

EXHIBIT 2

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

NETJUMPER SOFTWARE, L.L.C.,
a Michigan limited liability corporation,

Plaintiff,

vs.

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GOOGLE INC.,
a Delaware corporation,
Defendant.

Case No. 04-70366-CV
Hon. Julian Abele Cook
Magistrate Judge R. Steven Whalen

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DECLARATION OF BERNARD A. GALLER

1. I am Bernard A. Galler, Professor Emeritus at the University of Michigan, in the Department of Electrical Engineering and Computer Science. As my resume in Appendix A indicates, I was employed at the University of Michigan since 1955, first in

the Department of Mathematics, then in different departments covering the field of Computer Science. I hold a PhD in Mathematics from the University of Chicago in 1955.

I make this declaration under penalty of perjury.

2. I have had extensive experience since 1955 consulting for many domestic and foreign industrial and governmental organizations in the field of Computer Science, especially in the areas of software systems, programming languages, linear programming, the history of computing, intellectual property, and intelligent transportation systems. This work also included many aspects of hardware and computer architecture. Since 1981 I have been involved in a number of legal cases as consultant and expert witness, and I have authored, among other publications, a book titled: "Software and Intellectual Property Protection." My publications, including those of the last ten years, are listed in the attached Bibliography (Appendix B). Recent cases in which I have either testified in court or through deposition are listed in Appendix C to this report.

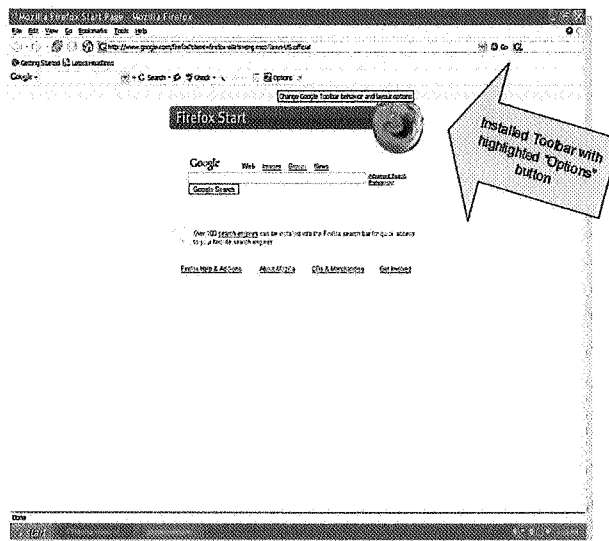
3. I have been retained by NetJumper Software L.L.C. to provide independent expert opinion concerning aspects of US Patent No. 5,890, 172 (the "172 Patent"), and specifically to address certain opinions and views taken by the Defendant in this litigation, Google, Inc., and its retained computer expert, Joseph Hardin, in its Motion For Summary Judgment Of Noninfringement And Invalidity Of the '172 Patent. I have been compensated for my study and testimony in the current litigation at my normal consulting rate, which is \$350 per hour. The total compensation will of course depend on the total amount of time I shall devote to this case.

4. I have carefully reviewed the '172 Patent, the file history of the '172 Patent, the Google brief in support of its motion, the CyberPilot software that is alleged to invalidate Claims 1-8 of the '172 Patent, and the Declaration of Joseph Hardin supporting the Google motion. I have operated the CyberPilot software on a Windows computer equipped with Internet Explorer 2.0, a browser available in 1996, the date that Google alleges this software was available to the public. As explained in detail below, in my opinion, one of ordinary skill in the art (for purposes of this Declaration I believe the level of ordinary skill in the art is a person with a bachelor's degree in computer science, or equivalent experience in the computer programming field) would find that (1) the '172 Patent discloses separate embodiments of the navigational tools concept; (2) that the claims of the '172 Patent granted by the Patent Office recognize there were different inventions made by the patentees and accordingly granted claims directed to these different inventions; (3) that the prior art cited by the examiner and the prosecution history further reinforce the idea that "search window" and "browser window," at least as those terms are defined by Google, are not synonymous; (4) that by giving the term "search window" its natural construction Claims 1-8 of the '172 Patent are given scope by the patent specification and are differentiated from Claims 15-18; (5) that Google's position that it is not infringing the '172 Patent because "search window" and "browser window" describe the same area on a computer screen, and its Toolbar is therefore not "separate" from the "search window display screen" is incorrect; and (6) that the CyberPilot reference cited by Google does not anticipate Claims 1-8 of the '172 Patent because many elements present in those claims are not present in the single alleged reference.

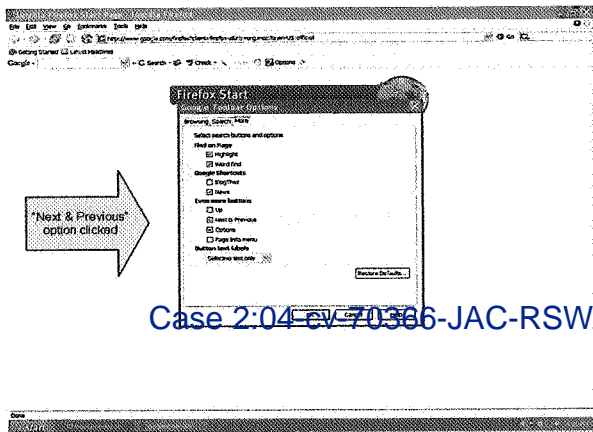
OPERATION OF THE GOOGLE TOOLBAR

5. The Google Toolbar software is available from Google by, among other means, a download. Once installed, the toolbar attaches to a browser, and is capable of being moved only within the browser frame. The Toolbar has an “Options” button as follows:

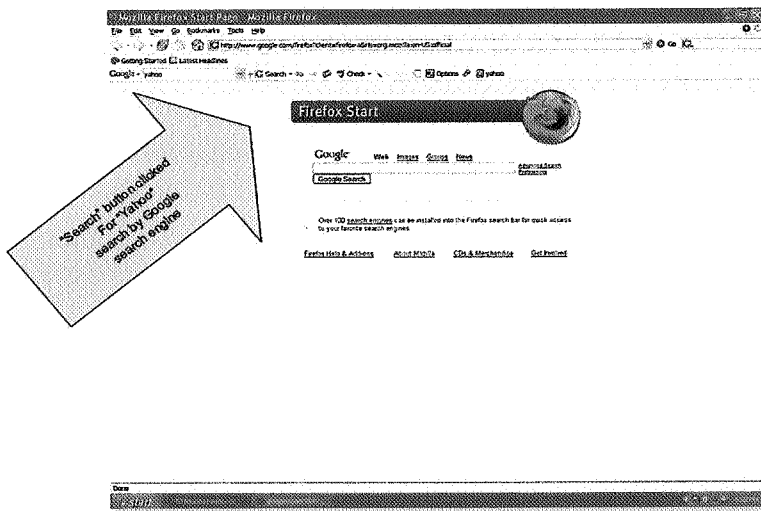
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6. Once the “Options” button is clicked, the display screen shows a dialogue box which presents the user with a “Next” and “Previous” option:

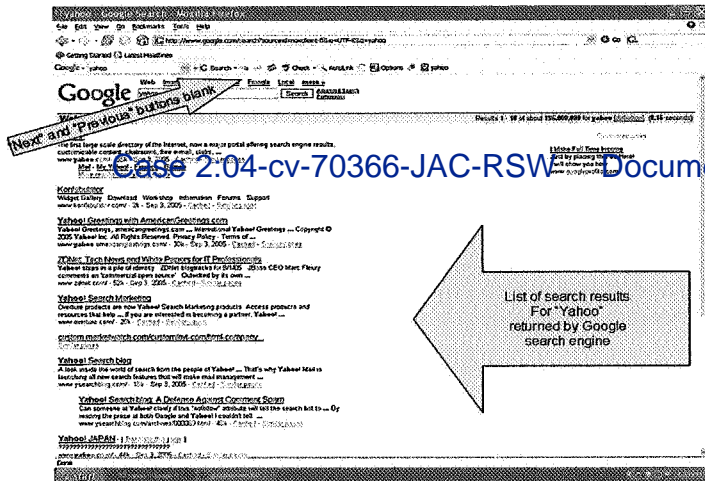


7. When the user clicks on the “Next & Previous” option, the Toolbar’s “Next” and “Previous” buttons become activated. The Toolbar contains a window for typing in searches using the Google search engine. Clicking the “Search” icon activates the search and generates a list of search results:

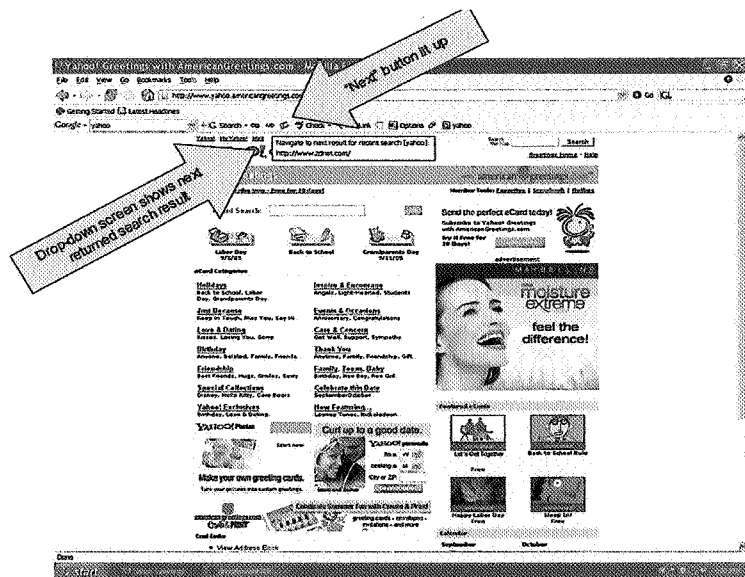


8. The Web page display screen on the user’s computer shows the first screen of returned search results. Here the screenshot shows the first page of a list

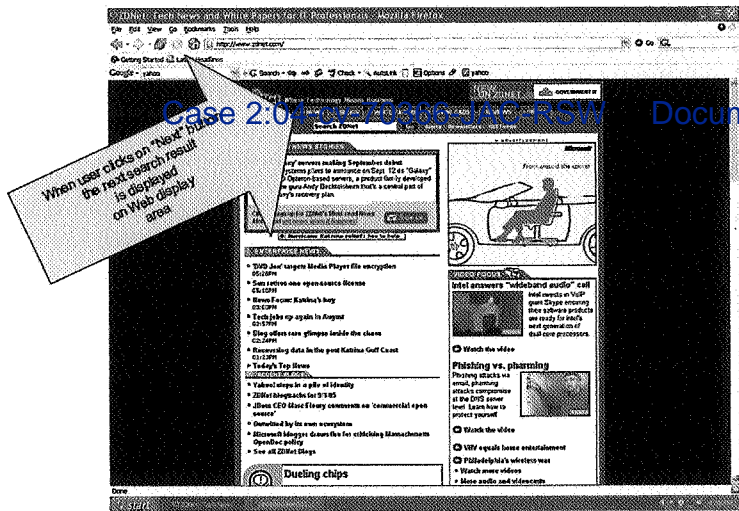
returned by Google for the search request “Yahoo” Typed into the search request window. The “Next” and “Previous” buttons on the Toolbar are not yet lit up:



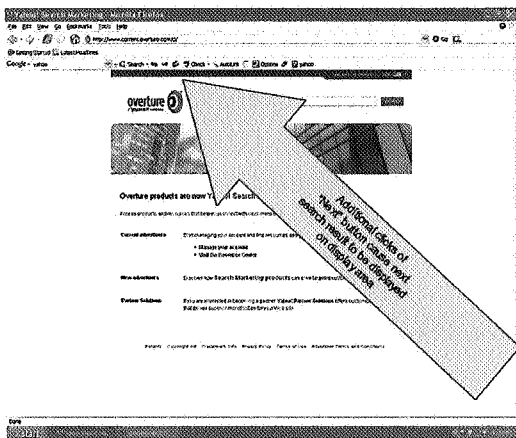
9. Once the user clicks on a search result, when the user’s cursor passes over the “Next” and “Previous” buttons, a drop-down menu appears showing a small URL snippet of the next search result returned by the Google search engine:



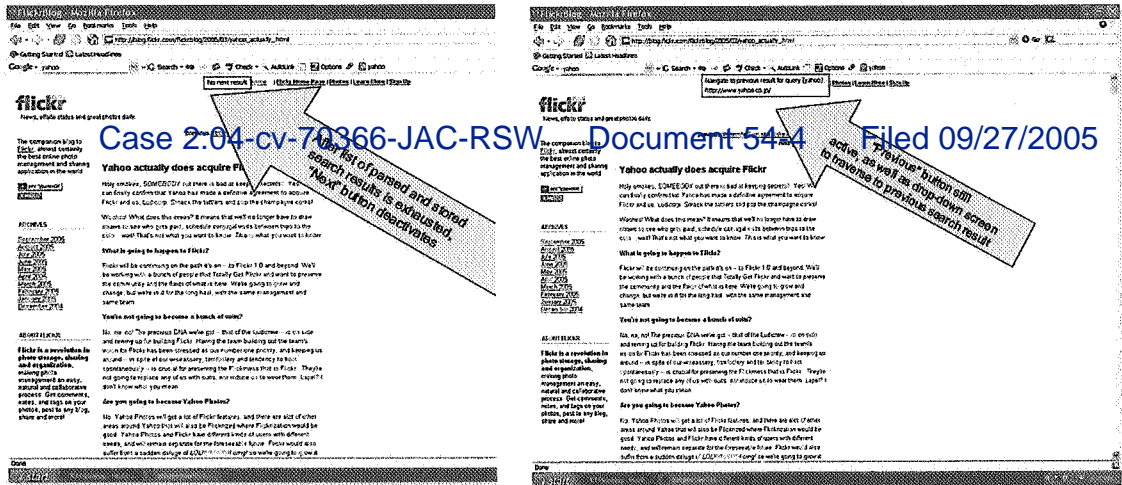
10. When the user clicks on the “Next” button, the next returned search result indicated by the drop down menu is displayed on the Web page display screen. The user does not need to back up his/her browser to return to the original search result screen:



11. Successive clicks of the “Next” button result in the display screen displaying the next returned search result. Clicking the “Previous” button traverses the user back one search result:



12. After a series of clicks, the stored references are exhausted. The user can still traverse backwards using the “Previous” button:

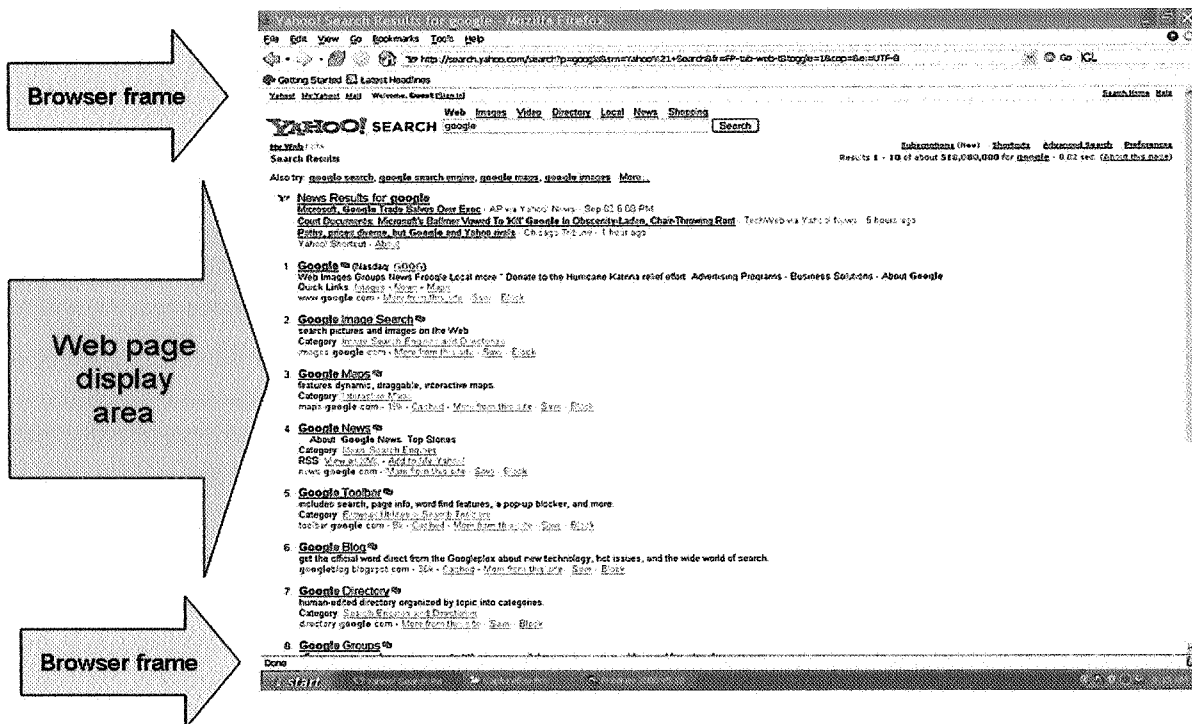


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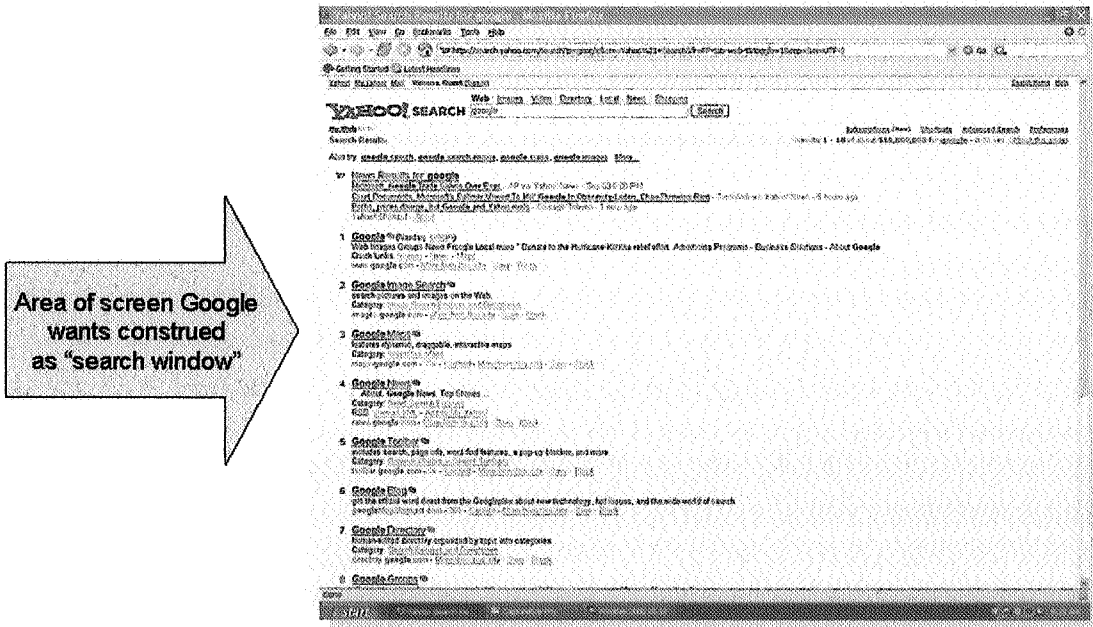
OPINION RELATING TO GOOGLE’S INFRINGEMENT ARGUMENT

13. It is my opinion that Google is wrong in its conclusion that the term “search window,” found in Claims 1-8 of the ‘172 Patent, should be construed to be identical to the term “browser window,” (which its proposed claim construction suggests is the entire opened window of an activated browser like Microsoft’s Internet Explorer), found in Claims 15-18. For reasons that follow, it is my opinion that the language of the claims, detail contained in the ‘172 Patent specification, the file history, and the prior art references cited by the Examiner during patent prosecution, dictate the opposite result: a “search window” of Claims 1-8 defines a different area on the computer display screen than the term “browser window”. I agree that the term “browser window” defines the entire computer display area, generally bounded by a "browser frame". But in my opinion, one of ordinary skill in the art would understand that a “search window” of

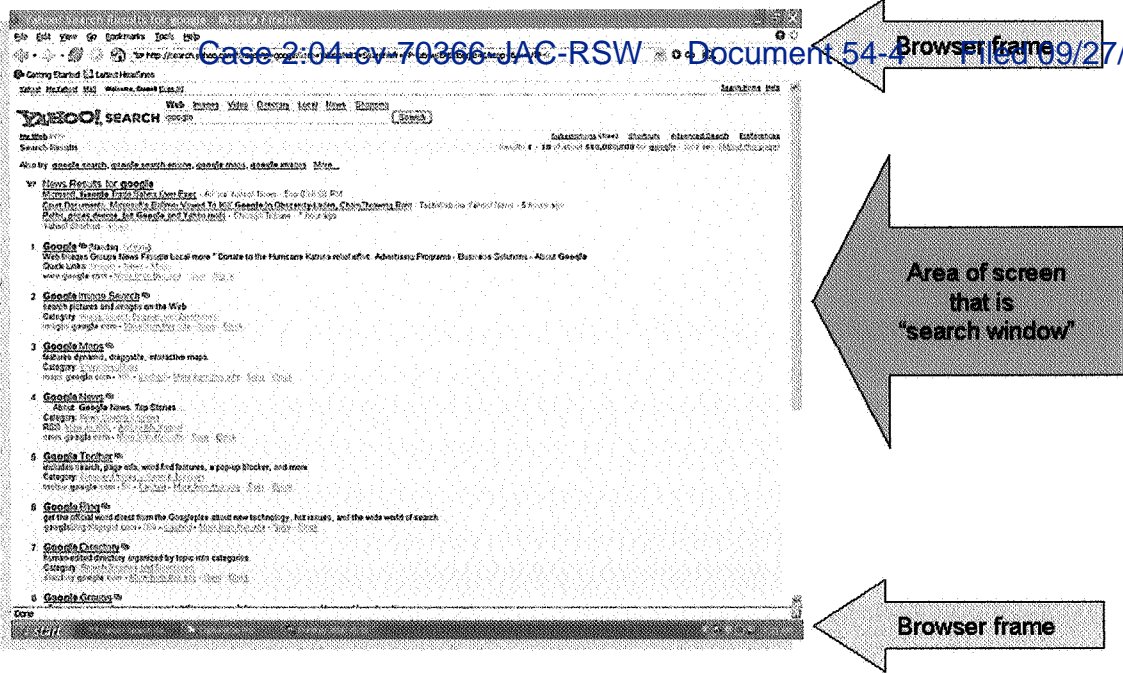
Claims 1-8 does not, as Google argues, define the same area as its purported “browser window.” The area bounded by “search window” is the space on a computer screen (when a browser is activated) where the application displays its results via the display services of the browser and the operating system (Windows). These areas appear generally as follows on a computer screen in which the user has activated a browser:



14. A comparison of the respective positions taken by the parties may be helpful. First, this is Google's position on what is meant by "search window" of Claims 1-8:



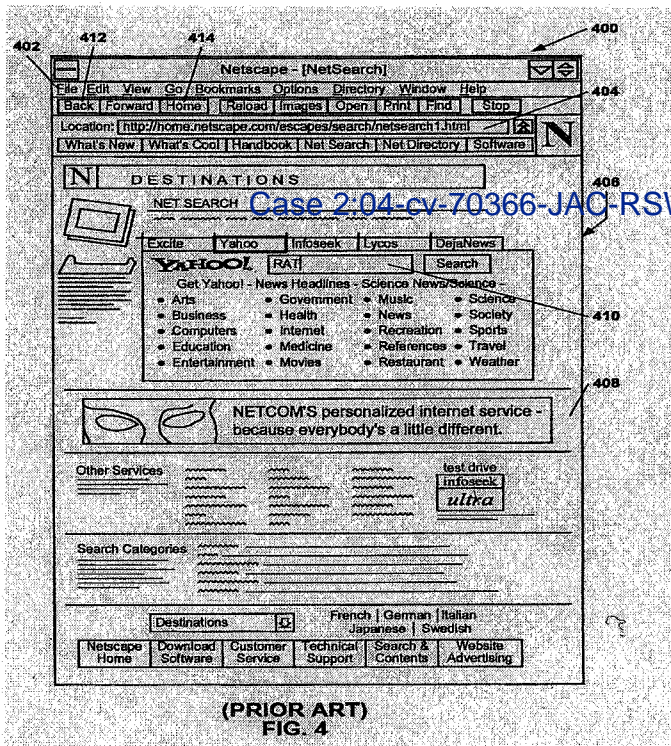
15. In contrast, this is what one of ordinary skill in the art would understand the '172 Patent shows is the “search window” of Claims 1-8:



REASONS FOR OPINION

16. The Web page display area that comprises the “search window” of Claims 1-8 is the area defined by the inventors of the '172 Patent as the structure identified as 406 in Figure 4 and elsewhere, rather than the entirety of the opened computer display screen, which would include the identified browser frame present on the user’s screen. Rather than using the term “browser window”, the entire computer screen display area is defined by the inventors as structure 400, called “browser interface” at various portions

of the specification. In the patent the distinction between these different elements 400 and 406 appears graphically:



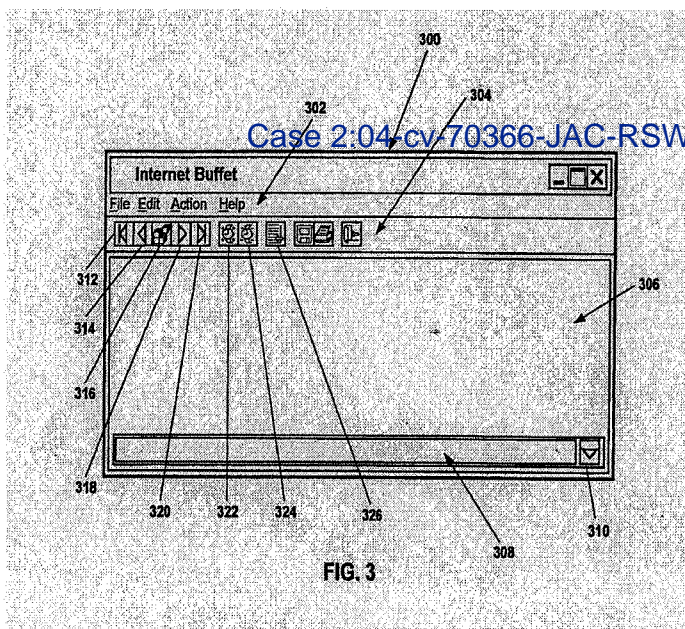
17. Since the “search window” defines a portion of an opened browser window, it is possible for the computer display screen to provide navigational tools of the type defined by the ‘172 Patent, specifically tools like the Next and Previous buttons on the Google toolbar, “separate” from the “search window”, whether they are bundled as the Google Toolbar into a browser, or displayed as a popup-type of tool which “floats” above the browser. My examination of the ‘172 Patent in view of one of ordinary skill in the art, and of the file history, supports this conclusion.

