

Petition for *Inter Partes* Review of
U.S. Patent No. 8,965,932 B2

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC and YOUTUBE, LLC,
Petitioner

v.

ROBOCAST, INC.,
Patent Owner

Case IPR2023-00593
U.S. Patent No. 8,965,932 B2
Issue Date: February 24, 2015

Title: AUTOMATED CONTENT SCHEDULER AND DISPLAYER

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 8,965,932 B2**

(PETITION 2 OF 2)

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List of Exhibits

Exhibit No.	Description of Document
1101	U.S. Patent No. 8,965,932 B2 to Damon C. Torres (filed Dec. 21, 2005, issued Feb. 24, 2015) (“932” or “932 patent”)
1102	Declaration of Christopher M. Schmandt (“Schmandt”)
1103	U.S. Patent No. 5,634,062 to Takeshi Shimizu et al. (filed October 20, 1994, issued May 27, 1997) (“Shimizu”)
1104	Excerpts from Robert C. Benedict, Jr., <i>Using Harvard Graphics 2 for Windows</i> (1993) (“Benedict”)
1105	Excerpts from David Fox & Troy Downing, <i>HTML Web Publisher’s Construction Kit</i> (1995) (“Fox”)
1106	Excerpts from Stephen W. Sagman, <i>Running Microsoft PowerPoint 4 for Windows</i> (1994) (“Sagman”)
1107	U.S. Patent No. 5,347,632 to Robert Filepp et al. (filed July 28, 1989, issued September 13, 1994) (“Filepp”)
1108	Catherine Guinan et al., <i>Information Retrieval from Hypertext Using Dynamically Planned Guided Tours</i> , Proceedings of the ACM Conference on Hypertext (Nov. 1992), pp.122-130 (“Guinan”)
1109	U.S. Patent No. 6,486,895 B1 to George G. Robertson et al. (filed September 8, 1995, issued November 26, 2002) (“Robertson”)
1110	Excerpts from Michael Miller, <i>Using CompuServe</i> (2d ed. 1994) (“Miller”)
1111	<i>Reserved</i>
1112	Excerpts from Ernest Ackermann et al., <i>Using Unix</i> (1994) (“Ackermann”)

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Exhibit No.	Description of Document
1113	Excerpts from Microsoft Press, <i>Microsoft Office for Windows 95 Resource Kit</i> (1995) (“Resource Kit”)
1114-1115	<i>Reserved</i>
1116	U.S. Patent No. 5,217,119 to Dale Hollingsworth (filed June 4, 1992, issued June 8, 1993) (“Hollingsworth”)
1117	U.S. Patent No. 5,884,056 to David A. Steele et al. (filed December 28, 1995, issued March 16, 1999) (“Steele”)
1118	<i>Reserved</i>
1119	U.S. Patent No. 5,793,980 to Robert D. Glaser et al. (filed Nov. 30, 1994, issued Aug. 11, 1998) (“Glaser”)
1120	Excerpts from <i>Microsoft Press Computer Dictionary</i> (2d ed. 1994)
1121	Declaration of James L. Mullins, PhD (“Mullins”)
1122	Declaration of David Fox (“Fox Decl.”)
1123	Claim Construction Order issued in <i>Robocast, Inc. v. Microsoft Corp.</i> , No. 1:10-cv-01055 RGA (D. Del.) and <i>Robocast, Inc. v. Apple Inc.</i> , No. 1:11-cv 00235 RGA (D. Del.), dated June 28, 2013
1124	Prosecution history of U.S. Patent No. 7,155,451 B1
1125	Prosecution history of U.S. Patent No. 8,606,819 B2
1126	Prosecution history of U.S. Patent No. 8,965,932 B2
1127	Prosecution history for U.S. Patent Appl. Serial No. 08/922,063
1128	Prosecution history for U.S. Provisional Patent Appl. Serial No. 60/025,360

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Exhibit No.	Description of Document
1129	Complaint filed in <i>Robocast, Inc. v. YouTube, LLC and Google LLC</i> , No. 1:22-00304 RGA (D. Del. filed March 7, 2022)
1130	Proof of Service of Complaint (Google LLC), <i>Robocast, Inc. v. YouTube, LLC et al.</i> , Case No. 1-22-cv-00304 (D. Del.)
1131	Proof of Service of Complaint (YouTube, LLC), <i>Robocast, Inc. v. YouTube, LLC et al.</i> , Case No. 1-22-cv-00304 (D. Del.)

I. MANDATORY NOTICES UNDER §42.8(A)(1)

A. Real Party-In-Interest under §42.8(b)(1)

Google LLC and YouTube, LLC (collectively “Petitioner”) are the real parties-in-interest to this IPR petition.

B. Related Matters under §42.8(b)(2)

The ’932 patent is the subject of the following currently-pending litigations: *Robocast, Inc. v. YouTube, LLC et al.*, Case No. 1-22-cv-00304 (D. Del., filed March 7, 2022), which involves Petitioner, and *Robocast, Inc. v. Netflix, Inc.*, Case No. 1-22-cv-00305 (D. Del., filed March 7, 2022).

The ’932 patent was the subject of a previous IPR petition, *Unified Patents, LLC v. Robocast, Inc.*, Case No. IPR2022-01125, in which institution was denied on January 20, 2023. *See* Paper 13, IPR2022-01125. Petitioner had no involvement in the *Unified Patents* petition. Petitioner is concurrently filing a second Petition requesting IPR of another set of claims of the ’932 patent, which does not overlap with the claims challenged herein. (*See Petitioner’s Explanation of Multiple Petitions*, filed herewith.)

Petitioner is also filing IPR petitions with respect to two related patents in the same family: *Google LLC et al. v. Robocast, Inc.*, Case Nos. IPR2023-00590 & IPR2023-00591 (U.S. Patent No. 7,155,451) and *Google LLC et al. v. Robocast, Inc.*, Case No. IPR2023-00594 (U.S. Patent No. 8,606,819 B2).

C. Lead and Back-Up Counsel under §42.8(b)(3)

Petitioner provides the following designation of counsel.

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D. Service Information

This Petition is being served by Federal Express to the correspondence address of record for the '932 patent, 135621 - IPSILON USA, 110 W 40th Street, Suite 2001, New York, NY 10018. Petitioner consents to electronic service at the addresses provided above for lead and back-up counsel.

II. FEE PAYMENT

Petitioner requests review of 41 claims, with a \$65,125 payment.

III. REQUIREMENTS UNDER §§ 42.104 AND 42.108 AND CONSIDERATIONS UNDER §§ 314(A) AND 325(D)

A. Grounds for Standing

Petitioner certifies that the '932 patent is available for IPR and that Petitioner is not barred or otherwise estopped.

B. Identification of Challenge and Statement of Precise Relief Requested

Petitioner requests IPR institution of claims 22-62 based on:

Ground	Claims	Basis for Challenge under §103
1	22-29, 32-45	Shimizu, Benedict, Fox, Wolfe, Guinan
2	46-51, 54-62	Shimizu, Benedict, Fox, Wolfe, Guinan, Miller
3	30-31	Ground 1 Prior Art with Filepp
4	52-53	Ground 2 Prior Art with Filepp

Submitted with this Petition is the Declaration of Christopher M. Schmandt (EX1102) ("Schmandt"), a qualified expert. (Schmandt, EX1102, ¶¶1-10, Ex. A.)

C. Considerations Under §§ 314(a) and 325(d)

§314(a): Petitioner has not previously filed an IPR petition with respect to the '932 patent. As noted in **Part I.A**, the patent was the subject of an IPR petition filed by Unified Patents (IPR2022-01125), in which institution was denied. The *Unified Patents* petition does not favor discretionary denial because (1) Petitioner had no role in its preparation or filing, (2) it challenged fewer claims than all sixty-seven that Petitioner challenges across the present Petition and concurrently filed second petition, and (3) there is no overlap between the prior art in the *Unified Patents* petition and the prior art relied upon here.

As noted, Petitioner is concurrently filing two separate IPR petitions against the '932 patent to account for the number of claims for which challenge is sought; the present Petition challenges claims 22-62 whereas the other challenges claims 1-21 and 63-67 (IPR2023-00592). The filing of two non-overlapping IPR petitions against the '932 patent is permissible as explained in Petitioner's Explanation of Multiple Petitions, filed herewith.

With respect to the pending litigation identified in **Part I.A**, it is in early stages with no discovery having occurred. No claim construction or other substantive rulings have issued from the district court. Petitioner intends to move to stay the pending litigation in the event of institution.

§325(d): The two-part *Advanced Bionics* framework considers: **(1)** whether the same or substantially the same art was previously presented to the Office and if so **(2)** whether Petitioner has demonstrated that the Examiner erred in a manner material to the patentability of challenged claims. *Advanced Bionics* does not apply to Shimizu (EX1103), Benedict (EX1104), Fox (EX1105), Wolfe (EX1114), Miller (EX1110), or Filepp (EX1107), as none of these references was presented during prosecution of the '932 patent. Only one of the prior art references in the proposed grounds here was considered – **Guinan** (EX1108).

During the prosecution of the '932 patent, the Examiner entered an Office Action rejecting claims reciting the online search feature based on the combination of U.S. Patent 5,515,490 to Buchanan and Guinan. The Examiner cited Guinan as teaching a method of creating a show structure in response to a search request submitted by a remote user. (EX1126, 0151-0157, 0165-0175.) The Examiner subsequently conducted an interview with Patent Owner to discuss the rejection, but did not specifically discuss Guinan. (EX1126, 0213-0215.)¹

Patent Owner's subsequent written response did not dispute that Guinan disclosed creating a show structure in response to a search request. Patent Owner

¹ The cover sheet of the Interview Summary lists Guinan as having been discussed during the interview, but the summary of the substance of the interview only mentions Buchanan. (EX1126, 0213, 0215.)

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conceded, in fact, that “Guinan suggests that a natural language or other search could be used to create a guided tour of the hyperlinks.” (EX1126, 0238.) Patent Owner instead argued that Guinan was inapplicable to the claims because, according to Patent Owner, “[t]he user would still need to manually click through the links,” and the hyperlinks would need to be “manually entered into the authoring tool of Buchanan.” (EX1126, 0238.)

Guinan was not further discussed during prosecution. The Examiner issued a subsequent Office Action rejecting all pending claims, but for the search-related limitations for which she relied on Guinan, the Examiner instead relied on U.S. Patent No. 6,026,368 to Brown. (EX1126, 0363-0380.)

Patent Owner subsequently amended its independent claims to recite limitations unrelated to the search features for which Guinan was cited. (EX1126, 0632-0644.) More specifically, Patent Owner argued that the prior art did not disclose “**that during said presentation of at least some of said content from said accessed resources, at least some of said other network accessible resources are being accessed,**” as recited in all independent claims as amended. (EX1126, 0647.) Patent Owner stated the Examiner agreed during a prior interview that the prior art did not disclose this feature. (EX1126, 0647.)

