *See supra* Section IX.D.1.d; *see also* Ex. 1007, ¶¶[0016], [0034]. A POSITA would have understood that Prajapat’s disclosure of a “request to co-browse,” which may “specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse” could be modified to include the “Invitation acknowledgment, myURL address” of Wang, which comprises an invitation comprises a hyperlink for joining the synchronized browsing session.

d. Prajapat Discloses Claim 5

275. Prajapat discloses **wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.** As discussed above, Prajapat describes a “user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b.” *See supra* Section IX.D.1.e; *see also* Ex. 1007, ¶[0016]. For example, the invitation to co-browse could be sent to “chachi@happydaycompany.com who is associated with browser 12b.” Ex. 1007, ¶[0017]. A POSTIA would understand that sending a request to co-browse via email is a “communication medium that would be suitable for transmitting” the invitation to an invitee device.

e. Prajapat Discloses Claim 6

276. Prajapat discloses **wherein information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.** Prajapat explains that “the request for a web page” may require information “to properly render the web page on browser 12a, such as session information, cookies, parameters to send to web content server 18, and any other suitable information.” Ex. 1007, ¶[0017].

f. Prajapat Discloses Claim 7

277. Prajapat discloses **wherein the session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; a URL; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.** Prajapat explains that a browser “may submit requests for one or more web pages by communicating a request to web media server,” where the request may “may specify the web page to retrieve and display,” and “include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server.” Ex. 1007, ¶[0022]. A POSITA would have understood that when “browser 12” sends a “request for one or more web pages” containing “session information” this comprises a session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.

g. Prajapat Discloses Claim 8

278. Prajapat discloses **wherein web browsing window is capable of accepting both shared and non-shared web browsing interactions.** As discussed above, Prajapat describes a “user associated with browser 12a may also

desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b.” *See supra* Section IX.D.1.a; *see also* Ex. 1007, ¶[0016]. A POSITA would have understood that when a “browser 12a” desires to “share” web pages to “another user associated browser 12b,” this comprises a web browsing window is capable of accepting both shared and non-shared web browsing interactions.

h. Prajapat Discloses Claim 9

279. Prajapat discloses **wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window**. As discussed above, Prajapat describes a “user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b” (*see supra* Section IX.D.1.a; *see also* Ex. 1007, ¶[0016]), or “browser 12a” can register with a “web media server 14a,” but “without actually sharing web pages with another browser 12.” *See supra* Section IX.D.1.e; *see also* Ex. 1007, ¶[0034]. A POSITA would understand that when a “user” desires to “share the or more web pages” to another, the user must necessarily first view the web pages in a non-shared browser window prior to deciding whether to share that web page.

i. Prajapat Discloses Claim 10

280. Prajapat discloses **receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.** Prajapat explains that “the request for a web page” may require information “to properly render the web page on browser 12a, such as session information, cookies, parameters to send to web content server 18, and any other suitable information.” Ex. 1007, ¶[0017].

j. Prajapat Discloses Claim 12

281. Prajapat discloses further **comprising a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.**

282. Prajapat discloses a **user interface adapted to initiate the processor to send the request in response to a user input.** Prajapat explains that the “browser” may include “any suitable interface for submitting requests for and displaying media such as web pages” (Ex. 1007, ¶[0015]) and that the “functionality described in connection with “browser 12a, web media server 14a, and web content server 18 may be provided using a single computer system,”

wherein that computer system “may include one or more suitable input devices, output devices, mass storage media, processors, memory, or other components for receiving, processing, storing, and communicating information.” Ex. 1007, ¶[0014].

283. As discussed above, Prajapat in view of Wang discloses wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session. *See supra* Section IX.D.2.b. Prajapat explains that “browser 12a” can start a communication session with its associated web media server 14a” via “clicking on an icon on a desktop of browser 12a.” Ex. 1007, ¶[0034]. Wang discloses that upon receiving the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.” Ex. 1006, ¶¶[0047-49]. A POSITA would also have understood that Prajapat’s disclosure of a desktop “icon” that initiates a “communication session” could be modified to include the “myURL address” of Wang, which meets this limitation.

k. Prajapat Discloses Claim 13

284. As explained above for claim 7, Prajapat discloses **the apparatus of claim 11, wherein the session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; URL; MAC address; or other unique indicator such that the**

synchronized browsing session may be identified for joining the session. *See supra* Section IX.D.3.f.

l. Prajapat Discloses Claim 14

285. As explained above for claim 8, Prajapat discloses **the apparatus of claim 11, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.** *See supra* Section IX.D.3.g.

m. Prajapat Discloses Claim 15

286. As explained above for claim 9, Prajapat discloses **the apparatus of claim 14, wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.** *See supra* Section IX.D.3.h.

n. Prajapat Discloses Claim 16

287. As explained above for claim 10, Prajapat discloses **the apparatus of claim 11, wherein the processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.** *See supra* Section IX.D.3.i.

4. Secondary Considerations

288. I am unaware of any secondary considerations that would render the claims of the challenged patent non-obvious.

5. Claim Charts and Summary of Invalidity

289. For the reasons provided above and further analyzed in the claim chart below, it is my opinion that the applied references render obvious claims 1-16 of the '448 patent.

290. The chart lists claim language from the challenged patent on the left side and provides my analysis for why the claims are obvious in view of the cited references on the right side.

291. To aid in referencing to individual portions of the chart, I enclose the chart for each ground under a separate paragraph number of this declaration.

a. '448 Patent Claims 1-16 in view of Lebrun and Wang

292. Claims 1-16 are obvious in view of Lebrun and Wang for at least the following reasons:

Claim No.	Claim	Prior Art Analysis
1[pre]	A method performed by a host device for establishing a synchronized browsing session between the host device	<i>Claim 1 is obvious in view of European Patent Application No. WO2000048110 ("Lebrun"), in view of U.S. Patent Pub. No. 2005/0033656 ("Wang").</i> <i>Lebrun discloses a synchronized browsing session.</i>

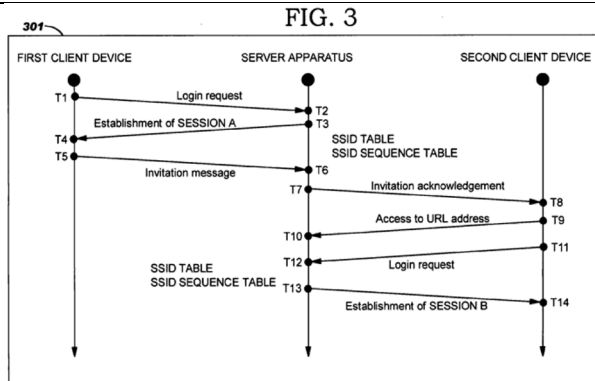
	and an invitee device, comprising:	Accordingly, it would be desirable to provide an improved technique for group access to web sites. Ex. 1005, 4:6-7. This is achieved in an embodiment of the invention in which multiple related users can simultaneously access a sequence of web sites (web surfing), such that each of the related users has substantially the same content presented at the same times. Ex. 1005, 4:7-9. <i>A POSITA would have understood that the group-surfing session described in Lebrun corresponds to a “synchronized browsing session.”</i> <i>Lebrun further discloses a host device for establishing a synchronized browsing session between the host device and an invitee device.</i> In a preferred embodiment, the web clients 110 each include a general-purpose computer, such as a laptop or workstation. However, the web clients 110 can also include (either alone or in conjunction with a laptop or workstation), a hand-held calendar (such as a “Palm Pilot” or other hand-held device), a portable computer, a special purpose computer, a cellular telephone or other telephonic device, a web server acting as the agent for a user, or another device. Ex. 1005, 30:19-24. <i>A POSITA would have understood that the web client described in Lebrun corresponds to a “host device” or “guest device.”</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. Ex. 1005, 32:9-11.
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		One or more of the web clients 110 are designated by the group-surfing server 140 as a controlling web client 110, and are therefore empowered by the group-surfing server 140 to control the group surfing session. Ex. 1005, 33:14-16. <i>A POSITA would have understood that a “first web client” establishing a “group-surfing session” administered by a “group-surfing server,” and inviting “other web clients” joining the session, meets this limitation.</i> The present invention also includes a client device for use in a system that enables computer devices to collaborate with one another through a network. The client device comprises: browser means for allowing the client device to display data received through the network; page navigation means for communicating, through the network, a request for changing ownership of the initiative to operate the web page displayed among a plurality of the client devices; synchronization control means for enabling the plurality of client devices to share the web page; and communication means for enabling the client device to display a message for other client devices. The synchronization control means may issue a request for making an inquiry about an identification value of previously compiled data of the web page through the network in response to ownership of the initiative of the operation of the web page. Ex. 1006, ¶[0020].
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		FIG. 3 <pre>sequenceDiagram participant FCD as FIRST CLIENT DEVICE participant SA as SERVER APPARATUS participant SC2D as SECOND CLIENT DEVICE Note over FCD: T1 FCD->>SA: Login request Note over SA: T2 SA->>FCD: Establishment of SESSION A Note over SA: T3 SA->>FCD: SSID TABLE SSID SEQUENCE TABLE Note over FCD: T4 FCD->>SA: Invitation message Note over SA: T5 SA->>SC2D: Invitation acknowledgement Note over SC2D: T6 SC2D->>SA: Access to URL address Note over SA: T7 SA->>SC2D: Login request Note over SC2D: T8 SC2D->>SA: Establishment of SESSION B Note over SA: T9 SA->>FCD: SSID TABLE SSID SEQUENCE TABLE Note over FCD: T10 FCD->>SA: SSID TABLE SSID SEQUENCE TABLE Note over SA: T11 SA->>SC2D: SSID TABLE SSID SEQUENCE TABLE Note over SC2D: T12 SC2D->>SA: SSID TABLE SSID SEQUENCE TABLE Note over SA: T13 SA->>FCD: SSID TABLE SSID SEQUENCE TABLE Note over FCD: T14</pre> Ex. 1006, Fig. 3. As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would have been motivated to combine Wang’s teachings of including “synchronization control means” to Lebrun’s “first web client.” Incorporating standard web software functionality, such as synchronization between a web browser and server, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.</i>
1[a]	sending a request to establish the	<i>Lebrun in view of Wang discloses sending a request to establish the synchronized browsing session to a synchronization server.</i>

	synchronized browsing session to a synchronization server;	<i>Lebrun discloses sending a request to establish the synchronized browsing session to a synchronization server.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. Ex. 1005, 32:9-11. The web client software 111 is disposed for sending a message 151 to the group-surfing server 140, to request the group-surfing server 140 to respond and perform functions described herein. In a preferred embodiment, the message 151 is responsive 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. Ex. 1005, 32:3-7. The group-surfing server 140 receives the session-creation message 151, and responds by (1) creating a group-surfing session, and (2) informing the participants in the group-surfing session. When the session-creation message 151 includes an identifier 152 for an initial page 153, the group-surfing server 140 proceeds to begin operation of the group-surfing session, as described below, causing the web site 130 to deliver the initial page 153 to the web clients 110 participating in the session. Ex. 1005, 32:26-31. <i>A POSITA would have understood that a “first web client” establishing a “group-surfing session” administered by a “group-surfing server,” comprises sending a request to establish the synchronized browsing session to a synchronization server.</i> <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses “a server apparatus for use in a system enabling computer devices to collaborate with</i>
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		<i>one another,” which may comprise a “a synchronization control unit for notifying each of the individual session destinations that the web page is shared.”</i> More specifically, the present invention includes server apparatus for use in a system enabling computer devices to collaborate with one another through a network. The server apparatus comprises: a group session control unit for creating a group session by integrating a plurality of individual sessions and for passing a command to an application execution unit; and a page navigation control unit for providing a web page common to each of the individual sessions. The server apparatus further may comprise: a synchronization control unit for notifying each of the individual session destinations that the web page is shared; and a mutual communication control unit for enabling a plurality of the individual session destinations to exchange a message. The server apparatus may include initiative switching means for switching ownership of the initiative of web page operation. The page navigation control unit may include a page sharing processing unit for creating data by compiling the web page and an identification value corresponding to the data in response to the display of a new web page, and for storing the data and the identification value in association with each other in a storage device. Ex. 1006, ¶¶[0018-19].
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Ex. 1006, Fig. 3.

As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047].

FIG. 4A

SSID TABLE

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SSID	Session 1	Session 2	Session 3
SSID a	Session A	Session B	
b5543212	56890543	345890	

Ex. 1006, Fig. 4.

A POSITA would understand that the “server apparatus” taught by Wang corresponds to a synchronization server,

		<i>and that login request taught by Wang corresponds to sending a request to establish a synchronized browsing session.</i> <i>A POSITA would have also been motivated to combine Wang's teachings of a "server apparatus" with a "synchronization control unit" to Lebrun's "group-surfing server." Incorporating standard web software functionality, such as sending a notification to begin a session to a server, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.</i>
1[b]	receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session;	<i>Lebrun discloses receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.</i> <i>Lebrun discloses receiving a confirmation message from a synchronization server.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12. In a preferred embodiment, the message 151 includes identifiers for a set of web clients 110 participating in, permitted to participate in, or forbidden from participating in, that session. Ex. 1005, 32:14-16.