18. The '172 Patent is generally directed to an improved navigation tool for a computer user working with an Internet search engine. The specification identifies a number of prior-art search engines, like Yahoo, Alta Vista, Excite, and others. (Col. 1, ll.64-66). It identifies these information indexers as storing indexes of Internet files and allowing computer users to find a list of all indexed files that meet a search criterion or criteria. (Col. 2, ll. 2-6). The inventors of the '172 Patent also identified that these search engines encode search results in HTML computer language as a so-called "hot-link." (Id. at ll. 19-21.) The use of a search engine in browsers of 1996 presented a problem for a user if the user "drilled down" in a particular returned search result, did not find what the user needed, and wanted to return to the original search result to follow another indexed hot-link. The browsers available in 1996 did not provide navigational tools beyond the "Back" and "Forward" buttons found on browsers to this day, and which only move up or down a single level in the *search tree*.

19. The '172 Patent describes a set of navigational tools that overcame that problem. The '172 Patent specifies several embodiments of those navigational aids, including as described below, an embodiment that was embedded in Web browser software, as well as an embodiment in which the tools are contained in a popup-type of software application. The granted claims of the '172 Patent pertain to these two general embodiments.

20. The first general embodiment described in the '172 Patent is for a "floating" or pop-up type window, which the inventors refer to as a "jumper window."

(Col. 3, l. 18). This embodiment is shown in **Figure 3**, where it is illustrated in comparison to an opened browser window in Figures 5A, 5B, and 5C. This figure appears as follows:



21. The description of the “jumper window” in the specification provides the general concept of navigational controls. Among other tools in the “jumper window,” structure 318 describes a “next entry” button, and structure 314 a “previous entry” button. (Col.6, ll. 47-54, Col. 7, ll. 6-9). The patent specification introduces the concept of automation within the tool set: “responsive to an activation by the user, a computer is directed to determine which of the stored site identifiers is currently selected and automatically selects an other. The other includes the first...the next... or the last on the list.” (Col. 3, ll. 18-22). The “floating” embodiment includes its own toolbar, identified as structure 304.

22. The '172 Patent specification then discloses embodiments which exactly describe the structure of the Google Toolbar (Col. 7, ll. 22-26):

In alternate embodiments the jumper window may take any of several forms. The user interface may include a popup or persistent window, a toolbar, a menu modification of the browser window, a toolbar modification of the browser window, or the use of accelerator keys on the keyboard.

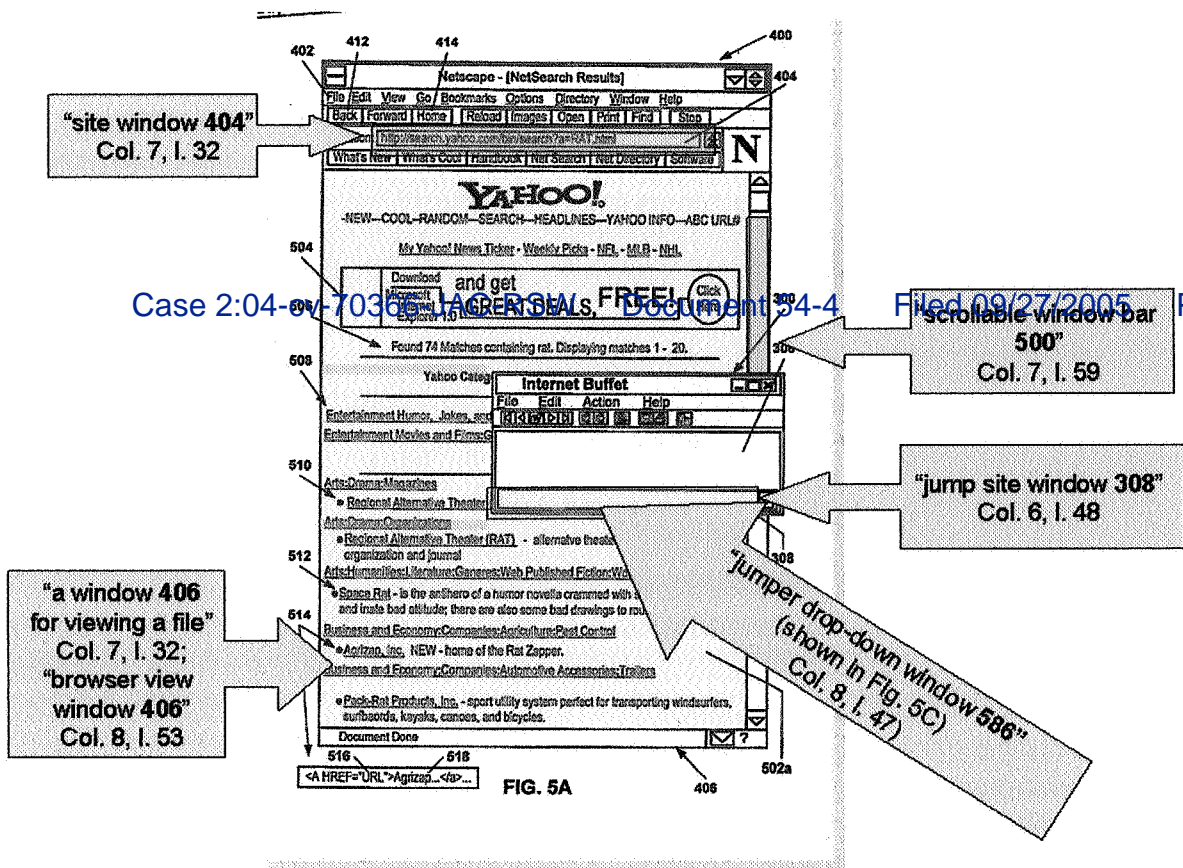
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23. Further in the specification, the inventors disclose ““better” integration of the jumper’s functions and the browser’s functions... In one embodiment, the jumper functions are built directly into the browser...All of these embodiments provide a more integrated jumper/browser environment for the user.” (Col. 12, ll. 27-34). I also note that the inventors cautioned those reading the patent that the “figures and the text are to be viewed in the illustrative sense only, and not limit the present invention.” (Col. 13, ll. 21-23.)

24. A person of ordinary skill in the art would understand that the underlying technology for the graphical display of complex user interfaces almost always provides for a series of distinct data elements organized into a special data structure for the Graphical Display Manager of the operating system to process. Each of these data elements would “describe” a portion of the visible graphical interface for the user, such as a toolbar, a window frame, etc. One reason for this organization is to allow efficient replacement of a data element by another under control of the user. Since the search window is clearly intended to be replaced frequently when the user selects (or directs the search engine to select) the next, etc., I would expect that the “search window” under discussion here is a separate data element in this organization

from the standard browser window within which it is displayed. It is my opinion that one of ordinary skill in the art would have understood from the above description that the navigational tools of the '172 Patent invention were **not** limited to a separate "floating" window, but were instead contemplated to be provided for the computer user directly within the browser frame by a variety of means known in the art in 1996.