Petitioner respectfully submits that the Examiner materially erred in not locating Benedict (EX1104) and Wolfe (EX1114), cited in all of the grounds here,

which confirm that the feature in the claim amendment discussed above – which appears to have been the basis for allowance of the claims over the prior art – was well-known. (Schmandt, ¶¶62-65, 137-142.) The Examiner erred in not issuing an Office Action rejecting the claims based on the references cited here, which provide a basis of rejection more compelling than the prior art considered during prosecution.

Although the Examiner ultimately allowed the claims based on limitations other than search feature for which Guinan was cited, Petitioner respectfully submits that the Examiner also materially erred in not relying on Guinan. As noted, Patent Owner faulted Guinan during prosecution based on two arguments: **(1)** that in the Guinan guided tour, “[t]he user would still need to manually click through the links,” and **(2)** that the hyperlinks located by Guinan from a search would need to be “manually entered into the authoring tool of Buchanan.” (EX1126, 0238.) The Examiner never directly addressed these arguments, but to the extent she relied on them in not issuing further rejections based on Guinan, this was an error.

Argument **(1)** was flawed because Patent Owner did not identify anything in Guinan suggesting that a guided tour user would need to “manually click through the links” to display content. Guinan itself observes that prior art hypertext systems included “automated playback” features. (Guinan, 008, §2 (discussion of Zelleweger).) This argument was also irrelevant because the Examiner cited Guinan for the claimed automatic creation of the show structure – not the subsequent

automatic display of content of the show structure as recited in later claim limitations. (EX1126, 0151-0153.) In any case, Petitioner here has cited different prior art that was not presented during prosecution (*e.g.* Shimizu, Benedict, Fox) that clearly renders obvious the automatic display-related features in the independent claims, and which is properly combinable with Guinan.

Argument (2) was also flawed as Patent Owner attacked Guinan and Buchanan individually and offered no explanation as to why, in the combined Buchanan-Guinan system, the guided tour links from Guinan would have to be “manually entered into the authoring tool of Buchanan.” (EX1126, 0237-0238; *see also Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1050 (Fed. Cir. 2019) (“A finding of obviousness... cannot be overcome ‘by attacking references individually where the rejection is based upon the teachings of a combination of references.’”) (quoting *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986)).) Patent Owner did not dispute that Guinan discloses automatically selecting hypertext links for a guided tour in response to a search query, and offered no explanation as to why anyone would have nonsensically applied Guinan to require that the automatically-selected links of a guided tour be manually re-entered into the Buchanan authoring tool.

In any case, as explained for claim 22**[b]** and 46**[c]** below, Petitioner has combined Guinan with other prior art not cited during prosecution and explained why the claimed automatic generation of a show structure would have been obvious.

As explained below, under the proposed combination, the hypertext nodes and links identified via the guided tour in Guinan would have been used to automatically create the show structure of nodes, with no action required by the user other than submitting its initial search request. (Schmandt, ¶196.)

IV. OVERVIEW OF THE CHALLENGED PATENT

A. Level of Ordinary Skill in the Art

A person of ordinary skill as of September 3, 1996 (the earliest application to which the '932 patent claims priority)² would have possessed a bachelor's in electrical engineering, computer science, or similar field, with at least two years of experience developing and implementing network-based computer systems, such as systems for storing and retrieving information over the Internet or communicating using the Web. Such a person could also have qualified with more formal education and less technical experience, or vice versa. (Schmandt, ¶¶13-17.)

B. Specification Overview

The '932 patent states that it “relates generally to computer networks, and specifically to a method of sequencing and scheduling web pages, via a suite of software applications.” ('932, 1:22-24.) The '932 patent acknowledges that the

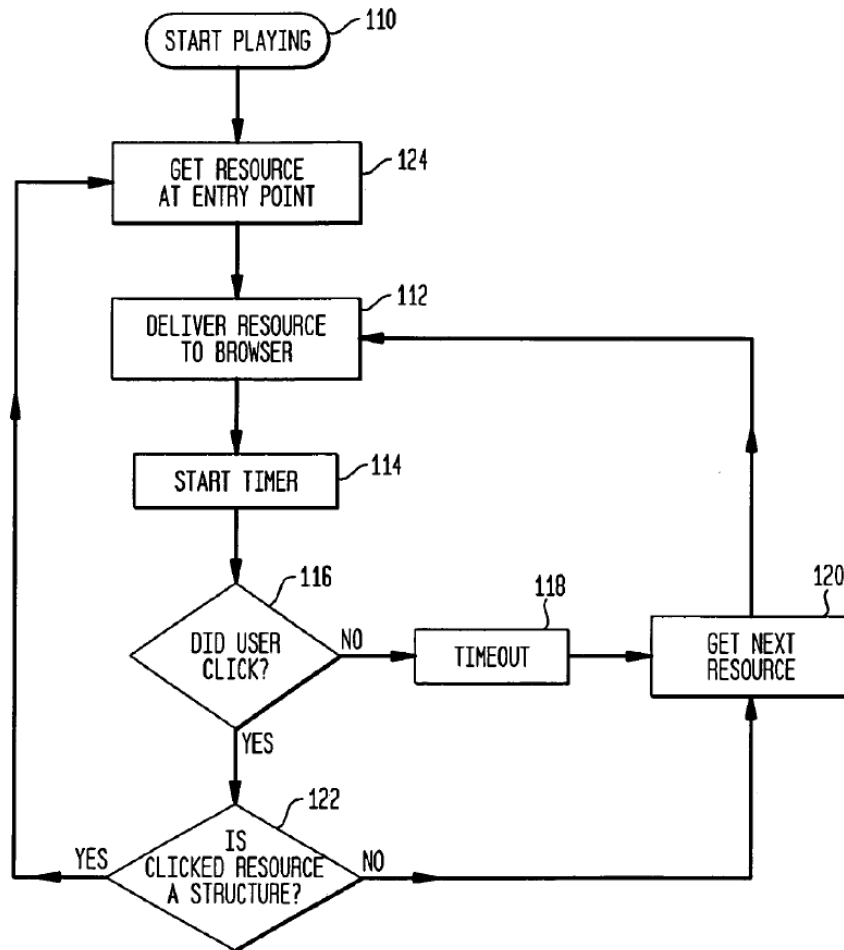
² Petitioner does not concede that the challenged claims are entitled to the filing date of the September 3, 1996 provisional application (60/025,360), but that issue is irrelevant as all of the prior art cited here predates that date. Petitioner reserves the right to respond if Patent Owner attempts to argue for an earlier date of invention.

Internet was already well-known and had “grown tremendously” with the popularization of the World Wide Web. (’932, 1:28-33.)

The ’932 patent describes methods for a user to be automatically presented with content of a series of resources, such as web pages, using what the patent calls a “show structure.” (’932, 2:59-63.) A “show structure” contains a set of nodes, each node “represent[ing] a resource such as a web page, an executable file, or a data file stored at a predetermined location and accessed via its corresponding address.” (’932, 2:61-65.) Each node includes both an address from which the content may be accessed and an indication of the duration for which the content will be presented. (’932, 3:30-35.) A show structure defines one or more paths through the set of nodes. (’932, 3:10-11.)

Figure 4 below outlines how a user may either “on-the-fly” interactively navigate the arrangement of resources specified by the show structure (*e.g.*, steps 116 and 122) or, much like traditional broadcast television or an automatic slideshow, “simply watch[] a series of pre-edited resources” (*e.g.*, steps 114-118):

FIG. 4
RoboSurf



(’932, Fig. 4; *see also id.*, 3:14-22, 11:5-36.) The ’932 patent explains that a show structure itself can be generated in a number of ways, including manually by a user collecting URLs, or automatically in connection with providing results to a user’s search query. (’932, 8:24-28, 11:61-12:3.)

V. CLAIM CONSTRUCTION

Petitioner does not believe express claim construction is necessary at this time. As discussed in **Part VI** below, a district court in prior litigation not involving Petitioner issued a claim construction order for related U.S. Patent No. 7,155,451

(which shares a near-verbatim written description with the '932 patent) with respect to certain terms and phrases recited in challenged claims. (EX1123.) The Board, in denying IPR institution in *Unified Patents, LLC v. Robocast, Inc.*, Case No. IPR2022-01125, expressly adopted those constructions. (Paper 13, at 13-15.) The prior art cited herein, as demonstrated below, renders the challenged claims obvious under the district court's constructions or under any other reasonable construction.

VI. THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. Overview of Grounds

The challenged claims attempt to lay claim over techniques for presenting a series of content resources in a sequenced and/or organized fashion. But these techniques were well-known long before the patent, as demonstrated by Shimizu (EX1103), Benedict (EX1104), and Fox (EX1105), which disclose techniques for linking a set of hypertext nodes so they can be automatically displayed in a particular order and at specified intervals. Shimizu, Benedict, and Fox provide the core combination on which the grounds here rest. **Ground 1** adds Wolfe (EX1114) for well-known techniques recited in the independent claims for prefetching content during display of other content, and Guinan (EX1108), which discloses searching and locating hypertext nodes and using them to create a sequenced “guided tour” of hypertext nodes for presentation to the user. **Ground 2** adds Miller (EX1110), for known category-based search features recited in claim 46. **Grounds 3-4**, which

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address dependent claims 30-31 and 52-53, cite **Filepp** (EX1107) for the unremarkable feature of providing targeted advertising content to the user.

Each reference cited in this Petition qualifies as prior art. Shimizu, Wolfe, and Filepp qualify as prior art under at least § 102(e) (pre-AIA) because they were filed before the earliest filing date of the '932 patent. The other references qualify under at least § 102(a)/(b) (pre-AIA) because they were published prior to the patent filing date, as evidenced by their availability in public libraries and being otherwise accessible to the public. (EX1121 (Mullins), ¶¶32-55 (Benedict), 56-75 (Fox), 114-137 (Miller); EX1122 (Fox Decl.), ¶¶3-9.)

B. Ground 1: Claims 22-29, 32-45 Are Obvious Over Shimizu in View of Benedict, Fox, Wolfe, and Guinan

1. Claim 22

The preamble recites “[a] **method for providing in a sequential arrangement to a user’s computer, content derived via a communications network from a plurality of resources....**” It is unnecessary to determine whether the preamble is limiting because the prior art renders it obvious.

Shimizu discloses a method of “**providing... to a user’s computer, content,**” such as text, pictures, and motion pictures:

When the entity information (character string, image, sounds, motion pictures) is acquired from the node information entity management part 8, the content of the acquired information is reproduced and displayed

in the node content display area 81 of the window 80 by applying the program which is associated with the pointer in the display procedure slot 62 of the node information structure 9.