		<i>A POSITA have understood that the “group-surfing server” would necessarily confirm a session has been created, in order for the host device to later invite additional users.</i> <i>Lebrun further discloses including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12. After creating the group-surfing session, the group-surfing server 140 prepares to add additional web clients 110 to the session. To add itself to the session, a second (or further) web client 110 sends a session-join message 151 to the group-surfing server 140. In a preferred embodiment, the message 151 includes the identifier for the group-surfing session. Ex. 1005, 33:1-4. In a preferred embodiment, the message 151 includes the identifier for the group-surfing session. Ex. 1005, 33:3-4. <i>A POSITA have understood that the group-surfing server would have generated a session identifier, if one was not provided by the host device. Further, that this session identifier would necessarily be associated with the host device that established the session.</i>
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1[c]	sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;	<i>Lebrun in view of Wang discloses sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.</i> <i>Lebrun discloses sending an invitation to an invitee device to join the synchronized browsing session.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) In a preferred embodiment, the message 151 includes identifiers for a set of web clients 110 participating in, permitted to participate in, or forbidden from participating in, that session. Ex. 1005, 32:9-16. <i>Lebrun further discloses wherein the invitation the includes the session identifier.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses a “client device” with</i>
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		<i>“communication means for enabling the client device to display a message for other client devices.”</i> The present invention also includes a client device for use in a system that enables computer devices to collaborate with one another through a network. The client device comprises: browser means for allowing the client device to display data received through the network; page navigation means for communicating, through the network, a request for changing ownership of the initiative to operate the web page displayed among a plurality of the client devices; synchronization control means for enabling the plurality of client devices to share the web page; and communication means for enabling the client device to display a message for other client devices. The synchronization control means may issue a request for making an inquiry about an identification value of previously compiled data of the web page through the network in response to ownership of the initiative of the operation of the web page. Ex. 1006, ¶[0020]. <i>A POSITA would have been motivated to combine Wang’s teachings of including a “communications means” to Lebrun’s “first web client.” Incorporating standard web software functionality, such as communication of information from one web browser to another web browser, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.</i>
1[d]	recording a shared web browsing interaction responsive to determining that a web browsing	<i>Lebrun discloses recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.</i> <i>Lebrun discloses recording a shared web browsing interaction.</i>

	interaction of the host device within a web browsing window is a sharable web browsing interaction;	In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. <i>A POSITA would have understood that the program fragment in Lebrun relates to the “synchronized browsing software.”</i> In a third aspect of the invention, a first user can allow a second user (or a set of such second users) temporary access to a set of web sites, possibly with the temporary access restricted to a subset of the information or services offered by those web sites. Ex. 1005, 6:19-32. <u>Web Page Look Ahead</u> The controlling web client 110 can select web pages 153 for “look ahead” before designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. This allows the controlling web client 110 to provide for one or more of, or some combination of, the following contingencies: • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are accessible at the time of the session. For example, some such pages 153 can be subject to restricted access in response to time or usage constraints.
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		• The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are appropriate for the web clients 110 participating in the session. For a first example, some such pages 153 can include information that is immaterial to the session (such as for a class, a seminar, or a demonstration of a product or service). For a second example, some such pages 153 can include information that is inappropriate for the session (such as so-called “adult-oriented” material for a session including users 112 who are minors). • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 require special access (such as password restriction or cost-burdened services). For a first example, the controlling web client 110 can choose to exclude such pages 153 from the session. For a second example, the controlling web client 110 can choose to accept such special access (such as entering a password or credit card number) without presenting that acceptance to other web clients 110 participating in the session. Ex. 1005, 37:27-38:17. <u>Web Page Special Access</u> The controlling web client 110 can select web pages 153 for special access when designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. For a first example, the controlling web client 110 can enter information required for special access privately, without presenting that information to other web clients 110 participating in the session. For a
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		second example, the controlling web client 110 can enter such information (such as for completing an HTML “form”) using information available from, and supplied by, other web clients 110 participating in the session. Ex. 1005, 38:19-27. <i>Lebrun further discloses determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.</i> In a third aspect of the invention, a first user can allow a second user (or a set of such second users) temporary access to a set of web sites, possibly with the temporary access restricted to a subset of the information or services offered by those web sites. Ex. 1005, 6:19-32. <u>Web Page Look Ahead</u> The controlling web client 110 can select web pages 153 for “look ahead” before designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. This allows the controlling web client 110 to provide for one or more of, or some combination of, the following contingencies: • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are accessible at the time of the session. For example, some such pages 153 can be subject to restricted access in response to time or usage constraints. • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are appropriate for the web clients 110 participating in the session. For a first example, some such pages 153 can include
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		information that is immaterial to the session (such as for a class, a seminar, or a demonstration of a product or service). For a second example, some such pages 153 can include information that is inappropriate for the session (such as so-called “adult-oriented” material for a session including users 112 who are minors). • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 require special access (such as password restriction or cost-burdened services). For a first example, the controlling web client 110 can choose to exclude such pages 153 from the session. For a second example, the controlling web client 110 can choose to accept such special access (such as entering a password or credit card number) without presenting that acceptance to other web clients 110 participating in the session. Ex. 1005, 37:27-38:17. <u>Web Page Special Access</u> The controlling web client 110 can select web pages 153 for special access when designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. For a first example, the controlling web client 110 can enter information required for special access privately, without presenting that information to other web clients 110 participating in the session. For a second example, the controlling web client 110 can enter such information (such as for completing an HTML “form”) using information available from, and supplied by, other web clients 110 participating in the session. Ex. 1005, 38:19-27.
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		<u>Web Page Automatic Form Completion</u> In a preferred embodiment, the controlling web client 110 enters information to complete the HTML form, and sends that information to the group-surfing server 140. The group-surfing server 140 enters information to complete the HTML form, and sends that information to the web site 130. When the web site 130 replies with a new page, the group-surfing server 140 sends that new page to all participating web clients 130. In alternative embodiments, the when the controlling web client 110 enters information to complete the HTML form, and sends that information to the group-surfing server 140, the group-surfing server 140 may present that information on the HTML form at each participating web client 110, so that each participating web client 110 can see the HTML form being filled in. The group-surfing server 140 may present that information on the HTML form as each field of the form is completed, or when the entire form is completed, or at other times. Ex. 1005, 38:29-39:10.
1[e]	sending a request for webpage content to a website server independent of the synchronization server;	<i>Lebrun in view of Wang discloses sending a request for webpage content to a website server independent of the synchronization server.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12.

		In a preferred embodiment, the message 151 can also include an identifier 152 for an initial page 153 for the group-surfing session. For example, the initial page 153 can include a home page for a selected web site 130 or a welcome page for a selected service available at the selected web site 130. Ex. 1005, 32:21-24. In alternative embodiments, where no “cookies” or other data related to identity are involved, each web client 110 can receive the next page 153 directly from the web site 130. Ex. 1005, 35:17-19. <i>A POSITA would have understood that when a user enters a URL into a web client and retrieves the corresponding web page, this discloses sending a request for webpage content to a website server independent of the synchronization server.</i> <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses a “computer-executable program” which may comprise a “a step of forming a page navigation control unit for providing a web page common to each of the individual sessions.”</i> The present invention also includes a computer-executable program for enabling a computer device to function as a server apparatus for use in a computer collaboration system. The program enables the computer device to execute: a step of forming a group session control unit for creating a group session by integrating a plurality of individual sessions and for passing a command to an application execution unit; a step of forming a page navigation control unit for providing a web page common to each of the individual sessions; a step of forming a synchronization control unit for notifying each of the individual session
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		destinations of the shared status of the web page; and a step of forming a mutual communication control unit for allowing a plurality of the individual session destinations to exchange a message. In the present invention, the program allows the group session control unit to execute a step of switching ownership of the initiative of web page operation. The program allows the page navigation control unit to execute a step of creating data by compiling the web page and an identification value corresponding to the data when a new web page is displayed and of storing the data and the identification value in association with each other in a storage device. Ex. 1006, ¶[0021]. FIG. 2 is a block diagram that illustrates the structure of the client device 12a and the server apparatus 14. As shown in FIG. 2, the client device 12a and the server apparatus 14 communicate through the network 16 using a protocol such as TCP/IP. The client device 12a includes browser means 20, page navigation means 22, synchronization control means 24, and mutual communication means 26. The page navigation means 22 includes initiative transfer means 28, and allows 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. In response to an instruction from a customer, the initiative transfer means 28 transmits, to the server apparatus 14, an HTTP request to transfer ownership of the initiative, and allows the server apparatus 14 to transfer ownership of the initiative of the web page operation to another client device. Immediately thereafter, snapshot data of the web page changed by the other client device is transmitted from the server apparatus 14 to the client device which has
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		lost the initiative, thus making it possible to share the web page. Ex. 1006, ¶[0041]. <i>A POSITA would have been motivated to combine Wang's teachings of "page navigation control" software functionality to Lebrun's "web client." Incorporating standard web software functionality, such as retrieving a web page by a web browser, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.</i>
1[f]	subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server,	<i>Lebrun in view of Wang discloses that subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server.</i> <i>Lebrun discloses subsequent to sending the request for webpage content to the website server.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12. In a preferred embodiment, the message 151 can also include an identifier 152 for an initial page 153 for the group-surfing session. For example, the initial page 153 can include a home page for a selected web site 130 or a welcome page for a selected service available at the selected web site 130. Ex. 1005, 32:21-24. In alternative embodiments, where no "cookies" or other data related to identity are involved, each

		web client 110 can receive the next page 153 directly from the web site 130. Ex. 1005, 35:17-19. <i>Lebrun further discloses transmitting information related to the shared web browsing interaction to the synchronization server.</i> In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. As the controlling web client 110 selects a progression of pages 153 for the session, that progression of pages 153 is presented at each of the web clients 110 participating in the session. Ex. 1005, 35:26-28. At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session. At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. Ex. 1005, 45:21-29.
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		The group-surfing server 140 is thus able to determine which next pages 153 are selected, and to assure that such next pages 153 are presented to all participating web clients 110. Ex. 1005, 44:33-45:2. <i>A POSITA would have understood that a group-surfing server would need to receive information from the host device relating to the shared browsing interaction in order to deliver web pages selected by the host device to others in participating in the session.</i> <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses a “synchronization control unit” capable of “notifying each of the individual session destinations of the shared status of the web page.”</i> The present invention also includes a computer-executable program for enabling a computer device to function as a server apparatus for use in a computer collaboration system. The program enables the computer device to execute: a step of forming a group session control unit for creating a group session by integrating a plurality of individual sessions and for passing a command to an application execution unit; a step of forming a page navigation control unit for providing a web page common to each of the individual sessions; a step of forming a synchronization control unit for notifying each of the individual session destinations of the shared status of the web page; and a step of forming a mutual communication control unit for allowing a plurality of the individual session destinations to exchange a message. In the present invention, the program allows the group session control unit to execute a step of switching ownership of the initiative of web page operation. The program allows the page navigation control unit to execute a step of creating data by compiling the web page and an
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		identification value corresponding to the data when a new web page is displayed and of storing the data and the identification value in association with each other in a storage device. Ex. 1006, ¶[0021]. Each client device sharing the web page access the server through its own individual session. The client devices can access an application execution unit through a dedicated URL address to engage in a group session. Ex. 1006, ¶[0015]. <i>A POSITA would have been motivated to combine Wang's teachings of a notification to "individual session destinations" to Lebrun's "web client." Incorporating standard web software functionality, such as requesting a web page by a web browser and transmitting that information (i.e., a notification) to a server, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.</i>
1[g]	wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the	<i>Lebrun in view of Wang discloses that the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i> <i>Lebrun discloses wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device.</i> The program fragment can be sent from the group-surfing server 140 to the web client 110, or can be resident at the web client 110. The program fragment can be loaded dynamically for the session, or can be permanently resident but only active for the session. Ex. 1005, 36:26-28.

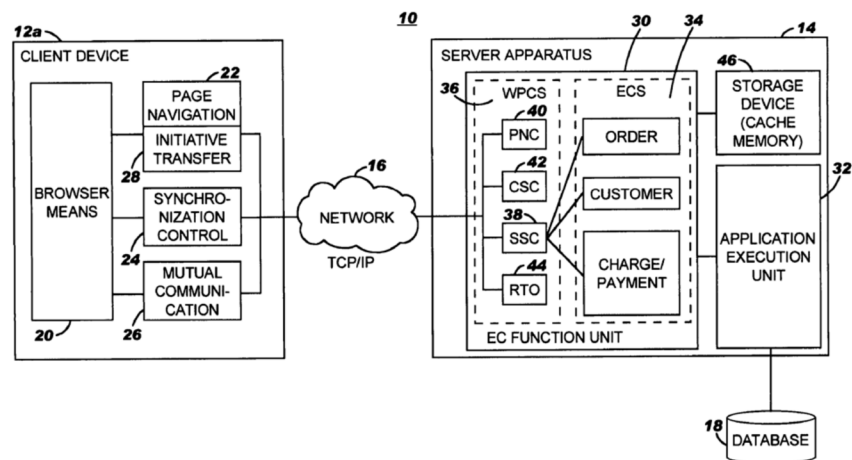
	webpage content from the host device;	At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session. At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. In a preferred embodiment, in order to reduce load on the group-serving server 140, the group-serving 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. At a step 235, the page 153 is presented at each of the web clients 110 5 participating in the session. Ex. 1005, 45:21-46:5. <i>Lebrun further discloses an invitee device enabled to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i> In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-
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		X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. In alternative embodiments, where no “cookies” or other data related to identity are involved, each web client 110 can receive the next page 153 directly from the web site 130. Ex. 1005, 35:17-19. At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session. At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. In a preferred embodiment, in order to reduce load on the group-serving server 140, the group-serving 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. At a step 235, the page 153 is presented at each of the web clients 110 5 participating in the session. Ex. 1005, 45:21-46:5.
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		<i>In addition, even if Lebrun did not disclose this limitation, Wang discloses that the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.”</i> The present invention also includes a collaboration system for enabling client devices to collaborate with one another through a network. The system comprises: a plurality of client devices individually connected to the network; and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a collaboration environment common to the plurality of client devices. The server apparatus comprises: means for providing a group session formed by integrating communication sessions among the plurality of client devices; and means for synchronizing the client devices in the collaboration environment. Each of the client devices includes means for displaying the synchronization status among the plurality of client devices. In a preferred embodiment, the collaboration system of the present invention is suitable for use as a virtual shopping system. Ex. 1006, ¶[0023]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the
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snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the client devices sharing the web page. Ex. 1006, ¶[0043].

FIG. 2



Ex. 1006, Fig. 2.

In an illustrative virtual shopping system including the collaboration system of the present invention, the same web page can be browsed from a plurality of different terminal devices. When one customer changes the web page, this causes the other customers' browsers to follow suit. Ex. 1006, ¶[0014].

A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with integration and synchronization functionality to Lebrun's

		<i>“group-surfing server” to allow a “controlling web client” to share web pages with other users participating in the session.</i>
1[h]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device, and	<i>Lebrun in view of Wang discloses a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.</i> <i>Lebrun discloses wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device.</i> In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. At a step 232, the controlling web client 110 receives a page 153 from the group-surfing server 140, which received that page 153 from the web site 130. When the controlling web client 110 selects a link 152 on the page 153, the selection is caught by the program fragment, which sends the selection to the group-surfing server 140 as described below (preferably using a protocol operating on top of TCP/IP). Ex. 1005, 45:13-17. At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session.

