

Petition for *Inter Partes* Review of U.S. Patent No. 11,106,744
Claims 1–20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

X CORP.,
Petitioner

v.

SEARCH AND SHARE TECHNOLOGIES, LLC,
Patent Owner

Case No. IPR2026-00235
U.S. Patent No. 11,106,744

PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 11,106,744

CHALLENGING CLAIMS 1–20
UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104

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PETITIONER’S EXHIBITS

Exhibit No.	DESCRIPTION
1001	U.S. Patent No. 11,106,744 (“’744 Patent”).
1002	Declaration of Dr. Loren G. Terveen
1003	U.S. Patent Publication No. 2006/0059134 to <i>Palmon</i> (“Palmon”).
1004	U.S. Patent Publication No. 2005/0234891 to <i>Walther</i> (“Walther”).
1005	U.S. Patent Publication No. 2005/256866 to <i>Lu</i> (“Lu”).
1006	U.S. Patent Publication No. 2009/0299824 to <i>Barnes Jr.</i> (“Barnes”).
1007	U.S. Patent Publication No. 2010/0011282 to <i>Dollard et al.</i> (“Dollard”).
1008	File History of U.S. Patent No. 11,106,744
1009	File History of U.S. Patent Application No. 15/142,479
1010	File History of U.S. Patent Application No. 13/420,503
1011	U.S. Patent No. 6,219,045 to <i>Leahy et al.</i> (“Leahy”).
1012	Comparison Between Claims of the ’744 Patent and Claims of the U.S. Patent Application No. 13/420,503, as filed.
1013	U.S. Patent No. 8,788,492 to Lu et al. (“ <i>Lu Patent</i> ”)
1014	File History of U.S. Patent Application No. 11/081,860 (“Walther Application”).
1015	U.S. Patent Publication No. 2006/0069699 to <i>Smadja et al.</i> (“Smadja”)

Throughout the Petition, all annotations, coloring, and emphases have been added unless indicated otherwise.

LISTING OF CLAIMS

[1Pre] A method comprising:

[1A] receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window, the identification of the first web content transmitted by the first user to the server computer via a user interface separate from the main browser window;

[1B] indexing, by the server computer, the first web content; and;

[1C] in response to receiving a search query from a web browser of a second client computer operated by a second user, transmitting, by the server computer, search results to the web browser of the second client computer, the search results comprising the first web content identified by the first user in a position relative to identifications of other web content received from other users.

[2] The method of claim 1, wherein the receiving of the identification of first web content further comprises receiving, by the server computer, a rating associated with the first web content from the first user.

[3] The method of claim 2, wherein the receiving of the identification of first web content further comprises receiving, by the server computer, ratings associated with the other web content from the other users.

[4] The method of claim 3, further comprising ranking, by the server computer, the first web content from the rating in relation to the ratings of the other web content received from the other users.

[5] The method of claim 2, wherein the rating associated with the first web content is selected from a group of rating types consisting of like, dislike, and neutral.

[6] The method of claim 1, wherein the indexing of the first web content further comprises receiving, by the server computer, keywords for the first web content.

[7] The method of claim 1, wherein the receiving of the identification of the first web content further comprises receiving, by the server computer from the first client computer, a comment on the first web content.

[8] The method of claim 1, wherein the first web content is same as the other web content.

[9] The method of claim 1, wherein the receiving of an identification of first web content further comprises receiving a rating on the first web content, wherein the rating is a score assigned by the user of the first client computer.

[10Pre] A computing device comprising:

[10A] at least one processor; and a storage medium tangibly storing thereon program logic configured to instruct the at least one processor to at least:

[10B] receive, from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window, the identification of the first web content transmitted by the first user via a user interface separate from the main browser window;

[10C] index the first web content; and

[10D] in response to receiving a search query from a web browser of a second client computer operated by a second user, transmit search results to the web browser of the second client computer, the search results comprising the first web content identified by the first user in a position relative to identifications of other web content received from other users.

[11] The computing device of claim 10, wherein the program logic configured to instruct the at least one processor to receive further comprises program logic to instruct the at least one processor to receive a rating associated with the first web content from the first user.

[12] The computing device of claim 10, wherein the program logic configured to instruct the at least one processor to receive further comprises program logic to instruct the at least one processor to receive ratings associated with the other web content from the other users.

[13] The computing device of claim 12, further comprising program logic configured to instruct the at least one processor to rank the first web content from the rating in relation to the ratings of the other web content received from the other users.

[14] The computing device of claim 11, wherein the rating associated with the first web content is selected from a group of rating types consisting of like, dislike, and neutral.

[15] The computing device of claim 10, wherein program logic configured to instruct the at least one processor to index further comprises program logic configured to instruct the at least one processor to receive keywords for the first web content.

[16] The computing device of claim 10, wherein the program logic configured to instruct the at least one processor to receive further comprises program logic to instruct the at least one processor to receive, from the first client computer, a comment on the first web content.

[17] The computing device of claim 10, wherein the first web content is the same as the other web content.

[18] The computing device of claim 10, wherein the program logic configured to instruct the at least one processor to receive further comprises program logic to

instruct the at least one processor to receive a rating on the first web content, wherein the rating is a score assigned by the user of the first client computer.

[19Pre] A non-transitory computer readable storage medium storing computer program instructions configured instruct a computer processor to perform at least:

[19A] receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window, and a user content created by the first user of the web browser;

[19B] indexing, by the server computer, the first web content based at least in part on the user content;

[19C] storing, by the server computer, the user content in association with the identification of the first web content; and

[19D] in response to receiving a search query from a web browser of a second client computer operated by a second user, transmitting, by the server computer, search results to the web browser of the second client computer,

[19E] the search results comprising the identification of the first web content and the user content associated with the first web content.

[20Pre] The non-transitory computer readable storage medium of claim 19,

[20A] wherein the user content including a comment on the first web content and a rating of the first web content by the first user; and

[20B] wherein the user content and the identification of the first web content are composed in a user interface separate from the main browser window for transmission to the server computer, while the web content is displayed in the main browser window.

Petition for *Inter Partes* Review of U.S. Patent No. 11,106,744
Claims 1–20

Petitioner respectfully requests *inter partes* review and cancellation of claims 1–20 in U.S. Patent No. 11,106,744 (“’744 Patent”).

I. MANDATORY NOTICES

A. Real Party-In-Interest (37 C.F.R. § 42.8(b)(1))

X Corp., the Petitioner, identifies itself as a real party in interest.

B. Related Matters (37 C.F.R. § 42.8(b)(2))

On September 25, 2025, Patent Owner Search and Share Technologies, LLC filed a patent infringement suit against Petitioner, asserting U.S. Patent Nos. 10,180,952; and **11,106,744**. *Search and Share Techs. v. X Corp.*, No. 1:25-CV-01540-RP (W.D. Tex.).

C. Lead And Back-up Counsel (37 C.F.R. § 42.8(b)(3))

Petitioner is filing a Power of Attorney appointing the practitioners associated with Customer Number 132,593. Petitioner designates the following lead and back-up counsel:

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II. FEES

Petitioner is concurrently electronically submitting the required fees for this Petition. The Board is authorized to charge Desmarais LLP's deposit account, No. 50-6822, for any fee deficiency.

III. CERTIFICATION OF GROUNDS FOR STANDING

Petitioner certifies that the '744 Patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting *inter partes* review.

IV. OVERVIEW OF CHALLENGE AND RELIEF REQUESTED

Under 37 C.F.R. §§ 42.22(a)(1) and 42.104(b)(1)-(2), Petitioner requests *inter partes* review and cancellation of Claims 1–20 of the '744 Patent.

A. Identification of Prior Art

The '744 Patent was filed on January 14, 2019, and claims priority to the Provisional Application No. 61/452,595, filed on March 14, 2011. EX1001, Cover. Accordingly, this Petition applies pre-AIA provisions of 35 U.S.C. §§ 102, 103.

The following references are pertinent to the grounds of unpatentability:

Pat. Pub. No.	Publication/ Priority Date	Prior Art Under At Least (35 U.S.C.)
US2006/0059134 (“Palmon”) (EX1003)	Published March 16, 2006	102(b)
US2005/0234891 (“Walther”) (EX1004)	Published October 20, 2005	102(b)
US2005/0256866 (“Lu”) (EX1005)	Published November 17, 2005	102(b)

B. Statutory Grounds of Unpatentability

Petitioner requests cancellation of Claims 1–20 under 35 U.S.C. §102 and §103 based on the following Grounds.

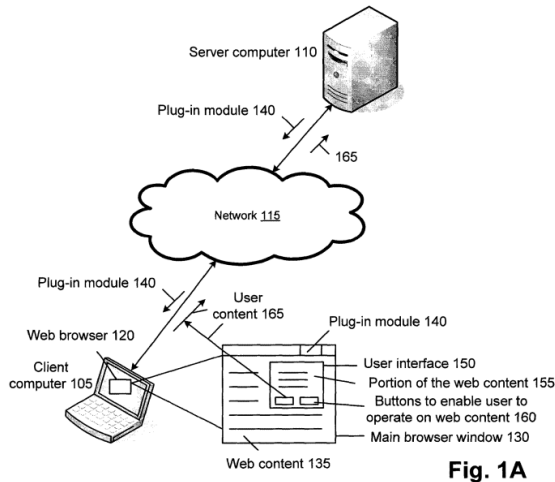
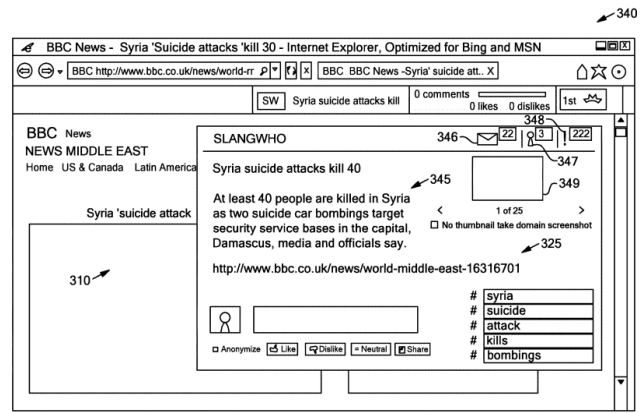
Ground	35 U.S.C.	Claims	References
I	§102	1-3, 5-6, 8-12, 14-15, 17-19	Palmon
II	§103	1-3, 5-6, 8-12, 14-15, 17-19	Palmon
III	§103	1-19	Palmon, Walther
IV	§103	19-20	Palmon, Walther, Lu

This Petition demonstrates that there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the challenged claims. 35 U.S.C. § 314(a).

V. OVERVIEW OF THE '744 PATENT

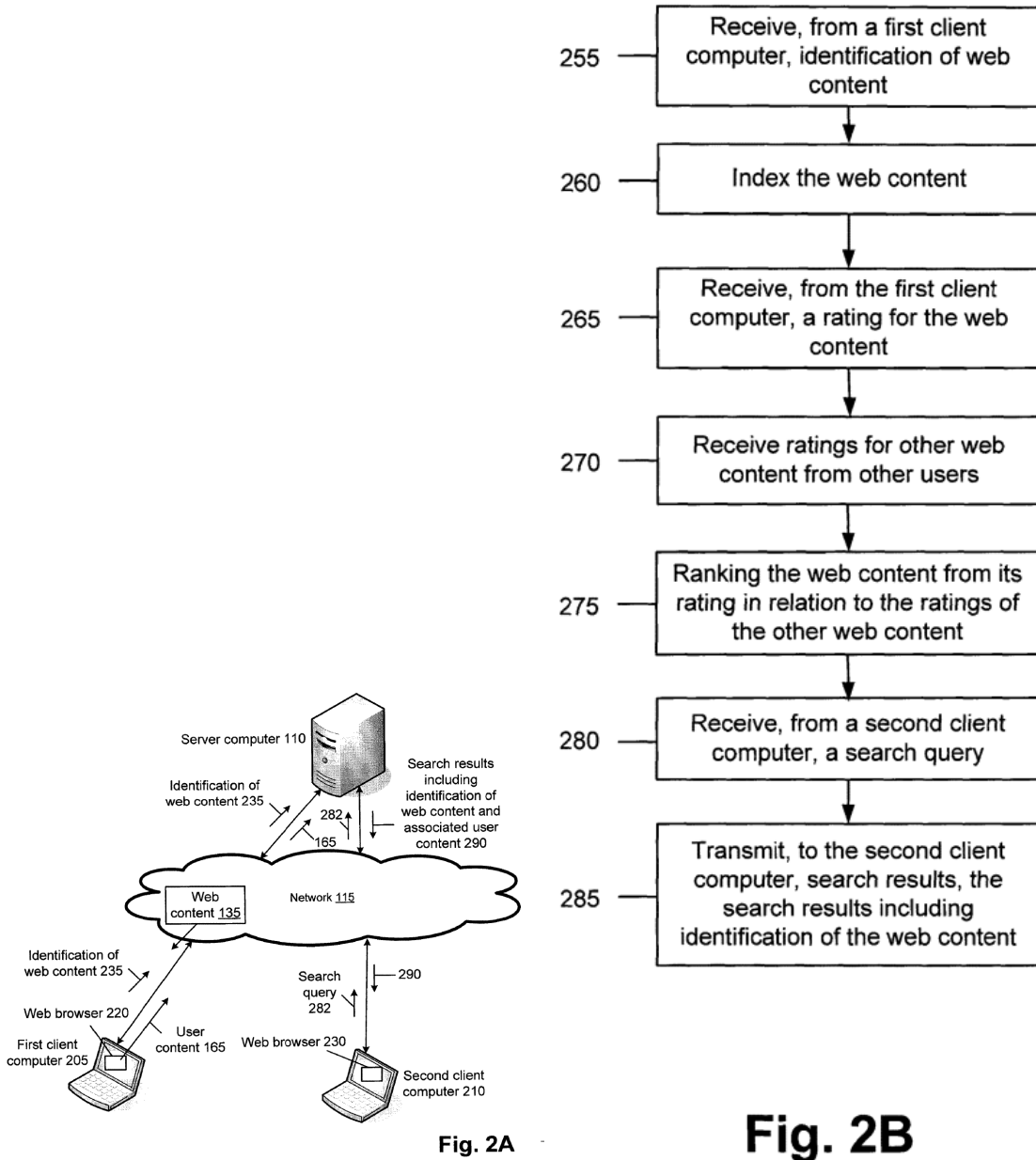
The '744 Patent is directed to a web-search system in which search results are generated based on user-provided input. EX1001, 8:41-49. When a user views a web content in a main browser window, the user can submit an identification of that content (e.g., a URL) together with user-generated content—such as keywords, tags, ratings, and/or comments—to a server. EX1001, 7:63-8:11, 9:67-10:4. The server subsequently stores and indexes the submission so that when a subsequent user performs a web search, the server provides search results affected by the submitted user-generated content. EX1001, 1:40-53, 8:12-16, claim 1. EX1002, ¶37.

Figures 1A and 3B illustrate the user-side portion of this workflow. As shown in Figure 1A, a client computer (105) runs a web browser (120) that displays web content (135) in a main browser window (130). The browser also presents a user interface (150) separate from the main window (130). EX1001, 3:53-61; 4:16-22. Using that separate user interface, a user submits “user content”—e.g., keywords/tags and other annotations—together with its URL to the server. EX1001, 4:22-30, 7:48-8:12. Figure 3B provides an example of the separate user interface (325), through which a user can provide the URL and associated user content. EX1001, 10:29-33. EX1002, ¶¶38-39.



EX1001, Figures 1A, 3B.

Figures 2A-2B illustrates server-side processing of the user's submission. The server receives the web content's URL and "indexes the web content" for "inclusion in search results." EX1001, 8:12-16, Figure 2B. This indexing includes "receiving keywords for the first web content" and using those keywords to index the identified web content so that when another user submits a search query, the server can provide the content's URL in the search result. EX1001, 1:63-65. EX1002, ¶40-41.



EX1001, Figures 2A-2B.

A. Prosecution History

The '744 Patent was originally filed on January 14, 2019 as U.S. Patent Application No. 16/247,361 (“361 Application”) as a continuation of U.S. Patent Application No. 15/142,479 (“479 Application”), filed April 29, 2016, which, in

turn, is a continuation of U.S. Patent Application No. 13/420,503 (“’503 Application”), filed March 14, 2012. The ’503 Application claims priority to U.S. Provisional Application No. 61/452,595, filed March 14, 2011. EX1001, Cover, p. 2. As explained below, the ’744 Patent’s claims are identical to the claims that were unsuccessfully prosecuted in the ’503 Application, and it was an error for the examiner to issue the ’744 Patent’s claims. EX1002, ¶¶42-44.

1. Grand-Parent Application—’503 Application

The ’503 Application—which is the grand-parent of the ’744 Patent—was originally filed with claims that have *identical* limitations as the issued claims of the ’744 Patent. *See* EX1012 (showing that the original claims in the ’503 Application are identical to the issued claims of the ’744 Patent). But, during prosecution of the ’503 Application, the examiner twice rejected all claims as being obvious. EX1010, 82-88, 128-140. EX1002, ¶44.

Eventually, Applicant narrowly amended the independent claims to require that “*the user interface automatically selects a portion of the web content and displays the portion of the web content within the first user interface based on settings received from the user via the user interface that include settings to display one or more of the following from the web content: a picture, an icon, a sentence, and a paragraph.*” EX1010, 283 (underlined limitations added via amendment).

That narrow amendment led to allowance of the '503 Application. EX1010, 337. EX1002, ¶¶45-47.

2. The '744 Patent ('361 Application)

Although the instant patent's '361 Application was filed with claims *identical* to the original—and importantly rejected—claims of the grand-parent '503 Application, the '361 Application's claims were eventually allowed *without amendment*. EX1010, 40–43; EX1001, Claims 1–20. The examiner originally issued an Office Action rejecting the claims in the '361 Application for being obvious over two references. EX1008, 120-126. Applicant responded to the rejection without any amendment, arguing that the cited prior art did not show “transmitting, by the server computer, search results to the web browser of the second client computer, the search results comprising the first web content identified by the first user in a position relative to identifications of other web content received from other users.” EX1008, 186-187. EX1002, ¶¶48-51.

Subsequently, the examiner allowed the originally-filed claims, despite having rejected the identical claims in the grand-parent '503 Application. EX1008, 182-185, 207-213. That was material error—as shown in Section IX [Grounds], the claims are anticipated or are obvious over prior art, and the examiner should not have allowed them, just as in the grand-parent '503 Application. EX1002, ¶52.

VI. LEVEL OF ORDINARY SKILL IN THE ART

A Person of Ordinary Skill in the Art (“POSITA”), as of the claimed priority date of March 14, 2011, would have had: (1) a bachelor’s degree in computer science, computer engineering, electrical engineering, or equivalent training, and (2) approximately two years of experience working in the field of information retrieval and user interfaces in computer systems. EX1002, ¶¶53-56.

VII. PRIOR ART REFERENCES

A. Palmon (EX1003)

Palmon discloses a web search system that “search[es] for information guided by a set of topics such as keywords.” EX1003, [0003]. Specifically, Palmon teaches a “topic-guided searching” that allows a user to iteratively search webpages by selecting one or more “topics.” EX1003, [0011], [0017]. EX1002, ¶¶57-58.

Palmon’s topic-guided searching is illustrated in Figure 2 (below), in which a user operates a client device to perform a search on a search server. EX1003, [0036], [0050]-[0051], Figure 1. EX1002, ¶59.

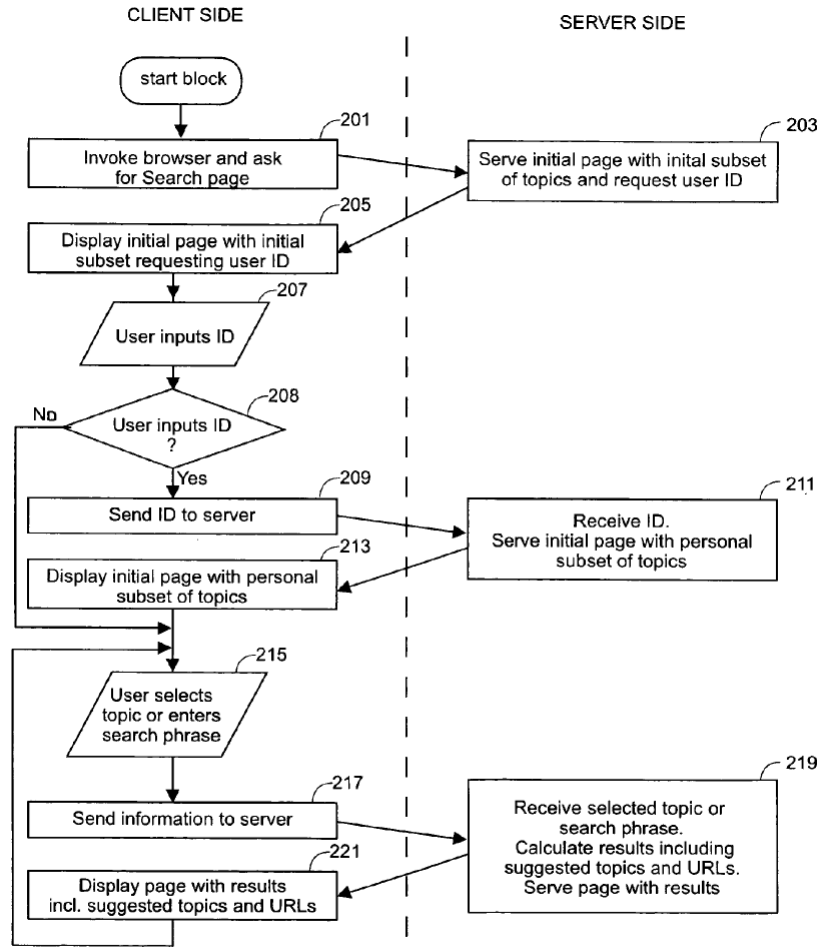


FIG. 2

200

EX1003, Figure 2.