(Shimizu, 8:52-59; *see also id.*, Fig. 8 (showing user interface for presenting node content), 8:11-25, 8:49-59.)³

The content is also derived from “**a plurality of resources**” *e.g.*, stored information (*e.g.* in data files) containing the character string, image, motion picture, etc., content. (Schmandt, ¶¶101, 180; Shimizu, 6:39-42, 6:57-59, 8:52-59.) And as explained in more detail below, it would have been obvious that the content would have been derived from resources on the Web (*e.g.*, web pages, images) identified by Uniform Resource Locators (URLs). (Schmandt, ¶¶108-115, 180; Fox, 0049 (“A *URL* (or *Universal Resource Locator*) is the address of a document, file, or other Internet resource.”) (*italics in original*).) It therefore would have been obvious, as explained in 22[b][2] below, that content would have been provided on a user’s computer “**via a communications network**,” *i.e.*, the Internet. (Schmandt, ¶102.)

The proposed combination also renders obvious transmitting and displaying content “**in a sequential arrangement**,” because the content of each node would have been presented in a particular sequence. (Shimizu, *e.g.*, 9:1-4 (“The processing above is carried out so that the node C is displayed followed by node B and node D,

³ Except as otherwise noted, all underlining has been added for emphasis.

in accordance with the order of the link information.”), 9:60-66, 5:10-14.) As explained below, the organization and sequencing of nodes is determined by link information in Shimizu.

- (a) “receiving a request for a user defined online search from a remote user;” (22[a])
- (b) “providing a plurality of search results and their corresponding resource locators in response to said request...” (22[b][1])

Because these two limitations are closely-related, Petitioner will address them together. In prior litigation, the court construed “**online search**” as “*an Internet search.*” (EX1123, 0021.) These limitations are obvious based on **Fox** and **Guinan**.

For example, Fox identifies more than 10 Internet search indexes existing as of 1995, including Lycos, WebCrawler and Yahoo. (Fox, 0047-0048, Table 1-1, 00204; Schmandt, ¶182.) Fox explains that a search index “is a special Web page that allows you to type in a search term or keyword. The index then spits out a list of Web pages matching your search.” (Fox, 0046-0047.)

But Fox does not describe how results from an on-line search are used beyond being displayed by the user. Petitioner has therefore cited Fox in combination with **Guinan**, which discloses a technique for (a) allowing a user to enter a natural language search query and then (b) searching hypertext nodes in response to the query to create a “guided tour” for the user. (Guinan, 008, §1, 124-125.)

Guinan explains that hypertext systems had problems such as “disorientation and the quality of the information retrieved by the user from the hypertext.” (Guinan, 007, §1.) This problem with hypertext was well-known and, as acknowledged in Fox, one of the key reasons the industry adopted on-line searching for the Web as discussed above. (Fox, 0046-0047; Schmandt ¶183.) Guinan discloses a proposed method of creating a “guided tour” to address these shortcomings.

The first step of Guinan’s proposed method is for the user to enter a “natural language” search query. (Guinan, 009, §3.) Hypertext nodes are then searched for keywords matching the query, which are scored using a weighting algorithm. (*Id.*; *see also id.*, 0014, §6 (“*Finding information*: When the user enters a search query in the form of a natural language statement it is matched to the nodes in the hypertext using standard information retrieval techniques.”) (italics in original).) The weighting algorithm takes into account the frequency of terms within the nodes, as well as their connections to other nodes. (*Id.*) Nodes that satisfy a threshold weight value are added to the tour. (Guinan, 0010; Schmandt, ¶¶184-185.)

Once matching nodes have been identified, a guided tour is assembled. “At this stage, the nodes for the guided tour have been dynamically chosen in response to a user’s query and some form of logical ordering has to be imposed on the selected tour nodes.” (Guinan, 0010, §3.) Guinan discloses an ordering procedure that takes

into account linking relationships between the matching nodes. (*Id.*) “This procedure is followed until every node selected for inclusion in the tour has been positioned correctly relative to each other node in the tour.” (*Id.*)

Rationale and Motivation to Combine (Shimizu, Fox, Benedict, Wolfe and Filepp with Guinan): It would have been obvious to combine Fox and Guinan with the Shimizu-Benedict-Fox combination (described in detail for 22[b][2]-[d] below), predictably resulting in the proposed combination further adapted to receive a request for a user-defined online search from a remote user, and then provide a plurality of search results and their corresponding resource identifiers in response. (Schmandt, ¶187.) These nodes will then be used to create the claimed “**show structure of nodes**” of 22[b][2] under the proposed combination, as further discussed for 22[b][2] below. (Schmandt, ¶¶195-196.)

Guinan does not expressly disclose that the hypertext nodes in the guided tour are located using an “**online search**,” *i.e.*, Internet search. But this would have been trivial and obvious in view of Fox which expressly discloses the use of Internet search indexes accessible over the Web, which provided results in response to search requests from remote users over the Internet. (Schmandt, ¶¶188, 182.) Guinan and Fox are analogous references in the same field of providing organized or sequenced presentation of hypertext content, and would have been reasonably pertinent to a number of problems facing the inventor. (Schmandt, ¶¶111, 189.)

Guinan provides an express motivation to apply her techniques by explaining that, by creating a guided tour based on a search, “[u]sers don’t need to worry about getting lost or confused in the hypertext as all they need to do is follow the tour which is generated in response to their query.” (Guinan, 0014, §6.) This motivation is echoed in Fox, which also explains that searching techniques help users locate specific information. (Fox, 0046-0047 (“Hypertext makes it easy to get lost... [W]hat if you want to find pages dealing with a specific topic? Luckily, the Web is full of indexes.”).) An ordinarily skilled artisan would thus also been motivated to use an online search to easily identify relevant hypertext nodes, which can then be used to create a show structure for display to the user. (Schmandt, ¶¶190-192, 196.)

A skilled artisan would also have been motivated to adapt Guinan to identify hypertext nodes in the form of Web resources from an Internet search as disclosed in Fox, which would have been identified by URLs (“**resource identifiers**”). (Schmandt, ¶193.) This would have been a natural adaptation considering that the Web, like Guinan, is an example of a hypertext-based system. (Fox, 0045 (“The World Wide Web uses hypertext to link all of its pages together.”).) A skilled artisan would have desired to take advantage of the commercial growth and growing popularity of the Web and thereby increase the number of users who would use the guided tour. (Schmandt, ¶¶193, 112-114.) As explained for 22[b][2] below, the ability to access content identified by URLs would also have expanded the universe

of content that could have been incorporated into a tour. (Schmandt, ¶¶193, 114.)

A skilled artisan would have had at least a reasonable expectation of success and could have implemented the proposed combination using conventional programming techniques. (Schmandt, ¶194.)

- (c) **“... automatically creating a show structure of nodes based on said search results, each node identifying a resource from a plurality of accessible resources via said communications network;” (22[b][2])**

The **“show structure of nodes”** in the proposed combination corresponds to a set of nodes and their links or connections to other nodes. Those nodes take the form of hypertext nodes under the proposed combination.

Shimizu discloses a system for defining a set of hypertext nodes and their relationships to other nodes. (Shimizu, 6:30-35, Fig. 10; Schmandt, ¶¶44-50, 195.)

Figure 9 shows a “conceptual” example of a set of nodes (7:49-51):

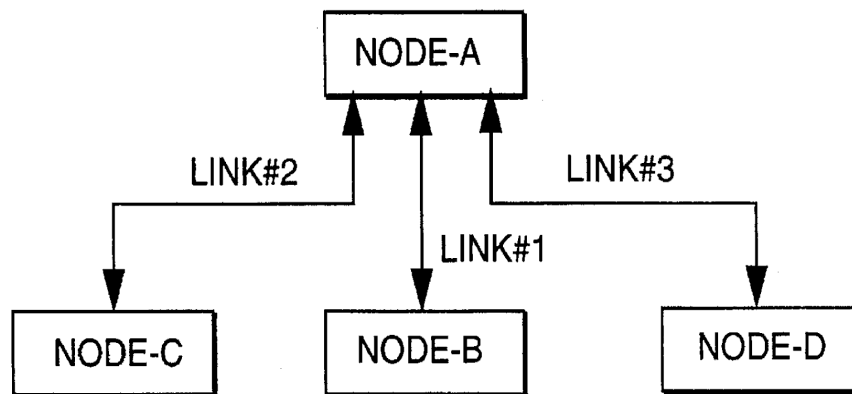


FIG. 9

(Shimizu, Fig. 9.) In this example, NODE-B, NODE-C, and NODE-D are linked to NODE-A by LINK#1, LINK#2, and LINK#3, respectively. (Shimizu, 7:51-54.) In

this example, as Shimizu explains, NODE-A would be displayed first followed by NODE-C, NODE-B, and NODE-D. (Shimizu, 7:54-65.) Figure 10 shows a different representation of the nodes from Figure 9:

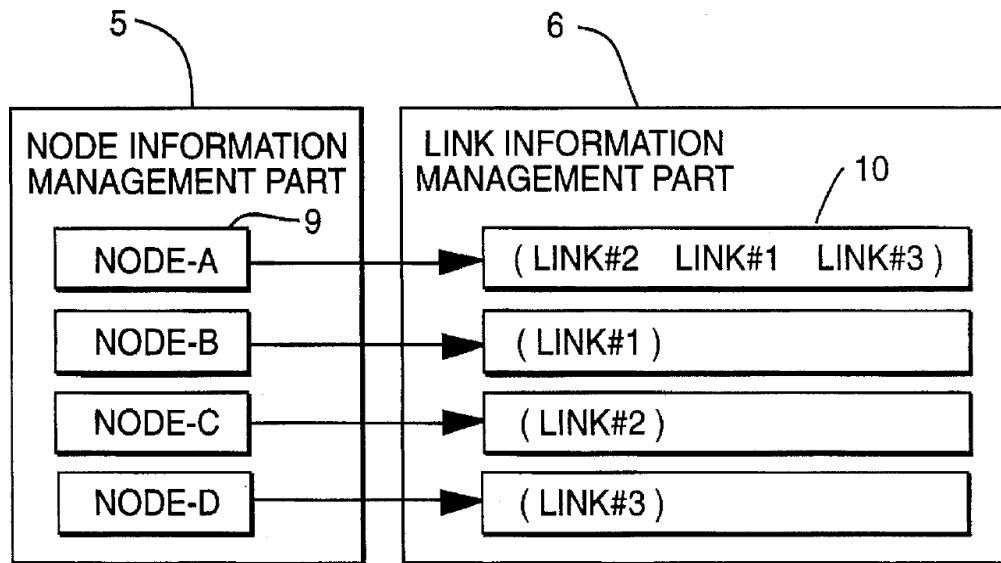


FIG. 10

(Shimizu, Fig. 10, 7:67-8:5.) Node information management part 5, shown on the left, “manages a plurality of node information structures holding the information about each node.” (Shimizu, 6:31-33.) Link information management part 6, on the right, “manages a plurality of link information structures defining the relations between the nodes.” (Shimizu, 6:33-35.) In the example above, as noted, “the node A is linked to the node C, node B and node D, in that order.” (Shimizu, 8:4-5.)