		At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. In a preferred embodiment, in order to reduce load on the group-serving server 140, the group-serving 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. At a step 235, the page 153 is presented at each of the web clients 110 5 participating in the session. Ex. 1005, 45:21-46:5. <i>Lebrun further discloses transmitting the information in response to receiving the information related to the shared web browsing interaction from the host device.</i> At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session. At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The
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		group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. Ex. 1005, 45:21-29. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.”</i> The present invention also includes a collaboration system for enabling client devices to collaborate with one another through a network. The system comprises: a plurality of client devices individually connected to the network; and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a collaboration environment common to the plurality of client devices. The server apparatus comprises: means for providing a group session formed by integrating communication sessions among the plurality of client devices; and means for synchronizing the client devices in the collaboration environment. Each of the client devices includes means for displaying the synchronization status among the plurality of client devices. In a preferred embodiment, the collaboration system of the present invention is suitable for use as a virtual shopping system. Ex. 1006, ¶[0023]. FIG. 2 is a block diagram that illustrates the structure of the client device 12 a and the server apparatus 14. As shown in FIG. 2, the client device 12 a and the server apparatus 14 communicate through the network 16 using a protocol such as TCP/IP. The client device 12 a includes browser means 20, page navigation means 22,
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		synchronization control means 24, and mutual communication means 26. The page navigation means 22 includes initiative transfer means 28, and allows the client device 12 a to access the server apparatus 14 directly and to acquire a web page when the client device 12 a has ownership of the initiative of web page operation. In response to an instruction from a customer, the initiative transfer means 28 transmits, to the server apparatus 14, an HTTP request to transfer ownership of the initiative, and allows the server apparatus 14 to transfer ownership of the initiative of the web page operation to another client device. Immediately thereafter, snapshot data of the web page changed by the other client device is transmitted from the server apparatus 14 to the client device which has lost the initiative, thus making it possible to share the web page. Ex. 1006, ¶[0041]. <i>A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Lebrun’s “group-surfing server.” Incorporating standard web software functionality, such as transmitting information from a server (i.e., a URL) to a web browser that would receive and process that information to request a web page, into Lebrun’s disclosed “web client” would allow Lebrun to perform the functions described in Lebrun’s disclosure.</i>
1[i]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web	<i>Lebrun in view of Wang discloses an invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> <i>Lebrun discloses wherein the invitee device retrieves data from the website server in response to receiving the</i>

	browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and	<i>information related to the shared web browsing interaction from the synchronization server.</i> In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. In a preferred embodiment, the message 151 can also include an identifier 152 for an initial page 153 for the group-surfing session. For example, the initial page 153 can include a home page for a selected web site 130 or a welcome page for a selected service available at the selected web site 130. Ex. 1005, 32:21-24. As the controlling web client 110 selects a progression of pages 153 for the session, that progression of pages 153 is presented at each of the web clients 110 participating in the session. Ex. 1005, 35:26-28. At a step 233, the controlling web client 110 sends a next-page message 151 to the group-surfing server 140, indicating the next page 153 in the progression of pages 153 in the session. At a step 234, the group-surfing server 140 receives the next-page message 151. The group-surfing server 140 (1) contacts the web site 130 having that next page 153 after adding proper cookie or other identity information, and directs that target web site 130 to deliver that next page 153 to the group-surfing server 140 itself. The
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		group-surfing server 140 then re-sends that page 153 to those web clients 110 participating in the session. Ex. 1005, 45:21-29. <i>Lebrun further discloses that the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> As the controlling web client 110 selects a progression of pages 153 for the session, that progression of pages 153 is presented at each of the web clients 110 participating in the session. Ex. 1005, 35:26-28. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses that the “server apparatus” comprises a means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.”</i> The present invention also includes a collaboration system for enabling client devices to collaborate with one another through a network. The system comprises: a plurality of client devices individually connected to the network; and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a collaboration environment common to the plurality of client devices. The server apparatus comprises: means for providing a group session formed by integrating communication sessions among the plurality of client devices; and means for synchronizing the client devices in the collaboration environment. Each of the client devices includes means for displaying the synchronization status among the plurality of client devices. In a preferred embodiment, the
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		collaboration system of the present invention is suitable for use as a virtual shopping system. Ex. 1006, ¶[0023]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the client devices sharing the web page. Ex. 1006, ¶[0043]. <i>A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with integration and synchronization functionality to Lebrun's "group-surfing server." Incorporating standard web software functionality, such as transmitting information from a server (i.e., a URL) to a web browser or server that would receive and process that information to request a web page, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.</i>
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1[j]	receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.	<i>Lebrun in view of Wang discloses receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> <i>Lebrun discloses receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> In a preferred embodiment, load is reduced on the group-surfing server 140 using a program fragment loaded at each web client 110. The program fragment can include one or more of, or any combination of, a Java applet, a section of JavaScript code, a web browser plug-in, an active-X element, or another technique for interfacing with the web client 110 and affecting its operation with the web site 130 and the group-surfing server 140. Ex. 1005, 36:21-25. In a preferred embodiment, the message 151 can also include an identifier 152 for an initial page 153 for the group-surfing session. For example, the initial page 153 can include a home page for a selected web site 130 or a welcome page for a selected service available at the selected web site 130. Ex. 1005, 32:21-24. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses the “server apparatus” comprises means that “receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device,” as well as means for “synchronizing the client devices in the collaboration environment.”</i>
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		FIG. 5 is a flowchart that shows the processing of the server apparatus that allows the client devices to share the web page after the plurality of sessions are established. In Step S100, the server apparatus receives a request for a new web page from the first client device. In Step S102, the server apparatus reads the new web page into the cache memory, sends the web page data to the PNC 40, and allows the PNC 40 to use the data for processing the web page. In Step S104, the server apparatus receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device, for example, “page synchro request.” The session identification value SESSION B is included in the “page synchro request,” and is configured to specify the session and a subordinate-superior relationships among the sessions. Ex. 1006, ¶[0054]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the
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		client devices sharing the web page. Ex. 1006, ¶[0043]. The page navigation means 22, synchronization control means 24, and mutual communication means 26 of the client device 12a individually receive information from the respective control units included in the WPCS 36 of the server apparatus 14, extract an applicable URL address and a command from the received HTTP response, and allow the address and the command to be displayed on the client devices by use of the browser means 20. The client device 12a may be enabled to perform a shopping operation desired by the customer in response to the HTTP response from the server apparatus 14. In the present invention, the above-described page navigation means 22, synchronization control means 24, and mutual communication means 26 can be realized by executing programs described in a language such as, for example, Java, Java Applet, Java Beans, or Java Script. Ex. 1006, ¶[0044]. <i>A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with synchronization functionality between a "first client device" and "second client device," to Lebrun's "group-surfing server." Incorporating standard web software functionality, such as receiving and processing information to request a web page, into Lebrun's disclosed "web client" would allow Lebrun to perform the functions described in Lebrun's disclosure.</i>
2	The method of claim 1, further comprising receiving a notification message indicative of the	<i>Lebrun discloses receiving a notification message indicative of the invitee device joining the synchronized browsing session.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31,</i>

	invitee device joining the synchronized browsing session.	33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5. The group-surfing server 140 receives the session-join message 151, and responds by adding the new web client 110 to the group-surfing session. The group-surfing server 140 can also inform the other participants in the group-surfing session of the newly added web client 110. The group-surfing server 140 causes the newly added web client 110 to participate in the session, as described below. Ex. 1005, 33:6-10
3	The method of claim 1, further comprising activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.	<i>Lebrun in view of Wang discloses activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.</i> See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5; Ex. 1006, ¶¶[0014], [0015], [0020-21], [0023], [0041], [0043-44], [0047], [0054], Fig. 2, Fig. 3. Fig. 4A. <i>Lebrun discloses activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.</i> A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. In a preferred embodiment, the message 151 includes an identifier for the group-surfing session, so that other web clients 110 can add themselves to that session. (The group-surfing server 140 can also assign this identifier in a reply to the session-creation message 151.) Ex. 1005, 32:9-12.

		In a preferred embodiment, the message 151 is responsive 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. Ex. 1005, 32:5-7. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses that upon receiving the “the Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.”</i> As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would have understood that accessing a URL relates to activating a hyperlink. A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.</i>
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4	The method of claim 1, wherein the invitation comprises a hyperlink for joining the synchronized browsing session.	<i>Lebrun in view of Wang discloses an invitation comprises a hyperlink for joining the synchronized browsing session.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5; Ex. 1006, ¶¶[0014], [0015], [0020-21], [0023], [0041], [0043-44], [0047], [0054], Fig. 2, Fig. 3. Fig. 4A.</i> <i>Lebrun discloses wherein the invitation comprises a hyperlink for joining the synchronized browsing session.</i> In a preferred embodiment, the message 151 is responsive 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. Ex. 1005, 32:5-7. A first web client 110 sends a session-creation message 151 to the group-surfing server 140, to request the group-surfing server 140 to create or set up a group-surfing session. Ex. 1005, 32:9-11. <i>In addition, even if Lebrun did not disclose this limitation, Wang discloses the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.”</i> As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping
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		session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would have understood a URL relates to a hyperlink. A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises invitation comprises a hyperlink for joining the synchronized browsing session.</i>
5	The method of claim 1, wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for	<i>Lebrun discloses wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> Those web clients 110 participating in the session can also communicate between and among groups of users 112 at those web clients 110. The techniques used for communication can include one or more of, or some combination of, the following: telephone communication, voice over IP, Internet chat, electronic mail, “instant messaging,” or other intra-user communication. In a preferred embodiment, the communication technique can be presented to each web client 110 at the initiation of the group-surfing server 140,

	transmitting the invitation.	using either a same or a separate window at the web client 110. Ex. 1005, 41:16-22.
6	The method of claim 1, wherein information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.	<i>Lebrun discloses that information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> The controlling web client 110 can import or export information related to web 10 sites 130, including bookmarks, “cookies,” and user registrations at participating web sites 130. Ex. 1005, 41:9-11. Each time the group-surfing server 140 requests a page from the web site 130, the group-surfing server 140 also sends any relevant “cookies” that were received from the web site 130. Ex. 1005, 46:7-11.
7	The method of claim 1, wherein the session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey;	<i>Lebrun discloses a session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> To add itself to the session, a second (or further) web client 110 sends a session-join message 151 to the group-surfing server 140. In a preferred embodiment, the message 151 includes the

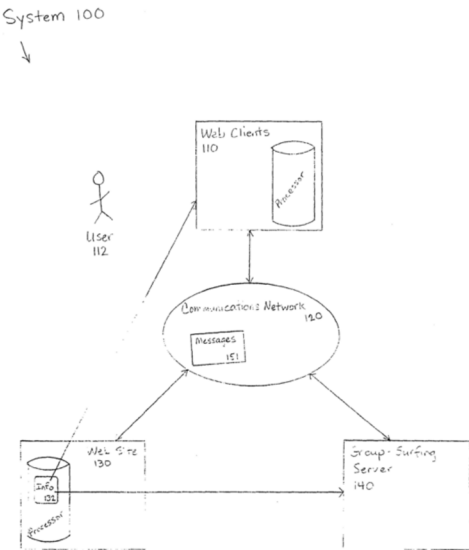
	MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.	identifier for the group-surfing session. Ex. 1005, 33:2-4.
8	The method of claim 1, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.	<i>Lebrun discloses a web browsing window is capable of accepting both shared and non-shared web browsing interactions.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> The controlling web client 110 can select web pages 153 for special access when designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. For a first example, the controlling web client 110 can enter information required for special access privately, without presenting that information to other web clients 110 participating in the session. For a second example, the controlling web client 110 can enter such information (such as for completing an HTML “form”) using information available from, and supplied by, other web clients 110 participating in the session. Ex. 1005, 38:21-27.
9	The method of claim 1, wherein web browsing interactions of	<i>Lebrun discloses wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.</i>

	the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window	<i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> In a third aspect of the invention, a first user can allow a second user (or a set of such second users) temporary access to a set of web sites, possibly with the temporary access restricted to a subset of the information or services offered by those web sites. Ex. 1005, 6:19-32. <u>Web Page Look Ahead</u> The controlling web client 110 can select web pages 153 for “look ahead” before designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. This allows the controlling web client 110 to provide for one or more of, or some combination of, the following contingencies: • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are accessible at the time of the session. For example, some such pages 153 can be subject to restricted access in response to time or usage constraints. • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 are appropriate for the web clients 110 participating in the session. For a first example, some such pages 153 can include information that is immaterial to the session (such as for a class, a seminar, or a demonstration of a product or service). For a second example, some such pages 153 can
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		include information that is inappropriate for the session (such as so-called “adult-oriented” material for a session including users 112 who are minors). • The user 112 at the controlling web client 110 can determine if the selected “look ahead” pages 153 require special access (such as password restriction or cost-burdened services). For a first example, the controlling web client 110 can choose to exclude such pages 153 from the session. For a second example, the controlling web client 110 can choose to accept such special access (such as entering a password or credit card number) without presenting that acceptance to other web clients 110 participating in the session. Ex. 1005, 37:27-38:17. <u>Web Page Special Access</u> The controlling web client 110 can select web pages 153 for special access when designating those web pages 153 as next pages 153 in the progression of pages 153 in the session. For a first example, the controlling web client 110 can enter information required for special access privately, without presenting that information to other web clients 110 participating in the session. For a second example, the controlling web client 110 can enter such information (such as for completing an HTML “form”) using information available from, and supplied by, other web clients 110 participating in the session. Ex. 1005, 38:19-27. <i>A POSITA would understand that when a “controlling web client” determines if a “look ahead” or “special access” page is displayed to “other web clients,” a user must necessarily first view that page in a non-shared</i>
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		<i>browser in the “web client” prior to deciding to share that web page.</i>
10	The method of claim 1, further comprising: receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.	<i>Lebrun discloses receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.</i> <i>See claim 1; see also Ex. 1005, 4:6-7, 4:7-9, 6:19-32, 30:19-24, 32:3-7, 32:9-16, 32:14-16, 32:21-24, 32:26-31, 33:3-4, 35:17-19, 35:26-28, 36:21-25, 36:26-28, 37:27-38:27, 44:33-45:2, 45:13-17, 45:21-46:5.</i> In a preferred embodiment, the controlling web client 110 enters information to complete the HTML form, and sends that information to the group-surfing server 140. The group-surfing server 140 enters information to complete the HTML form, and sends that information to the web site 130. When the web site 130 replies with a new page, the group-surfing server 140 sends that new page to all participating web clients 130. Ex. 1005, 38:32-39:2. <i>A POSITA would understand that the web page retrieved after form information is sent represents a reply message, wherein the reply message includes form data.</i>
11[pre]	An apparatus for establishing a synchronized browsing session between a host device and an invitee device, comprising:	<i>Lebrun in view of Wang discloses an apparatus for establishing a synchronized browsing session between a host device and an invitee device.</i> <i>See claim limitation 1[pre]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16.</i> <i>Lebrun discloses an apparatus.</i> As used herein, the phrase “web client” includes any combination of devices or software taking on

		the role of a client in a client-server environment in the internet, the world wide web, or an equivalent or extension thereof. Ex. 1005, 30:1-3. There is no particular requirement that the web clients 110 must be individual devices. They can each be a single device, a set of cooperating devices, a portion of a device, or some combination thereof (such as for example a device providing web server services that acts as an agent of the user). Ex. 1005, 30:4-6. <i>Wang discloses an apparatus.</i> More specifically, the present invention includes server apparatus for use in a system enabling computer devices to collaborate with one another through a network. The server apparatus comprises: a group session control unit for creating a group session by integrating a plurality of individual sessions and for passing a command to an application execution unit; and a page navigation control unit for providing a web page common to each of the individual sessions. Ex. 1006, ¶[0018].
11[a]	a network interface adapted to communicate with a synchronization server; and	<i>Lebrun discloses a network interface adapted to communicate with a synchronization server.</i> <i>See claim limitation 1[pre]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:3-7; 32:9-16; 32:26-31.</i> The messages 151 are formatted in the communication protocol recognized by the web clients 110, the web site 130, and the group-surfing server 140. Ex. 1005, 31:6-7.
11[b]	a processor adapted to:	<i>Lebrun discloses a processor.</i>