Once a user logs into the system, in step 213, the client device presents a “new initial page with the personalized subset of topics” to a user. EX1003, [0056]. In steps 215-217, the user initiates a search by “select[ing] a topic or input[ing] a search phrase”—collectively, the “search request information”—and “send[ing] the search request information to the search server.” EX1003, [0058]. EX1002, ¶60.

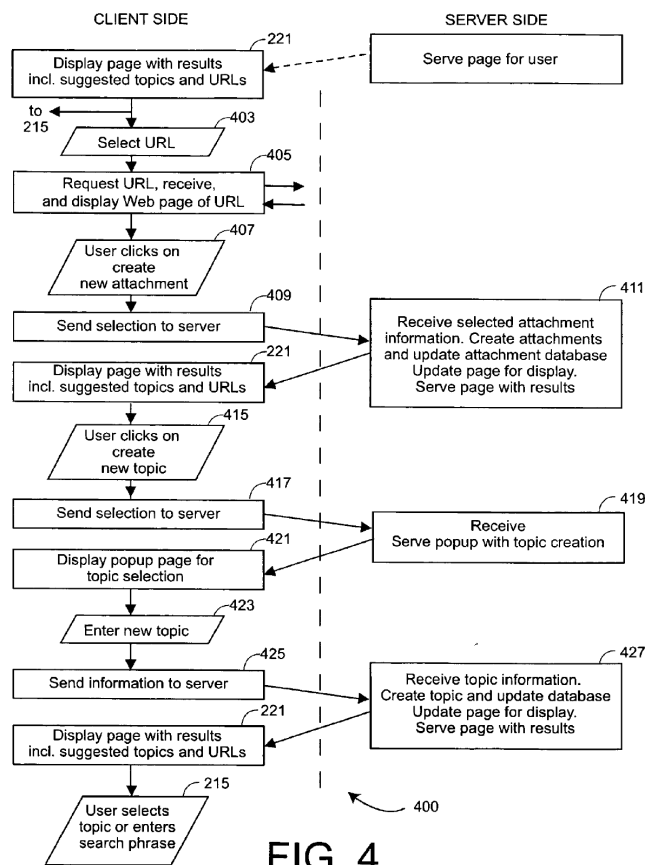
“At the search server 151, in [step] 219, the search request information is received, and the search engine ... generates results based on the search request information.” EX1003, [0059]. “[T]he search results ... include *one or more URLs that meet the search request information* according to one or more search criteria[], and further includes *one or more sets of suggested topics* that the searcher may select such that the searcher’s electing any of the suggested topics will further direct the search.”¹ EX1003, [0059]. EX1002, ¶61.

Subsequently, in step 221, the client device presents the search results received from the server and waits for the user “to select a topic, ... [or] to enter a new search phrase” to hierarchically narrow the search. EX1003, [0061], [0063], [0071]. “[T]he set of topics selected during a particular search by a particular searcher” is called a “*search topic path*.” EX1003, [0071]. EX1002, ¶62.

Palmon teaches that a user can associate a topic with a URL so that when a searcher selects the associated topic during search, the search results include that URL along with other URLs associated with the selected topic. Such association of a topic and a URL is called an “attachment.” EX1003, [0048], [0099]. EX1002, ¶63.

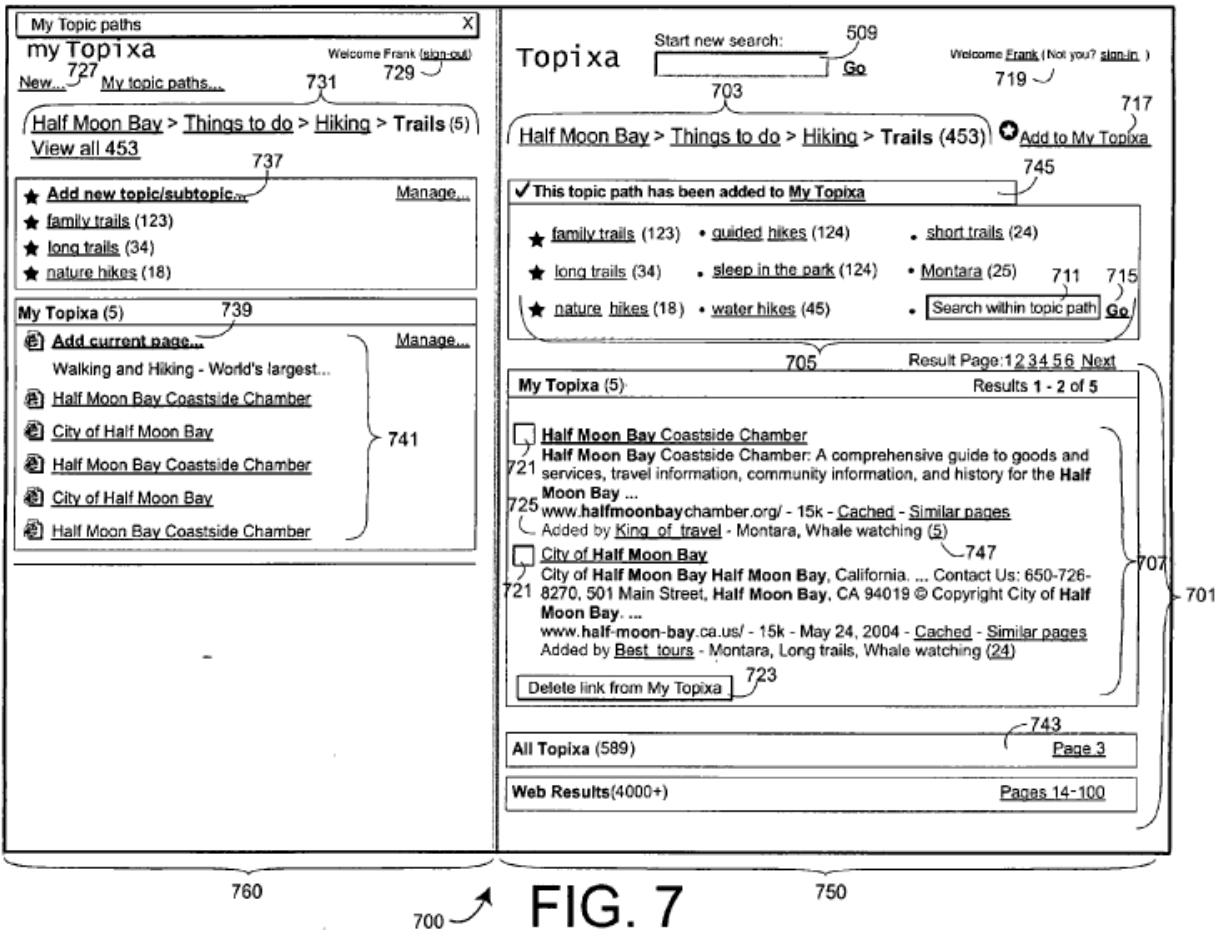
¹ In this Petition, all emphases are added unless noted otherwise.

Figure 4 illustrates a method of “a user providing attachment information.” EX1003, [0101]. In step 405, the user views a webpage “on the main window of the Web browser.” EX1003, [0102]. Then, in step 407, the user “click[s] on a ‘add current page’ button on the explorer bar.” EX1003, [0102]. Subsequently, in step 409, “[t]he user’s request, including the search topic path and the page URL is sent ... to the server,” and in step 411, the server “creat[es] an attachment between the URL and each topic in the search topic path for that user.” EX1003, [0102]. EX1002, ¶64.



EX1003, Figure 4.

A user can perform the topic-guided search and attachment creation using a user interface illustrated in Figure. That interface includes “a main display area 750 and a user-specific explorer bar (or *other additional window*) 760.” EX1003, [0206]. “[T]he main display window 750 ... includes the URL results 701” of the current search. EX1003, [0208], [0213]. When “a user selects a Web page by clicking on one of the results 701,” “the main window 750” displays the selected Webpage. EX1003, [0217]. “The explorer bar (or similar panel) 760 [] includes a clickable object 739... for adding an attachment between the currently displayed search topic path, and the Web page displayed in the main window 750.” EX1003, [0217]. This explorer bar may be implemented as an “additional window.” *See, e.g.,* EX1003, [0206] (“a user-specific explorer bar (or *other additional window*) 760.”). EX1002, ¶¶65-66.



EX1003, Figure 7.

Palmon explains that “the user interface provides for the user a mechanism to select a displayed URL to be a ‘favorite’ URL.” EX1003, [0132]. “[W]henver a URL is marked as a favorite, a new attachment between the URL and at least one topic is created” and is maintained in “a list of associated (‘favorite’) attachments.” EX1003, [0122], [0131]. EX1002, ¶67.

The server uses the attachments to determine search results in response to search queries, which may be submitted by users other than those who created the attachments. For instance, Palmon’s Figure 7 shows search results presented to a

querying user called Frank, who is different from the users—such as King_of_travel or Best_tours—who submitted some of the attachments, as explained below. See EX1003, [0206] (“an indication 719 of the current user”). EX1002, ¶68.

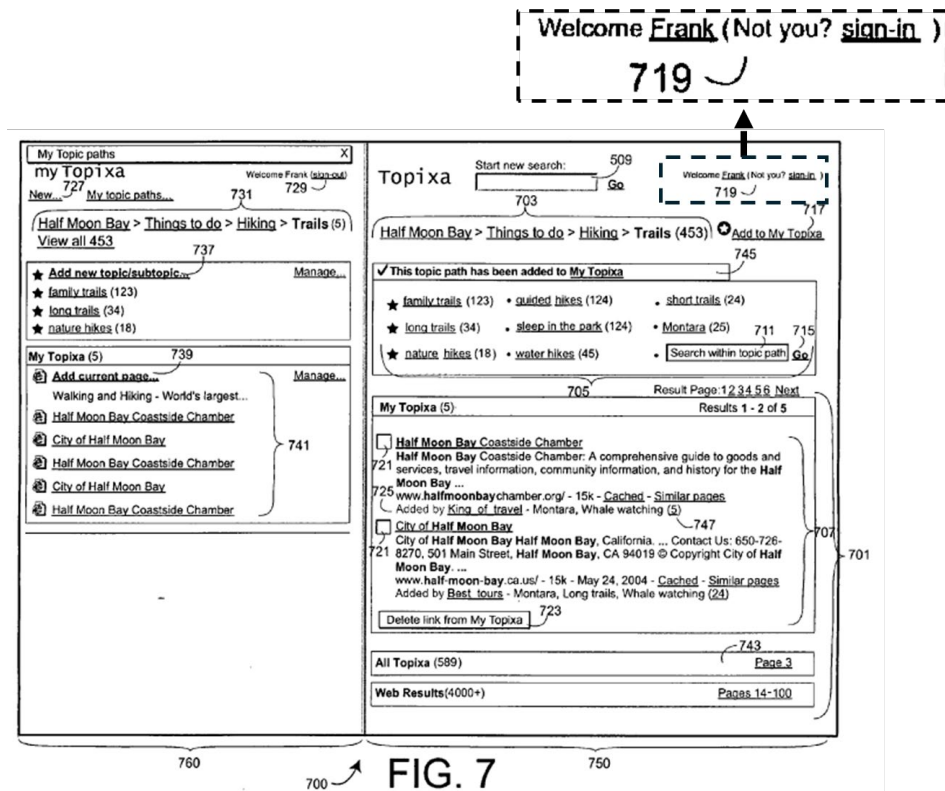


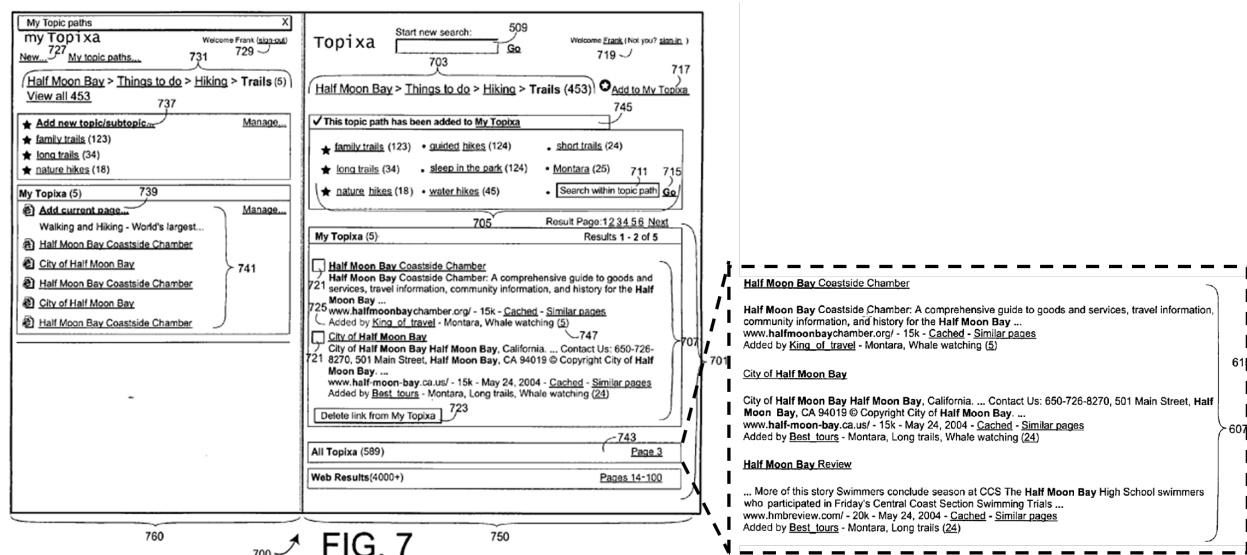
FIG. 7

EX1003, Figure 7.

When a querying user performs a search, the user’s client device presents search results “in three different presentations,” as shown in Figure 7. EX1003, [0208]. “The first includes the positively rated, e.g., ‘favorite’ results, that is, those URLs that have attachments to the topic(s) of the search topic path that the user has ‘selected’ to be included as the user’s ‘Favorite’ attachments.” EX1003, [0208], [0211] (“favorites results 707”). The results shown in “My Topixa” window include

Frank’s “favorites results 707.” EX1003, [0204]. “The second list 743 is of the overall results, e.g., the URLs presented in list 607 of FIG. 6” that are not specifically associated with the user. EX1003, [0208]. And the third includes “results of searching the Web for the terms in the search topic path.” EX1003, [0213]. EX1002, ¶69.

Although Palmon’s Figure 7 does not expressly show the results in the “second list 743,” “[t]he second list 743 is of the overall results, e.g., the URLs presented in *list 607 of FIG. 6*.” EX1003, [0208]. Accordingly, the second list 743 includes “the URLs presented in list 607 of FIG. 6” (EX1003, [0208]), as shown below. As shown, the second list 743 includes URLs that were “[a]dded by” users “King_of_travel” and “Best_tours”—not Frank. Therefore, Palmon discloses that Frank receives search results that includes URLs associated with attachments submitted by other users. EX1002, ¶70.



EX1003, Figures 6, 7.

B. Walther (EX1004)

Walther incorporates user-supplied metadata into search-result presentation and ranking. Walther teaches receiving metadata for webpages from third-party users and using that metadata to rank and present search results. Walther refers to such metadata as “annotations.” EX1004, [0009], [0019]. *See also* EX1004, [0018]. The annotations may include “a rating ..., a list of keywords identifying a topic (or topics) ..., a free-text description.” EX1004, [0018]. EX1002, ¶71.

Walther teaches collecting annotations through a user interface presented during search. For example, a search results page includes a “Save This” button that “launches a page ... via which the user can annotate that particular hit.” EX1004, Figure 6; [0117]; [0123] (“At step 806, an *annotation editing interface* for the subject page is displayed... in a *separate window*.”). Such annotation interface enables the user to enter ratings, keywords, or free-text comments about that page, as shown in Figure 9. EX1004, [0050], [0126]. EX1002, ¶72.

Save This

URL: 902

Title: 904

Save what? 908

☒ This page only

☐ All URLs beginning with 912

Keywords: 916

Description: 914

Rating: 920

☐

☐

☒ None

922 924

FIG. 9

EX1004, Figure 9.

Walther uses stored annotations to enhance search result presentation and ranking. Walther explains that “stored annotations can be used ... to enhance and personalize search and browsing operations,” including “to affect the manner in which search results are presented” and ranked. EX1004, [0019], [0051], [0133]-[0136]. Walther specifically teaches that the rankings by other users can impact the search results of a querying user: Walther explains that the ranking of search results can be based on “an *aggregate rating* (e.g., an average rating)” from “*every user*

who has provided ... a rating.” EX1004, [0072]. *See also* EX1004, [0180]-[0181]. EX1002, ¶73.

C. Lu (EX1005)

Lu relates to “search systems and methods that leverage user annotations of documents, including annotations provided by the querying user as well as annotations provided by other users.” EX1005, [0006]. Lu explains that such “[a]nnotations may include ... a *rating* ..., one or more *keywords or labels identifying a topic* (or topics) ..., [and/or] a *free-text description* of the page or site.” EX1005, [0050], [0085]. EX1002, ¶74.

Lu further teaches using annotations provided by other users in “search results for queries entered by [another querying] user.” EX1005, [0158]. Lu explains that “annotations by any member of a querying user’s trust network can ... enhance the querying user’s experience of browsing the corpus.” EX1005, [0015]. EX1002, ¶75.

Figure 9B (below) illustrates one example of this functionality. When a user enters a search query, the search server provides a “search results page 940 that provides excerpts from the comments made by trust network members in ‘My Web’ section 948.” EX1005, [0163]. For example, “[e]ach hit 950 is accompanied by *comments 952* extracted from *annotations by trust network members*.” EX1005, [0163]. EX1002, ¶76.

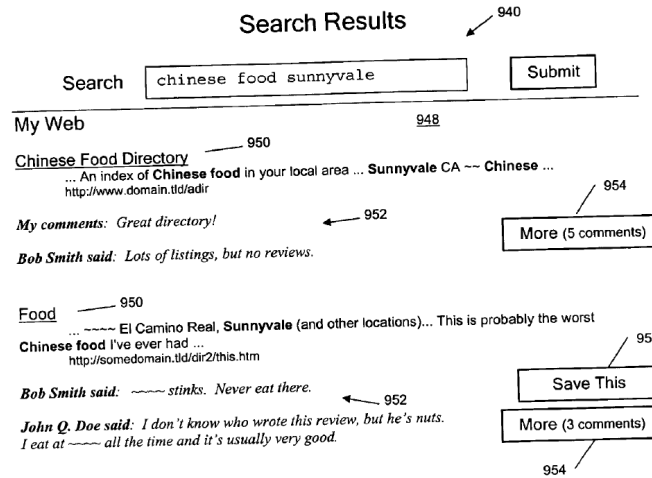


FIG. 9B

EX1005, Figure 9B.

VIII. CLAIM CONSTRUCTION

Petitioner submits that no terms require construction for the purposes of this IPR.² EX1002, ¶¶77-79.

² Petitioner reserves all rights to raise claim construction arguments in other forums.

IX. GROUNDS

A. Grounds I And II: Palmon Anticipates (Ground I) Or Renders Obvious (Ground II) Claims 1-3, 5-6, 8-12, 14-15, And 17-19.

1. Claim 1

a) [1Pre] A method comprising:

To the extent the preamble is limiting, Palmon discloses [1Pre]. Palmon discloses “[a] *computer implemented method* ... for directing a search aided by a set of topics.” EX1003, Abstract. *See also* EX1003, Claim 1, [0017]-[0022], Figures 2, 4, 7. EX1002, ¶¶82-83.

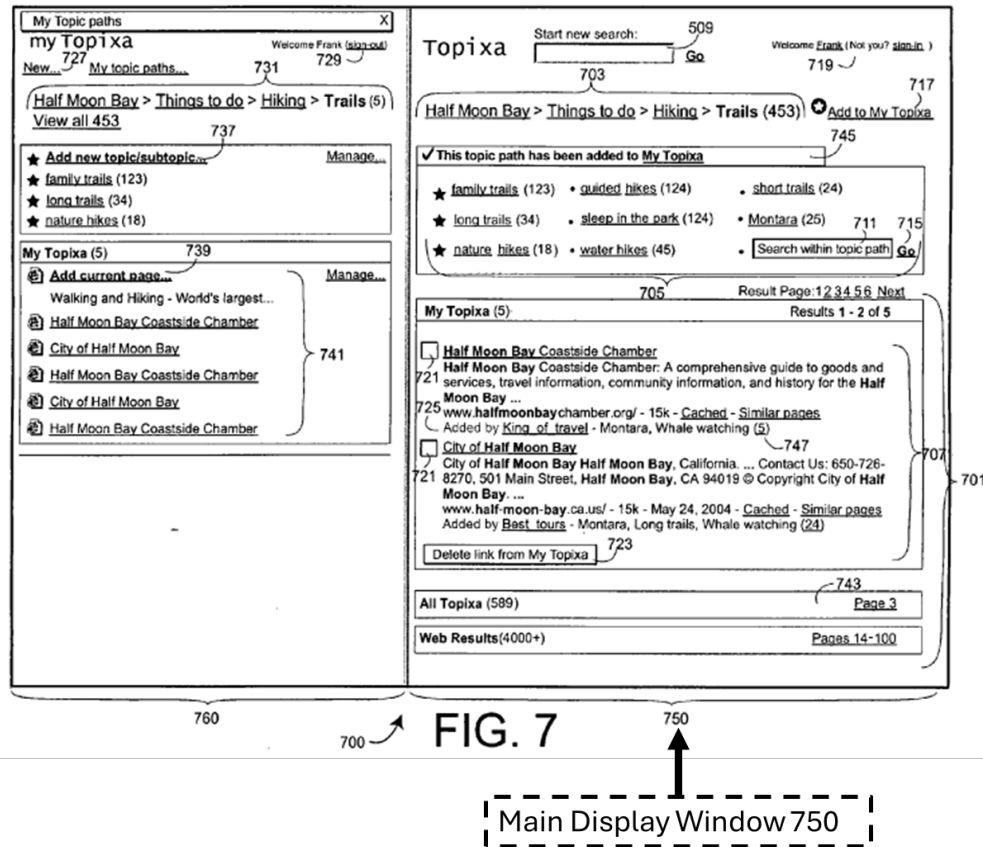
b) [1A] receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window, the identification of the first web content transmitted by the first user to the server computer via a user interface separate from the main browser window;

Palmon discloses (Ground I), or at a minimum renders obvious (Ground II), [1A]. EX1002, ¶¶84.