Shimizu thus discloses “**a show structure of nodes**,” which corresponds in Shimizu to an arrangement or set of nodes, which identify their associated content resources and their links to other nodes. With respect to “**creating**” the claimed

show structure, it would have been obvious that the show structure in Shimizu was “**creat[ed]**,” as it must have been brought into existence to perform the node display and other functions described in Shimizu. (Schmandt, ¶195.) As separately explained below, the show structure would have been created “**automatically**” under the further combination with Guinan.

Shimizu further discloses “**each node identifying a resource from a plurality of accessible resources.**” As noted, node information is stored in a “node information structure” for each node, as shown in Figure 6:

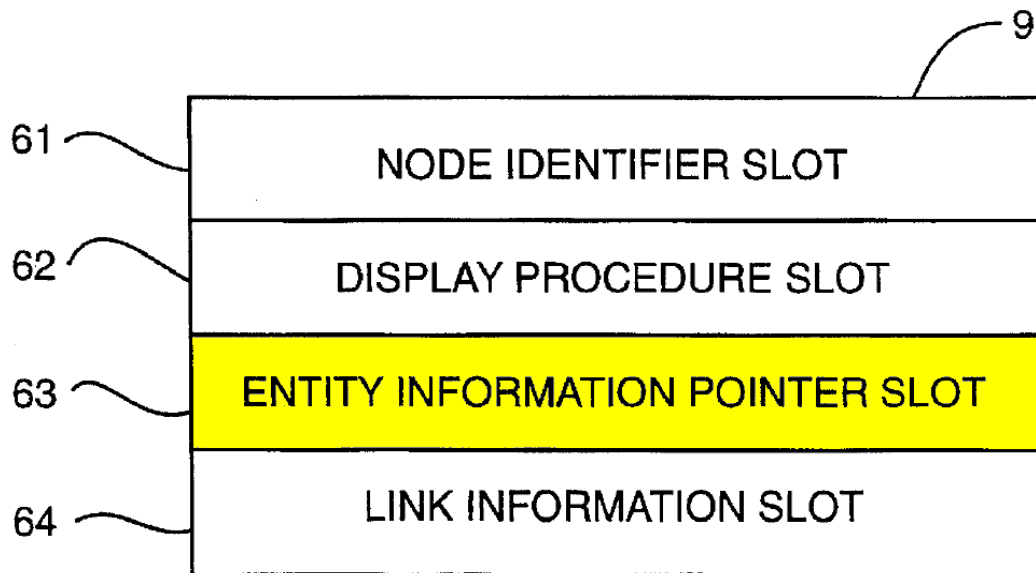


FIG. 6

(Shimizu, Fig. 6 (highlighting added), 6:44-45 (“FIG. 6 is a view showing members of a node information structure held by the node information management part 5.”).)

Node identifier slot **61** in Figure 6 “is used to uniquely identify this node information

structure within the system.” (Shimizu, 7:1-3.)

The key slot here is entity information pointer slot **63** in yellow, which holds a pointer to the content resource associated with the node:

The entity information pointer slot **63** retains the pointer pointing to the entity information to be displayed by the node in question. The entity information thus pointed to may be a character string, image information, motion pictures or sounds.

(Shimizu, 5:55-59.) As explained for 22**[b][2]-[d]** below, Shimizu uses the entity information pointer to identify, retrieve and display content associated with the node.

(Shimizu, 8:49-59.) The nodes in Shimizu thus “**identify[] a resource from a plurality of accessible resources,**” because each node points to and therefore identifies a particular resource (*e.g.*, text, image, motion picture, sound, etc.) from the plurality of resources accessible to the system.

The node information structure shown in Figure 6 also includes link information slot **64**, which stores “the pointer pointing to the link information structure for holding the link information attached to the node in question.”

(Shimizu, 6:59-62.) The link information structure for a current node, in turn, points to the node information structure for the next node to which the current node is linked. (Shimizu, 6:63-7:9, Fig. 7.)

This mapping of Shimizu is consistent with claim construction rulings in the prior litigation, in which the district court construed “**show structure of nodes**” as

“a structure that is arranged for the display of content by specifying one or more paths through a plurality of nodes,” which must also *“specify the duration of any display.”* (EX1123, 002.) The court further defined **“node”** as *“an identifier of a resource that includes an address to the resource and the duration for which the resource's content is to be presented by default.”* (EX1123, 0016.) The proposed combination satisfies these constructions.

With respect to **“a show structure of nodes,”** as explained, the node and link information in Shimizu define a structure that specifies a set of nodes, the content associated with the nodes, and links that specify the path through the nodes. With respect to **“node,”** it would have been obvious that entity information pointer slot **63** stores *“an identifier of a resource that includes an address to the resource,”* because it provides a pointer identifying the location of the content resource associated with the node. (Schmandt, ¶116.) Under the further combination with Fox, explained below, such resource would have been identified using a Uniform Resource Locator (URL) that provides an address to a Web content resource (*e.g.* web page, image, etc.) on the Internet. (Schmandt, ¶¶195, 110-114, 116.)

Petitioner notes that the '932 patent does not require any particular format or organization for the claimed **“show structure,”** but rather, describes it as an arrangement containing a set of nodes. ('932, 2:61-65.) The proposed combination similarly renders obvious an arrangement or set of nodes whose characteristics

(including their associated content resources and connections with other nodes) are defined by their node and link information as explained. (Schmandt, ¶117.)

The prior constructions above state that a show structure of nodes “*specifies the duration of any display,*” and that a node includes “*the duration for which the resource’s content is to be presented by default.*” Petitioner will provide a separate discussion below explaining how these requirements, if adopted here, would have been obvious based on the proposed combination.

Resources Accessible “Via Said Communications Network”

Shimizu discloses that resources could have been stored in “secondary storage” (e.g., Shimizu, 6:39-43, 2:49-53), which would have been understood as encompassing storage accessible through a network. (Schmandt, ¶107.) Shimizu does not disclose an example in which resources are expressly described as being “**accessible via said communications network,**” but network accessible resources would have been obvious in further view of **Fox**.

As noted, Fox confirms that the Web is yet another example of a hypertext system. (Schmandt, ¶108; Fox, 0044-0046.) Each resource on the Web was identified by a Uniform Resource Locator (URL) identifying its location on the Internet. (Fox, 0049; *see also id.*, 00332-00333 (describing IMG tag identifying location of image resource).) As was well-known, one of the components of a URL is the domain name of the server where the resource is located (e.g. “uspto.gov”), so

it would also have been obvious that each resource could have been associated with a different website at a unique domain. (Schmandt, ¶110.)

Fox also confirms that it was known to use URLs to identify content resources over the Internet in the same use case as Shimizu and Benedict (discussed below), *i.e.*, to display them automatically and sequentially. For example, Fox discloses a technique in which a web page, after a specified amount of time, can cause a web browser to automatically load another web page after 60 seconds, which Fox states could be used to “create an automatic slide show of many Web pages.” (Schmandt, ¶109 (quoting Fox, 00324).) It was thus known to use URLs to identify resources for a hypertext presentation system such as Shimizu in which the content resources associated with a series of nodes could be downloaded and presented to the user in a particular sequence and for a specified duration. (Schmandt, ¶109.)

Rationale and Motivation to Combine (Shimizu with Fox): Petitioner already explained the rationale for combining Guinan and Fox for 22[a]. (Schmandt, ¶¶188-194.) For this limitation 22[b][2], it would have been obvious to combine Shimizu with Fox, predictably resulting in each node in the claimed show structure being associated with a Web resource identified by a URL, such a web page or image. (Schmandt, ¶¶110, 195.) This would have resulted in each resource being accessible “**via said communications network,**” *i.e.*, the Internet. This would have been a straightforward adaptation; for example, entity information pointer slot 63 of

Shimizu discussed above could have been readily adapted to hold one or more URLs identifying Web resources on the Internet (web pages, images, etc.) associated with the node. (Schmandt, ¶110 (citing Fox, 0049 (“The World Wide Web gives every article, newsgroup, database, computer, file or other Internet fragment its own URL.”), 00332-00333 (describing how to embed graphic files on a web page using IMG tags identifying the URL of images for display on the page)).) A URL would have been a natural way to implement entity information pointer slot 63 because a URL provides a standardized way of identifying a file stored on the Internet. (Schmandt, ¶110.) Shimizu, like Fox above, is an analogous reference in the same field of techniques for providing organized or sequenced presentation of content, and would have been reasonably pertinent to a number of problems facing the inventor. (Schmandt, ¶111.)

An ordinarily skilled artisan would have been motivated to combine Shimizu with Fox to take advantage of the growing popularity of the Web. (Schmandt, ¶¶112-113.) The Background of the '932 patent, in fact, concedes that the web was “popularized in 1993.” ('932, 1:28-31.) Fox similarly describes the enormous commercial potential of the Web and its ability to reach millions of users. (Fox, 00253; *see also id.*, 00224.)

As a related motivation to combine, because nodes under the proposed combination could have referenced any content on the Internet accessible through a

URL, the proposed combination would have benefitted from the ability to draw from a broader universe of available Web content. (Schmandt, ¶114.) An ordinarily skilled artisan would have had a reasonable expectation of success and could have implemented the combination using conventional techniques. (Schmandt, ¶115.)

Show structure being created “automatically” and “in response to said search results received in response to said on-line search”

It would also have been obvious to create the show structure “**automatically**” and “**based on said search results.**” As explained for 22[a], Guinan discloses constructing a guided tour of hypertext nodes in response to a search query. It would have been obvious that this occurs “**automatically**” because Guinan requires no user action to build the guided tour based on the search results. (Schmandt, ¶196.) Although the user in Guinan does enter an initial search query, this is a separate and unclaimed act that precedes the claimed step of automatically creating a show structure. The ’932 patent similarly discloses user action for initiating searches used to create show structures. (’932, 11:63-66.)

It would have been obvious to provide the guided tour created by Guinan, which identifies the hypertext nodes and specifies the order in which they will be presented, to the system of Shimizu for use in creating node and link information for the show structure. (Schmandt, ¶196.) Because the hypertext nodes and their links were identified via the guided tour in Guinan, under the proposed combination, the

user would not need to take any action beyond entry of its initial search request. (*Id.*)

Under the proposed combination with Shimizu and Fox, therefore, the results obtained from the online search would have been used to identify the nodes to create the “**show structure of nodes**” of Shimizu. The rationale and motivation to combine as to Guinan, provided for 22[a], also applies here. (Schmandt, ¶¶196, 187-194.)