		The web clients 110 each include a processor operating under control of web client software 111, such as a web browser, and disposed for use by an operator or user 112. Ex. 1005, 30:14-15. After creating the group-surfing session, the group-surfing server 140 prepares to add additional web clients 110 to the session. To add itself to the session, a second (or further) web client 110 sends a session-join message 151 to the group-surfing server 140. In a preferred embodiment, the message 151 includes the identifier for the group-surfing session. Ex. 1005, 33:1-4.  Ex. 1005, Fig. 4.
11[c]	send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface;	<i>Lebrun in view of Wang discloses a processor adapted to disclose send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface.</i> <i>See claim limitations 1[a]-[b]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:3-7, 32:9-16, 32:26-31; Ex. 1006, ¶¶[0018-20].</i>

11[d]	receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session;	<i>Lebrun in view of Wang discloses a processor adapted to receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.</i> <i>See claim limitations 1[a], [c]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16, 33:1-4.</i>
11[e]	send an invitation from the host device to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;	<i>Lebrun in view of Wang discloses a processor adapted to send an invitation from the host device to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.</i> <i>See claim limitation 1[d]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-16, 32:14-16, 35:17-19, 44:12-14; Ex. 1006, ¶¶[0020], [0047], Fig. 3.</i>
11[f]	record a shared web browsing interaction	<i>Lebrun discloses a processor adapted to record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a</i>

	responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;	<i>web browsing window is a sharable web browsing interaction.</i> <i>See claim limitations 1[d]; see also Ex. 1005, 6:19-32, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 45:15-16; 45:21-29.</i>
11[g]	send a request for webpage content to a website server independent of the synchronization server;	<i>Lebrun in view of Wang in view of Wang discloses a processor adapted to send a request for webpage content to a website server independent of the synchronization server.</i> <i>See claim limitation 1[e]; see also Ex. 1005, 4:6-7, 7:7-9, 32:9-16, 32:21-24, 35:17-19, 44:12-14; Ex. 1006, ¶¶[0021], [0041], [0047], Fig. 3.</i>
11[h]	transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server,	<i>Lebrun in view of Wang discloses a processor adapted to transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server.</i> <i>See claim limitations 1[d]-[f]; see also Ex. 1005, 4:6-7, 7:7-9, 30:19-24, 32:9-12, 32:14-16, 32:21-24, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 45:1-2, 45:15-16; 45:21-29; Ex. 1006, ¶¶[0015], [0021], [0041].</i>

11[i]	wherein the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;	<i>Lebrun in view of Wang discloses that the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i> <i>See claim limitations 1[d], [g]; see also Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 45:1-2, 45:15-16; 45:21-46:5; Ex. 1006, ¶¶[0015], [0021], [0041].</i>
11[j]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web	<i>Lebrun in view of Wang discloses a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.</i> <i>See claim limitations 1[d]-[f], 1[h]; see also Ex. 1005, 6:19-32, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 45:1-2, 45:15-16; 45:21-29; Ex. 1006, ¶¶[0015], [0021], [0023], [0041].</i>

	browsing interaction from the host device, and	
11[k]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and	<i>Lebrun in view of Wang discloses an invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> <i>See claim limitations 1[d], [f]-[g], [i]; see also Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:17, 45:1-2, 45:15-16; 45:21-46:5; Ex. 1006, ¶¶[0014], [0023], [0041], [0043-44], [0054].</i>
11[l]	receive, responsive to sending the request for webpage content to the website server and after transmitting the	<i>Lebrun in view of Wang discloses a processor adapted to receive, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> <i>See claim limitations 1[d], [f]-[g], [l]; see also Ex. 1005, 6:19-32, 32:9-12, 32:21-24, 35:17-19, 35:26-28, 36:21-</i>

	information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.	25, 37:27-38:17, 45:1-2, 45:21-23; Ex. 1006, ¶¶[0043-44], [0054].
12	The apparatus of claim 11, further comprising a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.	<i>Lebrun discloses a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.</i> <i>See claims 11, 3, and 4; see also Ex. 1005, 4:6-7, 6:19-32, 7:7-9, 30:1-3, 30:4-6, 30:14-15, 30:19-24, 31:6-7, 32:3-7, 32:9-16, 32:21-24, 32:26-31, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 44:12-14, 45:1-2, 45:15-16; 45:21-29, Fig. 4; Ex. 1006, ¶¶[0015], [0018-21], [0041], [0043-44], [0047], [0054], Fig. 3.</i> <i>Lebrun discloses a user interface adapted to initiate the processor to send the request in response to a user input.</i> More generally, the group surfing process can be used in conjunction with functions that could otherwise occur on display before an in-person audience. Ex. 1005, 7:14-16. <i>Lebrun discloses wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.</i>

		In a preferred embodiment, the message 151 is responsive 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. Ex. 1005, 32:5-7. <i>In addition, to the extent that Lebrun did not explicitly disclose “wherein the invitation comprises a hyperlink,” Wang discloses that upon receiving the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.”</i> As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would also have understood that Lebrun’s disclosure of a “message” to the “group-surfing server” could be modified to include the “myURL address” of Wang, which comprises wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.</i>
13	The apparatus of claim 11, wherein the	<i>Lebrun discloses a session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; URL; MAC address; or</i>

	session identifier associated with the established synchronized browsing session comprises: - an identification number; - a passkey; - URL; - MAC address; or - other unique indicator such that the synchronized browsing session may be identified for joining the session.	<i>other unique indicator such that the synchronized browsing session may be identified for joining the session.</i> <i>See claims 11 and 7; see also Ex. 1005, 4:6-7, 6:19-32, 7:7-9, 30:1-3, 30:4-6, 30:14-15, 30:19-24, 31:6-7, 32:3-7, 32:9-16, 33:2-4, 32:21-24, 32:26-31, 33:1-5, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 44:12-14, 45:1-2, 45:15-16; 45:21-29, Fig. 4; Ex. 1006, ¶¶[0015], [0018-21], [0041], [0043-44], [0047], [0054], Fig. 3.</i>
14	The apparatus of claim 11, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.	<i>Lebrun discloses a web browsing window that is capable of accepting both shared and non-shared web browsing interactions.</i> <i>See claims 11 and 8; see also Ex. 1005, 4:6-7, 6:19-32, 7:7-9, 30:1-3, 30:4-6, 30:14-15, 30:19-24, 31:6-7, 32:3-7, 32:9-16, 32:21-24, 32:26-31, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 44:12-14, 45:1-2, 45:15-16; 45:21-29, Fig. 4; Ex. 1006, ¶¶[0015], [0018-21], [0041], [0043-44], [0047], [0054], Fig. 3.</i>
15	The apparatus of claim 14, wherein web browsing	<i>Lebrun discloses wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web</i>

	interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.	<i>browser window that is separate from the web browsing window.</i> <i>See claims 11 and 9; see also Ex. 1005, 4:6-7, 6:19-32, 7:7-9, 30:1-3, 30:4-6, 30:14-15, 30:19-24, 31:6-7, 32:3-7, 32:9-16, 32:21-24, 32:26-31, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 44:12-14, 45:1-2, 45:15-16; 45:21-29, Fig. 4; Ex. 1006, ¶¶[0015], [0018-21], [0041], [0043-44], [0047], [0054], Fig. 3.</i>
16	The apparatus of claim 11, wherein the processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.	<i>Lebrun discloses a processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.</i> <i>See claims 11 and 10; see also Ex. 1005, 4:6-7, 6:19-32, 7:7-9, 30:1-3, 30:4-6, 30:14-15, 30:19-24, 31:6-7, 32:3-7, 32:9-16, 32:21-24, 32:26-31, 33:1-4, 34:15-17, 35:17-19, 35:26-28, 36:21-25, 37:27-38:27, 38:31-39:2, 44:12-14, 45:1-2, 45:15-16; 45:21-29, Fig. 4; Ex. 1006, ¶¶[0015], [0018-21], [0041], [0043-44], [0047], [0054], Fig. 3.</i>

b. '448 Patent Claim 1-16 in view of Prajapat and Wang

293. Claims 1-16 are obvious in view of Prajapat and Wang for at least the following reasons:

Claim No.	Claim	Prior Art Analysis
1[pre]	A method performed by a host device for establishing a synchronized browsing session between the host device and an invitee device, comprising:	<i>Claim 1 is obvious in view of U.S. Patent Pub. No. 2005/0021626 ("Prajapat"), in view of U.S. Patent Pub. No. 2005/0033656 ("Wang").</i> <i>Prajapat discloses a synchronized browsing session.</i> FIG. 1 illustrates an example communication system 10 operable to provide peer-to-peer dynamic web page sharing. Communication system 10 includes browsers 12, web media servers 14a and 14b coupled via network 16, and web content server 18 coupled to web media server 14a via link 20. In general, web media servers 14 allow browser 12a to co-browse one or more web pages with browser 12b. The term "co-browse" may include one or more of the following situations: browser 12a and browser 12b display the same web pages at substantially the same time; browser 12a may alter web pages and browser 12b may view those alterations; browser 12b may alter web pages and browser 12a may view those alterations; or any other suitable situations. In one embodiment, system 10 is implemented to enable co-browsing in a call center environment such as a customer service environment. It should be understood, however, that system 10 may be implemented

Claim No.	Claim	Prior Art Analysis
		in any suitable environment where co-browsing may be desired. Ex. 1007, ¶[0012]. FIG. 2 <pre> graph TD START([START]) --> 100[ESTABLISH COMMUNICATION SESSION BETWEEN FIRST BROWSER AND ASSOCIATED WEB MEDIA SERVER] 100 --> 102[SUBMIT IDENTIFIER OF ANOTHER BROWSER WITH WHICH FIRST BROWSER DESIRES TO CO-BROWSE] 102 --> 104[RECEIVE REQUEST TO CO-BROWSE] 104 --> 106[LOCATE ANOTHER WEB MEDIA SERVER WITH WHICH THE OTHER BROWSER IS ASSOCIATED] 106 --> 108[ESTABLISH SIGNALING SESSION BETWEEN WEB MEDIA SERVERS] 108 --> 110[ESTABLISH MEDIA SESSION BETWEEN WEB MEDIA SERVERS] 110 --> 112[ESTABLISH COMMUNICATION SESSION BETWEEN OTHER BROWSER AND OTHER WEB MEDIA SERVER] 112 --> 114[SUBMIT REQUEST FOR WEB PAGE] 114 --> 116[RECEIVE REQUEST FOR WEB PAGE] 116 --> 118[LOCATE APPROPRIATE WEB CONTENT SERVER FOR REQUESTED WEB PAGE] 118 --> 120[REQUEST WEB PAGE FROM WEB CONTENT SERVER] 120 --> 122[RETURN REQUESTED WEB PAGE TO WEB MEDIA SERVER] 122 --> 124[TRANSFORM RETURNED WEB PAGE INTO INTERMEDIATE FORM] 124 --> 126[TRANSFORM INTERMEDIATE FORM INTO RENDERABLE FORM THAT MAY BE RENDERED BY FIRST BROWSER] 126 --> 128[SEND NOTIFICATION TO FIRST BROWSER] 128 --> 130[RETRIEVE RENDERABLE FORM FROM WEB MEDIA SERVER] 130 --> 132[COMMUNICATE INTERMEDIATE FORM TO OTHER WEB MEDIA SERVER] 132 --> 134[TRANSFORM INTERMEDIATE FORM INTO RENDERABLE FORM THAT MAY BE RENDERED BY OTHER BROWSER] 134 --> 136[SEND NOTIFICATION TO OTHER BROWSER] 136 --> 138[RETRIEVE RENDERABLE FORM FROM OTHER WEB MEDIA SERVER] 138 --> END([END]) </pre> Ex. 1007, Fig. 2. <i>Prajapat further discloses a host device that establishes a synchronized browsing session between a host device and an invitee device.</i> A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b. Although only one browser 12b is illustrated and described,

Claim No.	Claim	Prior Art Analysis
		the present invention contemplates browser 12a sharing web pages with any number of other browsers 12 (i.e. browser 12b, browser 12c, browser 12d, and so on). To begin a co-browsing session, the user of browser 12a may need to establish a communication session with an associated web media server 14a. For example, the user of browser 12a may click on a desktop icon associated with browser 12a to establish a communication session with web media server 14a. In another embodiment, browser 12a may already have an established communication session with web media server 14a. In certain embodiments, the communication session between browser 12a and web media server 14a includes an outgoing channel 30 a and an incoming channel 32a. Outgoing channel 30a may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel. Incoming channel 32a may include a LongPoll event channel such as that described in U.S. patent application Ser. No. 08/352,764 entitled “_____” and filed _____ with the U.S. Patent and Trademark Office, or any other suitable type of channel. For example, browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. In one embodiment, the communication session between browser 12a and web media server 14a may be established over a firewall or other security measure 25a. Outgoing channels 30 and incoming channels 32 may not necessarily include “always on” links. For example, in certain embodiments,

Claim No.	Claim	Prior Art Analysis
		outgoing channels 30 and incoming channels 32 are established for intermittent communications such as packets. Ex. 1007, ¶[0016]. <i>A POSITA would have understood that a “user with browser 12a” co-browsing with “browser 12b,” comprises a method performed by a host device for establishing a synchronized browsing session between the host device and an invitee device.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses a “client device for use in a system that enables computer devices to collaborate with one another through a network.”</i> The present invention also includes a client device for use in a system that enables computer devices to collaborate with one another through a network. The client device comprises: browser means for allowing the client device to display data received through the network; page navigation means for communicating, through the network, a request for changing ownership of the initiative to operate the web page displayed among a plurality of the client devices; synchronization control means for enabling the plurality of client devices to share the web page; and communication means for enabling the client device to display a message for other client devices. The synchronization control means may issue a request for making an inquiry about an identification value of previously compiled data of the web page through the network in response to ownership of the initiative of the operation of the web page. Ex. 1006, ¶[0020].