First, Palmon discloses “*receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window.*”³ EX1002, ¶85.

³ In this Petition, italicized and un-bolded text denotes claim language.

Palmon discloses that a user operates a web browser of a client device. EX1003, [0036], [0050]-[0051], Figure 1. For example, “[t]he client 101 includes a **browser application** 121 shown in FIG. 1.” EX1003, [0040]. The browser application 121 displays “pages” that implement a user interface. EX1003, [0040] (“The user interface ... is implemented as pages”). The user interface includes a “main display window 750” that displays a webpage. EX1003, [0208], [0217] (“URL ... displayed in the main window 750.”). And the client device 101 is a “*computer*” because it “includes a processing system of at least one processor 107, a memory subsystem 117, a display subsystem 119.” EX1003, [0037], Figure 1. Accordingly, a webpage (“*first web content*”) is displayed by a browser application (“*web browser*”) of the client device (“*first client computer*”) in a main display window 750 (“*a main browser window*”), as shown in Figure 7. EX1002, ¶¶86-88.



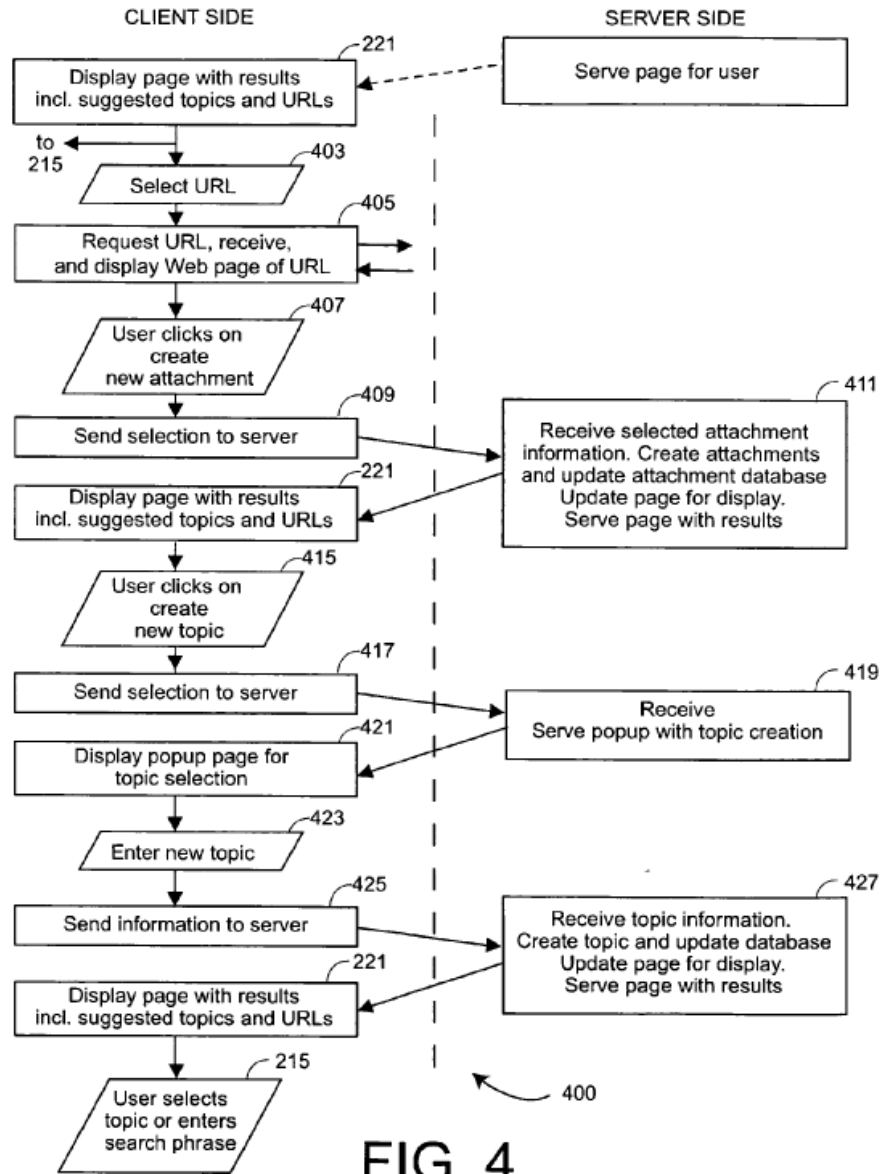
EX1003, Figure 7.

Palmon also discloses “receiving, by a server computer from a first client computer operated by a first user, an identification of first web content” displayed in the main display window 750. As explained in Section VII.A [Palmon], users can perform a topic-guided web search, iteratively selecting topics to narrow the searches. EX1003, [0061], [0063], [0071], [0208], [0213]. To build a database that supports such topic-guided search, a user creates an “attachment”—an association between a topic and a URL—so that when the topic is later selected during search, the search retrieves the URL, along with other URLs also associated with that topic.

EX1003, [0048], [0099]. This process of creating an attachment satisfies the “receiving” limitation. EX1002, ¶89.

For example, a user viewing a webpage on the main display window 750 can “click[] on an ‘add current page’ button on the explorer bar” of the user interface, and cause “[t]he user’s request, **including** the search topic path and **the page URL [to be] sent in 409 to the server**, e.g., the server 151.” EX1003, [0102]. “[O]n the **server side**, in [step] 411,” Palmon discloses “**receiv[ing]** the attachment information” (EX1003, [0102]), represented by a “<**URL**,topic> doublet” (EX1003, [0048]). *See also* EX1003, [0101]. As another example, a user can mark a URL “as a favorite,” and such marking creates “a new attachment between the URL and at least one topic” (EX1003, [0122]), by sending the URL and the topic to the server as explained above. EX1002, ¶90.

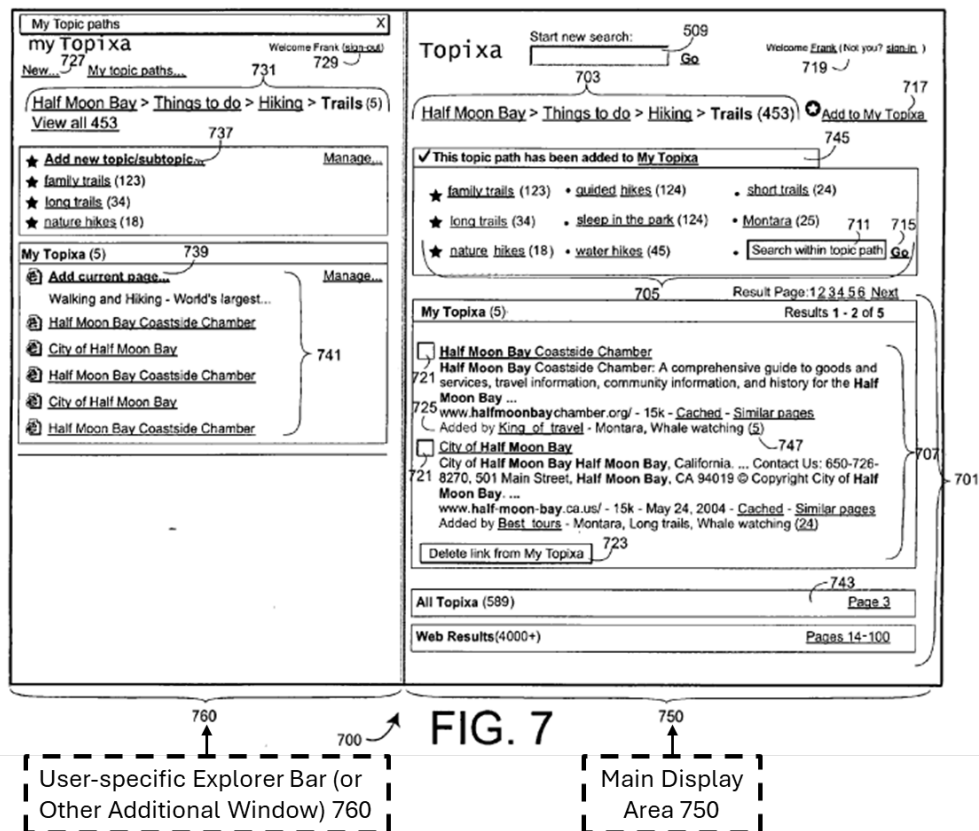
Accordingly, Palmon discloses receiving, by the server 151 (“*a server computer*”) from the client device 101 operated by the user (“*a first client computer operated by a first user*”) a URL of the webpage being displayed on the main display window 750 (“*an identification of first web content*”). EX1002, ¶91.



EX1003, Figure 4.

Second, Palmon discloses, or at a minimum renders obvious, that “*the identification of the displayed web content [is] transmitted to the server computer via a user interface separate from the main browser window.*” As explained above, the URL of the displayed web content is transmitted to the server 151 using a “user-

specific explorer bar (*or other additional window*) 760.” See EX1003, [0101]-[0102]. That explorer bar/additional window is part of the *user interface* display 700 and is *separate from* the main display area 750 (“*main browser window*”) that displays the webpage, as shown in Figure 7. See EX1003, [0206] (“The presented user interface display 700 includes a main display area 750 and a user-specific explorer bar (*or other additional window*) 760.”); [0101]. Accordingly, the user-specific explorer bar/additional window is “*a user interface separate from*” the main display area 750. EX1002, ¶¶92-93.



EX1003, Figure 7.

c) **[1B] indexing, by the server computer, the first web content; and**

The '744 Patent explains that “indexing [] the first web content includes receiving keywords for the first web content” (EX1001, 1:63-65) and associating the keywords with the first web content “for inclusion in search results.” EX1001, 8:15-17 (“The server computer 110 indexes the web content (Operation 260) for, for example, *inclusion in search results.*”); 8:55-57 (“the human user may specify a few *keywords* for the content identified by the user, and the content is indexed *using the human identified keywords.*”); 9:19-23; Claim 6. Palmon discloses [1B] to the same extent as the '744 Patent. EX1002, ¶¶94-95.

In Palmon, a user viewing a webpage on the main display window 750 can “click[] on an ‘add current page’ button” and submit “attachment information”—including “the *search topic path*⁴ and the page URL”—to the server. EX1003, [0102]. Subsequently, the server “*receives the attachment information*, and creates the attachment(s) ..., including creating an *attachment between the URL and each topic* in the search topic path.” EX1003, [0102]. This attachment is “an *association*

⁴ As explained in Section VII.A [Palmon], the “search topic path” is “the set of topics selected during a particular search by a particular searcher.” EX1003, [0071]. EX1002, ¶96.

between a URL and a topic,” and is “defined by at least the <URL,topic> doublet.”

EX1003, [0048]. EX1002, ¶96.

Palmon further explains that its “topics” may be *keywords* used to identify URLs. EX1003, [0003] (“the present invention is related to searching for information guided by a set of *topics such as keywords*”); [0071]. *See also* EX1003, [0005], [0059]. Accordingly, Palmon discloses a server receiving a topic/keyword and an identifier of a webpage (e.g., URL), and associating the topic/keyword with the webpage for inclusion in subsequent search results. EX1002, ¶¶97-98.

- d) **[1C] in response to receiving a search query from a web browser of a second client computer operated by a second user, transmitting, by the server computer, search results to the web browser of the second client computer, the search results comprising the first web content identified by the first user in a position relative to identifications of other web content received from other users.**

Palmon discloses, or at a minimum, renders obvious, [1C]. EX1002, ¶99.

First, Palmon discloses a server “receiving a search query from a web browser of a second client computer operated by a second user.” As explained in Section VII.A [Palmon], Palmon teaches that a user initiates a search using a user interface by “select[ing] a topic,” also referred to as the “search request information.” EX1003, [0058]. The search server 151 subsequently receives the search request information (“*search query*”) from the client device. EX1003, Figure 2 (step 219). EX1002, ¶¶100-101.

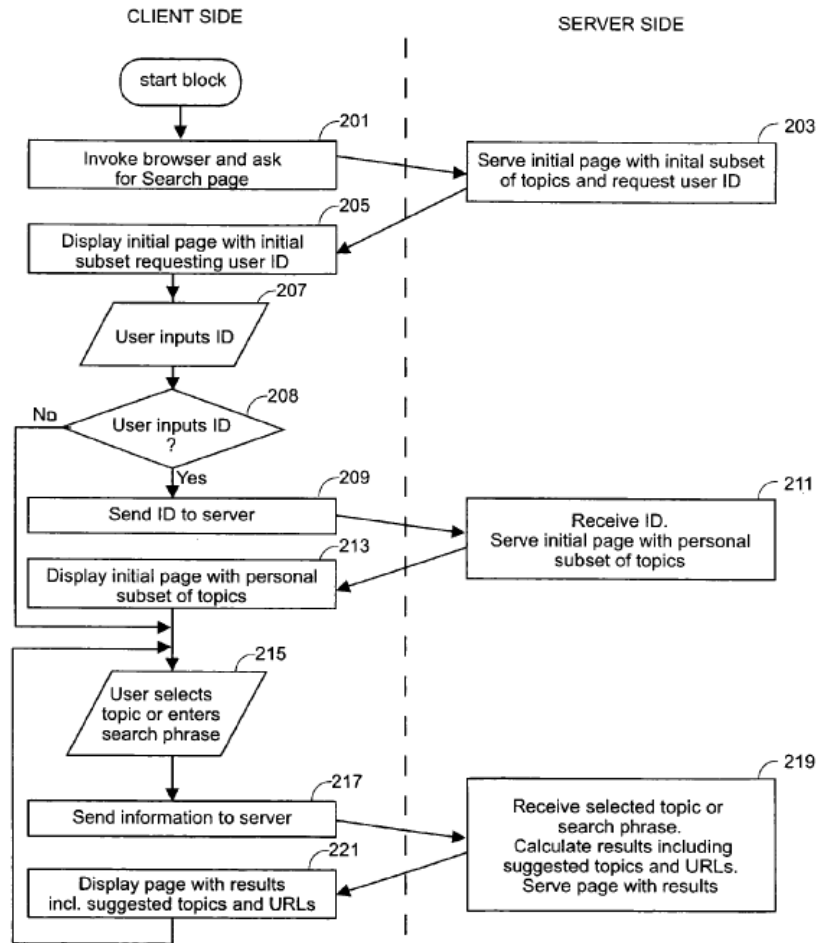


FIG. 2

200

EX1003, Figure 2.

For example, Palmon’s Figure 5 shows “an initial user interface display 500” that can be used to submit search request information to the server. EX1003, [0192]. For example, the user interface allows a user to “enter[] a search phrase” or “select[] one of the topics, e.g., by clicking on the presented topic,” thereby submit search request information. EX1003, [0193]-[0195]. This user interface is “implemented

as pages that are displayed on the client’s display 119 using a ***browser application***

121.” EX1003, [0040]; [0054]. EX1002, ¶¶102-105.

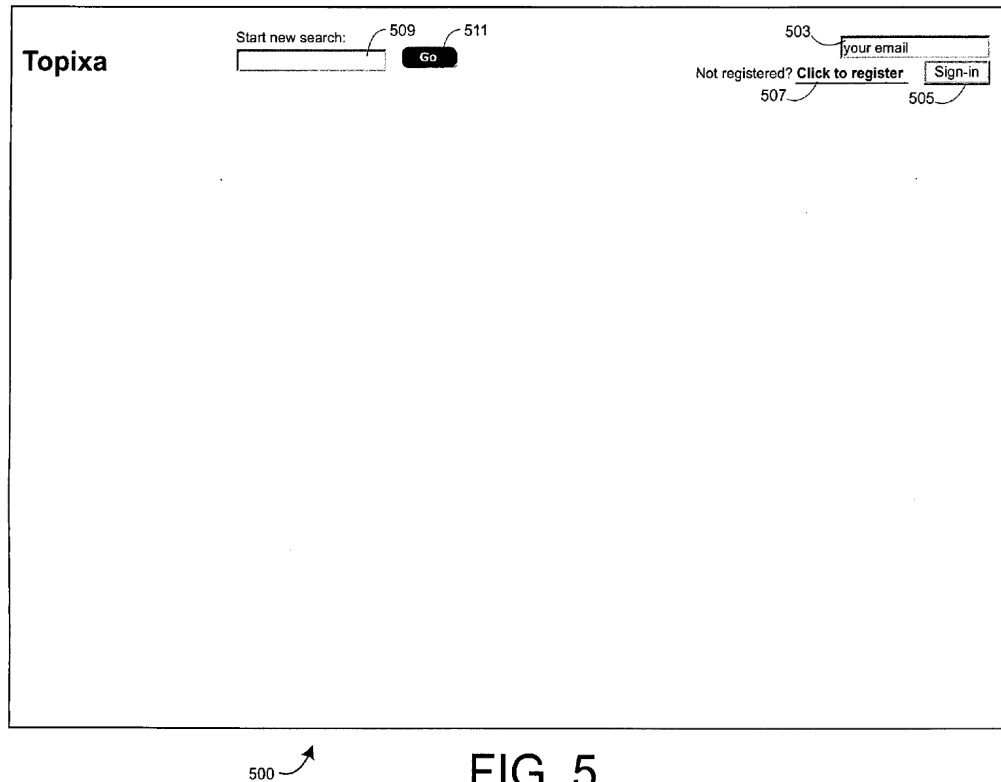
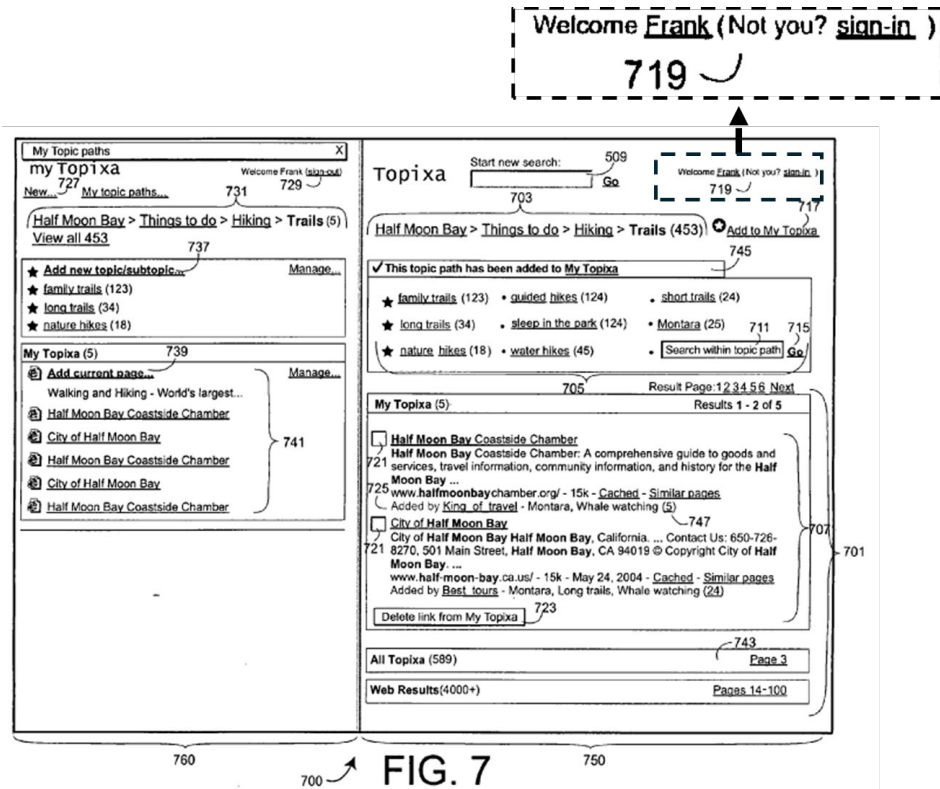


FIG. 5

EX1003, Figure 5.

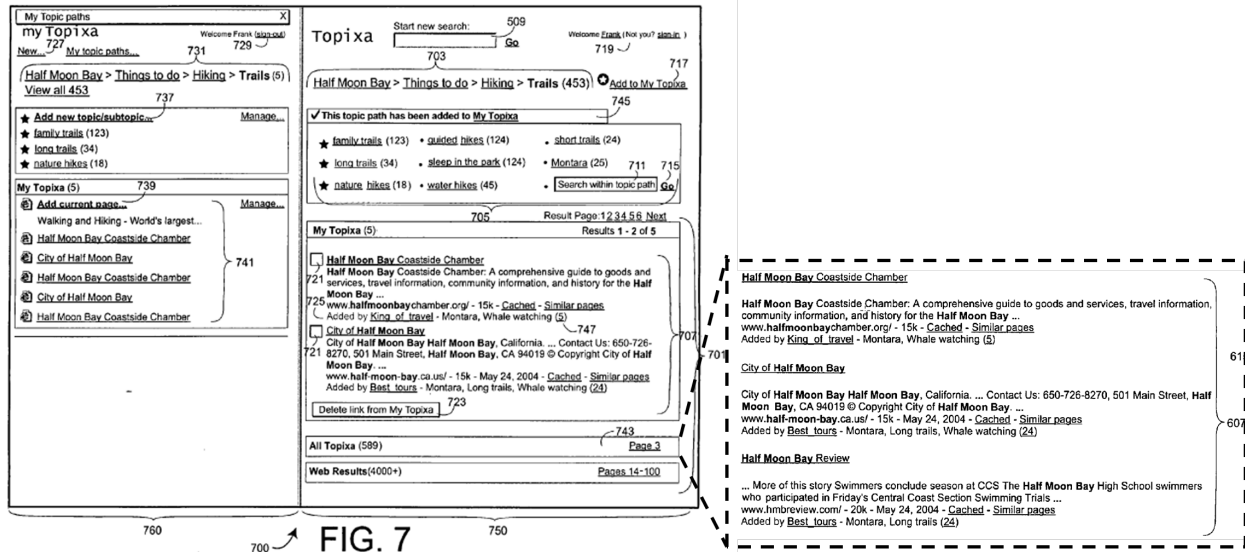
Palmon also teaches that the server receives the search query “*from a web browser ... operated by a second user.*” Palmon teaches that the user who performs the search may be different from the user who previously created the attachment between a topic and URL(s). Figure 7 of Palmon illustrates that. For example, Figure 7 shows a user interface on a client device, operated by a user called Frank. See EX1003, [0206] (“an indication 719 of the current user”). EX1002, ¶106.