An ordinarily skilled artisan would have been motivated to adapt the search feature of Guinan and Fox, as explained for 22[a], because it would have provided a useful technique for identifying nodes and placing them in an ordered sequence for creation of a show structure. (Schmandt, ¶196; Guinan, 0014, §6.) As a further motivation to combine, the “guided tour” of hypertext nodes in Guinan is directly analogous to the show structure of nodes under the proposed combination. (Schmandt, ¶196.) It therefore would have been obvious to use the search results provided – placed into an ordered/sequenced guided tour – as the basis for creating the claimed show structure of nodes. (*Id.*)

“Duration Information” Requirement

Finally, as noted, the prior district court constructions require that a show structure of nodes “*specifies the duration of any display,*” and that a node includes “*the duration for which the resource’s content is to be presented by default.*” Shimizu discloses a default display time, *i.e.*, a “predetermined” time or interval in which node content is displayed before proceeding to the next node. (Shimizu, 3:9-

16, 5:11-14 (“This makes it possible to build with ease an application program illustratively causing the display of the nodes to be switched in a specific order and at predetermined intervals.”).) But Shimizu does not appear to disclose whether the predetermined intervals are default values that can be changed by a user. But this would have been obvious in further view of **Benedict**.

Benedict describes Harvard Graphics software that, similar to Microsoft PowerPoint, allowed users to create computer-based slide presentations . (Benedict, 0019, 0041; Schmandt, ¶¶52-55, 121.) A user can view a presentation (a “ScreenShow”) that displays slides in a specified sequential order, similar to the sequential display of nodes in Shimizu. (Benedict, 0037.) Benedict discloses an additional feature (known as “HyperShows”) that allowed slides to include hypertext links to jump to other slides. (Benedict, 00123-00134; Schmandt, ¶¶121, 174.)

As relevant to the durational requirement, Benedict discloses “ScreenShow Effects that allow the user to customize the display of the presentation.” (Benedict, 00119-00123.) As shown in Figure 17.1 below, one of those features allows the user to specify how long a slide will be displayed before moving to the next slide:

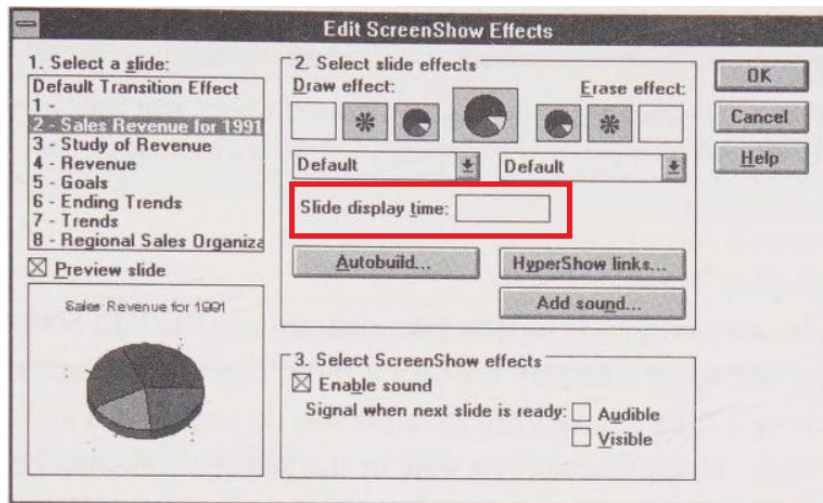


Fig. 17.1

The Edit
ScreenShow
Effects dialog box.

(Benedict, 00120, Fig. 17.1 (red box added).) Figure 17.1 shows an example of editing the ScreenShow Effects for a selected slide (“Sales Revenue for 1991”). The text box shown in **red** allows the user to specify how long (in seconds) to display the selected slide before automatically advancing to the next slide. (Benedict, 00121 (“The display time determines how long a slide remains on-screen if you do not press a key to move to the next slide....”).) In addition to assigning display time on a slide-by-slide basis (as shown in Fig. 17.1 above), the user can set a display time for all slides. (Benedict, 00122-00123, ¶4; Schmandt, ¶122-123.) Either way, the display time allows the user to create “self-running” presentations that advance to the next slide after a specified period. (Benedict, 00134 (“Self-running presentations automate your ScreenShow by displaying the slides for a specified length of time before the next slide appears—pressing a key is not necessary.”).)

Manner, Rationale and Motivation to Combine (Shimizu, Fox, and Guinan with Benedict): It would have been obvious to combine the Shimizu-Fox-Guinan

system with Benedict, predictably resulting in the system having the further ability to provide a default duration for each node that can be changed by the user. (Schmandt, ¶124.) Accordingly, each “**node**” would have further included information specifying “*the duration for which the resource’s content is to be presented by default.*” (EX1123, 0016.) As a result, the content resources of a node under the proposed combination would have been displayed for a “predetermined” (default) interval as disclosed in Shimizu, which the user could have changed as described in Benedict. (Schmandt, ¶124.) Like Shimizu, Benedict is also an analogous reference in the field of organized and sequenced presentation of content and would have been pertinent to problems facing the inventor. (Schmandt, ¶125.)

As noted, Shimizu itself discloses displaying node content for a “predetermined” time or interval before switching to the next node. (Shimizu, 3:9-16, 5:11-14.) Shimizu also suggests the ability to vary the display duration between nodes by explaining that “[i]t is also possible to build with ease a system for arranging information that emphasizes temporal relations between nodes (e.g. chronological tables).” (Shimizu, 9:66-10:2.) A skilled artisan would have been motivated to enhance the Shimizu-Fox-Guinan system by allowing the user to further adjust the default interval as described in Benedict, which would have improved user experience by providing greater customization and flexibility. (Schmandt, ¶¶126-127.) For example, some nodes may have had content that was

more complex than other nodes, thus justifying a longer display time to provide the user with more time to view and digest their content. (*Id.*) An ordinarily skilled artisan would have had at least a reasonable expectation of success and could have implemented the proposed combination using conventional programming techniques. (Schmandt, ¶128.)

- (d) **“without requiring user input automatically accessing a plurality of said resources;” (22[c])**
- (e) **“retrieving content corresponding to each of said accessed resources; and” (22[d])**
- (f) **“automatically accessing and presenting said retrieved content through said user's computer in accordance with said show structure...” (22[e][1])**

All three of these limitations are closely-related and thus will be addressed together. Shimizu discloses automatically accessing and retrieving the content resources identified by the nodes in order to display them to the user:

This processing is started using the mouse to click the “PLAY” button in the operation designating area **82** of the window **80** in FIG. 8. The contents of the linked nodes are displayed in the order set by the link information.

(Shimizu, 8:13-16.) In order to display the node contents, the entity information pointer slot **63** discussed in the previous limitation is used to identify the location of the resource, and then to access and retrieve its corresponding content. (Shimizu, 8:49-59, 8:49-52 (“Step 107 [Fig. 11] accesses and reads the entity information”

linked by the entity information pointer of the node information structure designated by the pointer pointing to the acquired node.”.) The content is also displayed “**in accordance with said show structure**,” because it is presented in the sequence specified by the link information for the nodes. (Shimizu, 8:67-9:4, 5:11-14.)

As also explained, because each resource would have been a Web resource identified by a URL under the proposed combination, the resources would have been accessed and retrieved by the user computer from the Internet. (Schmandt, ¶¶197, 130.) Under the proposed further combination with Fox, as noted, the entity information pointer slot **63** would have included a URL associated with the content resources on the Web (*e.g.*, web page, images, etc.) to be displayed with the node. For example, if a URL pointed to a web page, the web page and any content resources on that page (*e.g.* images, videos, etc.), would have been automatically accessed and retrieved. (Schmandt, ¶129.)

The proposed combination also renders obvious that the claimed steps of accessing, retrieving, and presenting in 22[c]-[e][1] occur **automatically** and **without requiring user input**, because under the proposed combination, the access, retrieval, and presentation of resources and their corresponding content would have proceeded from node-to-node without user intervention. (Shimizu, Fig. 11 (Steps 104-109), 8:67-9:4 (“In step **105**, the next node information is reproduced in accordance with the next link information. The processing above is carried out so

that the node C is displayed followed by node B and node D, in accordance with the order of the link information.”), 5:11-14 (“This makes it possible to build with ease an application program illustratively causing the display of the nodes to be switched in a specific order and at predetermined intervals.”).) Shimizu does not disclose or require any user controls (*e.g.* a “Next” button) to advance to the next node. (Schmandt, ¶130.)

Benedict similarly discloses the “**automatically**” and “**without requiring user input**” limitations because ScreenShows can run automatically. (Benedict, 00134 (“Self-running presentations automate your ScreenShow by displaying the slides for a specified length of time before the next slide appears—pressing a key is not necessary.”).) And Fox, as noted, also discloses automatically retrieving the next page URL after a specified period of time. (Fox, 00323 (“The server waits and automatically gives the Web page the new information.”).)

Under the proposed Shimizu-Benedict-Fox combination, the user commences the automatic display of node content by initially pressing “PLAY” or other control button. (Shimizu, 8:17-19, Fig. 11 (Step **101**).) This presents no obstacle to obviousness because the steps of “**accessing a plurality of said resources**,” “**retrieving content corresponding to each of said accessed resources**,” and “**accessing and presenting said retrieved content through said user’s computer**,” are separate from user activation of a PLAY button. (Schmandt, ¶¶133-

134, 197.) The district court’s claim construction order, in fact, expressly adopted Patent Owner’s argument that “**without requiring user input**” does not exclude a triggering event by a user that causes commencement of the show. (EX1123, 0026-0027.) In adopting Patent Owner’s argument, the district court relied on the specification which explains that “[a] triggering event, such as a mouse click on a single ‘link’ commences the presentation of a series of resources instead of one resource at a time.” (EX1123, 0026; ’932, 2:59-61.)⁴ The proposed combination thus renders obvious performing the steps of 22[c]-22[e][1] “**automatically**” and “**without requiring user input.**”

(g) “... such that during said presentation of at least some of said content from said accessed resources, at least some of said other network accessible resources are being accessed.” (22[e][2])

This final limitation in claim 22 is obvious based on Benedict (discussed above) and **Wolfe**. This feature recites nothing more than a well-known technique, commonly referred to as “prefetching” or “preloading,” in which a computer loads data *before* it is actually needed so when the computer *later* needs that data, it can utilize it immediately. Preloading was a commonly used technique for reducing

⁴ This is also consistent with Patent Owner’s infringement theory against Petitioner in the pending litigation as to this limitation, which alleges that videos in YouTube playlists proceeded “in continuous sequential fashion one after the other, all without requiring input from the computer user beyond (at most) just a single initial click that served to commence a playlist.” (EX1129, 0014, ¶26.)

delays associated with presenting information to a user. (Schmandt, ¶¶62-63, 137-138.) For example, Benedict discloses a feature in which Harvard Graphics preloads a subsequent slide during display of the current slide:

Signalling [sic] for the Next Slide. Depending on the power and speed of your computer, Harvard Graphics may need time to prepare the next slide in the presentation before displaying it. The Signal when next slide is ready: options in the Edit ScreenShow Effects dialog box enable you to activate an audible signal (a beep) and visual signal (a small arrow in the bottom right corner of your screen) to indicate when the next slide is ready.