Claim No.	Claim	Prior Art Analysis
		FIG. 3 <pre> sequenceDiagram participant FCD as FIRST CLIENT DEVICE participant SA as SERVER APPARATUS participant SC2 as SECOND CLIENT DEVICE Note over FCD: T1 FCD->>SA: Login request Note over SA: T2 SA->>FCD: Establishment of SESSION A Note over SA: T3 SA->>FCD: SSID TABLE SSID SEQUENCE TABLE Note over FCD: T4 FCD->>SA: Invitation message Note over SA: T5 SA->>SC2: Invitation acknowledgement Note over SC2: T6 SC2->>SA: Access to URL address Note over SA: T7 SA->>SC2: SSID TABLE SSID SEQUENCE TABLE Note over SC2: T8 SC2->>SA: Login request Note over SA: T9 SA->>SC2: Establishment of SESSION B Note over SC2: T10 Note over SA: T11 Note over SA: T12 Note over SA: T13 Note over SC2: T14 </pre> Ex. 1006, Fig. 3. As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would have been motivated to combine Wang’s teachings of including “synchronization control means” to Prajapat’s “browser,” because it would be a combination of prior art elements according to known methods to yield predictable results.</i>

Claim No.	Claim	Prior Art Analysis
1[a]	sending a request to establish the synchronized browsing session to a synchronization server;	<i>Prajapat in view of Wang discloses sending a request to establish the synchronized browsing session to a synchronization server.</i> <i>Prajapat discloses sending a request to establish the synchronized browsing session to a synchronization server.</i> FIG. 1 illustrates an example communication system 10 operable to provide peer-to-peer dynamic web page sharing. Communication system 10 includes browsers 12, web media servers 14a and 14b coupled via network 16, and web content server 18 coupled to web media server 14a via link 20. In general, web media servers 14 allow browser 12a to co-browse one or more web pages with browser 12b. The term “co-browse” may include one or more of the following situations: browser 12a and browser 12b display the same web pages at substantially the same time; browser 12 a may alter web pages and browser 12b may view those alterations; browser 12b may alter web pages and browser 12a may view those alterations; or any other suitable situations. In one embodiment, system 10 is implemented to enable co-browsing in a call center environment such as a customer service environment. It should be understood, however, that system 10 may be implemented in any suitable environment where co-browsing may be desired. Ex. 1007, ¶[0012]. A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another

Claim No.	Claim	Prior Art Analysis
		user associated browser 12b. Although only one browser 12b is illustrated and described, the present invention contemplates browser 12a sharing web pages with any number of other browsers 12 (i.e. browser 12b, browser 12c, browser 12d, and so on). To begin a co-browsing session, the user of browser 12a may need to establish a communication session with an associated web media server 14a. For example, the user of browser 12a may click on a desktop icon associated with browser 12a to establish a communication session with web media server 14a. In another embodiment, browser 12a may already have an established communication session with web media server 14a. In certain embodiments, the communication session between browser 12a and web media server 14a includes an outgoing channel 30a and an incoming channel 32a. Outgoing channel 30a may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel. Incoming channel 32a may include a LongPoll event channel such as that described in U.S. patent application Ser. No. 08/352,764 entitled “_____” and filed _____ with the U.S. Patent and Trademark Office, or any other suitable type of channel. For example, browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. In one embodiment, the communication session between browser 12a and web media server 14a may be established over a firewall or other security measure 25a. Outgoing channels 30 and incoming channels

Claim No.	Claim	Prior Art Analysis
		32 may not necessarily include “always on” links. For example, in certain embodiments, outgoing channels 30 and incoming channels 32 are established for intermittent communications such as packets. Ex. 1007, ¶[0016]. <i>A POSITA would have understood that a “user with browser 12a” co-browsing with “browser 12b,” via a “web media server,” comprises a host device sending a request and establishing a synchronized browsing session.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses “a server apparatus for use in a system enabling computer devices to collaborate with one another,” which may comprise a “a synchronization control unit for notifying each of the individual session destinations that the web page is shared.”</i> More specifically, the present invention includes server apparatus for use in a system enabling computer devices to collaborate with one another through a network. The server apparatus comprises: a group session control unit for creating a group session by integrating a plurality of individual sessions and for passing a command to an application execution unit; and a page navigation control unit for providing a web page common to each of the individual sessions. The server apparatus further may comprise: a synchronization control unit for notifying each of the individual session destinations that the web page is shared; and a mutual communication control unit for enabling a plurality of the individual session destinations

Claim No.	Claim	Prior Art Analysis
		to exchange a message. The server apparatus may include initiative switching means for switching ownership of the initiative of web page operation. The page navigation control unit may include a page sharing processing unit for creating data by compiling the web page and an identification value corresponding to the data in response to the display of a new web page, and for storing the data and the identification value in association with each other in a storage device. Ex. 1006, ¶¶[0018-19]. <i>A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with a "synchronization control unit" to Prajapat's "web media server." Incorporating standard web software functionality, such as sending a notification to begin a session to a server, into Prajapat's disclosed "browser" would allow Prajapat to perform the functions described in Prajapat's disclosure.</i>
1[b]	receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device	<i>Prajapat discloses receiving a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.</i> <i>Prajapat discloses receiving a confirmation message from a synchronization server.</i> FIG. 1 illustrates an example communication system 10 operable to provide peer-to-peer dynamic web page sharing. Communication system 10 includes browsers 12, web media servers 14a and 14b coupled via network 16,

Claim No.	Claim	Prior Art Analysis
	and the established synchronized browsing session;	and web content server 18 coupled to web media server 14a via link 20. In general, web media servers 14 allow browser 12a to co-browse one or more web pages with browser 12b. The term “co-browse” may include one or more of the following situations: browser 12a and browser 12b display the same web pages at substantially the same time; browser 12a may alter web pages and browser 12b may view those alterations; browser 12b may alter web pages and browser 12a may view those alterations; or any other suitable situations. In one embodiment, system 10 is implemented to enable co-browsing in a call center environment such as a customer service environment. It should be understood, however, that system 10 may be implemented in any suitable environment where co-browsing may be desired. Ex. 1007, ¶[0012]. Via outgoing channel 30a or in any other suitable manner, web media server 14a may receive requests from browser 12a for one or more web pages. For example, browser 12a may submit requests for one or more web pages by communicating a request to web media server 14a for a particular web site using the uniform resource locator (URL) of the web site. As discussed above, the request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server 18 associated with the requested web page, or any other suitable information. In one

Claim No.	Claim	Prior Art Analysis
		embodiment, web media server 14a may retrieve any suitable information from browser 12a using a signed Applet, plugin, or by other suitable means. Web media server 14a may derive any suitable information regarding browser 12a during a session with web content server 18. Ex. 1007, ¶[0022]. <i>Prajapat further discloses including a session identifier generated by the synchronization server, a session identifier associated with the host device and the established synchronized browsing session.</i> <i>A POSITA would have understood that a upon creating a “co-browsing session,” the “web media server” would send a confirmation message containing “session information” to a “browser,” and thus comprises a session identifier with information regarding the synchronized browsing session, which is generated by the synchronization server.</i>
1[c]	sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;	<i>Prajapat in view of Wang discloses sending an invitation to an invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier.</i> <i>Prajapat discloses sending an invitation to an invitee device to join the synchronized browsing session.</i> In a request to co-browse or otherwise, browser 12a may specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, a user of browser 12a may submit a request to co-browse with chachi@happydaycompany.com who is

Claim No.	Claim	Prior Art Analysis
		associated with browser 12b. Browser 12a may also submit requests for one or more web pages, for example by requesting a particular web site, to web media server 14a. The request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page on browser 12a, such as session information, cookies, parameters to send to web content server 18, and any other suitable information. Ex. 1007, ¶[0017]. Browser 12a may submit a request to web content server 18 for one or more web pages using link 42a, for example. Links 42 may include an HTTP link or any other suitable type of link. The request may be submitted in any suitable format such as HTTP. Web content server 18 may return the requested web page to browser 12a. Browser 12a may communicate the URL or other suitable information regarding the requested web page to web media server 14a. Web media server 14a may communicate the URL and any other suitable information to web media server 14b, using media session 28 for example. Web media server 14b may communicate the URL and any other suitable information to browser 12b. Browser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested. Ex. 1007, ¶[0043]. <i>Prajapat further discloses an invitation that includes the session identifier.</i>

Claim No.	Claim	Prior Art Analysis
		<i>A POSITA would have understood that when “browser 12a” communicates “the URL or other suitable information” to the “web media server” in a “request to co-browse” with “other browsers 12,” the invitation necessarily includes an identifier for other browsers to join the co-browsing session.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses a “client device” with “communication means for enabling the client device to display a message for other client devices.”</i> Web media server 14a may also establish a media session 28 with web media server 14b using any suitable means. Media session 28 may allow web media servers 14 to communicate one or more types of media between each other. For example, media session 28 may allow web media servers 14 to communicate one or more web pages between each other. In one embodiment, media session 28 includes a direct connection between web media servers 14. It should be understood that any suitable media protocol such as Real-time Transport Protocol (RTP), transport control protocol (TCP), or user datagram protocol (UDP) may be used to provide media session 28. Ex. 1006, ¶[0020]. <i>A POSITA would have been motivated to combine Wang’s teachings of including a “communications means” to Prajapat’s “browser 12a.”</i> <i>Incorporating standard web software functionality, such as communication of information from one web browser to another web browser, into Prajapat’s disclosed “browser” would allow Prajapat to</i>

Claim No.	Claim	Prior Art Analysis
		<i>perform the functions described in Prajapat's disclosure.</i>
1[d]	recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;	<i>Prajapat discloses recording a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.</i> <i>Prajapat discloses recording a shared web browsing interaction. Prajapat explains that a user may "desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b."</i> A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b. Ex. 1007, ¶[0016]. FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web

Claim No.	Claim	Prior Art Analysis
		content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. <i>Prajapat further discloses determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.</i> <i>A POSITA would have understood that when “browser 12a” registers with a “web media server 14a,” and decides to share a web page, is a determination that a web browsing interaction within a web browsing window is a sharable web browsing interaction.</i>
1[e]	sending a request for webpage content to a website server independent of the	<i>Prajapat in view of Wang discloses sending a request for webpage content to a website server independent of the synchronization server.</i> <i>Prajapat discloses sending a request for webpage content to a website server independent of the synchronization server.</i>

Claim No.	Claim	Prior Art Analysis
	synchronization server;	FIG. 3 illustrates an example communication system 40 operable to provide peer-to-peer simple web page sharing. System 40 includes browsers 12, web media servers 14, and web content server 18. In certain embodiments, system 40 includes firewalls or other security measures 25. In operation of system 40, browser 12a may request a web page sharing session with one or more other browsers 12 (in this example, browser 12b) and may submit this request to web media server 14a. Web media server 14a may locate the web media server associated with browser 12b in a substantially similar manner to that described above with reference to FIGS. 1 and 2. In one embodiment in which web media servers 14 are SIP endpoints, web media server 14a may locate web media server 14b using presence functionality or a SIP registrar/location function of SIP network 16 such as SIP softswitch, for example. In one embodiment, web media servers 14 are already registered with SIP network 16. Web media server 14a may establish a signaling session 26 with web media server 14b using network 16. In an embodiment in which network 16 is a SIP network, signaling session 26 may be a SIP signaling session. In one embodiment, once web media servers 14 have found each other using network 16, the established signaling session 26 is a direct connection between web media servers 14. Ex. 1007, ¶[0041]. Web content server 18 may include any suitable server or other computer for storing and communicating web pages. Web content server 18 may return a requested web page to web media server 14a. Web media server 14a

Claim No.	Claim	Prior Art Analysis
		may transform the returned web page into some intermediate form. In one embodiment, one or more links on the web page may be transformed into references and one or more links to images on the web page may also be transformed. The details of the transformation may depend on the syntax of the content being served. As merely an example, in an embodiment in which the retrieved web page includes HTML content, one transformation may need to be applied, while in the case of an IP phone display, another transformation may need to be applied. Ex. 1007, ¶[0024]. <i>A POSITA would have understood that a requesting “a web page” from a “web content server,” as opposed to a “web media server,” comprises sending a request for webpage content to a website server independent of the synchronization server.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses “computer-executable program” which may comprise a “a step of forming a page navigation control unit for providing a web page common to each of the individual sessions.”</i> A communication session between web media server 14b and browser 12b may be established in any suitable manner. In one embodiment, web media server 14b contacts browser 12b to establish the communication session. In another embodiment, a communication session between web media server 14b and browser 12b already exists. In another embodiment (as will be discussed below in more detail), a user of browser 12a and a user of browser 12b are engaged in a

Claim No.	Claim	Prior Art Analysis
		telephone conversation. In this example, the user of browser 12a may verbally tell the user of browser 12b to establish a communication session with web media server 14b. In certain embodiments, the communication session between browser 12b and web media server 14b may include an outgoing channel 30b and an incoming channel 32b. Outgoing channel 30b may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel, and incoming channel 32b may include a LongPoll event channel or any other suitable type of channel. For example, browser 14b may submit requests for web pages and other web content using outgoing channel 30b and web media server 14b may communicate notifications and other information to browser 14b using incoming channel 32b. In one embodiment, the communication session between browser 12b and web media server 14b may be established over a firewall or other security measure 25b. Ex. 1006, ¶[0021]. FIG. 3 illustrates an example communication system 40 operable to provide peer-to-peer simple web page sharing. System 40 includes browsers 12, web media servers 14, and web content server 18. In certain embodiments, system 40 includes firewalls or other security measures 25. In operation of system 40, browser 12a may request a web page sharing session with one or more other browsers 12 (in this example, browser 12b) and may submit this request to web media server 14a. Web media server 14a may locate the web media server associated with browser 12b in a substantially similar manner to that described