EX1003, Figure 7.

As explained in Section VII.A [Palmon], the main window 750 shows Frank’s search results “in three different presentations.” EX1003, [0208]. One such presentation includes “[t]he second list 743 ... of the overall results, e.g., the URLs presented in list 607 of FIG. 6,” as illustrated below. EX1003, [0208]; *see also* Section VII.A [Palmon]. The second list 743 includes URLs that were “[a]dded by” users “King_of_travel” and “Best_tours”—not Frank. *See also* EX1003, [0210]. Accordingly, the “*first user*” described in Section IX.A.1.b) [Ground I, 1A]—here, King_of_travel—is different from the user who now performs the search—here, Frank. Indeed, the server handles “[a] set of users.” EX1003, [0046]. Thus, the

server receives search request information (“*search query*”) from the user interface operated by Frank (“*a second user*”), who is different from King_of_travel (“*first user*”). EX1002, ¶107.



EX1003, Figures 6, 7.

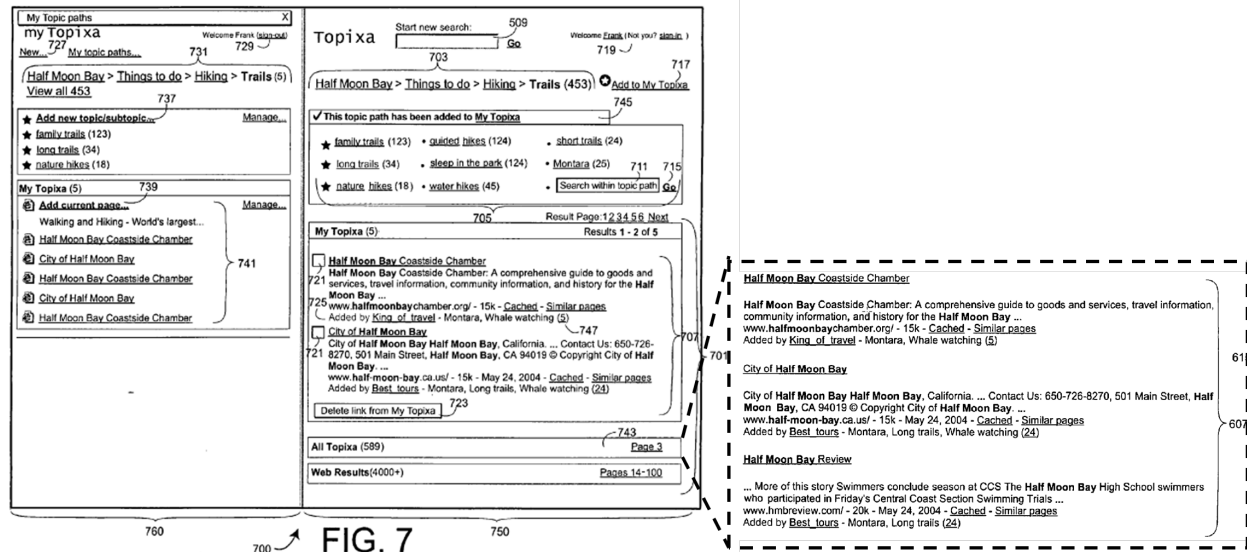
Additionally, Palmon teaches that the server receives the search query “*from a web browser of a second client computer*” operated by Frank (“*second user*”). Palmon teaches that the server communicates with multiple “clients” (EX1003, [0036])—as it was common for Internet applications adopting the client–server model. EX1011, 1:9-11; EX1015, [0080]-[0081]; Figure 1. Accordingly, a POSITA would have understood that Frank (“*second user*”) operates a separate client device (“*second client device*”) from the “*first client device*” operated by King_of_travel (“*first user*”). EX1002, ¶¶108-111.

At a minimum, it would have been obvious to implement Palmon’s system so that different users operate *different* client devices in this conventional manner. In view of Palmon and the ordinary client-server practices as described above, it would have been nothing more than a routine design choice for a POSITA to have the server receive search request information from a web browser running on a second client computer operated by a second user. *See Keynetik, Inc. v. Samsung Elecs. Co., Ltd.*, No. 2022-1127, 2023 WL 2003932, at *2 (Fed. Cir. Feb. 15, 2023). EX1002, ¶112.

In sum, Palmon discloses, or at a minimum renders obvious, a server receiving search request information (“*search query*”) from a user interface shown in a web browser (“*from a web browser*”) of a different client device (“*second client computer*”) operated by a user different from the first user (“*second user*”). EX1002, ¶113.

Second, Palmon discloses that in response to receiving the search request information (“*search query*”), the server “*transmit[s] ... search results to the web browser of the second client computer.*” Upon receiving the search request information from Frank’s client device, the server “generates results based on the search request information” (EX1003, [0059]) and “serv[es] [on Frank’s client device] a new page containing the search results” (EX1003, [0060]), “includ[ing] one or more URLs that meet the search request information” (EX1003, [0059]). *See also* EX1003, Figure 2 (step 219). Frank’s client device—which, as explained

above, is the “*second client device*”—then displays the search results on the user interface (EX1003, Figure 2 (step 221)), which is implemented as pages displayed on “a browser application.” EX1003, [0040]. *See also* EX1003, [0054] (“Web browser”). EX1002, ¶¶114-116.



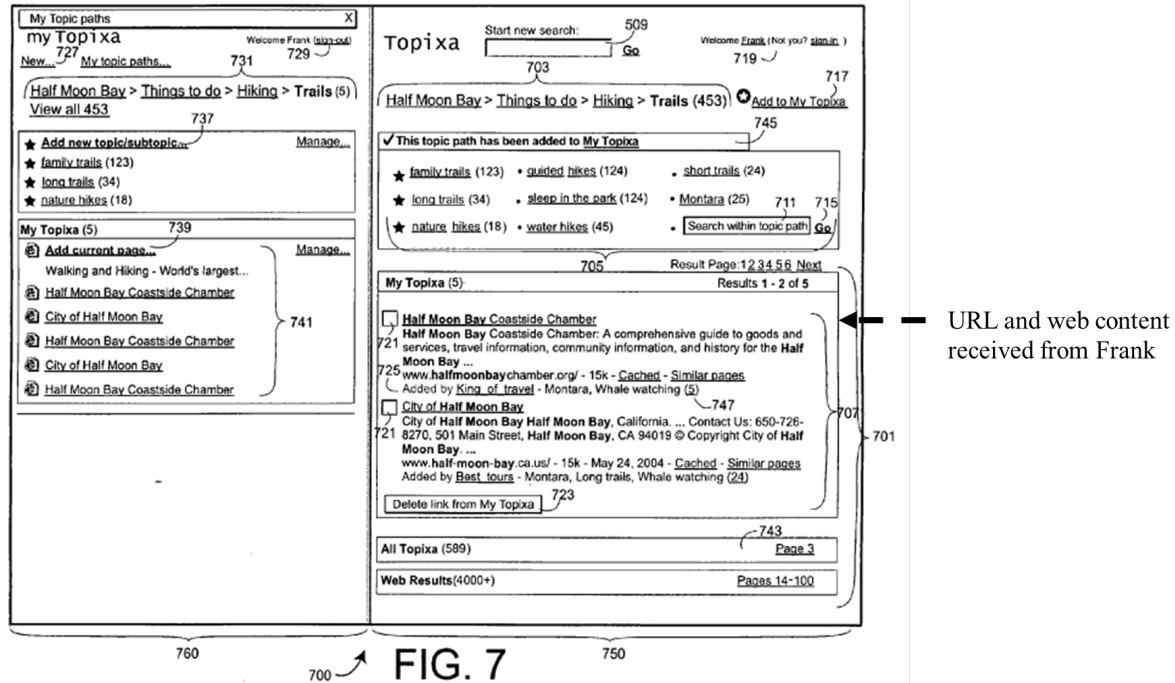
EX1003, Figures 6, 7.

Third, Palmon discloses that “the search results compris[e] the first web content identified by the first user in a position relative to identifications of other web content received from other users.” This limitation differentiates between a “web content” and an “identification[] of [a] web content.” According to the ’744 Patent, the “web content” “includes web pages, videos, photographs, blogs, news, media, song.” EX1001, 1:23-24. And the web content is identified using, for example, a URL. EX1001, 7:65-8:2 (“submitting of this identification of web

content 235 occurs when the user submits (via the user interface 150) a **URL** of the web page”). EX1002, ¶¶117-118.

Palmon discloses this limitation as the limitation is worded—requiring the search results to include “*the first web content*” itself “*in a position relative to identifications of other web content received from other users*”—and also to the extent it requires the search results to include an **identification** of the “*first web content*” and “*identifications of other web content.*” EX1002, ¶119.

Palmon’s Figure 7 shows search results received from the server for the current topic “Trails.” The “My Topixa” panel includes a list of “favorite” URLs 707 whose attachments were created by Frank. EX1003, [0122] (“whenever a URL is marked as a favorite, ***a new attachment between the URL and at least one topic is created***, with each such attachment including the particular user”); [0208]; [0211] (“‘My Topixa’ is the list of favorite attachments under the search topic path.”). And Frank’s favorite URLs are presented along with the associated web content, such as the title of the webpage (“Half Moon Bay Coastsides Chamber”) and the information on the web page (“A comprehensive guide to goods and services, travel information, community information, and history of the Half Moon Bay ...”). EX1002, ¶120.

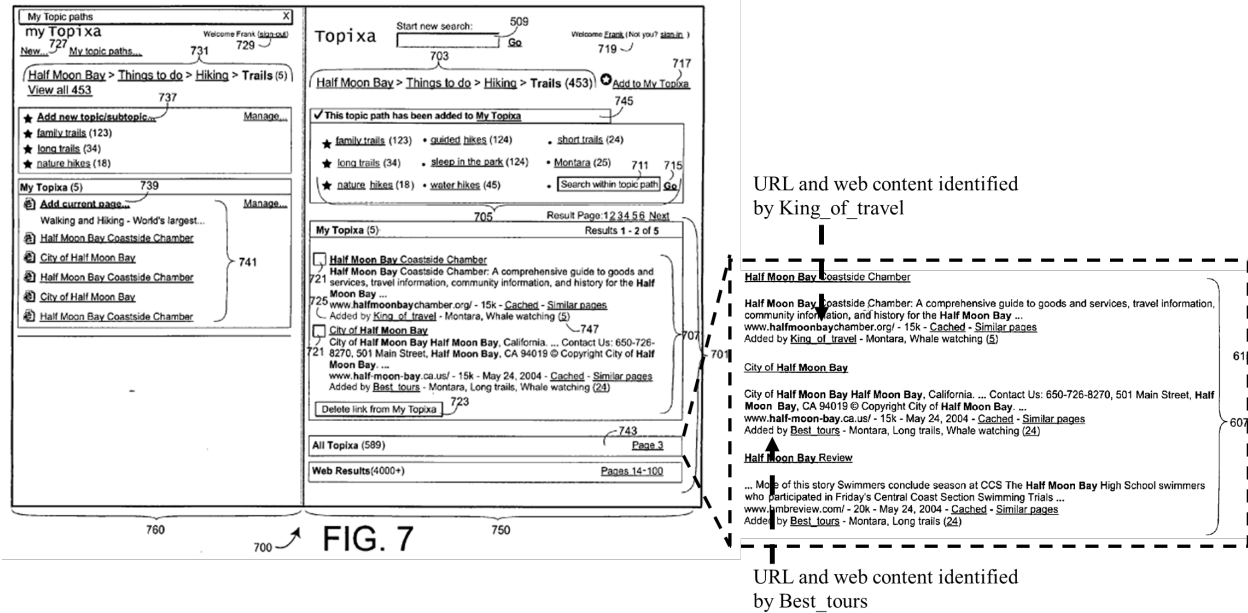


EX1003, Figure 7.

The search results also include a second list 607 (illustrated below) that includes “the overall results” that are not associated with any specific user. EX1003, [0208]. Those results include URLs whose attachments were created by “King_of_travel” and “Best_tours,” as explained above. EX1002, ¶121.

Those results also present, for each URL, the associated web content. For example, for the URL www.half-moon-bay.ca.us/, the search results include the title of the webpage (“City of Half Moon Bay”) and the content presented on the web page (e.g., “Contact Us: 650-726-8270”). Accordingly, the search results include URLs and associated web content are identified by “King_of_travel” and “Best_tours.” EX1002, ¶122.

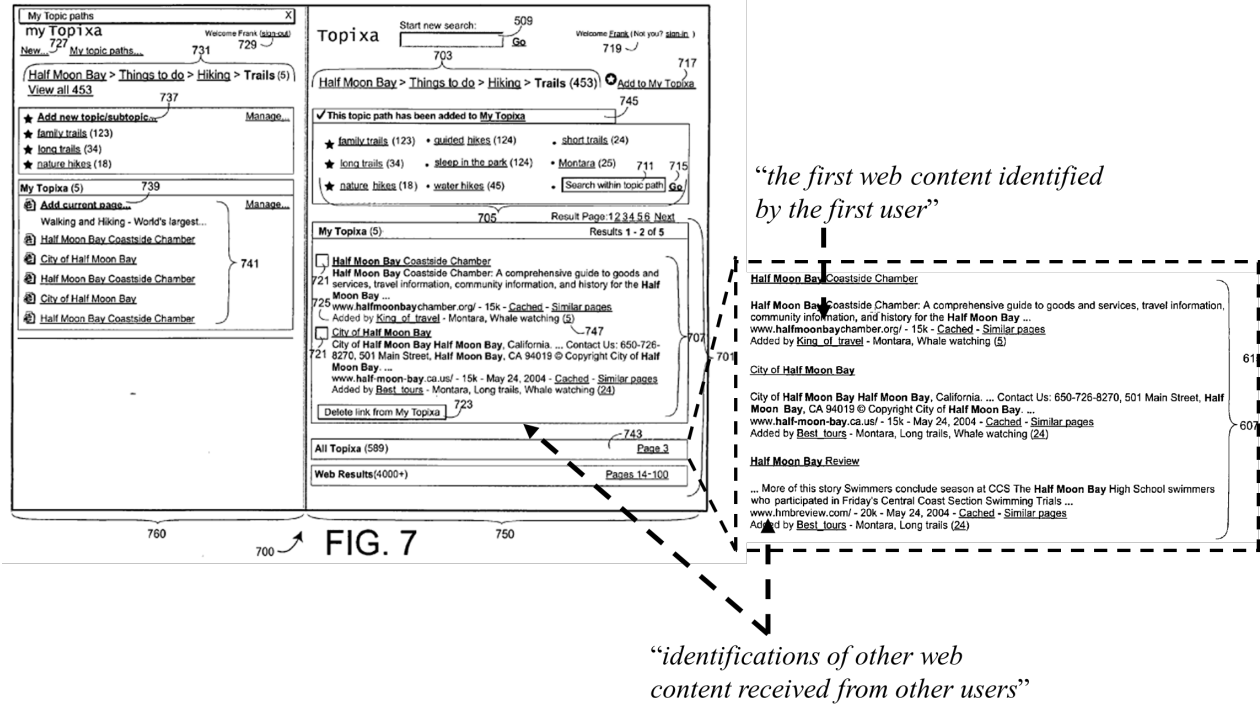
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Claims 1–20



EX1003, Figures 6, 7.

Accordingly, the search results include the URL and web content identified by King_of_travel (“*first user*”) in a position relative to URLs received from Frank (in the My Topixa section) and Best_tours (“*other users*”), as illustrated below. EX1002, ¶123.

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Claims 1–20



EX1003, Figures 6, 7.

To the extent the “*other users*” must be users different from both the “*first user*” and the “*second user*,” Palmon discloses that interpretation as well. Palmon discloses a multi-user system supporting “a set of users.” EX1003, [0046]; [0055]. Accordingly, a POSITA would have understood that the search results for Frank would include URLs and web contents for which the attachments were created by users other than King_of_travel (“*first user*”), Frank (“*second user*”), and Best_tours. Accordingly, Palmon teaches that the search results include URLs and web contents provided by Best_tours as explained above, as well as by other users from “the *set of users* in table 179.” EX1003, [0055]. EX1002, ¶124.

At a minimum, it would have been obvious to provide Frank’s search results that include URLs and web contents provided by Best_tours as explained above, as well as by other users identified in “the *set of users* in table 179” (EX1003, [0055]) because Palmon expressly contemplates a system that serves multiple users. Such a modification would have merely entailed implementing the known functionality in software, which was well within the skill of a POSITA. *See Keynetik*, 2023 WL 2003932, at *2. EX1002, ¶125.

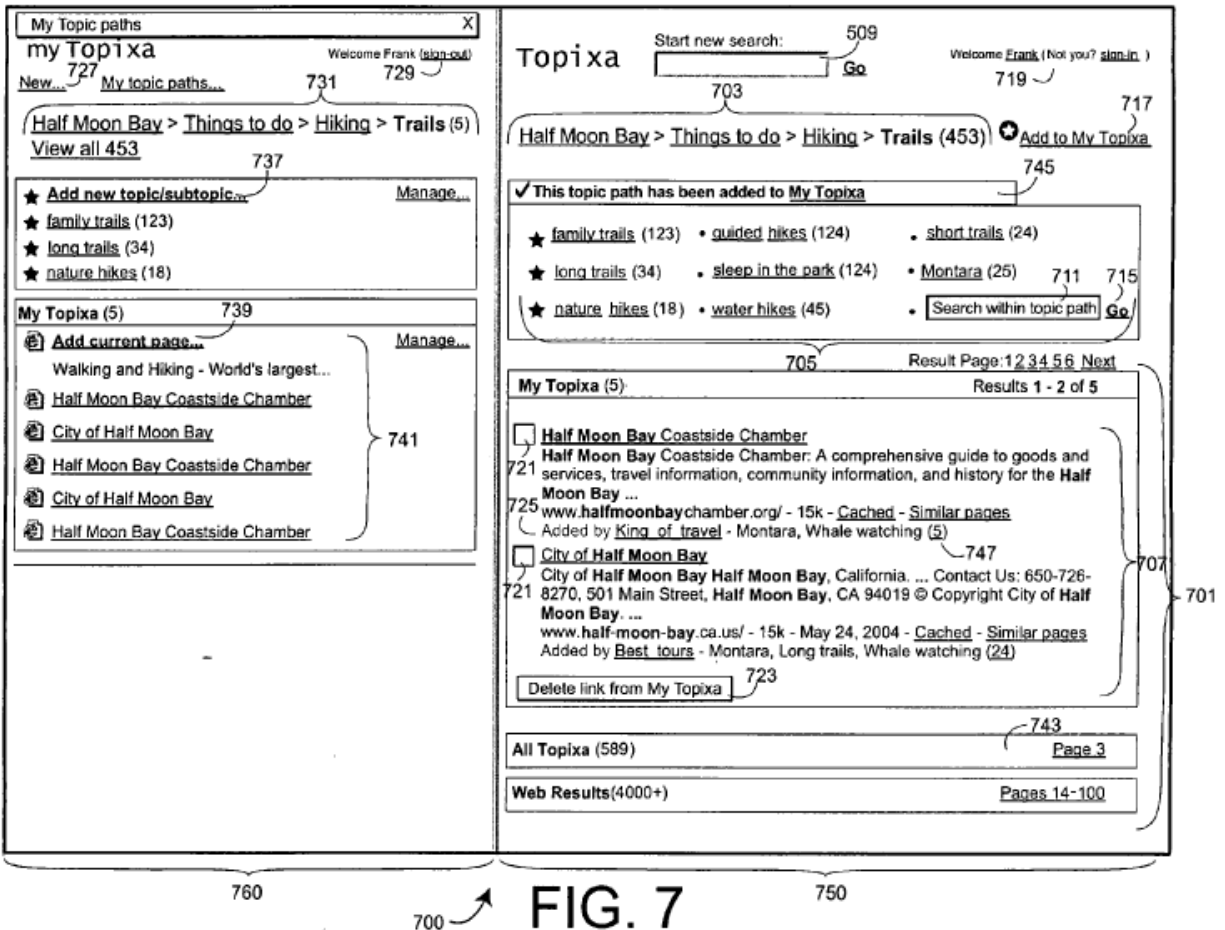
2. Claim 2

- a) [2] The method of claim 1, wherein the receiving of the identification of first web content further comprises receiving, by the server computer, a rating associated with the first web content from the first user.

Palmon discloses the additional limitation of [2]. EX1002, ¶126.

As explained in Sections VII.A [Palmon] and IX.A.1.b) [1A], the server receives “attachment information” from the client device. EX1003, [0102]. That attachment information includes a user-supplied rating associated with the identified URL. For example, “[a] *URL* viewed under a search topic path also may be actively *rated by a user*, and such a *rating of the URL creates and rates a new user-specific attachment* between the URL and each topic in the search topic path.” EX1003, [0120]. *See also* EX1003, [0117]; [0122]. Indeed, “an attachment can include the quadruple of information: the user, the topic, the URL, and the *rating*.” EX1003, [0117]. Thus, in the context of Figure 7, King_of_travel—the “*first user*” who

creates the attachment for “www.halfmoonbaychamber.org”—can rate the URL and send the rating information to the server. EX1002, ¶127.



EX1003, Figure 7.

Accordingly, Palmon teaches that “*the receiving of the identification of first web content*” to create an attachment includes receiving, by the server, a rating of the URL (“*a rating associated with the first web content*”) from the user that creates the attachment information (“*first user*”). EX1002, ¶128.

3. Claim 3

- a) **[3] The method of claim 2, wherein the receiving of the identification of first web content further comprises receiving, by the server computer, ratings associated with the other web content from the other users.**

Palmon discloses or renders obvious the additional limitation of [3]. EX1002, ¶129.