(Benedict, 00122 (boldface in original).)

An ordinarily skilled artisan would have understood that the act of accessing information as recited in 22[e][2] encompasses at least opening a file and reading information from it. (Schmandt, ¶139.) It would have been obvious that, in order to prepare a next slide, the software in Benedict would have accessed its resources by at least reading them into memory. (*Id.*)

Under the proposed combination, therefore, it would have been obvious that “**during said presentation of at least some of said content from said accessed resources,**” *i.e.*, during display of content resources associated with the current node, “**at least some of said other network accessible resources are being accessed,**” *i.e.*, content resources associated with the next node would have been

accessed (such as by retrieving them from the Internet via their URLs). An ordinarily skilled artisan would have been motivated to implement this technique to improve the performance of the system and user experience by reducing the amount of delay before display of the next node. (Schmandt, ¶140.)

Benedict does not disclose details about how its next slide preparation technique works. In the event Patent Owner faults Benedict for this lack of detail, therefore, Petitioner has also cited to **Wolfe** which provides a more detailed description of preloading . Wolfe describes a technique in which, while the user views certain information, other information the user is preloaded:

In a database system (or document retrieval system) in one embodiment of the present invention, information that the user is likely to eventually request is preloaded into memory while the user is viewing other information... The present invention also takes advantage of the fact that the time that the user spends viewing displayed information is often sufficient to advantageously preload a substantial amount of information.

(Wolfe, 2:25-35; *see also id.*, 5:47-59.) Although an embodiment in Wolfe involves an on-line legal database, his techniques are broadly applicable to any type of documents that can be retrieved and presented to the user. (Schmandt, ¶142; Wolfe, 4:20-23.) Wolfe also makes clear that preloading is applicable to networked databases accessible by multiple users simultaneously. (Wolfe, 3:60-4:8.)

Rationale and Motivation to Combine (Shimizu, Fox, Benedict and Guinan with Wolfe): It would have been obvious to further combine the Shimizu-Fox-Benedict-Guinan system with Wolfe, predictably resulting the ability to access “**at least some of said other network accessible resources,**” *i.e.*, resources on the Web associated with at least the next node in the show structure, “**during said presentation of at least some of said content from said accessed resources,**” *i.e.*, during display of content from the resources for the current node. For example, during display of content of the current node, the system would have accessed resources (*e.g.*, Web pages, images, etc.) associated with the next node over the Internet. (Schmandt, ¶143.) Wolfe is an analogous reference in the field of content retrieval and would have been reasonably pertinent to a number of problems facing the inventor. (Schmandt, ¶144.)

A skilled artisan would have been motivated to combine to reduce or eliminate delays associated with accessing and displaying the next node. (Schmandt, ¶¶145-146.) Wolfe expressly supports this motivation by explaining that an “undesirably slow” loading process can be reduced by preloading subsequently-needed information during the display period. (Wolfe, 5:47-59.) As Wolfe explains, “the time that the user spends viewing displayed information is often sufficient to advantageously preload a substantial amount of information.” (Wolfe, 2:31-35.)

Wolfe also explains that preloading is particularly appropriate in a scenario in

which the system can predict the information the user will next require. (Wolfe, 2:28-35, 5:52-59.) The proposed combination presents precisely that scenario because nodes are presented (and thus accessed) in the predictable sequence established by the link information. (Schmandt, ¶145; Shimizu, *e.g.*, 9:1-4.) A skilled artisan would have had a reasonable expectation of success and could have implemented this feature using conventional techniques. (Schmandt, ¶148.)

2. **Claim 23: “The method in accordance with claim 22, further comprising the step of causing said content to be presented through said user’s computer.”**

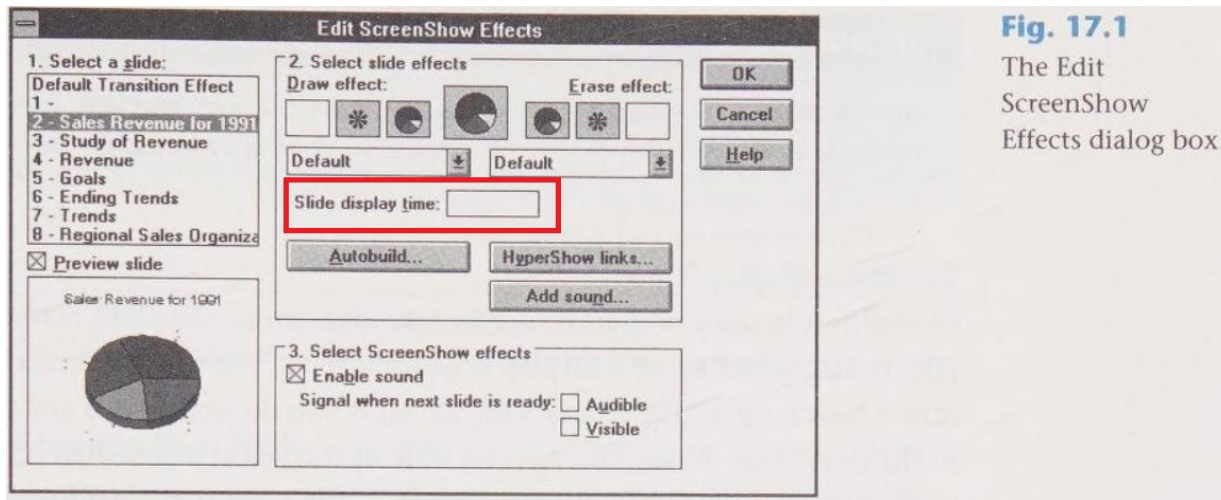
As explained for claim 22[c]-[e] above, the content is presented through the user’s computer. (Shimizu, *e.g.*, 8:49-59.)

3. **Claim 24: “The method in accordance with claim 23, wherein said step of presenting said content further comprises the step of providing duration information, representing the duration that corresponding content to said resource is presented.”**
4. **Claim 25: “The method in accordance with claim 24, wherein said step of providing duration information provides an interactively variable duration information, representing the duration that corresponding content to said resource is presented so as to enable a user to vary said duration.”**

These two claims are closely-related and thus will be addressed together. As explained for 22[b][2] above, the proposed combination renders obvious providing duration information, *e.g.*, a display time that represents the duration within which a corresponding content (*i.e.*, the content corresponding to the resource associated

with the node) is displayed. The prior art thus renders claims 24-25 obvious under two separate theories. (Schmandt, ¶¶150-154.)

First, as described for 22[b][2], Benedict discloses that the user can change the display time for one or more nodes using the ScreenShow Effects feature:



(Benedict, 00120, Fig. 17.1 (red box added).) As Benedict explains:

You can enter the time in seconds or in minutes and seconds separated by a colon. Entering 23, for example, sets the display time to 23 seconds; entering 1:30 sets the display time to 1 minute and 30 seconds.

(Benedict, 00121 (italics in original).) As noted, this technique can be used to edit the display time for each slide individually, or for all slides. (Schmandt, ¶¶122-123, 151.) Under the proposed combination, therefore, the duration information for a node (specifying how long its content can be provided) can be varied by the user. (Schmandt, ¶151.) The user for purposes of this technique would be the user creating or editing the presentation, who could have been the same user viewing the

presentation. (*Id.*)

As a second and independent way of showing “**an interactively variable duration information**,” Patent Owner in the pending litigation appears to be taking the position that this limitation is satisfied by a user’s ability to skip to another node during display of node content. (EX1129, ¶27.) Petitioner does not concede that this functionality satisfies the claim, but even if it did, a user viewing the content resource for a node under the proposed combination can simply press a button during display of content to immediately advance to the next node. (Benedict, 00121 (“The display time determines how long a slide remains on-screen if you do not press a key to move to the next slide.”), 00124 (“Next slide... Moves to the next slide in the presentation”).) Applying Patent Owner’s own theory, the user in the proposed combination could have shortened the display duration by immediately advancing to the next node. (Schmandt, ¶152.) The rationale and motivation to provide duration information, provided for 22[b][2], applies here. (Schmandt, ¶124-128.)

The proposed combination therefore renders obvious providing “**duration information**” (claim 24), *e.g.*, a display time representing how long content associated with a node will be presented before advancing to the next node. This duration is also “**interactively variable duration information**” (claim 25) because the user can change it as explained.

The district court in the prior litigation construed “**interactively variable**

duration information” as “*a parameter specifying how long a content is to be displayed by default before a subsequent content is displayed, where the viewer of the content can change the parameter.*” (EX1123, 0022.) This construction is satisfied by the proposed combination. In the first example above, the parameter corresponds to the display time advancing to the next node, which takes the form of a predetermined (default) value as disclosed in Shimizu, which the viewer can change as disclosed in Benedict. In the second example above, to the extent the claim were construed to encompass skipping functionality, the parameter corresponds to the amount of time the software waits when displaying a current node before automatically advancing to the next node. (Schmandt, ¶154.)

5. **Claim 26: “The method in accordance with claim 25, wherein said step of providing an interactively variable duration information further comprises providing a duration information for each of said accessed resources, representing the duration that corresponding content to said resource is presented.”**

Claim 26 further requires that the “**duration information**” of claim 25 be provided for “**each of said accessed resources,**” which adds nothing of significance. The duration information under the proposed combination would have been provided for each of the accessed resources, because it would have been provided for each node and thereby specified how long the content corresponding to the node’s resources would have been displayed. (Schmandt, ¶157.)

Claim 26 does not appear to require providing *different* durations for accessed resources, but even if the claim were interpreted in this manner, the user could have specified a display time separately for each node, *e.g.*, on a node-by-node basis as explained. (Schmandt, ¶¶158, 201; Benedict, 00120, ¶3 (“To see the effects for a particular slide, select the slide from the Select a slide: list box.”); *id.*, 00121 (“In addition to draw and erase effects, you can also use the Edit ScreenShow Effects dialog box to set a display time for a slide.”).) It would have been obvious to provide separate duration information for each accessed resource, to the extent required by claim 26. (Schmandt, ¶¶158, 201.) As explained, some nodes may have included complex content warranting a longer display time whereas other nodes may have included simpler content requiring a shorter display time. (Schmandt, ¶158.)

6. Claim 27: “The method in accordance with claim 22, wherein said step of accessing said resources further comprises the step of downloading a file from a server residing within said communications network.”

Claim 27 merely describes well-known techniques for retrieving content resources from the Web. Under the proposed combination, accessing the resources would have included downloading a file from a server residing within the Internet identified in the URL. (Schmandt, ¶¶203-204; Fox, 0050 (“The second part of most URLs is the full Internet address of the machine where the file is located.”).)