Claim No.	Claim	Prior Art Analysis
		above with reference to FIGS. 1 and 2. In one embodiment in which web media servers 14 are SIP endpoints, web media server 14a may locate web media server 14b using presence functionality or a SIP registrar/location function of SIP network 16 such as SIP softswitch, for example. In one embodiment, web media servers 14 are already registered with SIP network 16. Web media server 14a may establish a signaling session 26 with web media server 14b using network 16. In an embodiment in which network 16 is a SIP network, signaling session 26 may be a SIP signaling session. In one embodiment, once web media servers 14 have found each other using network 16, the established signaling session 26 is a direct connection between web media servers 14. Ex. 1007, ¶[0041]. <i>A POSITA would have been motivated to combine Wang's teachings of "page navigation control" software functionality to Prajapat's "browser 12a." Incorporating standard web software functionality, such as retrieving a web page by a web browser, into Prajapat's disclosed "browser" would allow Prajapat to perform the functions described in Prajapat's disclosure.</i>
1[f]	subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web	<i>Prajapat in view of Wang discloses that subsequent to sending the request for webpage content to the website server, transmitting information related to the shared web browsing interaction to the synchronization server.</i> <i>Prajapat discloses transmitting information related to the shared web browsing interaction to the synchronization server.</i>

Claim No.	Claim	Prior Art Analysis
	browsing interaction to the synchronization server,	Via outgoing channel 30a or in any other suitable manner, web media server 14a may receive requests from browser 12a for one or more web pages. For example, browser 12a may submit requests for one or more web pages by communicating a request to web media server 14a for a particular web site using the uniform resource locator (URL) of the web site. As discussed above, the request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server 18 associated with the requested web page, or any other suitable information. In one embodiment, web media server 14a may retrieve any suitable information from browser 12a using a signed Applet, plugin, or by other suitable means. Web media server 14a may derive any suitable information regarding browser 12a during a session with web content server 18. Ex. 1007, ¶[0022] FIG. 3 illustrates an example communication system 40 operable to provide peer-to-peer simple web page sharing. System 40 includes browsers 12, web media servers 14, and web content server 18. In certain embodiments, system 40 includes firewalls or other security measures 25. In operation of system 40, browser 12a may request a web page sharing session with one or more other browsers 12 (in this example, browser 12b) and may submit this request to web media server 14a. Web media server 14a may locate the web

Claim No.	Claim	Prior Art Analysis
		media server associated with browser 12b in a substantially similar manner to that described above with reference to FIGS. 1 and 2. In one embodiment in which web media servers 14 are SIP endpoints, web media server 14a may locate web media server 14b using presence functionality or a SIP registrar/location function of SIP network 16 such as SIP softswitch, for example. In one embodiment, web media servers 14 are already registered with SIP network 16. Web media server 14a may establish a signaling session 26 with web media server 14b using network 16. In an embodiment in which network 16 is a SIP network, signaling session 26 may be a SIP signaling session. In one embodiment, once web media servers 14 have found each other using network 16, the established signaling session 26 is a direct connection between web media servers 14. Ex. 1007, ¶[0041]. <i>A POSITA would have understood that a “web media server” receiving a “request for a web page,” comprises a request for webpage content to the website server, which is related to the shared web browsing interaction to the synchronization server.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses a “synchronization control unit” capable of “notifying each of the individual session destinations of the shared status of the web page.”</i> A communication session between web media server 14b and browser 12b may be established in any suitable manner. In one embodiment, web media server 14b contacts

Claim No.	Claim	Prior Art Analysis
		browser 12b to establish the communication session. In another embodiment, a communication session between web media server 14b and browser 12b already exists. In another embodiment (as will be discussed below in more detail), a user of browser 12a and a user of browser 12b are engaged in a telephone conversation. In this example, the user of browser 12a may verbally tell the user of browser 12b to establish a communication session with web media server 14b. In certain embodiments, the communication session between browser 12b and web media server 14b may include an outgoing channel 30b and an incoming channel 32b. Outgoing channel 30b may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel, and incoming channel 32b may include a LongPoll event channel or any other suitable type of channel. For example, browser 14b may submit requests for web pages and other web content using outgoing channel 30b and web media server 14b may communicate notifications and other information to browser 14b using incoming channel 32b. In one embodiment, the communication session between browser 12b and web media server 14b may be established over a firewall or other security measure 25b. Ex. 1006, ¶[0021]. Browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages. For example, browsers 12 may be associated with any device, application, hardware, and/or software for displaying one or more types of media. Browsers 12 may include analog,

Claim No.	Claim	Prior Art Analysis
		digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application. Furthermore, browsers 12 may be compatible with any suitable operating system according to particular needs. Reference to a browser 12 is meant to include reference to a user of browser 12, reference to a device including browser 12, reference to a user interface of browser 12, or any other suitable references as appropriate. A user of browser 12 may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12. Ex. 1006, ¶[0015]. <i>A POSITA would have been motivated to combine Wang’s teachings of a notification to “individual session destinations” to Prajapat’s “browser.” Incorporating standard web software functionality, such as requesting a web page by a web browser and transmitting that information (i.e., a notification) to a server, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.</i>
1[g]	wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the	<i>Prajapat in view of Wang discloses that the information related to the shared web browsing interaction is to be processed by a browser of the invitee device and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i>

Claim No.	Claim	Prior Art Analysis
	invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;	<i>Prajapat discloses wherein the information related to the shared web browsing interaction is to be processed by a browser of the invitee device.</i> FIG. 1 illustrates an example communication system 10 operable to provide peer-to-peer dynamic web page sharing. Communication system 10 includes browsers 12, web media servers 14a and 14b coupled via network 16, and web content server 18 coupled to web media server 14a via link 20. In general, web media servers 14 allow browser 12a to co-browse one or more web pages with browser 12b. The term “co-browse” may include one or more of the following situations: browser 12a and browser 12b display the same web pages at substantially the same time; browser 12a may alter web pages and browser 12b may view those alterations; browser 12b may alter web pages and browser 12a may view those alterations; or any other suitable situations. In one embodiment, system 10 is implemented to enable co-browsing in a call center environment such as a customer service environment. It should be understood, however, that system 10 may be implemented in any suitable environment where co-browsing may be desired. Ex. 1007, ¶[0012]. <i>A POSITA would understand that the ability to display or alter web pages, and to view those alterations, necessarily requires the browser to process shared interactions.</i> <i>Prajapat further discloses an invitee device enabled to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i>

Claim No.	Claim	Prior Art Analysis
		Browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages. For example, browsers 12 may be associated with any device, application, hardware, and/or software for displaying one or more types of media. Browsers 12 may include analog, digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application. Furthermore, browsers 12 may be compatible with any suitable operating system according to particular needs. Reference to a browser 12 is meant to include reference to a user of browser 12, reference to a device including browser 12, reference to a user interface of browser 12, or any other suitable references as appropriate. A user of browser 12 may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12. Ex. 1007, ¶[0015]. FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12 a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a

Claim No.	Claim	Prior Art Analysis
		and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. <i>A POSITA would have understood that when “browser 12a” registers with a “web media server 14a,” and shares a web page to “other browsers 12,” this comprises enabling an invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses that the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.”</i>

Claim No.	Claim	Prior Art Analysis
		Web media server 14a may locate the appropriate web content server 18 that includes the web page requested by browser 12a. For example, browser 12a may submit a web site address to web media server 14a, and web media server 14a may locate web content server 18 using the web site address. Ex. 1006, ¶[0023]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the client devices sharing the web page. Ex. 1006, ¶[0043]. In an illustrative virtual shopping system including the collaboration system of the present invention, the same web page can be browsed from a plurality of different terminal

Claim No.	Claim	Prior Art Analysis
		devices. When one customer changes the web page, this causes the other customers' browsers to follow suit. Ex. 1006, ¶[0014]. <i>A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with integration and synchronization functionality to Prajapat's "web media server" to allow a "browser 12a" to share web pages with other users participating in the session, because it would be a combination of prior art elements according to known methods to yield predictable results.</i>
1[h]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device, and	<i>Prajapat in view of Wang discloses a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.</i> <i>Prajapat discloses wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device.</i> Browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages. For example, browsers 12 may be associated with any device, application, hardware, and/or software for displaying one or more types of media. Browsers 12 may include analog, digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application. Furthermore, browsers 12 may be

Claim No.	Claim	Prior Art Analysis
		compatible with any suitable operating system according to particular needs. Reference to a browser 12 is meant to include reference to a user of browser 12, reference to a device including browser 12, reference to a user interface of browser 12, or any other suitable references as appropriate. A user of browser 12 may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12. Ex. 1006, ¶[0015]. Browser 12a may submit a request to web content server 18 for one or more web pages using link 42a, for example. Links 42 may include an HTTP link or any other suitable type of link. The request may be submitted in any suitable format such as HTTP. Web content server 18 may return the requested web page to browser 12a. Browser 12a may communicate the URL or other suitable information regarding the requested web page to web media server 14a. Web media server 14a may communicate the URL and any other suitable information to web media server 14b, using media session 28 for example. Web media server 14b may communicate the URL and any other suitable information to browser 12b. Browser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested. Ex. 1007, ¶[0043]. <i>Prajapat further discloses transmitting the information in response to receiving the information related to the shared web browsing interaction from the host device.</i>

Claim No.	Claim	Prior Art Analysis
		Browser 12a may submit a request to web content server 18 for one or more web pages using link 42a, for example. Links 42 may include an HTTP link or any other suitable type of link. The request may be submitted in any suitable format such as HTTP. Web content server 18 may return the requested web page to browser 12a. Browser 12a may communicate the URL or other suitable information regarding the requested web page to web media server 14a. Web media server 14a may communicate the URL and any other suitable information to web media server 14b, using media session 28 for example. Web media server 14b may communicate the URL and any other suitable information to browser 12b. Browser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested. Ex. 1007, ¶[0043]. <i>A POSITA would have understood that a “communication session between web media server 14b and browser 12b” includes transmission of “suitable information regarding the requested web page.” This comprises a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses the “server apparatus” comprises means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as</i>

Claim No.	Claim	Prior Art Analysis
		<i>well as means for “synchronizing the client devices in the collaboration environment.”</i> The present invention also includes a collaboration system for enabling client devices to collaborate with one another through a network. The system comprises: a plurality of client devices individually connected to the network; and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a collaboration environment common to the plurality of client devices. The server apparatus comprises: means for providing a group session formed by integrating communication sessions among the plurality of client devices; and means for synchronizing the client devices in the collaboration environment. Each of the client devices includes means for displaying the synchronization status among the plurality of client devices. In a preferred embodiment, the collaboration system of the present invention is suitable for use as a virtual shopping system. Ex. 1006, ¶[0023]. FIG. 2 is a block diagram that illustrates the structure of the client device 12a and the server apparatus 14. As shown in FIG. 2, the client device 12a and the server apparatus 14 communicate through the network 16 using a protocol such as TCP/IP. The client device 12a includes browser means 20, page navigation means 22, synchronization control means 24, and mutual communication means 26. The page navigation means 22 includes initiative transfer means 28, and allows the client device 12a to access the server

Claim No.	Claim	Prior Art Analysis
		apparatus 14 directly and to acquire a web page when the client device 12a has ownership of the initiative of web page operation. In response to an instruction from a customer, the initiative transfer means 28 transmits, to the server apparatus 14, an HTTP request to transfer ownership of the initiative, and allows the server apparatus 14 to transfer ownership of the initiative of the web page operation to another client device. Immediately thereafter, snapshot data of the web page changed by the other client device is transmitted from the server apparatus 14 to the client device which has lost the initiative, thus making it possible to share the web page. Ex. 1006, ¶[0041]. <i>A POSITA would have been motivated to combine Wang’s teachings of a “page navigation means” to Prajapat’s “group-surfing server.” Incorporating standard web software functionality, such as transmitting information from a server (i.e., a URL) to a web browser that would receive and process that information to request a web page, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.</i>
1[i]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web	<i>Prajapat in view of Wang discloses an invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> <i>Prajapat discloses wherein the invitee device retrieves data from the website server in response to</i>

Claim No.	Claim	Prior Art Analysis
	browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and	<i>receiving the information related to the shared web browsing interaction from the synchronization server.</i> Browser 12a may submit a request to web content server 18 for one or more web pages using link 42a, for example. Links 42 may include an HTTP link or any other suitable type of link. The request may be submitted in any suitable format such as HTTP. Web content server 18 may return the requested web page to browser 12a. Browser 12a may communicate the URL or other suitable information regarding the requested web page to web media server 14a. Web media server 14a may communicate the URL and any other suitable information to web media server 14b, using media session 28 for example. Web media server 14b may communicate the URL and any other suitable information to browser 12b. Browser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested. Ex. 1007, ¶[0043]. <i>Prajapat discloses that the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web

Claim No.	Claim	Prior Art Analysis
		media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. Via outgoing channel 30a or in any other suitable manner, web media server 14a may receive requests from browser 12a for one or more web pages. For example, browser 12a may submit requests for one or more web pages by communicating a request to web media server 14a for a particular web site using the uniform resource locator (URL) of the web site. As discussed above, the request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that

Claim No.	Claim	Prior Art Analysis
		may be required to properly render the web page such as session information, cookies, parameters to send to the web content server 18 associated with the requested web page, or any other suitable information. In one embodiment, web media server 14a may retrieve any suitable information from browser 12a using a signed Applet, plugin, or by other suitable means. Web media server 14a may derive any suitable information regarding browser 12a during a session with web content server 18. Ex. 1007, ¶[0022] FIG. 3 illustrates an example communication system 40 operable to provide peer-to-peer simple web page sharing. System 40 includes browsers 12, web media servers 14, and web content server 18. In certain embodiments, system 40 includes firewalls or other security measures 25. In operation of system 40, browser 12a may request a web page sharing session with one or more other browsers 12 (in this example, browser 12b) and may submit this request to web media server 14a. Web media server 14a may locate the web media server associated with browser 12b in a substantially similar manner to that described above with reference to FIGS. 1 and 2. In one embodiment in which web media servers 14 are SIP endpoints, web media server 14a may locate web media server 14b using presence functionality or a SIP registrar/location function of SIP network 16 such as SIP softswitch, for example. In one embodiment, web media servers 14 are already registered with SIP network 16. Web media server 14a may establish a signaling session 26 with web media server 14b using network 16. In an

Claim No.	Claim	Prior Art Analysis
		embodiment in which network 16 is a SIP network, signaling session 26 may be a SIP signaling session. In one embodiment, once web media servers 14 have found each other using network 16, the established signaling session 26 is a direct connection between web media servers 14. Ex. 1007, ¶[0041]. <i>A POSITA would have understood that when a “browser 12a” enters information into a presented web page, via a “web media server 14a,” that is retrieved from “other browsers 12,” this comprises an invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses that the “server apparatus” comprises a means for “providing a group session formed by integrating communication sessions among the plurality of client devices,” as well as means for “synchronizing the client devices in the collaboration environment.”</i> The present invention also includes a collaboration system for enabling client devices to collaborate with one another through a network. The system comprises: a plurality of client devices individually connected to the network; and a server apparatus for receiving requests from the client devices, responding to the client devices, and providing a collaboration environment common to the plurality of client

Claim No.	Claim	Prior Art Analysis
		devices. The server apparatus comprises: means for providing a group session formed by integrating communication sessions among the plurality of client devices; and means for synchronizing the client devices in the collaboration environment. Each of the client devices includes means for displaying the synchronization status among the plurality of client devices. In a preferred embodiment, the collaboration system of the present invention is suitable for use as a virtual shopping system. Ex. 1006, ¶[0023]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the client devices sharing the web page. Ex. 1006, ¶[0043].