25. I have examined the '172 Patent to determine if the inventors said anything inconsistent with the above opinion, and found they did not. An examination of the specification of the '172 Patent reveals that, contrary to Google's suggestions, the inventors did not intermix the terms "browser window" and "search window." The inventors pointed out to the Examiner that a typical browser window of 1996 contains a series of the particular segments and components many of which could be characterized as "windows" of one type or another. Referring to **Figure 4**, the inventors referred to the "browser interface **400**" when referring to the structure that Google now calls the "browser window." (Col. 7, l. 30.) In the same paragraph they identify a "site window **404**" and a "window **406** for viewing a file." (Id.). The display area **406** is also referred to in the specification as a "view window" or "browser view window."(Col. 8, l. 45). These terms would have been understood by those of ordinary skill in the art as describing different areas of the browser user interface, and specifically the area where the browser would display the returned HTML file, exactly as shown by **406** in **Figure 4**. I show these different "windows" graphically:



26. I take particular note that in its discussion Google is somewhat loose in its treatment of the patent specification and its own cited references. In the argument made on p. 24 of Google’s brief, supported by footnote 10, Google asserts that “search window is simply the browser window (400) shown in the patent.” But even in Google’s own citation in footnote 10 to the prosecution history, the patentee’s language cited is “**browser view window**,” not any other term and particularly not “browser window.” It is clear that the phrase “browser view window” used in the specification refers not to the interface, identified particularly as structure 400, but to item 406, the Web page display screen, which is the area where the browser displays an HTML file. On page 25 of Google’s brief, Google says the area in question is a “unified browser window (400),”

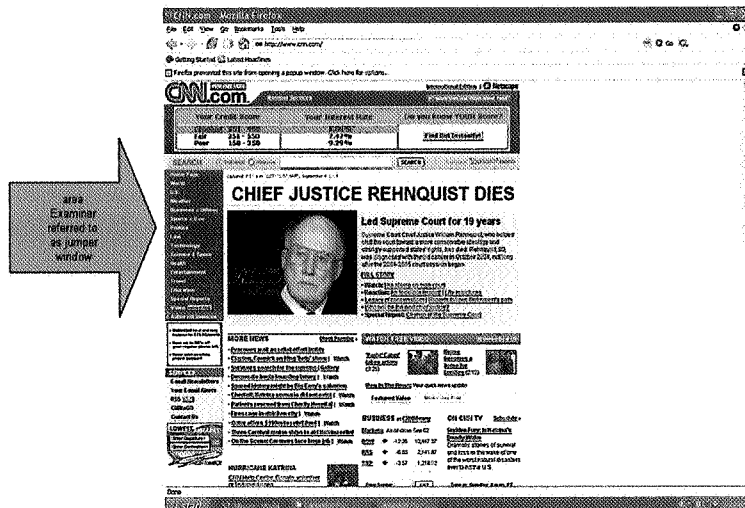
citing to Col. 7, ll. 30-33. That is just not so: line 30 of Column 7 says “*browser interface 400*”, and the other lines in that citation include “a window **406** for viewing a file.” (emphasis added). One of ordinary skill in the art would not confuse these structures. I note that even in the “IBM Dictionary Of Computing,” copyright 1994, attached in part as Google’s Exhibit E, the term “window” is defined as “**a portion of a display surface** in which display images pertaining to a particular application can be presented...Different applications can be displayed simultaneously in different windows...(2) an area of the **screen with visible boundaries within which information is displayed. A window can be smaller than or the same size as the screen...**(3) **A division of a screen** in which one of several programs being executed concurrently can display information...” (emphasis added). The same dictionary also defines “window component” as “the smallest named visual part of a window, such as the title bar, system menu icon, action bar, and scroll bar.” In particular, a window may have component sub-windows representing different functions, such as one sub-window for user input, and another for the display of results, including search results. It is my opinion that one skilled in the art would understand these terms at the time the patent was applied for, and that the inventors of the ‘172 Patent distinguished between the terms contained in Claims 1-8 and 15-18 when they delineated the entire browser as **400** and the display screen subpart as **406**.

27. In connection with rendering this opinion I have also examined the prosecution history of the ‘172 Patent to see if it is inconsistent with the understanding

obtained from the claim language and the patent specification. It is my opinion that one of ordinary skill in the art would understand from reading the prior art cited by the Examiner and the patentees' response that (1) the prosecution history is consistent with the idea that "search window" is not a "browser window" (i.e., it is a "browser interface" as used in the patent) and (2) the patentees did not give up the embedded embodiment of their invention. This is so for the following reasons.

28. When the NetJumper patentees presented the Patent Office their first set of claims, they sought coverage for a "computer implemented method and system for retrieving information from a network." (Original Claims 1-22). The original claims 23-26 introduced the term "browser window." The Examiner rejected original claims 1-5, 7-11, and 13-22 on the basis of features contained in the Yahoo search engine. The Examiner pointed out that the Yahoo HTML site that was displayed "automatically select[s] an other of said site identifier form [sic] said list (e.g., the Yahoo search engine shown in FIG. 5C, item 588 "Next 20" shows where the user activates the next page request, and in view of the current page, the next page (i.e., site) identifier is automatically chosen)." Also it is important to note that in the original rejection the Examiner cited to the "Yahoo search engine (in FIG.5C, **item 406**)." This shows the Examiner understood there was a distinction between the screen structure of the browser itself and the structure where the screen displays a Web page. The Examiner then referenced the Alta Vista search engine, and rejected as anticipated original claims 6 and 12, pointing out that the Alta Vista Web site provides a "Next" and other icons **within the display field** which act as automatic jump commands for the user. This reference is

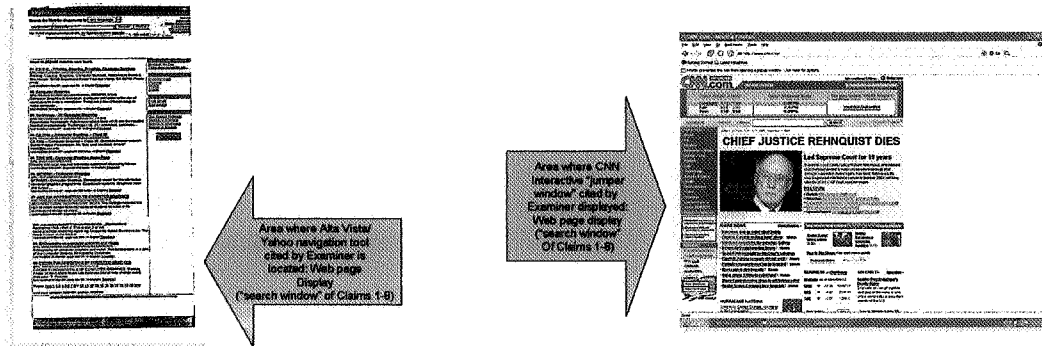
photocopied in the file. With reference to the originally presented claims which used the “browser window” language (claims 23-26), the Examiner cited to a Web page of the CNN Interactive Web site. The Examiner noted that when the CNN page is displayed on a computer screen, a browser window receives a first file of information. The Examiner then called a portion of the Web display page which consists of a series of hotlinks which appear in the browser display window, a “jumper window.” In the file history that reference is photocopied and hard to read, but a current version of the same page makes the area pointed to by the Examiner easier to see:



29. In giving his reasons for rejection, the Examiner said, “[The] CNN-like jumper window in the Yahoo search engine would have given the user the concurrent access to the URL indexes while viewing the contents of an index.” It appears the original rejection of the claims was due to a combination of (1) the Yahoo search engine HTML page, which showed a “next” icon navigational tool in the display window when the browser called up the Yahoo URL, and (2) the CNN Interactive page “jumper

window,” which appeared in the display window when the user called up the CNN Interactive URL.

30. The Examiner was therefore citing prior art which showed both the navigational tool and the “jumper window” only within the display window, i.e., the area defined as structure 406 in the specification. This is graphically shown as follows:

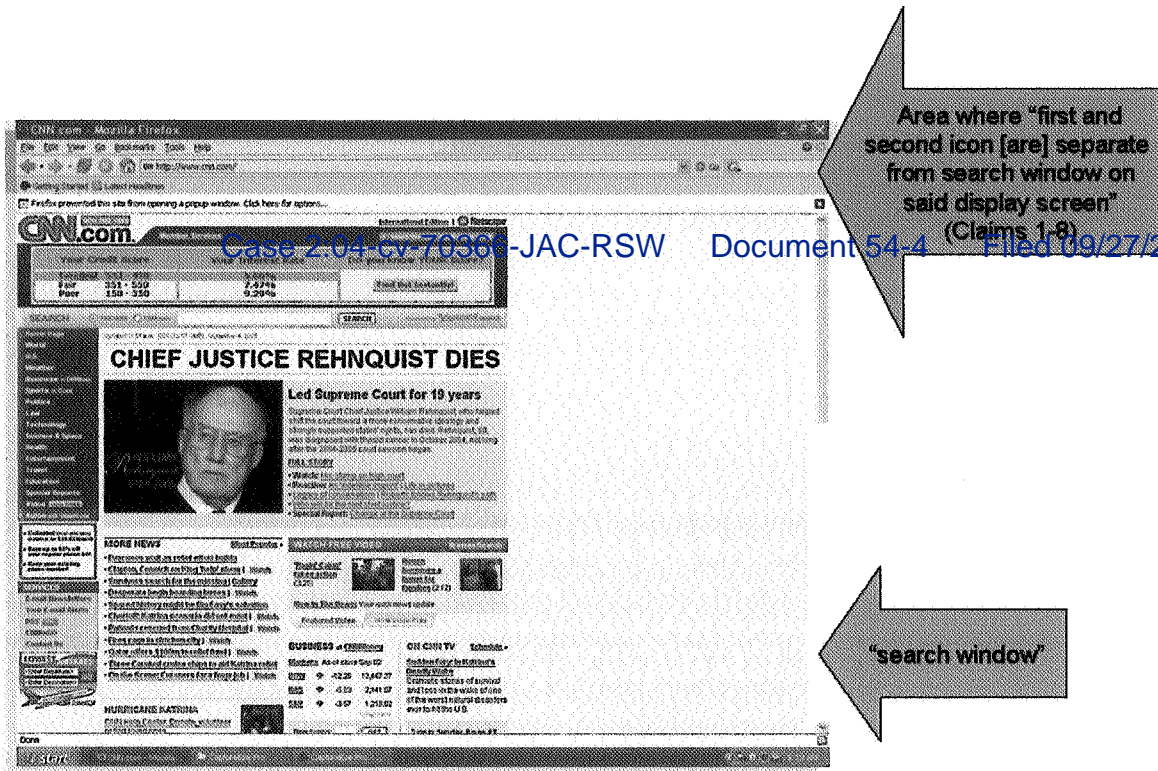


In response to the rejection, the patentees amended the claims in two ways. First, they amended the claims that would become granted claims 1-8 by changing the scope to “a computer implemented method for searching on a local computer...,” (emphasis added) therefore introducing the “search” concept referred to extensively in the specification as the reason behind the invention of the navigational tools. Second, they amended the claims to add the step of “constructing a search window on a display screen of the local computer.” (emphasis added). The response pointed out

that the navigational tools of the Yahoo and Alta Vista Web pages do not achieve the same functionality as the invention because they are hard-coded **into the Web page**. They say: “Thus the button bar is a transient phenomenon, viable only within the confines of the Yahoo page.” The patentees said:

The applicant claims that the subsequent display of any of the data files stored on the network in the search window, any files from any site, **will not prevent the display of a first data file corresponding to a selected one of the location identifiers in the stored initial list responsive to the selection of the second icon**. This ability to perform a two dimensional traversal to the next site on the initial list is a unique feature of the applicants’ invention. (emphasis added)

31. In my opinion, one of ordinary skill in the art would understand that the patentees distinguished the prior art which contained the navigational tool/jumper window in the Web page display area, by claiming an invention whose **only** limitation was that the navigational tools, that is icon(s) which the user selects to go to the “next”, “previous”, and the like site, are **separate from the Web page display window**, i.e., the “search window.” This was the only limitation in the art cited by the Examiner. The patentees did not need to “give up” the embedded embodiment because the invention could be carried out and the prior art avoided by separating the navigational tools only from the Web page display area identified as **406**. This is shown graphically as follows:



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32. My opinion regarding this is supported by the patent specification. There, as I point out above, the inventors disclosed an alternative embodiment which integrated a set of navigational tools into the browser and eliminated the navigational tools being placed in a separate “floating” window. One of ordinary skill in the art would understand, exactly as explained by the patentees in the amendment, that removing the possibility that the navigational tools reside in the search window, i.e., the Web page display screen, does not prevent them from being separate, since they are within the browser frame, but separated from the “search window.”

33. My opinion is further supported by the fact that the '172 Patent claims use the terms "search window" and "browser window" in a second set of claims in the '172 Patent which are essentially identical to Claims 1-8, except they use the phrase "construct a browser window" in place of "construct a search window." The embodiment described in the patent specification that would support the latter claims is the "floating" jumper window, as in that embodiment the "separateness" between the browser and the navigational tool is maintained by the second window. But these claims would not support the embedded embodiment of the invention.

34. Further, to read "search window" and "browser window" (as that term is defined by Google, to mean "browser interface") identically as Google suggests would obviate the need for the word "search" in the claims. As I have previously noted, the patent specification speaks extensively to the advent of Web-based search engines like Yahoo, Alta Vista, Inktomi, and the like. Many passages of the patent description pertain to the utility of the navigational tool to aid in traversing search engine results: typically a search of a search engine site like that maintained by Yahoo returns many search results to which these tools are directed. Obviously, even Google believes that its search engine can be better utilized by adding these tools to the user's browser. One of ordinary skill in the art would understand that a "search window" pertains to a particular class of Web-based activity different from just opening a browser window. It is my opinion therefore that the patentees never disavowed a claim based on separating the navigational tools from the browser. The sole distinction introduced by them, to address the Yahoo/Alta Vista/CNN Interactive Web pages cited by the Examiner, was to require

that the navigational tools be separate from the Web display screen. Because the Google Toolbar does display its “Next and Previous” navigational tools separate from the “search window,” I disagree with Professor Hardin that the Google Toolbar does not infringe Claims 1-8 of the ‘172 Patent.

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OPINION RELATING TO PARSING DEFINITION

35. I further understand that Google has suggested the following definition for the terms “parse” and “parsing”: “The act of examining a string of text, breaking it into subunits, and establishing the relationships among the subunits.” I believe this is unnecessarily restrictive, and that one of ordinary skill in the art would not derive this definition from the patent specification or the file history. The patent specification nowhere restricts the common word “parse” to one requiring (1) “examining a string of text,” (2) “breaking it into subunits,” and (3) “establishing the relationships” among the subunits. What the patent specification **does** say in numerous places is that there is a parsing step which can take different forms and functions. It is performed when the jumper software takes the HTML file obtained by the browser and “parses” it in a variety of alternative ways for access by the local computer. For instance, the software may handle the task of “converting an HTML encoded file uploaded from browser user...into a format suitable for a single-jump or automatic-jump mode search...” (Col. 6, ll. 26-28). The parsed file may be hot-links: “The jump site window **308** has an associated drop down list...this list comprises parsed hot-links.” (Col. 6, ll. 55-57). The “parsed list” may “be stored in [the local computer’s] HTML storage segment **230**...” (Col. 7, ll. 20-21). The software may provide for parsing “categories... given their

location in the search result,” or to allow the user to define “how many site identifiers should be parsed from the search results,” or “what types of results should be parsed.” (Col. 12, ll. 44-58). Nothing in the file specification suggests that “parsing” is limited to the elements suggested by Google.

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**CYBERPILOT PRO DOES NOT ANTICIPATE CLAIMS 1-8
OF THE ‘172 PATENT**

36. I understand that Google argues that a piece of art called CyberPilot Pro renders Claims 1-8 of the ‘172 Patent invalid due to anticipation. It is further my understanding that in order to render a claim invalid under the doctrine of anticipation, each and every element of each claim at issue must be found in the allegedly anticipatory reference.

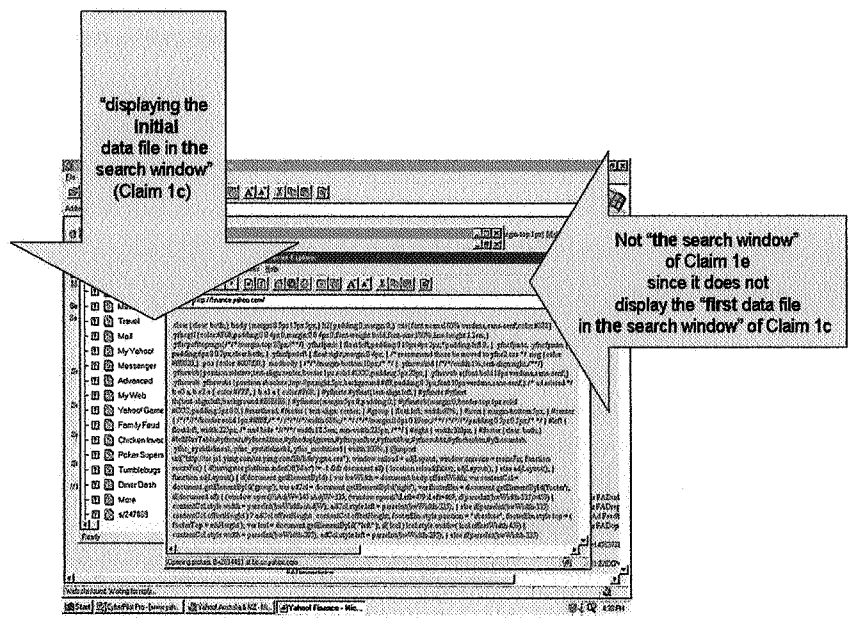
37. I have examined CyberPilot in a computer also equipped with a browser from 1996, Internet Explorer 2.0. In my opinion, even assuming it is art which occurred prior to the ‘172 Patent, this reference does not anticipate Claims 1-8. This is so for a number of reasons.