7. **Claim 28: “The method in accordance with claim 22, further comprising the step of transmitting to said user dynamic content.”**

It was well-known that web servers could transmit dynamic content to users. Fox describes a well-known process known as the Common Gateway Interface (CGI) in which web servers generated Web content on-the-fly in response to requests from browsers. (Fox, 00382, 00411 (“CGI scripts are used for doing all of the ‘cool’ stuff on the Net. There are... sites that create graphic images on-the-fly.”).) For example, Fox shows an example of a CGI script that generates a new image for a web page showing an image currently captured by a camera. (Fox, 00412, Fig. 15-2.) It was also well-known to use CGI techniques to generate HTML on-the-fly in response to a user request, as discussed in Fox. (Fox, 00409-00411.) It would have been obvious to generate new content for a wide variety of purposes, such as financial, weather, or other topics where information changes. (Schmandt, ¶205.)

Under the proposed combination with Fox, therefore, it would have been obvious to “**transmit[] to said user a dynamic content**” which could have included generating a new data file (*e.g.* an HTML web page file, an image file, etc.) in response to the request from the web browser on the user computer. (Schmandt, ¶206.) For example, if the entity information pointer slot **63** for a particular node of Shimizu under the proposed combination included a URL to a resource on the Web (such as an HTML web page or image), when that node was to be displayed, the

server identified in the URL would respond to the request by creating a new data file. Fox itself provides multiple express motivations to employ this technique, as it explains that “CGI scripts are used for doing all of the ‘cool’ stuff on the Net,” such as creating graphic images on-the-fly, accessing live video feeds, accessing large databases, among other uses. (Fox, 00411; Schmandt, ¶206.) A skilled artisan would have been motivated to provide dynamic content because it is more likely to be relevant and interesting to the user than static content. (Schmandt, ¶206.)

8. Claim 29: “The method in accordance with claim 28, further comprising the step of inserting resource identifiers interspersed within said show structure relating to said dynamic content.”

Claim 29 adds nothing of patentable significance as it merely identifies built-in functionality of using URLs (“**resource identifiers**”) to identify Web resources. Fox explains that “[a] *URL* (or *Universal Resource Locator*) is the address of a document, file, or other Internet resource... The World Wide Web gives every article, newsgroup, database, computer, file, or other Internet fragment its very own URL.” (Fox, 0049 (italics in original).)

Insertion of resource identifiers to identify Web resources was basic knowledge of ordinarily skilled artisans. Under the proposed combination, therefore, it would have been obvious to “**insert[] resource identifiers interspersed within said show structure relating to said dynamic content.**” (Schmandt, ¶¶208-209.) As explained for 22[b][2], the show structure corresponds to a set of nodes

and their links or connections to other nodes, and in a web-based implementation, content associated with these nodes (*e.g.*, pages, images, etc.) would have been identified by URLs. These URLs would have been stored within the show structure, *e.g.*, via the entity information pointer slot **63** of Shimizu as fully described for claim 22[b][2]. (Schmandt, ¶110.) It therefore would have been obvious to insert (“**intersperse**”) URLs (“**resource identifiers**”) relating to the dynamic content within the show structure. (Schmandt, ¶209.)

9. Claim 32: “The method in accordance with claim 22, further comprising the step of storing said content for each resource accessed.”

The claimed storage is a built-in feature of conventional web browser software, which stored all web content downloaded by and displayed by the web browser including web pages and graphic images (“**each resource accessed**”). (Schmandt, ¶210; Fox, *e.g.*, 00114 (“Once you retrieve a Web page, SkipKnot saves it on your hard disk—graphics and all—for as long as you want to keep it.”).)

More fundamentally, it would have been obvious (and basic knowledge to skilled artisans) that storing would have occurred at least (1) by the server on the Internet that stores “**said content**” in order to make that file available to the user computer for download, and (2) by the user computer after it downloads that content from the server in order to access and display it to the user. (Schmandt, ¶¶210-211.) It would have been apparent and obvious that the content would have been stored in

both temporary (volatile) and permanent (non-volatile) storage, at both the server and user computer. (*Id.*)

10. Claim 33: “The method in accordance with claim 22, wherein one or more of said nodes identifies video content.”

11. Claim 34: “...audio [content].”

12. Claim 35: “...displayable content.”

As explained for claim 22, each node in Shimizu can identify content such as “a character string, image information, motion pictures or sounds.” (Shimizu, 5:55-59; *see also id.*, 8:52-59, 1:23-29.) Fox similarly discloses that Web resources can include video and audio content. (Fox, 0080 (“The Web combines graphics, video, sound, text, hypertext, and more.”).) It thus would have been obvious that one or more of the nodes would have identified video and/or image content, both of which are examples of displayable content. (Schmandt, ¶162.)

13. Claim 36: “The method in accordance with claim 22, wherein said computer is a mobile device.”

This claim adds nothing of patentable significance. It was basic knowledge that the user computer (“**said computer**”) could have been a mobile device such as a laptop or mobile computer. Mobile devices were widely available by the early 1990s, several years before the priority date. (Schmandt, ¶¶169-170; *see also* EX1116, 1:14-17 (“Recent years have seen a proliferation of so-called ‘laptop’ computers, that is, personal computers so reduced in size and weight as to be

conveniently carried and employed while traveling or the like.”).) It would also have been obvious that a mobile device could have performed the functions of the user computer for claim 1. (Schmandt, ¶170.) An ordinarily skilled artisan would have been motivated to use a mobile device because such a device would have been portable and thus more convenient for the user. (*Id.*)

14. Claim 37: “The method in accordance with claim 22, wherein said content is presented through said user's computer using a web browser.”

As explained for claim 22, under the proposed combination, content resources are resources on the Web identified by URLs, such as web pages, images, etc. (Schmandt, ¶110.) It would have been obvious to display that content through a web browser, the standard software tool for displaying content from the Web. (Schmandt, ¶171.)

15. Claim 38: “The method in accordance with claim 22, wherein said user request comprises a search of accessible Internet content.”

16. Claim 39: “The method in accordance with claim 22, wherein said user request comprises a search of a web site.”

17. Claim 40: “The method in accordance with claim 22, wherein said user request comprises a search of a remote server.”

As explained for claim 22[a]-[b], under the proposed combination, the user request would have comprised a search of Web content accessible through the Internet, such as web pages and at least one web site. (Schmandt, ¶¶182, 188; Fox,

0046-0047 (“An index is a special Web page that allows you to type in a search term or keyword. The index then spits out a list of Web pages matching your search.”).)

And because Web content is provided by servers over the Internet, the user request would have comprised a search at least one remote server.

18. **Claim 41: “The method in accordance with claim 22, wherein said show structure is presented to said user.”**
19. **Claim 42: “The method in accordance with claim 41, wherein said show structure is presented to said user while said content is being delivered.”**

Claims 41-42 would have been obvious in view of Shimizu. Figure 8 of Shimizu shows a user interface screen for presenting node content to the user:

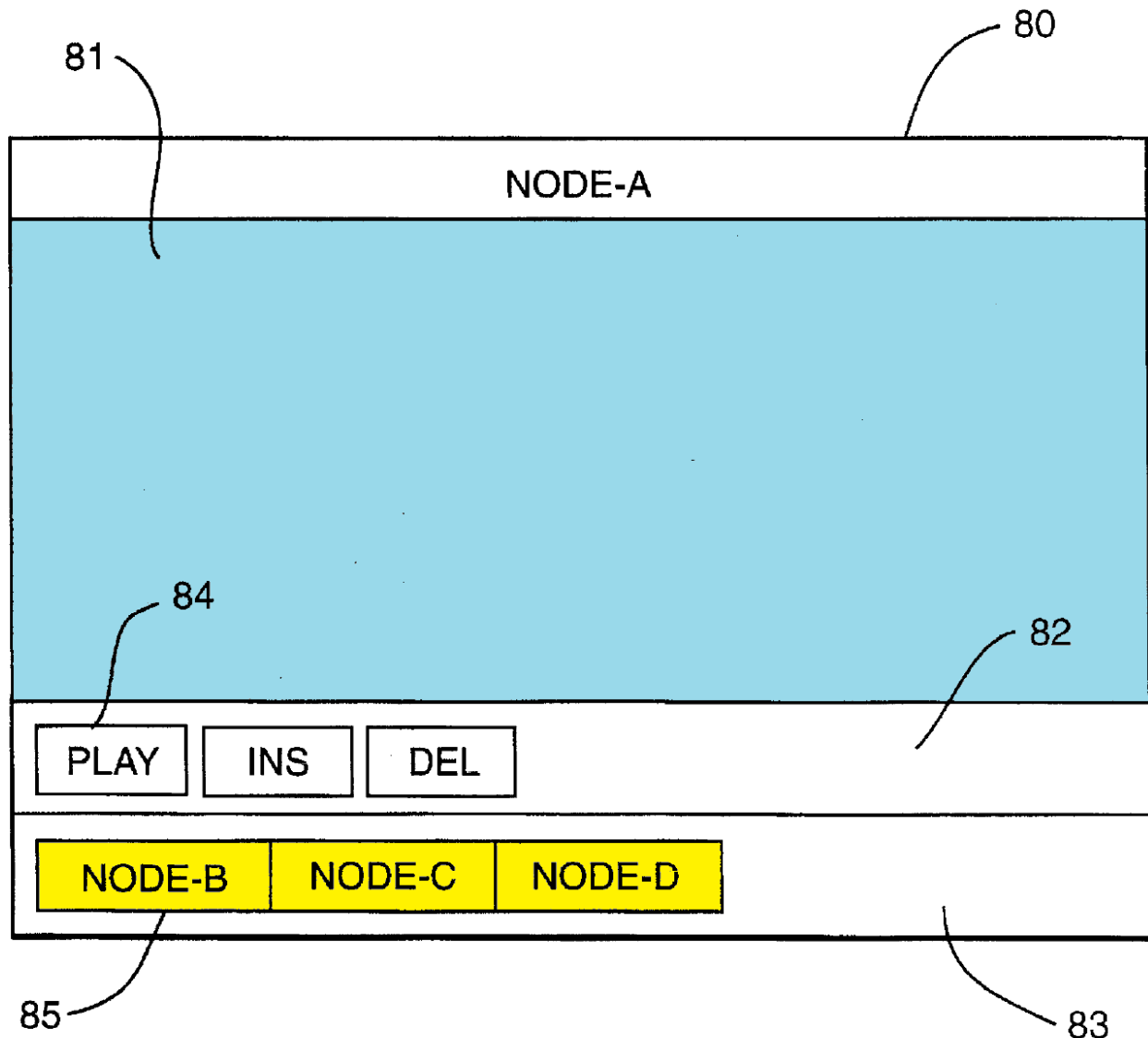


FIG. 8

(Shimizu, Fig. 8 (highlighting added).)