As explained in Section IX.A.2 [Grounds I/II, 2], Palmon discloses that a user can rate a URL and then send the URL and the rating to the server to create an attachment. EX1003, [0102], [0117], [0120], [0122]. Palmon further teaches that such rating can be performed by “each user” in the system. EX1003, [0117] (“*each user may rate* an attachment between a URL and a topic”). EX1002, ¶130.

Thus, as explained in Sections IX.A.2 [Ground I, 2], in the context of Figure 7, Frank and Best_tours and other users in the system (“*other users*”) can rate the URLs and send the rating information to the server. EX1002, ¶131.

4. Claim 5

- a) **[5] The method of claim 2, wherein the rating associated with the first web content is selected from a group of rating types consisting of like, dislike, and neutral.**

Palmon discloses the additional limitation of [5]. EX1002, ¶132.

As explained in Section IX.A.2 [Grounds I/II, 2], Palmon allows each user to rate a URL. EX1003, [0120]-[0127]. For example, “a user viewing URLs, e.g., that

are attached to one or more topics as a result of a search, may *positively rate* any of the viewed URLs,” which is “also called marking the URL as a ‘*favorite*’ URLs.” EX1003, [0122]. Similarly, a user can “*negatively rat[e]* a URL, e.g., a URL in a search result” “e.g., by marking the URL as ‘*junk*.’” EX1003, [0126]. Such positive or negative ratings may be “as a quadruple <UserID, Topic, URL, NegRate>, where NegRate is a binary quantity that is false (value 0) for a positive rating and true (value 1) for a negative rating.” EX1003, [0119]. EX1002, ¶134.

Accordingly, Palmon discloses that the rating associated with the URL (“*the rating associated with the first web content*”) is selected from a positive rating (“*like*”) or a negative rating (“*dislike*”).⁵ EX1002, ¶135.

5. Claim 6

- a) [6] The method of claim 1, wherein the indexing of the first web content further comprises receiving, by the server computer, keywords for the first web content.

Palmon discloses the additional limitation of [6]. EX1002, ¶136.

As explained in Sections VII.A [Palmon] and IX.A.1.c) [Grounds I/II, 1B], in Palmon, a user viewing a webpage can “click[] on an ‘add current page’ button” and

⁵ Claim 5 is written as a Markush group and requires only one of “*like, dislike, and neutral*” from the group. *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1380 (Fed. Cir. 2003). EX1002, ¶133.

submit “attachment information”—including “the *search topic path* and the page URL”—to the server. EX1003, [0102]. That “search topic path” includes “the *set of topics* selected during a particular search by a particular searcher” (EX1003, [0071]), and Palmon explains that the “set of topics” are “keywords” (EX1003, [0003]). The server “*receives the attachment information*” and “creat[es] an *attachment between the URL and each topic* in the search topic path,” thereby indexing the first web content. EX1003, [0102]. EX1002, ¶137.

Accordingly, creating the attachment (“*indexing of the first web content*”) includes receiving, by the server, *search topic path* that includes multiple topics for the first web content (“*keywords for the first web content*”). EX1002, ¶138.

6. Claim 8

a) [8] The method of claim 1, wherein the first web content is same as the other web content.

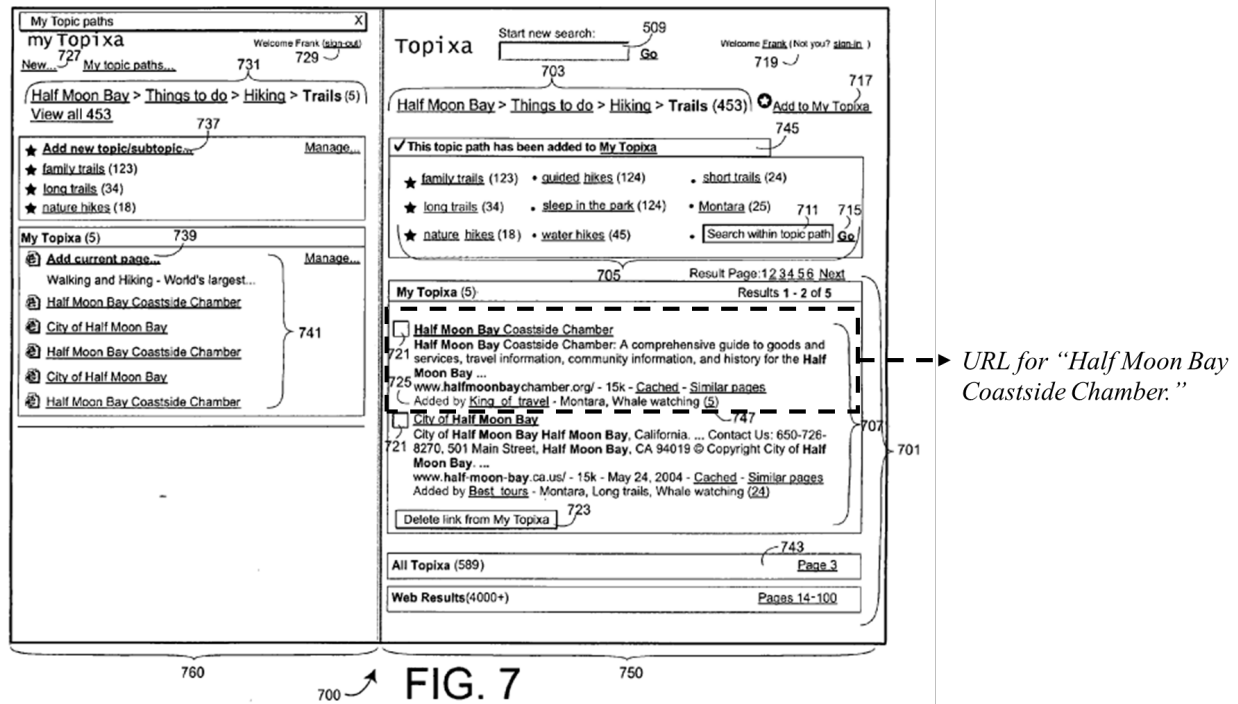
Palmon discloses, or at a minimum renders obvious, the additional limitation of [8]. EX1002, ¶139.

Palmon teaches search results that include “*other web content*” identified by users other than the first user. As explained in Section IX.A.1.d) [Grounds I/II, 1C], Frank’s search results include Frank’s “favorite” URLs, shown in “My Topixa” section of the display 750. Palmon discloses that “whenever a URL is marked as a favorite, *a new attachment between the URL and at least one topic is created.*” EX1003, [0122]. Accordingly, URLs in the “My Topixa” section are for the “*other*

web content” created by Frank (“*other user*” from the “*first user*”). EX1003, [0211].

And as shown in Figure 7, the “*other web content*” in “My Topixa” includes the URL and web content for “Half Moon Bay Coastsides Chamber.” EX1003, Figure 7.

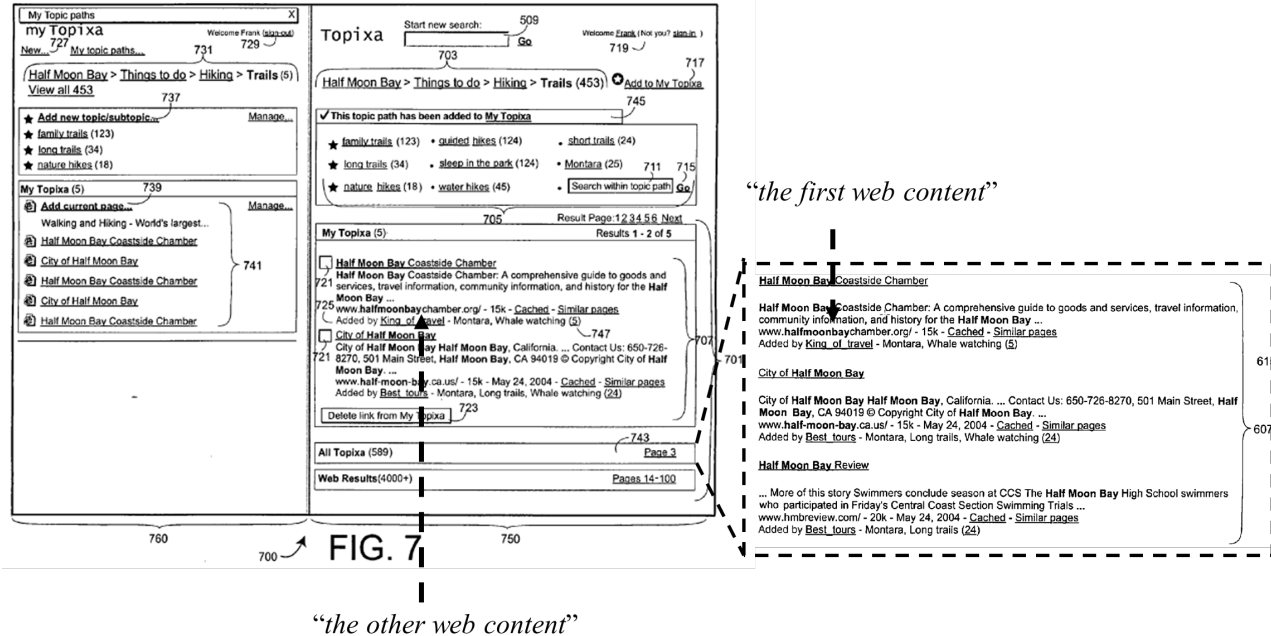
EX1002, ¶140.



EX1003, Figure 7.

Palmon also teaches search results that include “*first web content*” identified by “King_of_travel” (“*first user*”). As explained in Section IX.A.1.d) [Grounds I/II, 1C], Frank’s search results include “overall results, e.g., the URLs presented in list 607 of FIG. 6.” EX1003, [0208]. The “overall results” include URLs identified by “King_of_travel,” including the URL and web content for “Half Moon Bay

Coastside Chamber” (“*first web content*”). See EX1003, Figure 7. EX1002, ¶¶141-142.



EX1003, Figures 6, 7.

Thus, Palmon teaches that the “*first web content*” and the “*other web content*” may be the same web content: Palmon discloses that the “*first web content*”—“Half Moon Bay Coastside Chamber”—is the same as the “*other web content*,” which also corresponds to “Half Moon Bay Coastside Chamber.” EX1002, ¶¶142-143.

To the extent that the “*other users*” must be different from both the “*first user*” and the “*second user*,” and the “*other web content*” in the search results must be identified by users other than the “*first user*” or “*second user*” (as explained in Section IX.A.1.d) [Grounds I/II, 1C]), Palmon teaches that “*the first web content is same as the other web content*” even under such interpretation. EX1002, ¶144.

Palmon teaches that **multiple** users can create an attachment between the same URL and topic. For example, Palmon explains that “the result of a first user defining a first attachment between a first topic and a first information item [e.g., a webpage] and a second user defining an attachment between the first topic and the first information item is that **at least two attachments exist** between the first topic and the first information item.” EX1003, Claim 36. *See also* EX1003, Claim 27. Indeed, “an attachment can include the quadruple of information: **the user**, the topic, the URL, and the rating in the attachment data structure (table) 175.” EX1003, [0117]. EX1002, ¶145.

Palmon also teaches that when Frank performs a search by selecting a topic, the user interface presents overall results that includes “a set of results ... **attached to** topic A.” EX1003, [0071]. Accordingly, Palmon teaches that the overall results shown in Figure 7 include **all** attachments associated with a selected topic—including multiple attachments corresponding to the same URL because multiple attachments may have been created by different users. Thus, a POSITA would have understood that the overall results include **all** attachments created by different users, even if the attachments correspond to the same URL (i.e., same web content). Indeed, Palmon does not teach performing any deduplication of URLs in the search results. EX1002, ¶146.

Accordingly, Palmon teaches that the search results can include the “*first web content*” identified by “King_of_travel” (the “*first user*”) and the “*other web content*” identified by another user (e.g., Best_tours), where the “*first web content*” and the “*other web content*” correspond to the same underlying URL. EX1002, ¶147.

At a minimum, it would have been obvious to modify Palmon to present search results that include *all* attachments stored for a particular topic, including those provided by multiple users corresponding to the same URL, as explained above. EX1002, ¶148.

A POSITA would have been motivated to do so. Palmon teaches that a user is associated with a credibility level, indicating the quality of attachments created by a particular user. *See* EX1003, [0147] (“the credibility measure for a user is a measure of how many other users positively rate the topics first created by a user.”). *See also* EX1003, [0033], [0146]-[0161]. Thus, a POSITA would have been motivated to present search results that present all attachments by all users, so that a querying user can determine the reliability of each attachment based on who provided the attachment. Additionally, multiple independent attachments to the same URL provide corroborative evidence that the URL is relevant to the selected topic. Displaying those multiple attachments would predictably improve the user’s ability to assess relevance by showing that more than one user associated the same content with the topic. EX1002, ¶¶148-150.

A POSITA would have had a reasonable expectation of success in making this modification because the modification would have merely entailed presenting all attachments stored in the attachment database, which would have been well within the skill of a POSITA. EX1002, ¶151.

To the extent claim 8 requires that every instance of “*other web content*” also be “*first web content*,” that requirement would have been obvious in view of Palmon. EX1002, ¶152.

As explained above, Palmon teaches that multiple users can create attachments for the same URL. *See* EX1003, Claims 27, 36. A POSITA therefore would have understood that there may be multiple attachments between the same “Topic and URL,” including attachments created by different users. Accordingly, it would have been obvious from Palmon that King_of_travel (“*first user*”) creates attachments for all web content for which Frank, Best_tours, and/or additional users (“*other users*”) have created attachments. EX1002, ¶153.

That scenario represents a straightforward and predictable use case of Palmon’s disclosed system, and a POSITA would not have needed to modify Palmon’s system to accommodate such use. This use case would have involved only the routine operation of Palmon’s disclosed features and would have yielded entirely predictable results—namely, that the same web content is identified by multiple users and appears both as “first web content” and as “other web content” in search

results. Because Palmon already supports multiple attachments for the same URL without restriction, implementing this use case would have required no system changes, no redesign, and no departure from Palmon’s intended operation. EX1002, ¶154.

7. Claim 9

- a) [9] The method of claim 1, wherein the receiving of an identification of first web content further comprises receiving a rating on the first web content, wherein the rating is a score assigned by the user of the first client computer.

Palmon discloses the additional limitation of [9]. EX1002, ¶155.

First, Palmon discloses that “*the receiving of an identification of first web content further comprises receiving a rating on the first web content*” for the reasons provided in Section IX.A.2 [Grounds I/II, 2]. EX1002, ¶156.

Second, Palmon also discloses that “*the rating is a score assigned by the user of the first client computer.*” Palmon discloses that the rating may be “an *integer rating* between 0 and 5, [or] an *integer rating* between 0 and 10.” EX1003, [0118]. An “integer rating” within a defined numeric range teaches a “*score.*” Also, as explained in Section IX.A.2 [Grounds I/II, 2], the rating is assigned by the user who provides attachment information for the URL. Accordingly, the rating (score) is *assigned by the first user* operating the first client device that submits the attachment

information to the server—i.e., “*the user of the first client computer.*” EX1002, ¶¶157-158.

8. Claim 10

Claim 10 is materially identical to claim 1 except for [10Pre] and [10A]. Palmon discloses or renders obvious [10B]-[10D] for the reasons provided above for [1A]-[1C], respectively. *See* Sections IX.A.1.b) [Grounds I/II, 1A]-IX.A.1.d) [Grounds I/II, 1C]. Palmon also discloses [10Pre] and [10A] as explained below. EX1002, ¶¶159, 165-167.

a) [10Pre] A computing device comprising:

To the extent the preamble is limiting, Palmon discloses [10Pre]. EX1002, ¶160.

Palmon describes a client-server system that includes a “search server 151.” EX1003, [0036] (“An exemplary client 101 is connected to ... a search server 151.”); Figure 1. Palmon further explains that “search server 151” is a “*computing device*” having well-known components, including “a processing system of at least one processor 157, a memory subsystem 167, ... local storage 159, and a NIC 162 coupling the processor system to the network 105.” EX1003, [0038]. EX1002, ¶161.

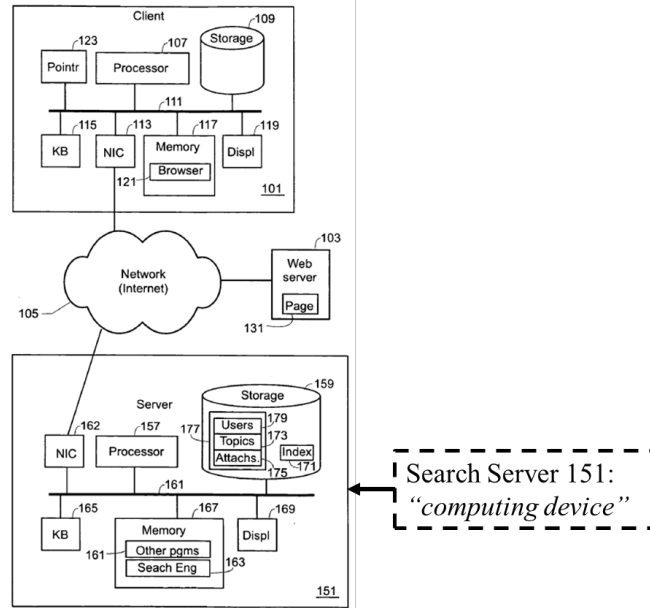


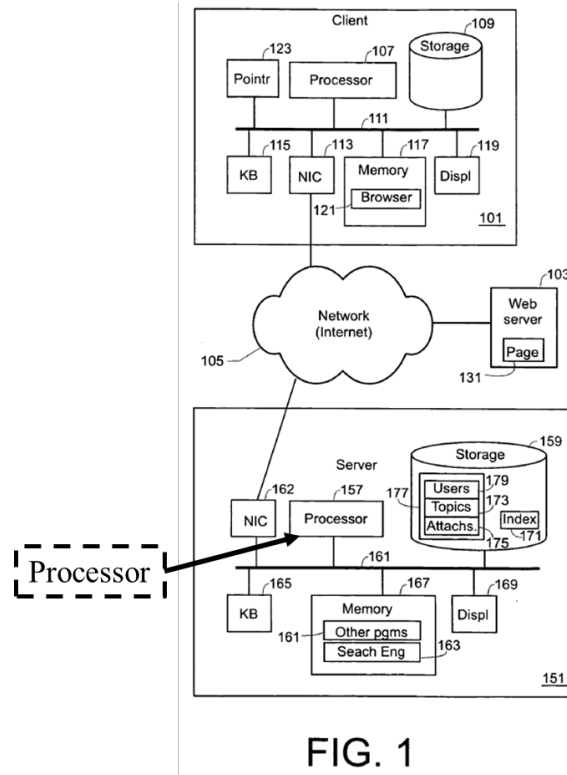
FIG. 1

EX1003, Figure 1.

- b) [10A] at least one processor; and a storage medium tangibly storing thereon program logic configured to instruct the at least one processor to at least:

Palmon discloses [10A]. EX1002, ¶162.

First, Palmon discloses “*at least one processor.*” Palmon explains that a “search server such as search server 151 includes a processing system of *at least one processor 157.*” EX1003, [0038]; Figure 1. EX1002, ¶163.



EX1003, Figure 1.

Second, Palmon discloses “a storage medium tangibly storing thereon program logic configured to instruct the at least one processor.” Palmon discloses that “search server 151 includes ... a memory subsystem 167.” EX1003, [0038]; Figure 1. Palmon further discloses that the “search server 151 includes a search engine application 163 shown in Figure 1 as being in **memory 167**.” EX1003, [0038], [0041]; Figure 1. The search engine application 163 includes “**a set of instructions implementing an embodiment of the invention**.” EX1003, [0041]. Accordingly, Palmon discloses a memory subsystem 167 (“storage medium”) storing a set of instructions (“tangibly storing thereon program logic”) that are

configured to instruct the at least one processor 157 (“*the at least one processor*”).

EX1002, ¶164.

9. Claims 11-12, 14-15, 17-18

Palmon discloses or renders obvious additional limitations of Claims 11-12, 14-15, 17-18 for the reasons provided for Claims 2-3, 5-6, 8-9, respectively. *See* Sections IX.A.2 [Grounds I/II, 2]-IX.A.3 [Grounds I/II, 3], IX.A.4 [Grounds I/II, 5]-IX.A.5 [Grounds I/II, 6], IX.A.6 [Grounds I/II, 8]-IX.A.7 [Grounds I/II, 9]. EX1002, ¶¶168-173.

10. Claim 19

- a) **[19Pre] A non-transitory computer readable storage medium storing computer program instructions configured instruct a computer processor to perform at least:**

To the extent the preamble is limiting, Palmon discloses [19Pre] as explained in Sections IX.A.8.a) [Grounds I/II, 10Pre] and IX.A.8.b) [Grounds I/II, 10A]. EX1002, ¶174.

For example, Palmon discloses a “search server 151” having “a processing system of at least one processor 157” and “a memory subsystem 167.” EX1003, [0038], Figure 1. Palmon further explains that the “search server 151 includes a search engine application 163 shown in Figure 1 as being in memory 167,” and that application includes “a set of instructions implementing an embodiment of the invention.” EX1003, [0038], [0041], Figure 1. Accordingly, Palmon discloses a

memory subsystem 167 (“*non-transitory computer readable storage medium*”) storing a set of instructions (“*storing computer program instructions*”) configured to instruct the processor 157 (“*computer processor*”) to perform the claimed operations. EX1002, ¶175.

- b) [19A] receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window, and a user content created by the first user of the web browser;

Palmon discloses [19A]. EX1002, ¶176.

First, Palmon discloses “*receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window*” as explained in Section IX.A.1.b) [Grounds I/II, 1A]. EX1002, ¶177.

Second, Palmon also discloses “*receiving ... a user content created by the first user of the web browser.*” The ’744 Patent explains that the user content includes “*keywords*.” EX1001, 9:19-27. EX1002, ¶178.

Palmon teaches that the server receives keywords (“*user content*”) associated with a URL of the web content. As explained in Section IX.A.1.c) [Grounds I/II, 1B], a user viewing a webpage can “click[] on an ‘add current page’ button” and submit “attachment information”—including “the *search topic path* and the page URL”—to the server. EX1003, [0102]. That “search topic path” includes “the set

of topics selected during a particular search by a particular searcher” (EX1003, [0071]), and Palmon explains that the “set of topics” are “keywords” (EX1003, [0003]). EX1002, ¶179.