38. First, CyberPilot does not “[1] construct a [2] search window” on a display screen of a local computer. CyberPilot is a stand-alone piece of software that can be used to create a hot-links “map” of any Web site. All of the asserted claims are directed to either a computer-implemented method for searching (Claims 1-4), or a computer-usable medium having computer-readable code means embodied therein for searching (Claims 5-8). There is no indication that CyberPilot performs a “search.” It is

merely a tool for aiding in the navigation of an already known site. The lack of a search capability is evident from the CyberPilot instructions. One does not enter keywords or terms to search the Internet, but enters an already known URL. The '172 Patent specification clearly directs the invention towards the use of the navigational tools with a search engine. There is a difference between conducting a search and navigating through a Web site. Nor is there any indication from its description or operation that CyberPilot does anything to "construct" a search window. CyberPilot appears to be a piece of software that catalogues links that appear in a particular Web site manually selected by the computer user. When CyberPilot is activated and given a URL, it constructs a window in which to display its Map before any browser is launched. I therefore disagree with the statement in the comparison analysis presented in Exhibit F attached to the Hardin Declaration. In the analysis of the element identified as [1b], the claim is made that "The Web browser ... constructs a search window ... on the display screen..." It would be clear to one skilled in the art that the window that CyberPilot constructs does not involve the browser's graphical display services, but is displayed via the Windows operating system graphical services. Later references to "the search window" in Google's analysis seem to be subject to the same confusion regarding the separate identity of the search window and the browser window that we have seen throughout their analysis. Therefore, the first element of Claim 1, an independent claim (and Claim 5 as well) is not met.

39. Second, CyberPilot does not appear to display "the first data file in the search window, responsive to a selection of the second icon." The asserted claims also

require the step of “retrieving an initial data file from the network together with displaying the initial data file in the search window...” CyberPilot does not perform this function. When a URL is entered into the CyberPilot New Map dialog box, CyberPilot merely displays an icon representing the home page, and does not display the page itself as required by the claim. (I have depended on the Stark Declaration, Exh. B, pg. 5 of 30 Case 2:04-cv-70366-JAC-RSW Document 54-4 Filed 09/27/2005 Page 29 of the Google motion). It appears, from observing the behavior of this application, that it only retrieves the directory of links in the target file, and not the contents of the specified file. When the hot-link URL in the displayed “map” is manually clicked, the software directs the IE 2.0 browser to create another window, and to retrieve and display the manually-selected page. By definition, therefore, the first data file is not displayed in the search window (that is the original window), but is instead displayed in another window (the newly created window). This is shown below:



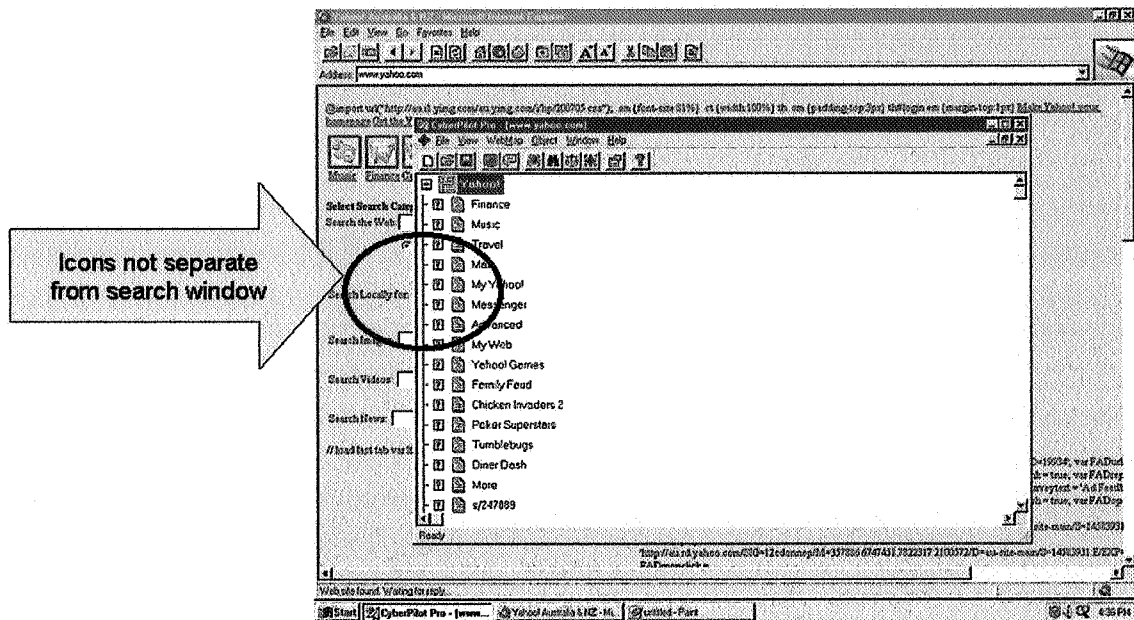
Claim element [1c] is therefore not met.

40. Third, the asserted claims also require the step of “parsing the location identifiers from the initial data file to form an initial list of location identifiers together with storing the initial list, **responsive to a selection of the first icon...**” According to the claims, the first icon is displayed separate from the search window on a display screen. However, at the point when CyberPilot retrieves an initial data file and parses the location identifiers from that initial data file to form an initial list of location identifiers, there is no first icon (a control icon, e.g., “?” according to Google) displayed anywhere. The control icon of CyberPilot does not come into play until after its initial parsing step. Therefore, CyberPilot cannot possibly parse the location identifiers from the initial data file to form an initial list of location identifiers together with storing the initial list, **responsive to a selection of the first icon.**

41. Fourth, in the comparison chart of Exhibit F of the Hardin Declaration, there is a claim, regarding Claim 2, that "The initial data file ... comprises information in a markup language ..." From what is displayed during operation of the software, I see no basis for this statement. What is displayed is taken from links in the target file, but I cannot tell, from this display, anything about its internal representation. I would make a similar statement with respect to the comparison statement for Claim 3.

42. Fifth, there is a question as to what is the “search window” that CyberPilot is supposed to construct. Claims 1 and 5 require the first and second icons to be separately displayed from the “search window on said display screen” (Claim 1b).

CyberPilot initially generates a window that contains the two icons that Google says represent the claimed elements in the same window, that is the search window displaying the “initial data file” of Claim 1c:



And if Google believes that the window formed when the browser is activated is the “search window”, that element cannot be met, since that window can only display a “first data file” of Claim 1e (“displaying the first data file in **the** search window”).

43. Fifth, in my opinion Google and Professor Hardin misread the limitations of Claims 4 and 8. As I understand Professor Hardin’s position, he believes that Claims 4 and 8 add nothing to Claims 1-3 (and 5-7), and therefore need not be separately and particularly addressed. I disagree with that assessment. These claims are directed to and supported by parts of the invention clearly set forth in the patent specification which

provide automated navigational tools, such as the “next” and “previous” buttons described in **Figure 3** and at **314** and **318**. The utility of these devices is to allow the user to click a pre-defined icon—for instance a “next” button, and be able to redirect the browser to the next file from a search result. Other embodiments described in the patent would allow the user to click a pre-defined icon and go to a “last” or “first” search result. CyberPilot does not contain, or even suggest, any such automation. Instead, the extent of what the software does automatically is merely to create a list of URL references from the displayed Web site and make that list available to the user in a separate window. The user is **not** provided a pre-defined navigational tool to direct the browser to perform any “next”, “previous,” “first”, or “last” function. In the absence of an automated feature the user must **manually** choose a URL link from the displayed “map” and **manually** click on that link in order to have the browser create a new window displaying that HTML file. In this the CyberPilot is no different than any Web page which displays more than one hot-link. I note that Claim 4 requires the retrieval of "the first data file corresponding to the one of the location identifiers ... selected from a group consisting of: a next ... a prior ... a first ... and a last location identifier, ..." It is ridiculous to suggest that because a user may choose manually to select the first item in a sequence, or the last, etc., this is equivalent to the existence of such a required grouping. Moreover, in my opinion, CyberPilot is less broad than the art considered and rejected by the Examiner during the prosecution history. These references (the Yahoo/Alta Vista/CNN Interactive Web sites) did provide the user with a pre-defined navigational tool such as the “Next” icon displayed on the Yahoo Web page. For that reason, there is an independent lack of anticipation of Claims 4 and 8.