Claim No.	Claim	Prior Art Analysis
		<i>A POSITA would have been motivated to combine Wang’s teachings of a “server apparatus” with integration and synchronization functionality to Prajapat’s “server.” Incorporating standard web software functionality, such as transmitting information from a server (i.e., a URL) to a web browser or server that would receive and process that information to request a web page, into Prajapat’s disclosed “browser” would allow Prajapat to perform the functions described in Prajapat’s disclosure.</i>
1[j]	receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.	<i>Prajapat in view of Wang discloses receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> <i>Prajapat discloses receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> Browser 12a may submit a request to web content server 18 for one or more web pages using link 42a, for example. Links 42 may include an HTTP link or any other suitable type of link. The request may be submitted in any suitable format such as HTTP. Web content server 18 may return the requested web page to browser 12a. Browser 12a may communicate the URL or other suitable information regarding the requested web page to web media server 14a. Web media server 14a may communicate the URL and any other

Claim No.	Claim	Prior Art Analysis
		suitable information to web media server 14b, using media session 28 for example. Web media server 14b may communicate the URL and any other suitable information to browser 12b. Browser 12b may use the URL and any other suitable information to request from web content server 18 the web page that browser 12a requested. Ex. 1007, ¶[0043]. <i>A POSITA would have understood that when “browser 12a” presents web pages to “browser 12b,” via the “web media server” this comprises receiving, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> <i>In addition, to the extent Prajapat did not disclose this limitation, Wang discloses the “server apparatus” comprises means that “receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device,” as well as means for “synchronizing the client devices in the collaboration environment.”</i> FIG. 5 is a flowchart that shows the processing of the server apparatus that allows the client devices to share the web page after the plurality of sessions are established. In Step S100, the server apparatus receives a request for a new web page from the first client device. In Step S102, the server apparatus reads the new web page into the cache memory, sends the web page data to the PNC 40, and allows the PNC 40 to use the

Claim No.	Claim	Prior Art Analysis
		data for processing the web page. In Step S104, the server apparatus receives, from the second client device, a page synchronization request commanding the page to be synchronized with a request from the first client device, for example, “page synchro request.” The session identification value SESSION B is included in the “page synchro request,” and is configured to specify the session and a subordinate-superior relationships among the sessions. Ex. 1006, ¶[0054]. The SSC 38 enables the plurality of client devices sharing the web page to establish unique individual sessions (described below) among themselves. When the web page is changed by a customer, the PNC 40 executes the following processing to display the web page on the client devices of the other customers. First, the PNC 40 creates snapshot data by compiling a plurality of files for configuring the web page and creates an identification value for designating the snapshot data uniquely. Subsequently, the PNC 40 stores the snapshot data and the identification value in the server apparatus 14 in association with each other. The CSC 42 gives the web page or the snapshot data to the client devices among which the web page is to be shared, so that the same web page is displayed synchronously on the plurality of different client devices. Further, the RTC 44 may provide a chat function that enables real-time communication among the customers using the client devices sharing the web page. Ex. 1006, ¶[0043].

Claim No.	Claim	Prior Art Analysis
		The page navigation means 22, synchronization control means 24, and mutual communication means 26 of the client device 12a individually receive information from the respective control units included in the WPCS 36 of the server apparatus 14, extract an applicable URL address and a command from the received HTTP response, and allow the address and the command to be displayed on the client devices by use of the browser means 20. The client device 12a may be enabled to perform a shopping operation desired by the customer in response to the HTTP response from the server apparatus 14. In the present invention, the above-described page navigation means 22, synchronization control means 24, and mutual communication means 26 can be realized by executing programs described in a language such as, for example, Java, Java Applet, Java Beans, or Java Script. Ex. 1006, ¶[0044]. <i>A POSITA would have been motivated to combine Wang's teachings of a "server apparatus" with synchronization functionality between a "first client device" and "second client device," to Prajapat's "server." Incorporating standard web software functionality, such as receiving and processing information to request a web page, into Prajapat's disclosed "browser" would allow Prajapat to perform the functions described in Prajapat's disclosure.</i>
2	The method of claim 1, further comprising receiving a notification	<i>Prajapat discloses receiving a notification message indicative of the invitee device joining the synchronized browsing session.</i>

Claim No.	Claim	Prior Art Analysis
	message indicative of the invitee device joining the synchronized browsing session.	<i>See</i> claim 1; <i>see also</i> Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054]. Prajapat discloses receiving a notification message indicative of the invitee device joining the synchronized browsing session. FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a

Claim No.	Claim	Prior Art Analysis
		may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. A POSITA would have understood that a “other browser 12” joining a co-browsing session in response to “a request to co-browse” comprises receiving a notification message indicative of the invitee device joining the synchronized browsing session.
3	The method of claim 1, further comprising activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.	<i>Prajapat in view of Wang discloses activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate

Claim No.	Claim	Prior Art Analysis
		notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. <i>In addition, to the extent that Prajapat did not explicitly disclose “activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session,” Wang discloses an invitation that comprises a hyperlink associated with the request to establish synchronized browsing session. Wang discloses that upon receiving the “Invitation acknowledgment, myURL address” the “second client device accesses the designated URL address.”</i> As shown in FIG. 3, at T1, a customer connects to the server apparatus from a first client device. The server apparatus sets up an individual session with the first client device with an identification value SESSION A at T2. The server apparatus transmits an HTTP response to the first client at T3, establishes a session therewith (T4), and stores values of the SESSION A as an SSID table (described below) in an appropriate storage device. At T4, the first client device transmits a message

Claim No.	Claim	Prior Art Analysis
		inviting the other client devices to the shopping session, for example the message “Add Others” and a message such as “Invitee” including data designating a person to be invited. At T6, the server apparatus receives a request including the messages of “Add Others” and “Invitee.” Ex. 1006, ¶[0047]. <i>A POSITA would also have understood that Prajapat’s disclosure of a desktop “icon” that initiates a “communication session” could be modified to include the “myURL address” of Wang, which comprises activating a hyperlink on a website to initialize the sending of the request to establish the synchronized browsing session.</i>
4	The method of claim 1, wherein the invitation comprises a hyperlink for joining the synchronized browsing session.	<i>Prajapat in view of Wang discloses an invitation comprises a hyperlink for joining the synchronized browsing session.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> <i>For the reasons stated above in Ground II element 1[d], Prajapat in view of Wang discloses wherein the invitation comprises a hyperlink for joining the synchronized browsing session.</i> A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b. Although only one browser 12b is illustrated and described, the present invention contemplates browser 12

Claim No.	Claim	Prior Art Analysis
		a sharing web pages with any number of other browsers 12 (i.e. browser 12b, browser 12c, browser 12d, and so on). To begin a co-browsing session, the user of browser 12a may need to establish a communication session with an associated web media server 14a. For example, the user of browser 12a may click on a desktop icon associated with browser 12a to establish a communication session with web media server 14a. In another embodiment, browser 12a may already have an established communication session with web media server 14a. In certain embodiments, the communication session between browser 12a and web media server 14a includes an outgoing channel 30a and an incoming channel 32a. Outgoing channel 30a may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel. Incoming channel 32a may include a LongPoll event channel such as that described in U.S. patent application Ser. No. 08/352,764 entitled “_____” and filed _____ with the U.S. Patent and Trademark Office, or any other suitable type of channel. For example, browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. In one embodiment, the communication session between browser 12a and web media server 14a may be established over a firewall or other security measure 25a. Outgoing channels 30 and incoming channels 32 may not necessarily include “always on” links. For example, in certain embodiments, outgoing channels 30 and incoming channels

Claim No.	Claim	Prior Art Analysis
		32 are established for intermittent communications such as packets. Ex. 1007, ¶[0016]. FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034].

Claim No.	Claim	Prior Art Analysis
		<i>A POSITA would have understood that Prajapat's disclosure of a "request to co-browse," which may "specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse" could be modified to include the "Invitation acknowledgment, myURL address" of Wang, which comprises an invitation comprises a hyperlink for joining the synchronized browsing session.</i>
5	The method of claim 1, wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.	<i>Prajapat discloses wherein the invitation is sent to the invitee device via: a social network communication; a news feed; an email message; an instant message communication; a micro-blogging communication; a text message communication; or other communication medium that would be suitable for transmitting the invitation.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b. Although only one browser 12b is illustrated and described, the present invention contemplates browser 12a sharing web pages with any number of other browsers 12 (i.e. browser 12b, browser 12c, browser 12d, and so on). To begin a co-browsing session, the user of browser 12a may need to establish a communication session with an associated web media server 14a. For example, the user of browser 12a

Claim No.	Claim	Prior Art Analysis
		may click on a desktop icon associated with browser 12a to establish a communication session with web media server 14a. In another embodiment, browser 12a may already have an established communication session with web media server 14a. In certain embodiments, the communication session between browser 12a and web media server 14a includes an outgoing channel 30a and an incoming channel 32a. Outgoing channel 30a may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel. Incoming channel 32a may include a LongPoll event channel such as that described in U.S. patent application Ser. No. 08/352,764 entitled “_____” and filed _____ with the U.S. Patent and Trademark Office, or any other suitable type of channel. For example, browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. In one embodiment, the communication session between browser 12a and web media server 14a may be established over a firewall or other security measure 25a. Outgoing channels 30 and incoming channels 32 may not necessarily include “always on” links. For example, in certain embodiments, outgoing channels 30 and incoming channels 32 are established for intermittent communications such as packets. Ex. 1007, ¶[0016]. <i>A POSTIA would understand that sending a request to co-browse via email is a “communication medium</i>

Claim No.	Claim	Prior Art Analysis
		<i>that would be suitable for transmitting” the invitation to an invitee device.</i>
6	The method of claim 1, wherein information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.	<i>Prajapat discloses that information related to the shared web browsing interactions comprises a URL, form data, cookie information, or script data.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> In a request to co-browse or otherwise, browser 12a may specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, a user of browser 12a may submit a request to co-browse with chachi@happydaycompany.com who is associated with browser 12b. Browser 12a may also submit requests for one or more web pages, for example by requesting a particular web site, to web media server 14a. The request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page on browser 12a, such as session information, cookies, parameters to send to web content server 18, and any other suitable information. Ex. 1007, ¶[0017].
7	The method of claim 1, wherein the session identifier associated with	<i>Prajapat discloses a session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; MAC address; or other unique indicator such that</i>

Claim No.	Claim	Prior Art Analysis
	the established synchronized browsing session comprises: an identification number; a passkey; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.	<i>the synchronized browsing session may be identified for joining the session.</i> See claim 1; <i>see also</i> Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054]. Via outgoing channel 30a or in any other suitable manner, web media server 14a may receive requests from browser 12a for one or more web pages. For example, browser 12a may submit requests for one or more web pages by communicating a request to web media server 14a for a particular web site using the uniform resource locator (URL) of the web site. As discussed above, the request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page such as session information, cookies, parameters to send to the web content server 18 associated with the requested web page, or any other suitable information. In one embodiment, web media server 14a may retrieve any suitable information from browser 12a using a signed Applet, plugin, or by other suitable means. Web media server 14a may derive any suitable information regarding browser 12a during a session with web content server 18. Ex. 1007, ¶[0022]. <i>A POSITA would have understood that when “browser 12” sends a “request for one or more web pages” containing “session information” this comprises a session identifier associated with the</i>

Claim No.	Claim	Prior Art Analysis
		<i>established synchronized browsing session comprises: an identification number; a passkey; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.</i>
8	The method of claim 1, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.	<i>Prajapat discloses a web browsing window is capable of accepting both shared and non-shared web browsing interactions.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> A user associated with browser 12a may desire to view one or more web pages. The user associated with browser 12a may also desire to co-browse or share the one or more web pages or other web content with another user associated browser 12b. Although only one browser 12b is illustrated and described, the present invention contemplates browser 12a sharing web pages with any number of other browsers 12 (i.e. browser 12b, browser 12c, browser 12d, and so on). To begin a co-browsing session, the user of browser 12a may need to establish a communication session with an associated web media server 14a. For example, the user of browser 12a may click on a desktop icon associated with browser 12a to establish a communication session with web media server 14a. In another embodiment, browser 12a may already have an established communication session with web media server 14a. In certain embodiments, the communication session between browser 12a and web media server