Palmon also teaches that the topics/keywords can be “*created by*” the user using the same interface for creating the attachment. EX1003, [0110] (“the user-specific explorer panel includes mechanisms for the user to *create a new topic*, e.g., by clicking on an ‘Add new topic’ button on the *explorer panel*”); Claim 11. “When a user creates a new topic, the user *at the same time* or later creates one or more attachments between the newly created topic and one or more URL.” EX1003, [0109]. EX1002, ¶180.

Accordingly, Palmon discloses that the server receives keywords (“*user content*”) created by the user who creates the attachment (“*first user*”) using the user interface, which is part of the “*web browser*.” EX1002, ¶181.

c) [19B] indexing, by the server computer, the first web content based at least in part on the user content;

Palmon discloses “*indexing, by the server computer, the first web content*” as explained in Section IX.A.1.c) [Grounds I/II, 1B]. EX1002, ¶¶182-183.

Palmon also teaches that the indexing is “*based at least in part on the user content*” because “[w]hen a user creates a new topic [i.e., *user content*], the user at the same time or later *creates one or more attachments* between *the newly created*

topic and one or more URL.” EX1003, [0109]. *See also* EX1003, [0107], [0111].
EX1002, ¶184.

- d) [19C] storing, by the server computer, the user content
in association with the identification of the first web
content; and

Palmon discloses [19C]. EX1002, ¶185.

Palmon teaches that when a user creates a new topic, “the information of the
new topic is sent to the server. On the server side, in 427, the method receives the
new topic information, and *updates the set of topics 173 in the database 177.*”
EX1003, [0111]. EX1002, ¶186.

Palmon explains that “[w]hen a user creates a new topic, the user at the same
time or later *creates one or more attachments* between *the newly created topic* and
one or more URL” (EX1003, [0109]) “by updating the set of attachments (table 175)
in the database 177” (EX1003, [0102]). EX1002, ¶187.

As explained in Section IX.A.1.c) [Grounds I/II, 1B], the attachment is “an
association between a URL and a topic,” and is “defined by at least the <*URL,topic*>
doublet.” EX1003, [0048]. Accordingly, by creating an attachment between the
newly created topic and the URL, Palmon’s server stores the newly created topic
 (“*user content*”) in association with the URL of the webpage being displayed (“*first
web content*”) in the database 177. EX1002, ¶188.

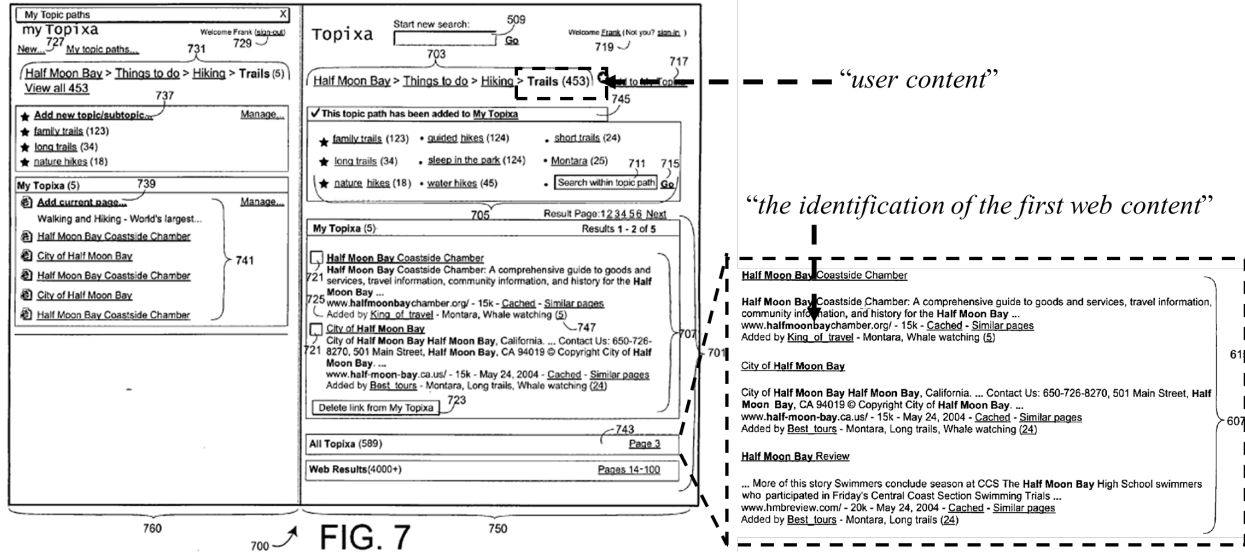
- e) **[19D] in response to receiving a search query from a web browser of a second client computer operated by a second user, transmitting, by the server computer, search results to the web browser of the second client computer,**

Palmon discloses (Ground I), or at a minimum renders obvious (Ground II), [19D] for the reasons provided in Section IX.A.1.d) [Grounds I/II, 1C]. EX1002, ¶189.

- f) **[19E] the search results comprising the identification of the first web content and the user content associated with the first web content.**

Palmon discloses, or at a minimum renders obvious, [19E]. EX1002, ¶190.

As explained in Section IX.A.1.d) [Grounds I/II, 1C], Palmon’s Figure 7 shows the search results received from the server, which includes identification of the current topic “Trails.” EX1003, [0207] (“the main window 750 includes an indication of the search topic path 703, in this case again ‘Half Moon Bay>Things to do>Hiking>*Trails*.’”). And the search results also include a list of URLs 707 corresponding to the identified current topic, for example, the “second list 743” that includes “the overall results, e.g., the URLs presented in *list 607 of FIG. 6*,” as illustrated below. EX1003, [0208]. See Section VII.A [Palmon]. As explained in Section IX.A.1.d) [Grounds I/II, 1C], the list 607 includes “*search results comprising the first web content identified by the first user,*” i.e., *King_of_travel*,” as illustrated below. EX1002, ¶¶191-192.



EX1003, Figures 6, 7.

As explained in Section IX.A.10.b) [Grounds I/II, 19A], Palmon teaches that the topic—such as the current topic “Trails”—may be newly created by a user. In such circumstances, the current topic “Trails” would be “*the user content associated with the first web content,*” as illustrated above. EX1002, ¶193.

At a minimum, it would have been obvious to implement Palmon’s interface in Figure 7 to show the topics newly created by a user in place of the topic “Trails” because that would have merely amounted to a simple substitution of one known element (preexisting topics per Palmon) for another (newly created topics as taught by Palmon) to obtain predictable results of providing a user interface that shows the search results for the newly created topics. EX1002, ¶194.

B. Ground III: Palmon In View Of Walther Renders Obvious Claims 1-19.

1. Claim 1

Palmon discloses or renders obvious Claim 1 as explained in Section IX.A.1 [Ground I/II, Claim 1]. EX1002, ¶195.

To the extent Patent Owner contends that Palmon’s explorer bar implemented as an “additional window” does not teach or suggest “*a user interface separate from the main browser window*,” that is wrong, but regardless, such “*user interface*” would have been obvious in view of Walther. EX1002, ¶196.

As explained in Section VII.A [Palmon], Palmon teaches a user interface provided in an “additional window 760” separate from the main display area. EX1003, [0206]. That interface includes an “add current page” control that transmits the URL of the currently displayed page to the server. EX1003, [0101]-[0102], [0117]-[0119], [0206], [0217]. EX1002, ¶197.

A POSITA would have understood that there were many ways to implement the user interface in the additional window. For example, Walther teaches that the interface may be implemented as a “page” that is separate from the main display area. Specifically, as explained in Section VII.B [Walther], Walther teaches that “editing interface is advantageously displayed in a *separate window* ... that opens when a “Save This” button is activated.” EX1004, [0123]. And Walther further teaches that “the editing interface is arranged on the user’s display in such a way that

the user can look at both the subject page and the annotation or easily flip back and forth between the two.” EX1004, [0123]. *See also* EX1004, Figure 6, [0117], [0124], Figure 9. EX1002, ¶198.

A POSITA would have found it obvious to combine Palmon with Walther so that the user’s selection of Palmon’s “add current page” control would invoke Walther’s “*separate window*” to collect the user’s input for that page, and submit that information to Palmon’s server for storage. EX1003, [0102], EX1004, [0117], [0123], [0126]. EX1002, ¶199.

A POSITA would have been motivated to incorporate Walther’s annotation interface that is displayed in a separate window into Palmon. **First**, Walther’s interface allows the user to view the main display while providing information on the separate user interface. EX1004, [0117], [0123]-[0124]. **Second**, a POSITA would have understood that Walther’s interface is highly compatible with Palmon. In fact, Palmon already contemplates a user interface separate from the main window (EX1003, [0102], [0206], [0217]), and a POSITA would have understood that Walther’s interface provides one way to implement the interface. EX1002, ¶200.

A POSITA would have had a reasonable expectation of success. Palmon already teaches using a user interface to transmit and store user’s input. EX1003, [0102], [0117]-[0119]. Walther simply provides one way to implement the interface. EX1003, [0102], [0117]-[0119]; EX1004, [0117], [0124]. Modifying Palmon’s

existing “add current page” function using Walther’s user interface therefore would have been straightforward and would have predictably yielded Palmon’s attachments using Walther’s known UI mechanism. EX1003, [0102], [0117]-[0119], [0206], [0217]; EX1004, [0117], [0123]-[0124]. EX1002, ¶201.

Additionally, the combination would have been obvious because it would have merely amounted to a simple substitution of one known element (e.g., Palmon’s user interface in an “additional window”) for another (e.g., Walther’s separate window) to obtain predictable results of providing a user interface separate from the main display area. EX1002, ¶202.

2. Claims 2-3

Palmon discloses additional limitations of claims 2 and 3 as explained in Sections IX.A.2 [Grounds I/II, 2] and IX.A.3 [Grounds I/II, 3], respectively. EX1002, ¶¶203-204.

3. Claim 4

- a) [4] The method of claim 3, further comprising ranking, by the server computer, the first web content from the rating in relation to the ratings of the other web content received from the other users.**

Palmon in view of Walther renders obvious the additional limitation of [4]. EX1002, ¶205.

As explained in Section IX.A.2 [Grounds I/II, 2], Palmon discloses that users can rate URLs and send the URLs and the associated ratings to the server to create an attachment. EX1003, [0102], [0117], [0120], [0122]. EX1002, ¶206.

Palmon does not explicitly teach ranking search results based on collected ratings. That, however, was well known in the art. Walther explains that annotations—such as ratings—can be used to “affect the manner in which search results are presented.” EX1004, [0018]-[0019]. *See also* EX1004, [0051], [0068]. For instance, the search results may be “reranked using ratings contained in the annotations.” EX1004, [0147]. EX1002, ¶207.

Walther explains that the re-ranking can be based on “an aggregate rating (e.g., an average rating)” from “every user who has provided ... a rating.” EX1004, [0072]. For example, the server can “collect all ratings that any user might have assigned to the page or site having that URL.” EX1004, [0180]. “These ratings are then averaged or combined ... to determine a *global rating*.” EX1004, [0180]. Such global rating “may be used as a factor in the search-results ranking algorithm.” EX1004, [0181]. EX1002, ¶208.

A POSITA would have found it obvious to combine Palmon with Walther so that Palmon’s server re-ranks URLs in search results based on the URLs’ global ratings. That way, Palmon’s server “rank[s] ... *the first web content*” and other web contents based on the associated global ratings. EX1002, ¶209.

Walther explains that the global ratings are based on ratings from “every user who has provided ... a rating.” EX1004, [0072]. So, when the “*first web content*” is rated only by the first user (e.g., by adding the URL to its list of favorite URLs, EX1003, [0122]), the global rating for the “first web content” is the rating by the first user; when “*the other web content*” is rated only by “*the other users*” (e.g., by adding the URLs to their list of favorite URLs, EX1003, [0122]), the global rating of “*the other web content*” is based on “*the ratings of the other web content received from the other users.*” EX1002, ¶210.

Accordingly, Palmon in view of Walther teaches that Palmon’s server (“server computer”) “rank[s] ... *the first web content from*” the global rating of the first web content (“*the rating*”) in relation to the global rating of “*the other web content*” (“*the ratings ... received from the other users*”). EX1002, ¶211.

A POSITA would have been motivated to apply Walther’s method in Palmon’s system to adjust search-result rankings. Walther teaches that aggregated annotations—such as aggregated ratings—“can be used for purposes such as resolving ambiguity in search queries.” EX1004, [0191]. In this way, even when “the user’s identity or particular interests are not known” (EX1004, [0191]), search results can be refined to “enhance the user’s experience” (EX1004, [0189]). A POSITA would have recognized that Palmon already collects the ratings necessary to compute such aggregated ratings. Accordingly, a POSITA would have been

motivated to re-rank the research results based on the aggregated ratings (as explained above) to “enhance the user’s experience” with the search system. EX1004, [0189]. EX1002, ¶212.

A POSITA would have had a reasonable expectation of success because Palmon already collects the requisite rating information (‘positive’ and ‘negative’ or “integer rating[s]”) (EX1003, [0118]), and applying Walther’s re-ranking technique would have merely amounted to using a known technique (using Walther’s re-ranking technique) to improve a similar system (Palmon’s server that collects user’s ratings of webpages and returns search results) in the same way (re-ranking the search results based on the user’s ratings of webpages). Such combination would have merely entailed implementing the known functionality in software, which was well within the skill of a POSITA. *See Keynetik*, 2023 WL 2003932, at *2. EX1002, ¶213.

4. Claims 5-6

Palmon discloses additional limitations of claims 5 and 6 as explained in Sections IX.A.4 [Grounds I/II, 5] and IX.A.5 [Grounds I/II, 6], respectively. EX1002, ¶¶214-215.

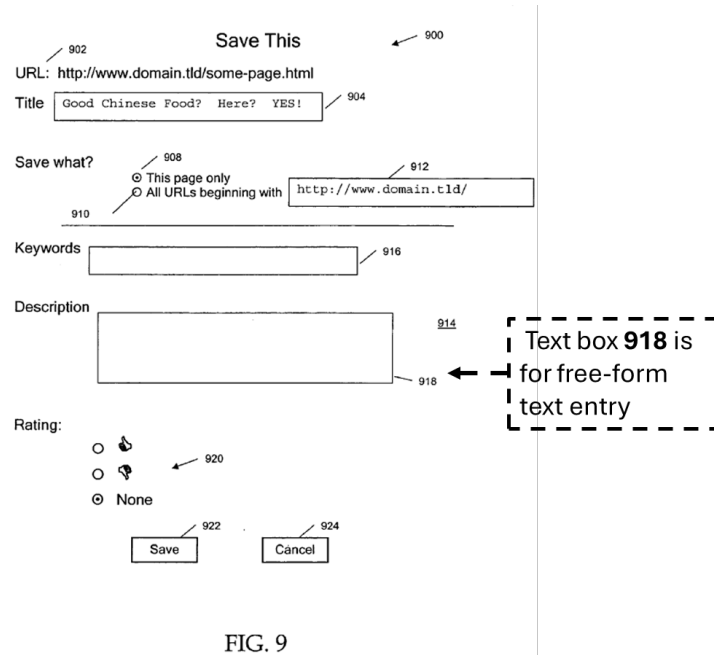
5. **Claim 7**

- a) **The method of claim 1, wherein the receiving of the identification of the first web content further comprises receiving, by the server computer from the first client computer, a comment on the first web content.**

Palmon in view of Walther renders obvious the additional limitation of [7].
EX1002, ¶216.

As explained in Section IX.A.1.b) [Grounds I/II, 1A], Palmon teaches that the server receives an identification of first web content (a URL) as part of a request to create an attachment. EX1003, [0048], [0099], [0117]. EX1002, ¶217.

Palmon does not expressly teach that the server also receives “*a comment on the first web content.*” That, however, was well known in the art. Walther teaches that a server can collect annotations that include a “free-text description of the document.” EX1004, [0050]. Such free-text descriptions of a webpage—shown, for example, in Figure 9 as field 918—constitute “*a comment on the first web content*” because they provide a user’s description of the webpage. Indeed, Walther explains that such annotations can be viewed by clicking a button called “Show My *Comments.*” See EX1004, [0119]. EX1002, ¶218.



EX1004, Figure 9.

It would have been obvious to combine Palmon with Walther to allow the server to collect a “free-text description” of a webpage as part of a request for attachment. Palmon already teaches that the server “*receiv[es]* the attachment information” (EX1003, [0102]) that includes metadata—topic and rating. EX1003, [0048]; [0101]. It therefore would have been obvious to combine Palmon with Walther so that the attachment information received by the server also includes additional metadata, such as Walther’s “free-text descriptions of the web page.” EX1004, [0091]. EX1002, ¶219.

A POSITA would have been motivated to combine Palmon with Walther as described above. Walther explains that additional annotations, such as the “free-text description,” can be “advantageously used in responding to current and future

queries submitted by that user.” EX1004, [0077]. For example, Walther teaches that such descriptions can also be used to generate an abstract of the webpage, or be viewed along with the underlying webpage. EX1004, [0128] (“the abstract is generated by using the user-supplied keywords and/or *description*....”); [0139]. Accordingly, a POSITA would have been motivated to obtain other types of metadata, such as the “free-text description” taught by Walther. EX1002, ¶220.

A POSITA also would have had a reasonable expectation of success in making this combination. Palmon already teaches a server that receives user-supplied metadata together with a URL. EX1003, [0101]-[0102], [0117]-[0119]. Walther simply identifies an additional type of information—a free-text description—to collect and store alongside the URL. EX1004, [0018], [0077]. Accordingly, combining Palmon with Walther would have merely amounted to a routine, predictable extension of Palmon’s attachment request. EX1002, ¶221.

The combination would have merely amounted to using a known technique (Walther’s technique of collecting and using free-text description for use in web search applications) to improve similar devices (Palmon’s server that performs webpage searches) in the same way (using the additional free-text description in responding to current and future search queries). EX1002, ¶222.

6. Claims 8-9

Palmon discloses additional limitations of claims 8 and 9 as explained in Sections IX.A.6 [Grounds I/II, 8] and IX.A.7 [Grounds I/II, 9], respectively. EX1002, ¶¶223-224.

7. Claim 10

Palmon discloses or renders obvious Claim 10 as explained in Section IX.A.8 [Ground I/II, Claim 10]. EX1002, ¶225.

To the extent Patent Owner contends that Palmon’s “additional window” does not teach or suggest “*a user interface separate from the main browser window*,” that is wrong, but regardless, such “*user interface*” would have been obvious in view of Walther as explained in Section IX.B.1 [Ground III, Claim 1]. EX1002, ¶226.

8. Claims 11, 12, 14, 15, 17-19

Palmon discloses the additional limitations of claims 11 and 12, 14-15, 17-19 as explained in Sections IX.A.2 [Grounds I/II, 2]-IX.A.3 [Grounds I/II, 3], IX.A.4 [Grounds I/II, 5]-IX.A.5 [Grounds I/II, 6], IX.A.6 [Grounds I/II, 8]-IX.A.7 [Grounds I/II, 9], and Section IX.A.10 [Grounds I/II, 19]. EX1002, ¶¶227-228, 230-231, 233-235.

9. Claims 13, 16

Palmon in view of Walther renders obvious the additional limitations of Claims 13 and 16 as explained in Sections IX.B.3 [Ground III, 4] and IX.B.5 [Ground III, Claim 7], respectively. EX1002, ¶¶229, 232.

C. Ground IV: Palmon In View Of Walther And Lu Renders Obvious Claims 19 And 20.

1. Palmon In View Of Walther and Lu

a) Palmon In View Of Walther’s Annotations And Their Presentation In Search Results (“Palmon-Walther Combination)

As explained in Section VII.A [Palmon], Palmon teaches a “topic-guided searching” that allows a user to iteratively search webpages by selecting one or more “topics.” EX1003, [0011], [0017]. To facilitate such topic-guided searching, a user can associate one or more topics with a URL, which is called an “attachment.” EX1003, [0048], [0099]. EX1002, ¶236.

When creating an attachment, the user can also provide metadata associated with web content, such as a rating. For example, “[a] *URL* viewed under a search topic path also may be actively *rated by a user*, and such a *rating of the URL* creates and rates a new user-specific attachment.” EX1003, [0120]. *See also* EX1003, [0122]. Indeed, “an attachment can include the quadruple of information: the user, the topic, the URL, and the *rating*.” EX1003, [0117]. EX1002, ¶237.

Although Palmon does not expressly teach associating web content with metadata other than ratings, associating web content with additional types of metadata was well known in the art. For example, as explained in Section VII.B [Walther], Walther discloses a search server that collects user-supplied metadata for a web page, referred to as “annotations.” EX1004, [0009], [0065]. Walther’s annotations include “a rating (which may be favorable or unfavorable) of the document, a list of keywords identifying a topic (or topics) of the document, [and] a free-text description of the document.” EX1004, [0018]. These annotations are associated with the URL of the web page and stored together in a database coupled to the search server. *See* EX1004, [0076], [0083]-[0085], Figure 3. EX1002, ¶238.

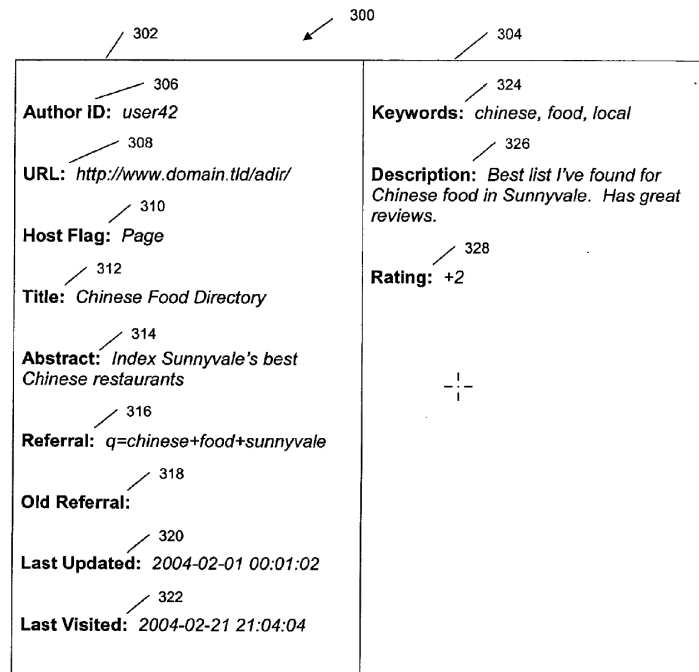


FIG. 3

EX1004, Figure 3.