FURTHER AFFIANT SAYETH NOT:


Bernard A. Galler

Dated: September 27, 2005

Subscribed and sworn to before me

This 27th day of September 2005

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**Appendix A. Resume of Bernard A. Galler
(See Attached)**

**Appendix B. Bibliography of Bernard A. Galler
(See Attached)**

BERNARD A. GALLER

BIRTHDATE: October 3, 1928 **PLACE OF BIRTH:** Chicago, IL

EDUCATION

University of Chicago, Chicago, IL
Ph.D. Mathematics 1955
University of California, Los Angeles
MA Mathematics 1949
University of Chicago, Chicago, IL
BS Mathematics 1947
PhB Liberal Arts 1946

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PROFESSIONAL EXPERIENCE

The University of Michigan
Professor Emeritus of Elect. Eng. & Computer Science 1994 -
Professor of Electrical Engineering & Computer Science 1984-1994
Professor of Computer & Communication Sciences 1966 -1984
Associate Professor of Mathematics 1962 - 1966
Assistant Professor of Mathematics 1958 - 1962
Instructor in Mathematics 1955 - 1958
Associate Dean for Long-Range Planning, College of Literature,
Science and the Arts 1975-1979
Chairman, Dept. of Computer & Communication Sciences, 1973-1975
Associate Director, Computing Center 1966 - 1991
Visiting Professor, Hebrew University, Jerusalem, Winter, 1988
Senior Visiting Fellow, Univ. of Newcastle-upon-Tyne, UK, Summer 1973
Overseas Visitor, Australian Computer Society, 1970
Visiting Professor in the Mathematisch Centrum, Amsterdam,
The Netherlands, 1965 - 1966

HONORS:

Fellow, ACM 1994
AFIPS Distinguished Service Award, 1984
Excellence in Concentration Advising Award, U of M, 1993
ACM Distinguished Service Award, 1980
IBM Triangle Fellow in the History of Technology, 1980
Invited Speaker, IFIP World Congress 1994, Hamburg
Invited Speaker, IFIP Congress 1974, Stockholm

Appendix A

Invited Speaker, 1974 Jerusalem Conference on Information
Technology, Jerusalem
Senior Visiting Fellowship, 1973, Science Research Council, England

OFFICES AND CURRENT ASSIGNMENTS

Member, ACM Fellows Committee (2001 -), Chairman (2004)
Founding Editor-in-Chief, *Annals of the History of Computing*, AFIPS
Press (1978-87), Editorial Board (1987 -)
President, Association for Computing Machinery (ACM) (1968 - 70),
Vice-President (1966 - 68)
Founder & Chairman, Board of Directors, Software Patent Institute
(1992 - 94), President (1995 - 1998), Executive Comm. (1998 -)
Member, Board of Directors, Charles Babbage Foundation (1982-)
Secretary (2001 -), Chairman, Audit Comm. (2001 -),
Chairman, Nominating Comm. (2002 -), Vice Chairman (2004 -)
Founder/President/Treasurer, Friends of the Ypsilanti Youth Orchestra
(1999 -)

PREVIOUS MAJOR COMMITTEE ASSIGNMENTS:

Member, Commercial Panel, American Arbitration Assoc. (1999 - 2002)
Member, ACM Turing Award Committee (1971 - 75, 1988 - 1993),
Chairman (1973 - 75, 1991 - 1992)
Member, CSNET Executive Committee (1983 - 1989),
Vice-Chairman (1986 - 1987), Chairman (1988 - 1989)
Member, AFIPS Publications Committee (1977-87)
Member, AFIPS History of Computing Committee (1977 - 79, 1981 - 89)
Category Editor, ACM Computing Reviews (1987 - 1996)
Chairman, AFIPS Special Comm. on Electr. Funds Transfer Syst. (1974-78)
Chairman, Board of Directors, Corp. for Research & Educational
Networking (CREN) (1989 - 1992)
Member, HOPL II Organizing Committee (1989 - 1994)
Member, ITS AMERICA System Architecture Committee (1991 - 1996),
Chairman, ITS America Information Exchange Subcommittee (1994 - 1996)
Member, Computer Science and Technology Board, National Academy of
Sciences-National Research Council (1977-79)
Member, Steering Committee, COSERS Study, NSF (1975-80)
Member, Board of American Federation of Information Processing
Societies (AFIPS) (1968-70)
Chairman, ACM Government Organization Committee (1974-75)

3

Member, Advisory Panel, National Center for Atmospheric Research,
Boulder, Colorado (Chairman, 1972-73)

Member, Advisory Committee, NSF Office of Computing Activities,
Computer Science & Engineering Division (1971-74)

AFIPS Liaison Representative, National Academy of Sciences - National
Research Council Division of Mathematical Sciences (1973-75)

REPRESENTATIVE CONSULTING: Case 2:04-cv-70366-JAC-RSW Document 54-4 Filed 09/27/2005 Page 37 of

General Motors Research Laboratories, Michigan

Booth Computer Research Division, Michigan (Booth Newspapers, Inc.)

The Technion, Haifa, Israel

Jet Propulsion Laboratory, California

NCR Science Advisory Committee, Dayton, Ohio

Nijmegen University, The Netherlands

National CSS, Inc., Member, Board of Directors

Naval Weapons Center, China Lake, California

IBM Corporation

REPRESENTATIVE EXPERT WITNESS ROLES IN LITIGATION:

Lotus Development Corp. vs Paperback Software (1990)

Intel vs NEC (1986)

Fairchild Camera & Instrument Corporation vs Data General
Corporation (1981)

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Professor Emeritus
Electrical Engineering and Computer Science
The University of Michigan

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2002

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No. 1, 2001, pp. 22-23

1999

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1997

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The 4th World Congr. on Intell. Transport Systems, October 21-24, 1997, Berlin, Germany.

1996

"Collision Warning using Neighboring Vehicle Information," (with Harry J. Asher),
Proc. 1996 ITS America National Meeting, April 15-18. pp. 674-684.

1995

Software and Intellectual Property Protection: Copyright and Patent Issues for Computer and Legal
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York, NY.

Appendix B

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1994

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1992

"An IVHS System Architecture Workshop." (with Kan, Chen), Proc. of the IVHS AMERICA 1992 Annual Meeting, Newport Beach, CA. pp. 449-455.

1991

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1990

"System Considerations for Diversion Advice and Recommendation Technology", (with K. Chen), Proceedings of the 22nd International Symposium on Automotive Technology & Automation, Vol. 1, 1990, pp. 185-190.

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1988

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- "The IBM 650 and the Universities." Annals of the History of Computing. Vol. 8, No. 1, 1986, pp. 36-38

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1985

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- "An LSA Computer Environment." LSA, The Univ. of Michigan. Winter 1985, Vol. 8, No. 2, pp. 13-15

1982

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"An Improved Equivalence Algorithm." With M. J. Fischer. Communications of the ACM 7:5:301-303.

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**Appendix C. Recent Litigation (15 years) in which
Bernard A. Galler has testified**

Case	Date initiated	Retained by counsel for:
- Lotus v. Paperback, Mosiac (Copyright)	1990	Lotus
- AMI v. IBM (Copyright)	1990	IBM
- Frybarger v. IBM (Copyright)	1990	IBM
- Flexben v. Comerica	1990	Flexben (Trade secret)
- Apple v. Microsoft, HP (Copyright)	1990	Apple
- Lotus v. Borland (Copyright)	1991	Lotus
- Heath v. AT&	1991	AT&T (Non-performance)
- Iowa Dept. of Revenue v. Rev.	1991	Iowa Dept. of Burlington Railroad (Tax evaluation)
- Iowa Dept. of Revenue v. IBM	1993	Iowa Dept. of Revenue (Tax evaluation)
- Nat'l Advanced Systems v. US Gov't	1993	U.S.Gov't (Customs appeal)
- Casio v. US Gov't (Customs appeal)	1993	U.S.Gov't
- RGB v. Pride (Copyright)	1994	Pride
- IBM v. Kyocera (Copyright)	1994	IBM
- Intel v. US Gov't (Customs appeal)	1994	U.S.Gov't
- Qantel v. Texas Inst.	1994 (Copyright)	Texas Inst.
- Detroit Center Tool, Inc. v. Robotics N. A., Inc. (Performance)	1994	DCT Fanuc
- Hydra-Flex v. Indice, Inc. (Trade Secrets)	1995	Hydra-Flex
- EGS, Inc. v. Lohitsa, Inc.	1996	EGS (Trade Secrets)
- Detroit Center Tool, Inc. v. Design, Inc. (Performance)	1996	DCT Classic
- S. V. Char v. Clark Atlanta University	1996	S. V. Char

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1997 U.S.Gov't
(Customs appeal)
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(Copyright)
- Hughes Training, Inc. v. Eidetics, Inc. 1997 Hughes Training
(Trade Secret)
- Intermedics, Inc. v. 1998 Intermedics
Cardiac Pacemakers, Inc.
(Patent Infringement)
- CTC Communications v. Bell Atlantic 1998 CTC Comm.
(Performance)
- State of California v. Lockheed Martin 1998 State of California
IMS Corp.
(Performance)
- Alfa Mutual Ins. v. ISI systems, Inc. 1998 ISI systems, Inc.
(Performance)
- McGraw-Hill, Inc. v. 2000 Essential Research,
Inc. Inc.
- Rosenbluth Int'l, Inc. v. 2001 Essential Research, Inc.
Analytics, Inc. (Patent Infringement)
Travel
- Norton v. Norton 2003 Travel Analytics, Inc.
(Divorce) (Patent Infringement)
Norton
- Pitney Bowes v. Stamps.com 2003 Stamps.com
(Patent Infringement)
- Agentware systems, Inc. v. 2005 Agentware
Sandalwood Enterprises, Inc.
(Trade Secret)