Claim No.	Claim	Prior Art Analysis
		14a includes an outgoing channel 30a and an incoming channel 32a. Outgoing channel 30a may include a hypertext transfer protocol (HTTP) channel or any other suitable type of channel. Incoming channel 32a may include a LongPoll event channel such as that described in U.S. patent application Ser. No. 08/352,764 entitled “_____” and filed _____ with the U.S. Patent and Trademark Office, or any other suitable type of channel. For example, browser 14a may submit requests for web pages and other web content using outgoing channel 30 a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. In one embodiment, the communication session between browser 12a and web media server 14a may be established over a firewall or other security measure 25a. Outgoing channels 30 and incoming channels 32 may not necessarily include “always on” links. For example, in certain embodiments, outgoing channels 30 and incoming channels 32 are established for intermittent communications such as packets. Ex. 1007, ¶[0016]. <i>A POSITA would have understood that when a “browser 12a” desires to “share” web pages to “another user associated browser 12b,” this comprises a web browsing window is capable of accepting both shared and non-shared web browsing interactions.</i>
9	The method of claim 1, wherein web browsing interactions of	<i>Prajapat discloses wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a</i>

Claim No.	Claim	Prior Art Analysis
	the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.	<i>non-shared web browser window that is separate from the web browsing window.</i> See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054]. FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other

Claim No.	Claim	Prior Art Analysis
		browsers 12 according to particular needs. Ex. 1007, ¶[0034]. <i>A POSITA would understand that when a “user” desires to “share the or more web pages” to another, the user must necessarily first view the web pages in a non-shared browser window prior to deciding whether to share that web page.</i>
10	The method of claim 1, receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.	<i>Prajapat discloses receiving, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.</i> <i>See claim 1; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054].</i> In a request to co-browse or otherwise, browser 12a may specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, a user of browser 12a may submit a request to co-browse with chachi@happydaycompany.com who is associated with browser 12b. Browser 12a may also submit requests for one or more web pages, for example by requesting a particular web site, to web media server 14a. The request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page on browser 12a, such as

Claim No.	Claim	Prior Art Analysis
		session information, cookies, parameters to send to web content server 18, and any other suitable information. Ex. 1007, ¶[0017].
11[pre]	An apparatus for establishing a synchronized browsing session between a host device and an invitee device, comprising:	<i>Prajapat in view of Wang discloses an apparatus for establishing a synchronized browsing session between a host device and an invitee device.</i> <i>See claim limitation 1[a]; see also Ex. 1007, ¶¶[0012], [0016], Fig. 2; Ex. 1006, ¶[0020].</i>
11[a]	a network interface adapted to communicate with a synchronization server; and	<i>Prajapat discloses a network interface adapted to communicate with a synchronization server.</i> <i>See claim limitation 1[a]; see also Ex. 1007, ¶¶[0012], [0016], Fig. 2.</i> Browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages. For example, browsers 12 may be associated with any device, application, hardware, and/or software for displaying one or more types of media. Browsers 12 may include analog, digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software applications, or any other suitable device or application. Furthermore, browsers 12 may be compatible with any suitable operating system according to particular needs. Reference to a browser 12 is meant to include reference to a user of browser 12, reference to a device including browser 12, reference to a user interface of browser 12, or any other suitable

Claim No.	Claim	Prior Art Analysis
		references as appropriate. A user of browser 12 may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12. Ex. 1007, ¶[0015].
11[b]	a processor adapted to:	<i>Prajapat discloses a processor.</i> Browsers 12, web media servers 14, and web content server 18 may each comprise an appropriate combination of hardware and software associated with one or more computers at one or more locations. These components of system 10 may share data storage, communications, or other resources according to particular needs. For example, functionality described in connection with browser 12a, web media server 14a, and web content server 18 may be provided using a single computer system or other device, which in a particular embodiment might include a single server system. Furthermore, functionality described in connection with browsers 12, web media servers 14, and web content server 18 may be provided using any suitable software components. Each computer system may include one or more suitable input devices, output devices, mass storage media, processors, memory, or other components for receiving, processing, storing, and communicating information according to the operation of system 10. In a distributed embodiment of system 10, particular components of system 10 may be communicatively coupled to one another using one or more local area networks (LANs), metropolitan area networks (MANs), wide area networks (WANs), a global

Claim No.	Claim	Prior Art Analysis
		computer network such as the Internet, or any other wireline, optical, wireless, or other links. Ex. 1007, ¶[0014].
11[c]	send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface;	<i>Prajapat in view of Wang discloses a processor adapted to disclose send a request from the host device to establish the synchronized browsing session to the synchronization server via the network interface.</i> See claim limitations 1[pre]-[a]; see also Ex. 1007, ¶¶[0012], [0016], Fig. 2; Ex. 1006, ¶¶[0018-20].
11[d]	receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session;	<i>Prajapat discloses a processor adapted to receive a confirmation message from the synchronization server including a session identifier generated by the synchronization server, wherein the session identifier is associated with the host device and the established synchronized browsing session.</i> See claim limitations 1[pre], [b]; see also Ex. 1007, ¶¶[0012], [0016], [0022], Fig. 2.
11[e]	send an invitation from the host device	<i>Prajapat in view of Wang discloses a processor adapted to send an invitation from the host device to the invitee device to join the synchronized browsing</i>

Claim No.	Claim	Prior Art Analysis
	to the invitee device to join the synchronized browsing session, wherein the invitation includes the session identifier;	<i>session, wherein the invitation includes the session identifier.</i> <i>See claim limitation 1[c]; see also Ex. 1007, ¶[0017]; Ex. 1006, ¶[0020].</i>
11[f]	record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction;	<i>Prajapat discloses a processor adapted to record a shared web browsing interaction responsive to determining that a web browsing interaction of the host device within a web browsing window is a sharable web browsing interaction.</i> <i>See claim limitation 1[d]; see also Ex. 1007, ¶¶[0016], [0034].</i>
11[g]	send a request for webpage content to a website server independent of the synchronization server;	<i>Prajapat in view of Wang discloses a processor adapted to send a request for webpage content to a website server independent of the synchronization server.</i> <i>See claim limitations 1[e]; see also Ex. 1007, ¶¶[0024], [0041]; Ex. 1006, ¶¶[0021], [0041].</i>
11[h]	transmit, subsequent to sending the request for webpage content to the website server,	<i>Prajapat in view of Wang discloses a processor adapted to transmit, subsequent to sending the request for webpage content to the website server, information related to the shared web browsing interaction to the synchronization server.</i>

Claim No.	Claim	Prior Art Analysis
	information related to the shared web browsing interaction to the synchronization server,	See claim limitations 1[b], [e]-[f]; <i>see also</i> Ex. 1007, ¶¶[0012], [0022], [0024], [0041]; Ex. 1006, ¶¶[0015], [0021], [0041].
11[i]	wherein the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device;	<i>Prajapat in view of Wang discloses that the information related to the shared web browsing interactions is to be processed by an application of the invitee device, and enables the invitee device to generate a request to retrieve a substantially the same webpage content as the request for the webpage content from the host device.</i> See claim limitations 1[pre], [g]; <i>see also</i> Ex. 1007, ¶¶[0012], [0015], [0034]; Ex. 1006, ¶¶[0014], [0018], [0021], [0041].
11[j]	wherein the synchronization server transmits the information related to the shared web browsing interaction to the invitee device in	<i>Prajapat in view of Wang discloses a synchronization server transmits the information related to the shared web browsing interaction to the invitee device in response to receiving the information related to the shared web browsing interaction from the host device.</i>

Claim No.	Claim	Prior Art Analysis
	response to receiving the information related to the shared web browsing interaction from the host device, and	<i>See claim limitations 1[g]-[h]; see also Ex. 1007, ¶¶[0012], [0015], [0034]; Ex. 1006, ¶¶[0018], [0023], [0041].</i>
11[k]	wherein the invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction; and	<i>Prajapat in view of Wang discloses an invitee device retrieves data from the website server in response to receiving the information related to the shared web browsing interaction from the synchronization server, the data associated with the webpage content requested by the host device and the information related to the shared web browsing interaction.</i> <i>See claim limitations 1[[pre], [b], [e], [g], [i]; see also Ex. 1007, ¶¶[0012], [0016], [0022], [0024], [0034], [0041], Fig. 2; Ex. 1006, ¶¶[0018], [0023], [0043].</i>
11[l]	receive, responsive to sending the request for	<i>Prajapat in view of Wang discloses a processor adapted to receive, responsive to sending the request for webpage content to the website server and after transmitting the information related to the shared</i>

Claim No.	Claim	Prior Art Analysis
	webpage content to the website server and after transmitting the information related to the shared web browsing interaction to the synchronization server, the requested webpage content from the website server.	<i>web browsing interaction to the synchronization server, the requested webpage content from the website server.</i> See claim limitations 1[h], [j]; see also Ex. 1007, ¶¶[0015], [0043]; Ex. ¶¶[0018], [0021], [0023], [0054].
12	The apparatus of claim 11, further comprising a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.	<i>Prajapat discloses a user interface adapted to initiate the processor to send the request in response to a user input, wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.</i> See claims 11, 3, and 4; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2; Ex. 1006, ¶¶[0014-16], [0018-21], [0023], [0041], [0043-44], [0047], [0054]. Browsers 12 may include any suitable interface for submitting requests for and displaying media such as web pages. For example, browsers 12 may be associated with any device, application, hardware, and/or software for displaying one or more types of media. Browsers 12 may include analog, digital, or Internet protocol (IP) telephones, personal computers, video-conferencing equipment, wireless communication devices, personal digital assistants (PDAs), software

Claim No.	Claim	Prior Art Analysis
		applications, or any other suitable device or application. Furthermore, browsers 12 may be compatible with any suitable operating system according to particular needs. Reference to a browser 12 is meant to include reference to a user of browser 12, reference to a device including browser 12, reference to a user interface of browser 12, or any other suitable references as appropriate. A user of browser 12 may include a computer program or other suitable software for automatically communicating with one or more other users of other browsers 12. Ex. 1007, ¶[0015] Browsers 12, web media servers 14, and web content server 18 may each comprise an appropriate combination of hardware and software associated with one or more computers at one or more locations. These components of system 10 may share data storage, communications, or other resources according to particular needs. For example, functionality described in connection with browser 12a, web media server 14a, and web content server 18 may be provided using a single computer system or other device, which in a particular embodiment might include a single server system. Furthermore, functionality described in connection with browsers 12, web media servers 14, and web content server 18 may be provided using any suitable software components. Each computer system may include one or more suitable input devices, output devices, mass storage media, processors, memory, or other components for receiving, processing, storing, and communicating information according to the operation of system 10. In a distributed

Claim No.	Claim	Prior Art Analysis
		embodiment of system 10, particular components of system 10 may be communicatively coupled to one another using one or more local area networks (LANs), metropolitan area networks (MANs), wide area networks (WANs), a global computer network such as the Internet, or any other wireline, optical, wireless, or other links. Ex. 1007, ¶[0014]. <i>Prajapat in view of Wang discloses wherein the user input comprises activation of a hyperlink on a website or third party application for initializing the sending of the request to establish the synchronized browsing session.</i> FIG. 2 illustrates an example method for peer-to-peer dynamic web page sharing. At step 100, browser 12a establishes a communication session with its associated web media server 14a. This may include clicking on an icon on a desktop of browser 12a to initiate page sharing. However, in certain embodiments, browser 12a may be registered with web media server 14a without actually sharing web pages with another browser 12. In certain embodiments, the communication session between browser 12a and web media server 14a includes outgoing channel 30a and incoming channel 32a. Browser 14a may submit requests for web pages and other web content using outgoing channel 30a and web media server 14a may communicate notifications and other information to browser 14a using incoming channel 32a. At step 102, browser 12a submits to web media server 14a one or more names or other identifiers of other browsers 12 with which browser 12a

Claim No.	Claim	Prior Art Analysis
		desires to co-browse. For example, browser 12a may submit a request to co-browse with chachi@happydaycompany.com. For purposes of this description, it will be assumed that the browser 12 with which browser 12a desires to share is browser 12b; however, as discussed above, browser 12a may share with any suitable number of other browsers 12 according to particular needs. Ex. 1007, ¶[0034]. <i>A POSITA would also have understood that Prajapat's disclosure of a desktop "icon" that initiates a "communication session" could be modified to include the "myURL address" of Wang, which meets this limitation.</i>
13	The apparatus of claim 11, wherein the session identifier associated with the established synchronized browsing session comprises: - an identification number; - a passkey; - URL; - MAC address; - or other unique indicator such that the	<i>Prajapat discloses a session identifier associated with the established synchronized browsing session comprises: an identification number; a passkey; URL; MAC address; or other unique indicator such that the synchronized browsing session may be identified for joining the session.</i> <i>See claims 11 and 7; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2.</i>

Claim No.	Claim	Prior Art Analysis
	synchronized browsing session may be identified for joining the session.	
14	The apparatus of claim 11, wherein the web browsing window is capable of accepting both shared and non-shared web browsing interactions.	<i>Prajapat discloses a web browsing window that is capable of accepting both shared and non-shared web browsing interactions.</i> See claims 11 and 8; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2.
15	The apparatus of claim 14, wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.	<i>Prajapat discloses wherein web browsing interactions of the host device determined to be non-shared web browsing interactions are depicted in a non-shared web browser window that is separate from the web browsing window.</i> See claims 11 and 9; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2.
16	The apparatus of claim 11, wherein the processor is	<i>Prajapat discloses a processor is further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a</i>

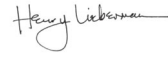
Claim No.	Claim	Prior Art Analysis
	further adapted to: receive, from the synchronization server, a reply message, wherein the reply message includes an adcode, an adcode identification code, XML, a modified URL address, cookie information, form data, script data, user input information, or attached files.	<i>modified URL address, cookie information, form data, script data, user input information, or attached files.</i> See claim 11; see also Ex. 1007, ¶¶[0012], [0015-17], [0020], [0022], [0024], [0034], [0041], [0043], Fig. 2. In a request to co-browse or otherwise, browser 12a may specify one or more names or other identifiers of other browsers 12 with which browser 12a desires to co-browse. For example, a user of browser 12a may submit a request to co-browse with chachi@happydaycompany.com who is associated with browser 12b. Browser 12a may also submit requests for one or more web pages, for example by requesting a particular web site, to web media server 14a. The request for a web page may specify the web page to retrieve and display, as well as any other suitable information. For example, the request for the web page may include information that may be required to properly render the web page on browser 12a, such as session information, cookies, parameters to send to web content server 18, and any other suitable information. Ex. 1007, ¶[0017].

X. CONCLUSION

294. For the reasons presented above, it is my opinion that the applied references render obvious claims 1-16 of the '448 patent.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: December 16, 2022



Henry A. Lieberman