Walther further teaches that the search server can use the stored annotations to improve search results. EX1004, [0009], [0019], [0066]. For example, when a user submits a search query, the server provides a “results page” that includes “a personalized results area (‘My Results’), in which any hits that the user has previously annotated are displayed.” EX1004, [0137]-[0138]. *See also* EX1004, [0126]. Such results page is shown in Figure 12, below. EX1002, ¶239.

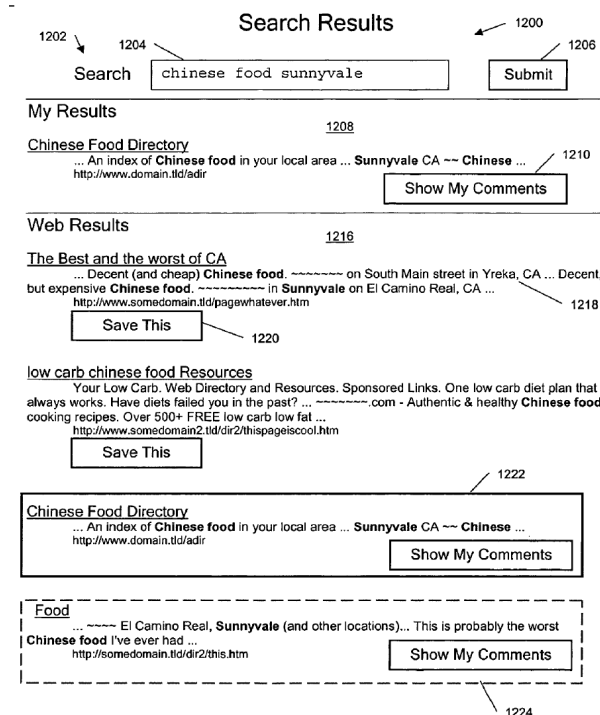


FIG. 12

EX1004, Figure 12.

For results displayed in the results area, “the user can activate to view her previous annotation.” EX1004, [0138]. Walther’s Figure 13 (below) shows an

example of an annotation view page 1300 that displays the user's prior annotations associated with the URL, including "Keywords," "Description," and "Rating." EX1004, [0139], Figure 13. Although Figure 13 depicts the annotations as being shown on a separate annotation view page 1300, Walther explains that annotations may alternatively be displayed directly within the search results page itself. EX1004, [0139] ("the annotation may be displayed *in-line in [search results] page 1200.*"). EX1002, ¶240.

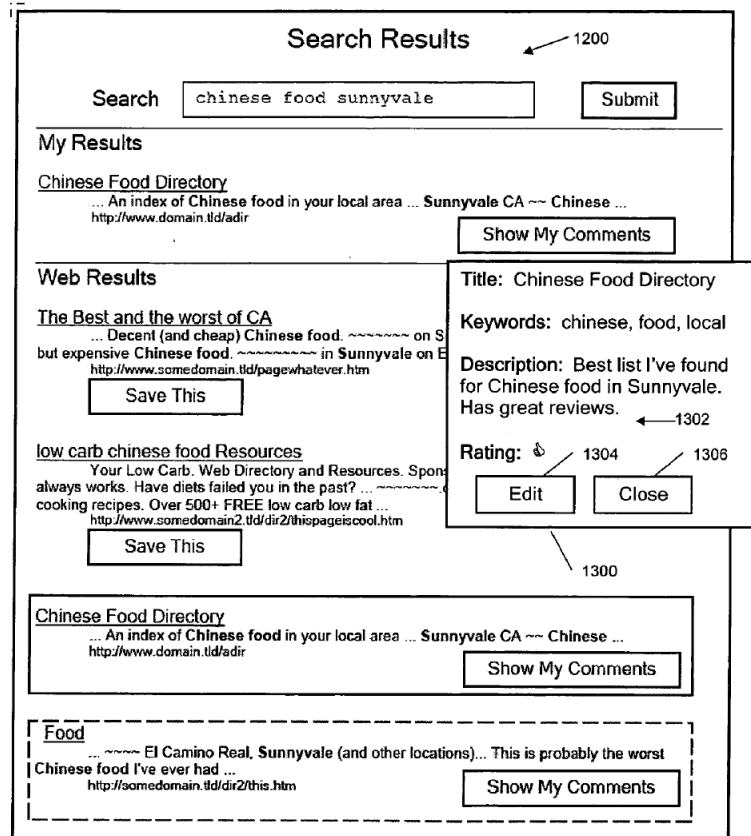
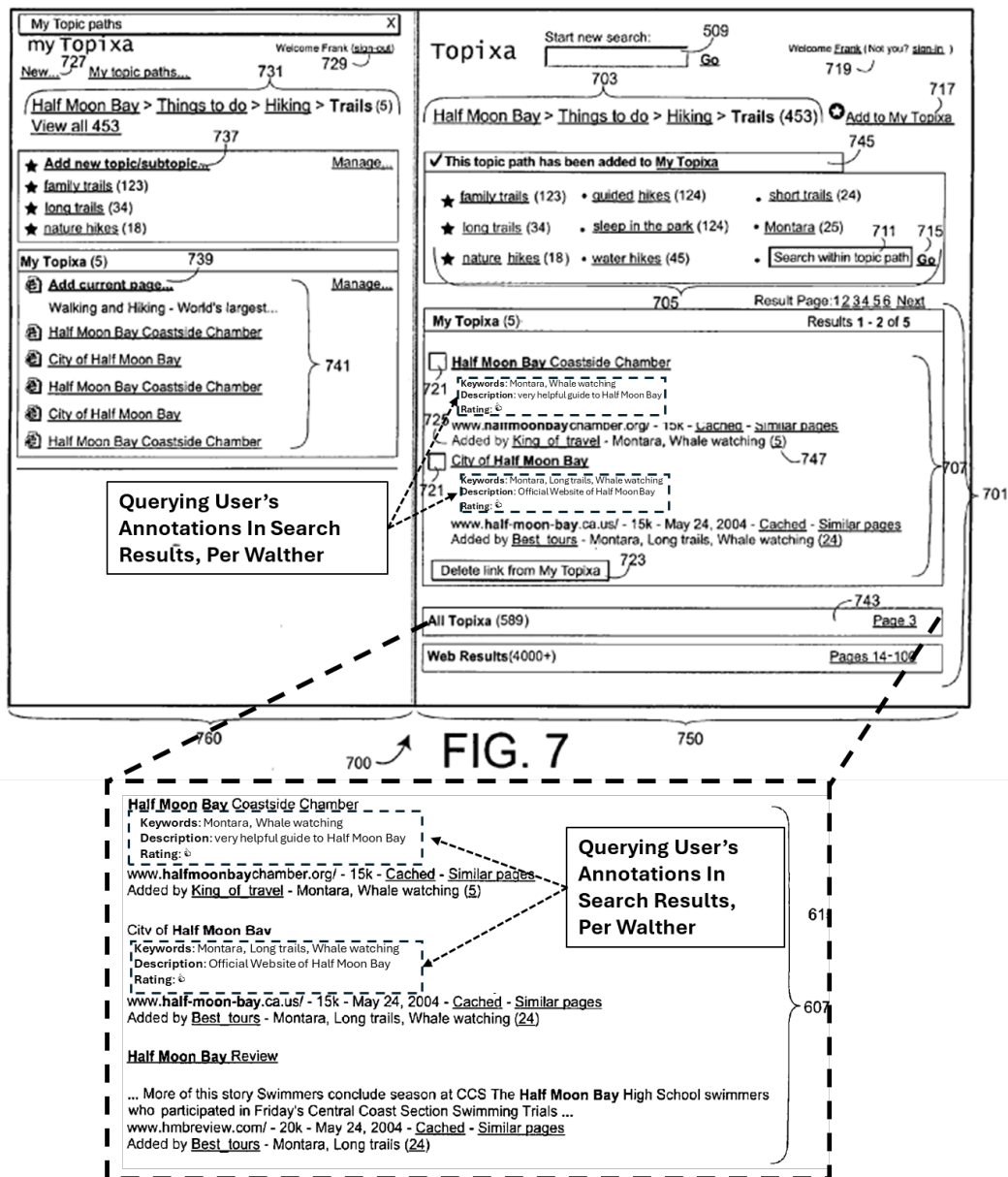


FIG. 13

EX1004, Figure 13.

A POSITA would have found it obvious to combine Palmon with Walther to incorporate Walther's annotation functionality into Palmon's system. Specifically, a POSITA would have found it obvious to modify Palmon such that: (1) during attachment creation, Palmon's server collects and stores user annotations—rating and text description—using an annotation editing interface as taught by Walther (EX1004, [0018], [0050], [0077], [0083]-[0085], Figure 9); and (2) when presenting search results, Palmon's server presents—for one or more URL in the search results—the querying user's keywords/topics, rating, and free-text description associated with the URL, in-line with the search results, as taught by Walther and illustrated below (EX1004, [0138]-[0139]). EX1002, ¶241.

Palmon-Walther Combination



EX1003, Figures 6, 7.

A POSITA would have been motivated to combine Palmon with Walther's teachings as described above for three independent reasons. **First**, Walther explains that “[o]nce collected, annotation data can be used in various ways to enhance the user’s searching and Web browsing experience.” EX1004, [0134]. Accordingly, a

POSITA would have been motivated to use Walther’s annotations-related techniques taught in Palmon’s system to “enhance the user’s searching and Web browsing experience” (EX1004, [0134]), and one such technique is collecting and displaying querying user’s annotations along with search results as shown in Figure 13 of Walther. Thus, a POSITA would have been motivated to collect and show the keywords/topics, ratings, and text descriptions together with search results in Palmon’s system, as illustrated above. EX1002, ¶¶242-243.

Second, Palmon and Walther are highly compatible and directed to the same technical problem. Both references teach a way to associate webpages with metadata. *See* EX1003, [0048], [0099] (associating URLs with topics and ratings); EX1004, [0018] (associating URLs with topics, ratings, and text descriptions). Both also teach augmenting search results by displaying URLs alongside the associated metadata to help users more efficiently evaluate search results. *See* EX1003, [0208], Figure 7 (displaying keywords/topics along with URLs), EX1004, [0133], Figure 13 (displaying keywords/topics, rating, description along with URLs). Because both references address a substantially similar issue—helping users quickly assess the relevance of search results using metadata/annotations—a POSITA would have readily understood that Walther’s expanded set of metadata would readily be applicable to Palmon’s system. Thus, a POSITA would have been motivated to use the expanded set of metadata—keywords/topics, ratings, and text descriptions—

taught by Walther to collect and display the expanded set of metadata along with the search results in Palmon’s system. EX1002, ¶244.

Third, combining Palmon with Walther would have involved nothing more than the predictable use of known techniques to achieve their established functions. Walther teaches well-understood mechanisms for collecting and displaying multiple types of metadata, and Palmon already collects and displays metadata associated with URLs. EX1003, [0206]-[0207]; EX1004, [0134], [0136], [0139]-[0140]. Extending Palmon’s system to collect and display additional metadata (e.g., keywords, ratings, free-text descriptions) as taught by Walther would have been a straightforward and predictable design choice that improves the user’s ability to evaluate search results, without altering the fundamental operation of Palmon. EX1002, ¶245.

A POSITA would have had a reasonable expectation of success in combining Palmon and Walther for two reasons. **First**, Palmon and Walther are highly compatible. Accordingly, the combination of Palmon and Walther would have merely amounted to using a known technique (e.g., Walther’s technique of collecting, storing, and displaying user annotations—topics/keywords, ratings, and text descriptions—in search results (EX1004, [0018], [0136]-[0139], [0142])) to improve a similar system (e.g., Palmon’s search system that also collects and stores a rating and topics/keywords and displays the topics/keywords (EX1003, [0117]-

[0119])) in the same way (e.g., displaying text descriptions of a webpage as well as a rating and topics/keywords in search results). A POSITA therefore would have expected that incorporating Walther’s annotation techniques into Palmon would function as intended, namely by displaying keywords/topics, ratings, and text descriptions together with keywords/topics in search results. EX1002, ¶¶246.

Second, the combination would have been straightforward and predictable. Palmon teaches collecting and storing metadata associated with a URL as an “attachment”—including user ID, keyword/topic, URL, and rating. EX1003, [0117]-[0119]. Walther similarly teaches that URL annotations include keywords/topics, ratings, and free-text descriptions and further teaches displaying those annotations within search results. EX1004, [0018], [0136]-[0139], [0142]. Accordingly, the combination would have merely amounted to expanding Palmon to collect, store, and display annotations taught by Walther (e.g., topics/keywords, ratings, and free-text descriptions) and displaying them within search results—an incremental software modification that would have been well within the capabilities of a POSITA. EX1003, [0117]-[0119], [0206]-[0207]; EX1004, [0136], [0139], [0142]. EX1002, ¶247.

Additionally, the combination would have been obvious because it merely applies Walther’s known technique for collecting and storing user annotations and augmenting search results with the annotations to Palmon’s known topic-guided

search system to obtain the predictable result of “enhanc[ing] the user’s searching and Web browsing experience.” EX1003, [0206]-[0207]; EX1004, [0120], [0134], [0136], [0138]-[0139]. EX1002, ¶248.

**b) Palmon-Walther Combination, Further In View Of
Lu’s Presentation Of Other User’s Annotations In
Search Results (“Palmon-Walther-Lu Combination”)**

In the Palmon-Walther Combination, the search results present querying user’s annotations. But it was well known in the art that the search results can also present annotations by other users, not just the querying user. EX1002, ¶249.

For example, Lu teaches “search systems and methods that leverage ... *annotations provided by other users* who have a trust relationship to the querying user.” EX1005, [0006]. As explained in Section VII.C [Lu], when a user enters a search query, the search server provides a search results page that includes a “personalized (‘My Web’) results area, in which any hits that members of the querying user’s trust network have previously annotated are displayed.” EX1005, [0158]-[0159]. Lu explains that the “search results page [also] provides excerpts from the comments made by trust network members in ‘My Web’ section 948.” EX1005, [0163]. Specifically, “[e]ach hit 950 [in the search results] is accompanied by *comments 952* extracted from *annotations by trust network members*.” EX1005, [0163]. EX1002, ¶250.

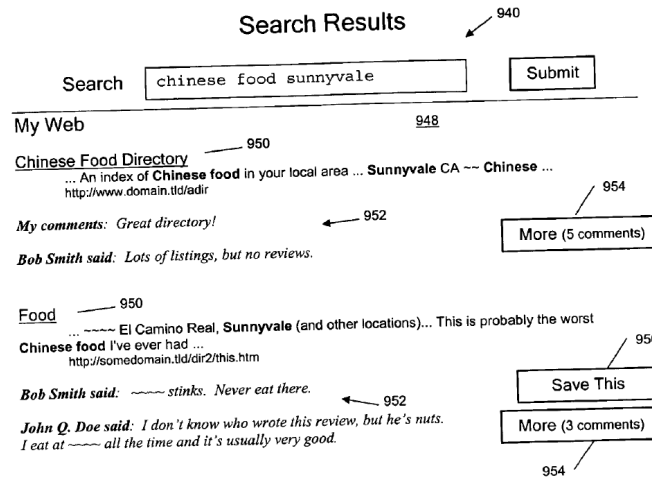
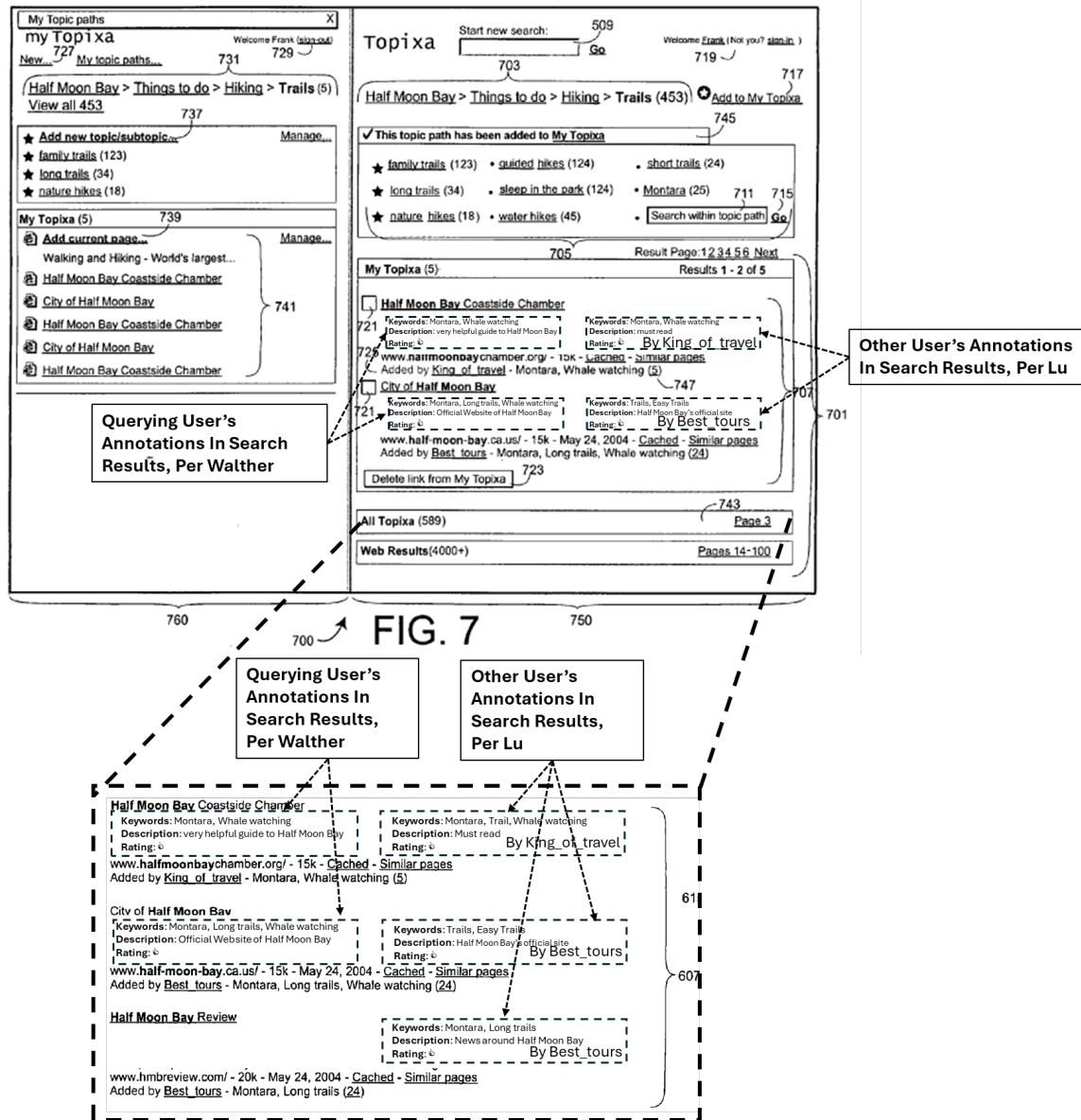


FIG. 9B

EX1005, Figure 9B.

A POSITA would have found it obvious to combine the Palmon-Walther Combination with Lu so that the search results also include annotations contributed by other users—such as by those who created the attachment for the associated URL. In such a combined system, the search results page would present URLs together with associated annotations from the querying user and other users who created the attachments for the web content, thereby providing additional context to help the querying user evaluate the search results, as illustrated below. EX1002, ¶251.

Palmon-Walther-Lu Combination



EX1003, Figures 6, 7.

A POSITA would have been motivated to combine the Palmon-Walther Combination with Lu for two reasons. **First**, Lu expressly teaches that annotations contributed by other users can “enhance the querying user’s experience,” and that one way to leverage such annotations is by displaying them alongside the querying

user's search results. EX1005, [0015], [0163]. Accordingly, a POSITA would have been motivated to apply Lu's teachings in the Palmon-Walther Combination to further enhance the user's searching and Web browsing experience by providing additional, socially informed context in the search results. EX1002, ¶252.

Second, a POSITA would have understood that Lu's teachings are readily applicable to the Palmon-Walther Combination. The Palmon-Walther Combination already provides a search results page in which querying user's annotations are displayed alongside URLs. *See* Section IX.C.1.a) [Palmon-Walther Combination]. Lu teaches extending the displayed search results to also include annotations from users other than the querying user, particularly users within a trust network. Because this modification builds directly on the existing annotation-display framework of the Palmon-Walther system, a POSITA would have readily recognized Lu's approach as a natural and predictable extension. Accordingly, a POSITA would have readily understood that Lu builds directly on Walther's annotation-based search framework, reinforcing that Lu's teachings regarding multi-user annotations are not only compatible with, but a natural extension of, the Palmon-Walther combination. EX1002, ¶¶253-256.

A POSITA would have had a reasonable expectation of success in implementing Lu's teaching in the Palmon-Walther Combination as explained above, for two reasons. **First**, as explained above, Lu's teachings are highly compatible

with the Palmon-Walther Combination. A POSITA would have understood that the combination merely amounts to using a known technique (displaying other users' annotations in search results, as taught by Lu) to improve similar systems (the Palmon-Walther Combination that displays the querying user's annotations in search results) in the same way (displaying other users' annotations in search results) to enhance the querying user's search experience. EX1002, ¶257.

Second, the combination would have been straightforward and predictable. The Palmon-Walther Combination presents search results with querying user's annotations. Lu teaches selecting annotations from other users, particularly those having a trust relationship with the querying user, and presenting those annotations alongside the associated URLs in the search results. EX1005, [0006], [0158], [0163]. Implementing Lu's technique in the Palmon-Walther Combination would have been straightforward because the search results in the Palmon-Walther system already identifies URLs, and the modification simply amounts to retrieving annotations from other users and including them in the search results, as illustrated by Lu. EX1003, Figure 7; EX1004, [0139]-[0140], Figure 13; EX1005, [0163]. Such a modification merely implements known functionality in software, which is well within the ordinary skill of a POSITA once the desired function is identified. EX1002, ¶258.

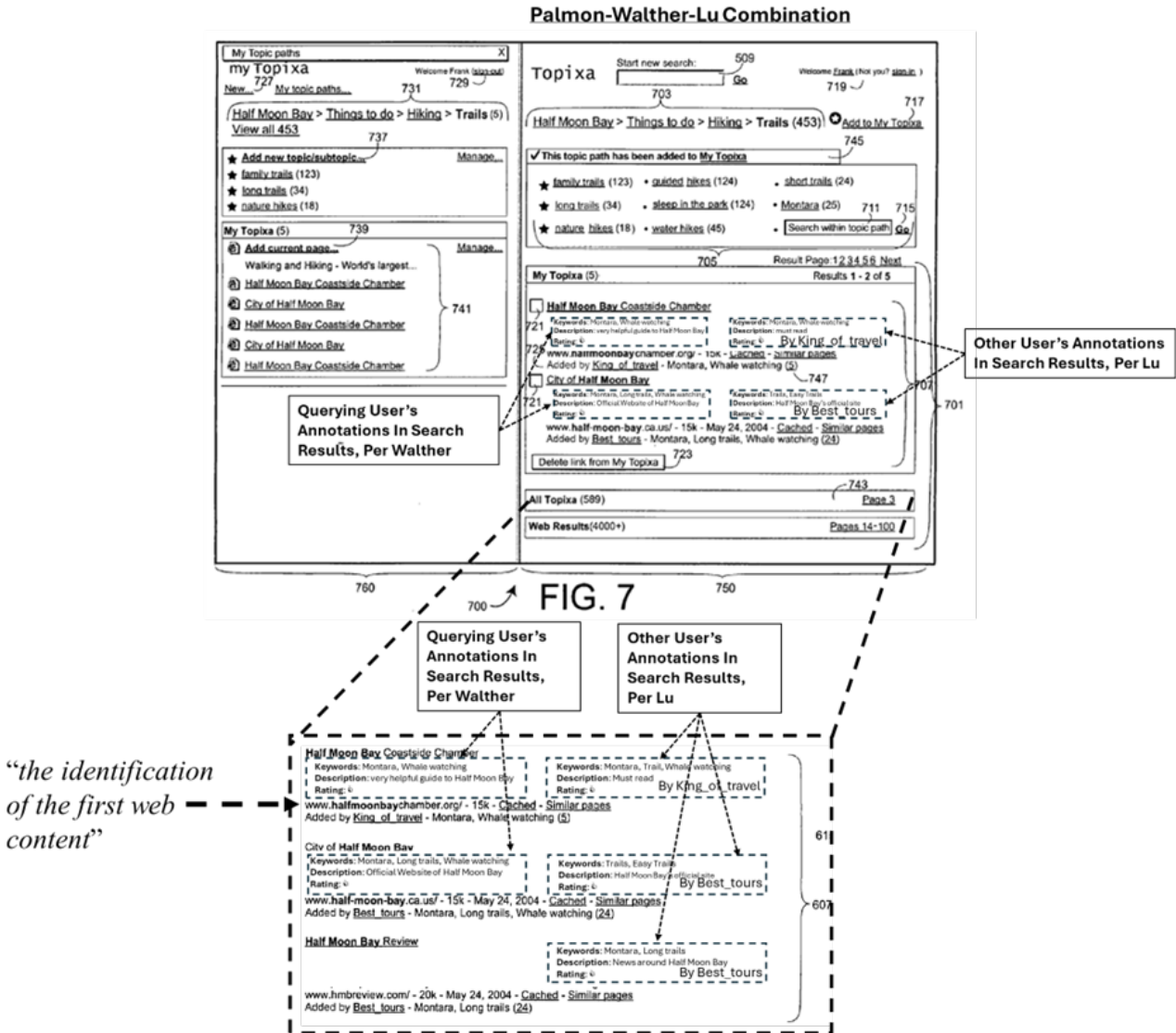
2. Claim 19

a) [19Pre]

The Palmon-Walther-Lu Combination teaches [19Pre] as explained in Section IX.A.10.a) [Grounds I/II, 19Pre]. EX1002, ¶259.

b) [19A]

The Palmon-Walther-Lu Combination teaches “*receiving, by a server computer from a first client computer operated by a first user, an identification of first web content displayed by a web browser of the first client computer in a main browser window*” as explained in Section IX.A.1.b) [Grounds I/II, 1A]. For example, in the Palmon-Walther-Lu Combination illustrated below, the server has received attachment information for the webpage “Half Moon Bay Coastsides Chamber” (“*first web content*”) from a user called “King_of_travel” (“*first user*”), which would have included the URL for the webpage “Half Moon Bay Coastsides Chamber” (“*an identification of first web content*”) as explained in Section IX.A.1.b) [Grounds I/II, 1A]. EX1002, ¶¶260-261.



EX1003, Figures 6, 7.

The Palmon-Walther-Lu Combination also teaches that the server “receiv[es] ... a user content created by the first user of the web browser.” Palmon teaches that the server receives *one or more keywords/topics* associated with a URL of the web content, as explained in Section IX.A.10.b) [Grounds I/II, 19A]. In addition, Walther teaches that “a user can create and save an annotation” (EX1004, [0019]), which is a “descriptive and/or evaluative metadata related to a document (e.g., a Web

page or site)” (EX1004, [0050]). The annotation may include “a rating ... [and] a free-text description” of a webpage. EX1004, [0018], [0050], [0090]-[0092]. Walther also teaches that the user-create annotations are received and stored by Walther’s server-side components. See EX1004, [0065] (“Personalization database 166 ... includes ... records of user-supplied annotations for various Web pages or sites.”); [0070], [0076], [0083]-[0085]. EX1002, ¶262.

Thus, for the reasons provided above, the Palmon-Walther-Lu Combination teaches that the server receives one or more key words/topics, rating, and text description of the URL (collectively, “*user content*”) created and provided by the first user of the web browser. EX1002, ¶263.

c) [19B]

The Palmon-Walther-Lu Combination teaches “*indexing, by the server computer, the first web content based at least in part on*” the topic/keyword (“*user content*”) as explained in Section IX.A.10.c) [Grounds I/II, 19B]. For example, Palmon discloses that the server “index[es] ... the first web content based at least in part on” one or more created keywords/topics (“*user content*”), as explained in Section IX.A.10.c) [Grounds I/II, 19B]. EX1002, ¶¶264-265.

To the extent [19B] requires indexing the first web content using the entirety of the “*user content*,” the Palmon-Walther-Lu Combination teaches such interpretation as well. For example, Walther explains that user annotations—such

as the rating and text description—are associated with a webpage and stored together in a database coupled to the search server. *See* EX1004, [0071], [0076] (“each annotation is a ***structured entry*** in a-personalization database 166”), [0083]-[0085], Figure 3. And Walther teaches using the annotations for inclusion in search results—*e.g.*, to determine whether a URL should be included in a search result. *See, e.g.*, EX1004, [0101]; [0137] (“after ***comparisons between hits and annotations*** are completed, the results list is optionally reranked using ***ratings*** contained in the annotations.”); [0141]. EX1002, ¶266.

Accordingly, the Palmon-Walther-Lu Combination teaches a server computer that indexes webpages (“*the first web content*”) based at least in part on the entirety of the user annotations (keywords/topics, ratings, text descriptions) (“*user content*”). EX1002, ¶267.

d) [19C]

The Palmon-Walther-Lu Combination teaches [19C]. For example, Palmon teaches that the server stores the newly created topic/keywords associated with the URL as an attachment, as explained in Section IX.A.10.d) [Grounds I/II, 19C]. Also, Walther teaches that the server stores the rating and the text description associated with a URL in “a ***structured entry*** in a-personalization database 166,” as shown in Figure 3 of Walther (below). Accordingly, the Palmon-Walther-Lu Combination teaches that the server stores the keywords/topics, rating, and the text description

(collectively, “*user content*”) in association with a URL (“*the identification of the first web content*”). EX1002, ¶¶268-269.

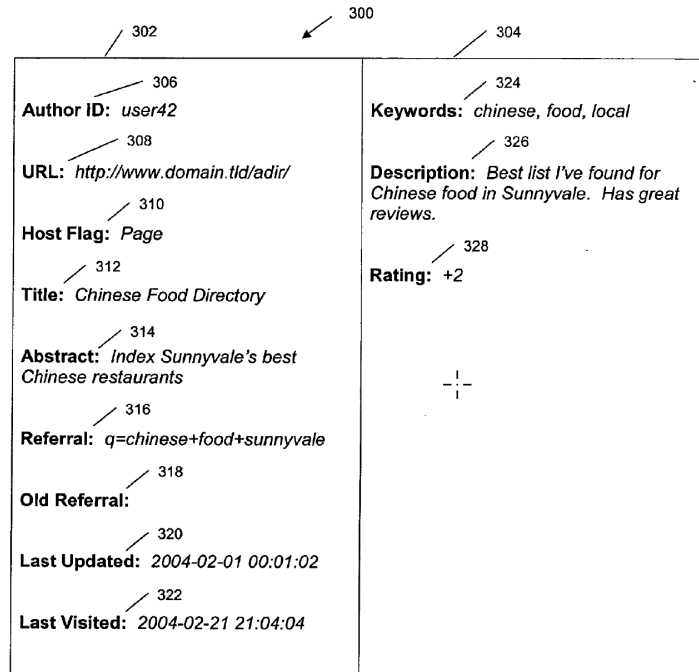


FIG. 3

EX1004, Figure 3.

e) [19D]

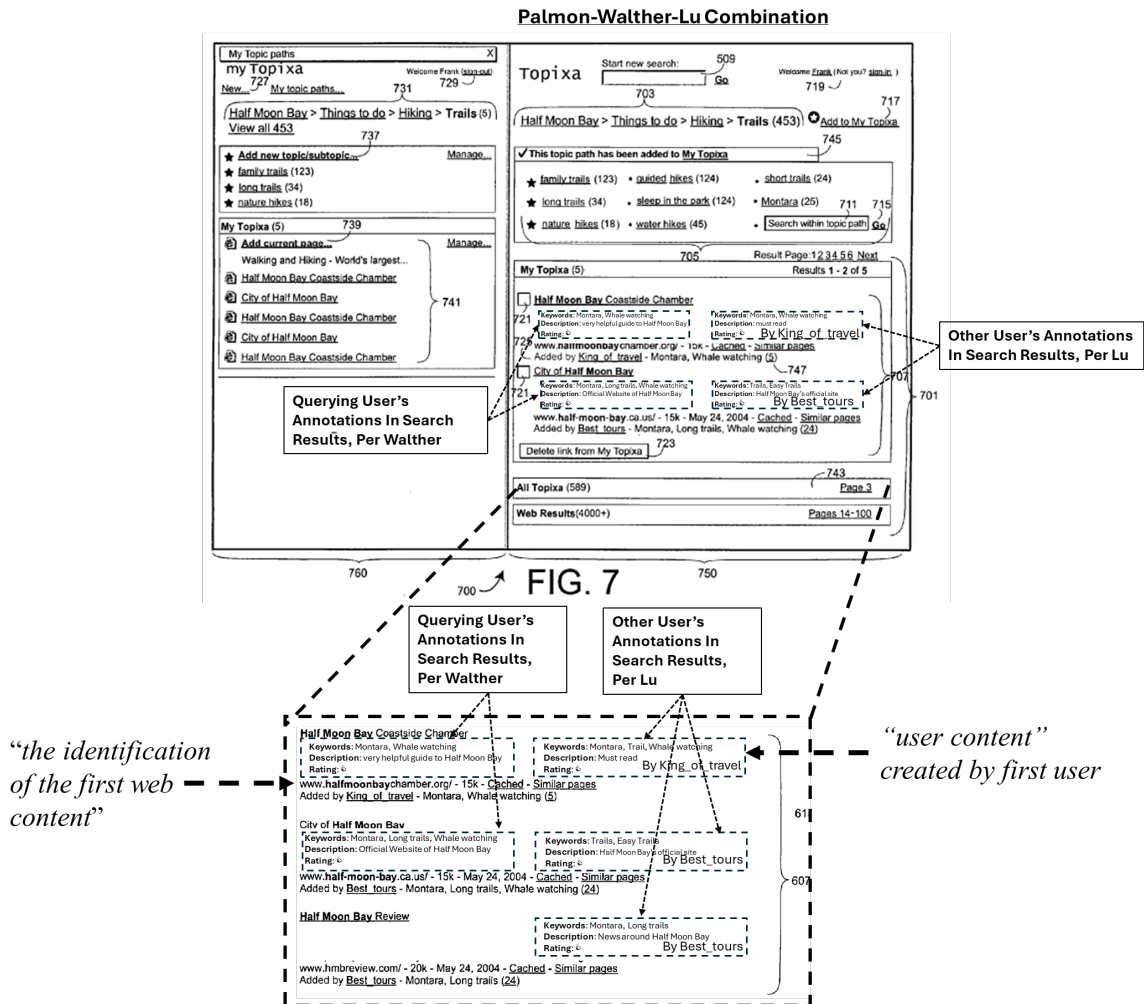
The Palmon-Walther-Lu Combination teaches [19D] as explained in Section IX.A.10.e) [Grounds I/II, 19D]. EX1002, ¶270.

f) [19E]

The Palmon-Walther-Lu Combination teaches [19E]. EX1002, ¶271.

The search results page in the Palmon-Walther-Lu Combination is illustrated below. As shown, the search results includes the “URL of a web page (“*the first*

web content”)—“Half Moon Bay Coastside Chamber” —that was previously annotated by King_of_travel (“*first user*”). And that URL is displayed along with the annotations—Keywords, Description, and Rating—by King_of_travel (“*first user*”). EX1002, ¶272.



EX1003, Figures 6, 7.

Accordingly, the Palmon-Walther-Lu Combination teaches that the search results include the URL of the webpage “Half Moon Bay Coastside Chamber” (“*the identification of the first web content*”) and the keywords/topics, rating, and

description (“*user content*”) associated with the webpage “Half Moon Bay Coastsides Chamber” (“*the first web content*”) provided by King_of_travel (“*first user*”). EX1002, ¶273.

3. Claim 20

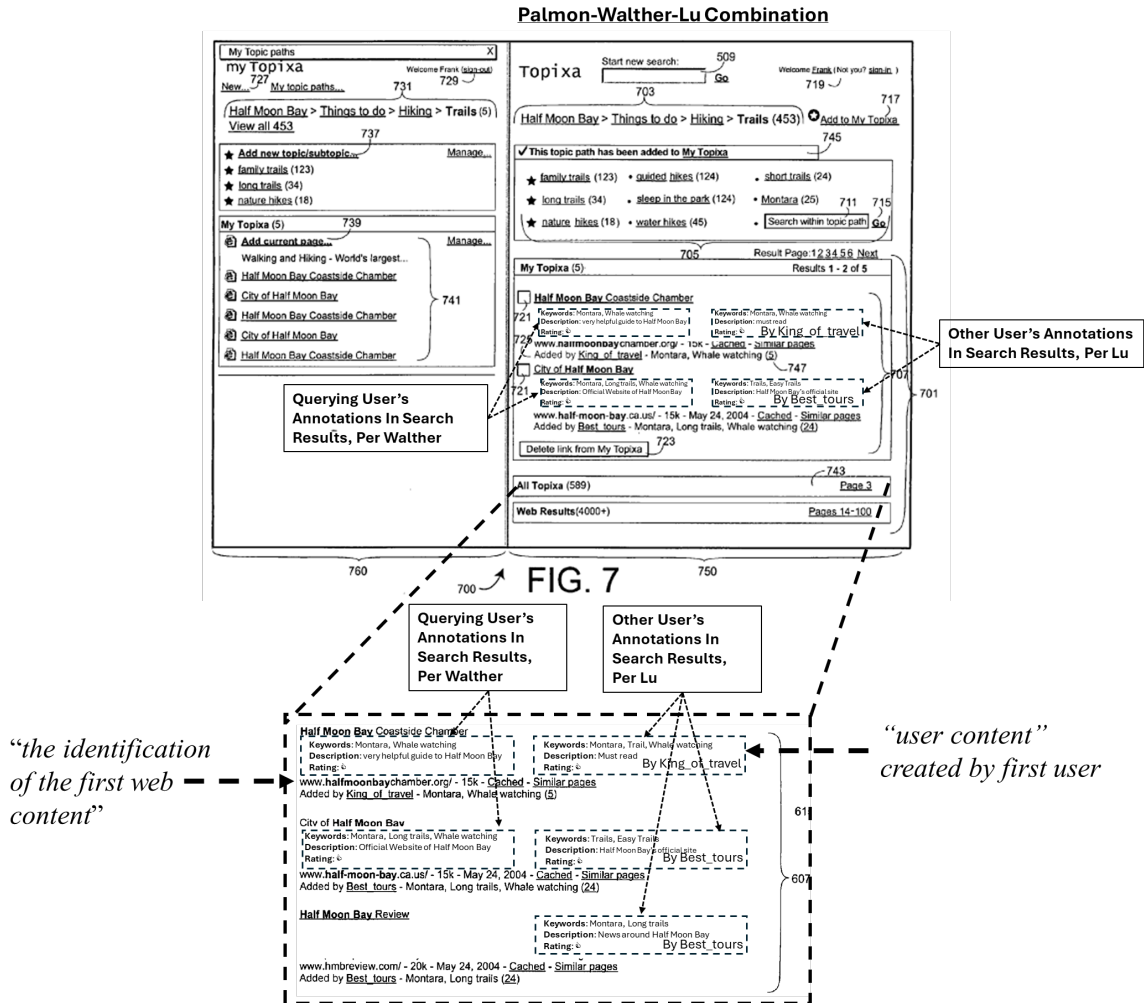
a) [20Pre] The non-transitory computer readable storage medium of claim 19,

Palmon in combination with Walther and Lu renders obvious claim 19 as explained in Section IX.C.2 [Ground IV, 19]. EX1002, ¶274.

b) [20A] wherein the user content including a comment on the first web content and a rating of the first web content by the first user; and

The Palmon-Walther-Lu Combination teaches [20A]. EX1002, ¶275.

As explained in Section IX.C.2.f) [Ground IV, 19E], the Palmon-Walther-Lu Combination teaches that the “*user content*” includes the text description (“*comment*”) and the rating (“*rating*”) of the webpage “Half Moon Bay Coastsides Chamber” (“*first web content*”) submitted by a user called King_of_travel (“*first user*”). See also Section IX.C.1.b) [Palmon-Walther-Lu]; EX1004, [0018], [0139], [0142]; EX1005, [0162]-[0164]. EX1002, ¶276.



EX1003, Figures 6, 7.

- c) [20B] wherein the user content and the identification of the first web content are composed in a user interface separate from the main browser window for transmission to the server computer, while the web content is displayed in the main browser window.

The Palmon-Walther-Lu Combination teaches [20B]. EX1002, ¶277.

First, as explained in Section IX.B.1 [Ground III, 1], Palmon in view of Walther teaches a user interface separate from the main browser window through which the user transmits the identification of the displayed web content (the URL)

and associated annotations. EX1004, [0116]-[0117]. For example, Walther discloses an annotation editing interface that is “a separate window” launched for a selected page, arranged so the user can view the subject page while entering the annotation. EX1004, [0117], [0119], [0123], Figure 9. Walther further teaches that this separate interface may be populated with the page’s identifying information (e.g., the URL), and the user then enters keywords, ratings, and free-text description within that same window for transmission and storage with the page. EX1004, [0124], Figure 9. EX1002, ¶278.

Save This

URL:

Title

Save what?

☒ This page only

☐ All URLs beginning with

Keywords

Description

Rating:

☐ ☒ ☐

☒ None

FIG. 9

EX1004, Figure 9.

Accordingly, the Palmon-Walther-Lu teaches that the user annotations such as keywords, ratings, and free-text description (“*user content*”) and the URL (“*the identification of the first web content*”) are composed in an editing interface page 900 (“*a user interface separate from the main browser window*”) for transmission to the server computer. EX1002, ¶279.

Second, the Palmon-Walther-Lu teaches that the user content and the identification of the first web content are composed “*while the web content is displayed in the main browser window.*” For example, Walther discloses that “the editing interface is arranged on the user’s display in such a way that the ***user can look at both the subject page and the annotation.***” EX1004, [0123]. Accordingly, Walther teaches that the user content and the identification of the first web content are composed while the subject page is displayed—which, as Palmon teaches, is in the main browser window. *See* EX1003, [0217]. EX1002, ¶280.

X. CONCLUSION

Petitioner respectfully requests that the Director institutes *inter partes* review and cancels the challenged claims.

Petition for *Inter Partes* Review of U.S. Patent No. 11,106,744
Claims 1–20

Dated: February 4, 2026

Respectfully submitted,

/Taeg Sang Cho/

Taeg Sang Cho (Reg. No. 69,618)

DESMARAIS LLP

CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

I hereby certify that this Petition for *Inter Partes* Review of U.S. Patent No. 11,106,744 has, excluding the portions exempted under 37 C.F.R. § 42.24(a), 13,956 words as counted by the word-processing system used to prepare this document, in compliance with 37 C.F.R. § 42.24(d).

Dated: February 4, 2026

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CERTIFICATE OF SERVICE

Under 37 C.F.R. §§ 42.6(e) and 42.105, the undersigned certifies that on February 4, 2026, complete copies of the foregoing and any accompanying exhibits were caused to be served by sending them via Federal Express Priority Overnight shipping, which is at least as fast and reliable as U.S. Priority Mail Express, to the correspondence address of record for U.S. Patent No. 11,106,744 as indicated in Patent Center:

120944 - Hunton Andrews Kurth LLP/HAK NY
Attention: Intellectual Property - Patent Docket
200 Park Avenue
New York, NY 10016
UNITED STATES

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