Figure 8 includes the display of a current node (NODE-A) in area **81**, and in area **83**, icons **85** representing each of the nodes linked starting from NODE-A. (Shimizu, 7:30-35.) As a result, “[t]he link information of the node A indicates that the node A is linked to the nodes B, C and D, in that order.” (Shimizu, 7:37-38.) Under the proposed combination, therefore, it would have been obvious that “**said**

show structure is displayed to said user” (claim 41), because icons **85** identify each node from NODE-A and the order in which they are linked (and thus depict the show structure).

As noted, Figure 8 also depicts display area **81** for presenting the content of NODE-A, the currently displayed node. (Shimizu, 7:16-18 (“The window **80** is made up of node content display area **81**....”), 7:20-24, 7:62-65, 7:52-59 (“...the content of the acquired information is reproduced and displayed in the node content display area **81** of the window **80**.”).) The proposed combination therefore renders obvious presenting the show structure to the user “**while said content is being delivered**” (claim 42), *e.g.*, content of NODE-A. (Schmandt, ¶219.)

20. Claim 43: “The method in accordance with claim 22, wherein said show structure includes a sequential path of nodes.”

As fully explained for claim 22, the show structure under the proposed combination includes at least a sequential path of nodes. (Shimizu, *e.g.*, 7:62-65 (“...node A is displayed first followed by the contents of the nodes C, B and D, in that order....”), 9:1-4; *see also* Benedict, 0037 (“ScreenShows are on-screen presentations in which the program displays each slide in order.”).)

21. Claim 44: “The method in accordance with claim 22, wherein said show structure includes a concurrent path of nodes.”

Benedict and Fox also make clear that the nodes under the proposed combination need not be linked solely in single sequential fashion – there could also

be concurrent paths through them. For example, Benedict explains that slides can include hyperlinks to jump to other slides:

HyperShow goes beyond the special effects of ScreenShow in presenting information. HyperShow keys and buttons enable you to control the flow of your presentation spontaneously, without editing the original slide order. With HyperShow links, you can jump back to a previous slide to reinforce a point, for instance, or you can skip ahead to slides that are more relevant to an idea or question from the audience. The capability of viewing slides in any sequence turns an order-driven presentation into a presentation driven by information.

(Benedict, 00116-00117.)

The capability to view nodes (which in Benedict are represented as slides) “in any sequence” (*id.*) was basic functionality of hypertext systems such as the Web. It was well-known that each page in a collection of Web pages could have had hyperlinks to other pages in the collection, allowing the user to navigate the set of pages out of order. (Schmandt, ¶174.) For example, Fox discloses a web site having five pages, each containing a hyperlink to the other four pages:

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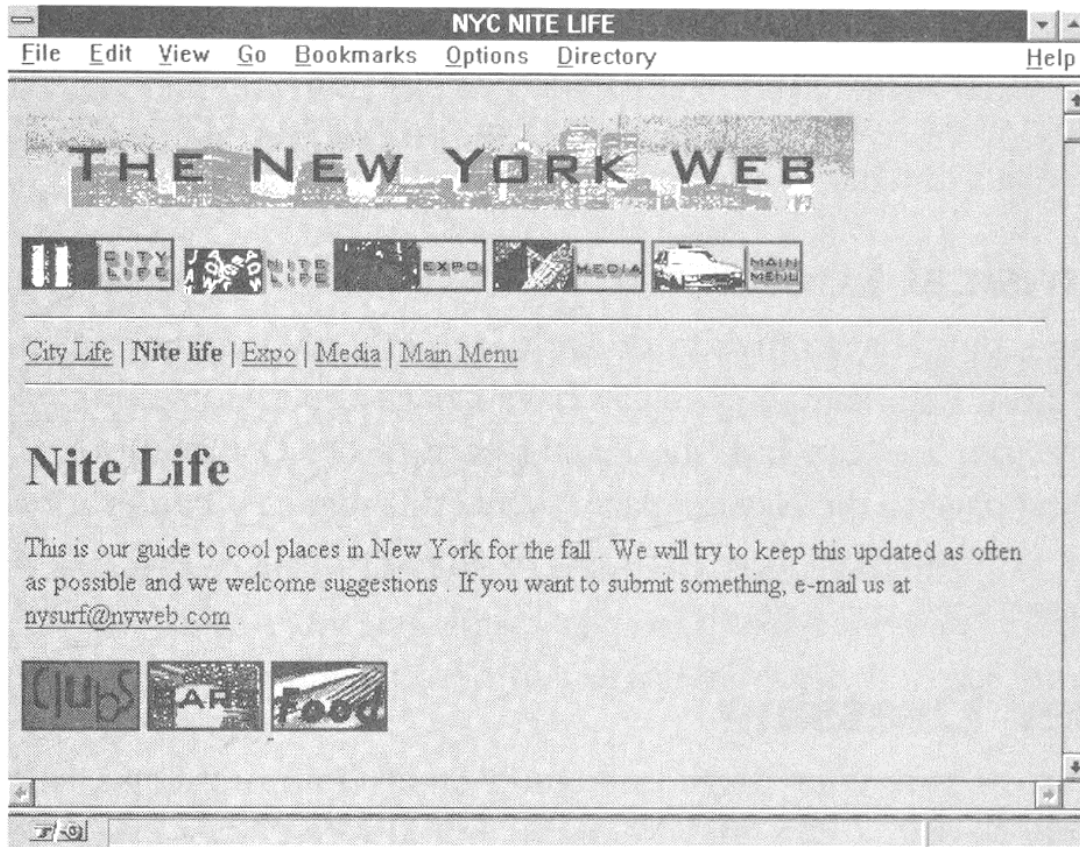
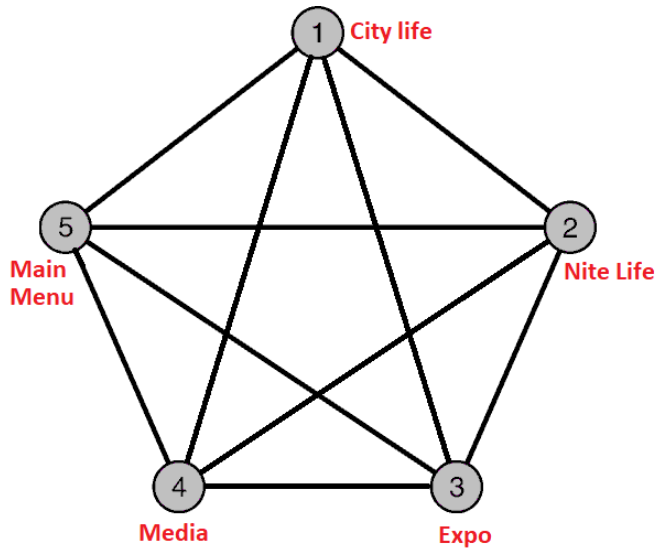


Figure 9-3 The New York Web, where each Web page contains links to other major sections

(Fox, 00263, Fig. 9-3.)

Figure 9-3 above shows an example page in which “[a] set of custom icons at the top of the screen leads to the City Life, Nite Life, Expo, Media, or Main Menu section. This same menu is printed at the top of every page.” (Fox, 00262.) These links are also shown under the icons

as hyperlinks (as indicated by the underlining). The user can reach any one of the five web pages in the set (*i.e.*, City Life, Nite Life, Expo, Media, or Main Menu) from any other page by clicking the hyperlink.



Each page thus links to each other page (at right). (Schmandt, ¶175.)

It therefore would have been obvious to implement the proposed combination such that the “**show structure of nodes**” for 22[b][2] also includes “**a concurrent path of nodes,**” because simultaneous paths could have existed through the plurality of nodes. During operation of the system based on the proposed combination, therefore, nodes would have been navigated and displayed either (a) automatically using the default sequential path specified by the node and link information in Shimizu, as explained for claim 43 above, or (b) by utilizing hyperlinks within the nodes to skip to one or more other nodes, thus taking advantage of one or more concurrent paths. (Schmandt, ¶176.)

Petitioner provided a full explanation of the motivation to combine Shimizu, Benedict and Fox for 22[b][2], which applies here. A skilled artisan would have been further motivated to provide a “**concurrent path of nodes.**” (Schmandt, ¶177-178.) Benedict provides an express motivation to provide this functionality by explaining that HyperShow links “enable you to control the flow of your presentation spontaneously, without editing the original slide order.” (Benedict, 00116-00117.) A concurrent path through the nodes have provided a useful enhancement to the proposed combination which would otherwise be limited to the sequential path established by the node and link information. (Schmandt, ¶178.)

22. Claim 45: “The method in accordance with claim 22, wherein said show structure of nodes is customized based on user specified information.”

Shimizu and Benedict disclose several ways in which the show structure can be customized based on user specified information. Shimizu discloses a DEL button (Fig. 8) that the user can activate to delete a node. (Shimizu, Fig. 8, 7:25-28 (“...the DEL button is used to delete a node.”).) Shimizu also discloses an INS button (Fig. 8) that allows the user to insert a new node at a particular position. (Shimizu, Fig. 8, 7:26-27, 9:5-59.) And Shimizu discloses a feature allowing the user (using a mouse) to change the order of nodes. (Shimizu, 7:40-48.) Similarly, Benedict discloses a Slide Sorter feature that allows the user to delete, add, or reorder slides in a presentation. (Benedict, 0075-076.) And as explained for claim 44 above,

Benedict discloses a HyperShow feature in which users can create customized hyperlinks to jump to other slides within the presentation. (Benedict, 00116-00117.)

Each one of these actions provides a separate way in which, under the proposed combination, “**said show structure of nodes is customized based on user specified information,**” because the user can provide information to the system about the order of nodes, the identity of nodes to delete, and hyperlinks connecting to other nodes as discussed. (Schmandt, ¶223.) Any one of these user actions would have resulted in further customization of the show structure.

C. Ground 2: Claims 46-62 Are Obvious Over Shimizu in View of Benedict, Fox, Wolfe, Guinan, and Miller

1. Independent Claim 46

Independent claim 46 is substantially similar to claim 22 except that it adds “**providing a predefined list of categories,**” and then providing a plurality of search results relating to a category among those categories. The category-based limitations added by claim 46 are obvious based on the further disclosures in Miller. The preamble of claim 46 is identical to the preamble of claim 22, and as such, the proposed combination thus renders obvious the preamble. (Schmandt, ¶¶224-226.)

(a) “providing a predefined list of categories;” (46[a])

As explained for 22[a]-[b], Fox describes various on-line search facilities available by the mid-1990s, including Yahoo – “the mother of all Web indexes.” (Fox, 00204; Schmandt, ¶182.) Fox explains that “Yahoo has hundreds of links to

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pages in all of the following categories,” and then lists 19 categories including Art, Business, Computers, Society and Culture, among others. (Fox, 00204.) Figure 8-2 of Fox shows a screen from Yahoo showing a list of predefined subcategories within the “Society and Culture” category, each category containing documents:

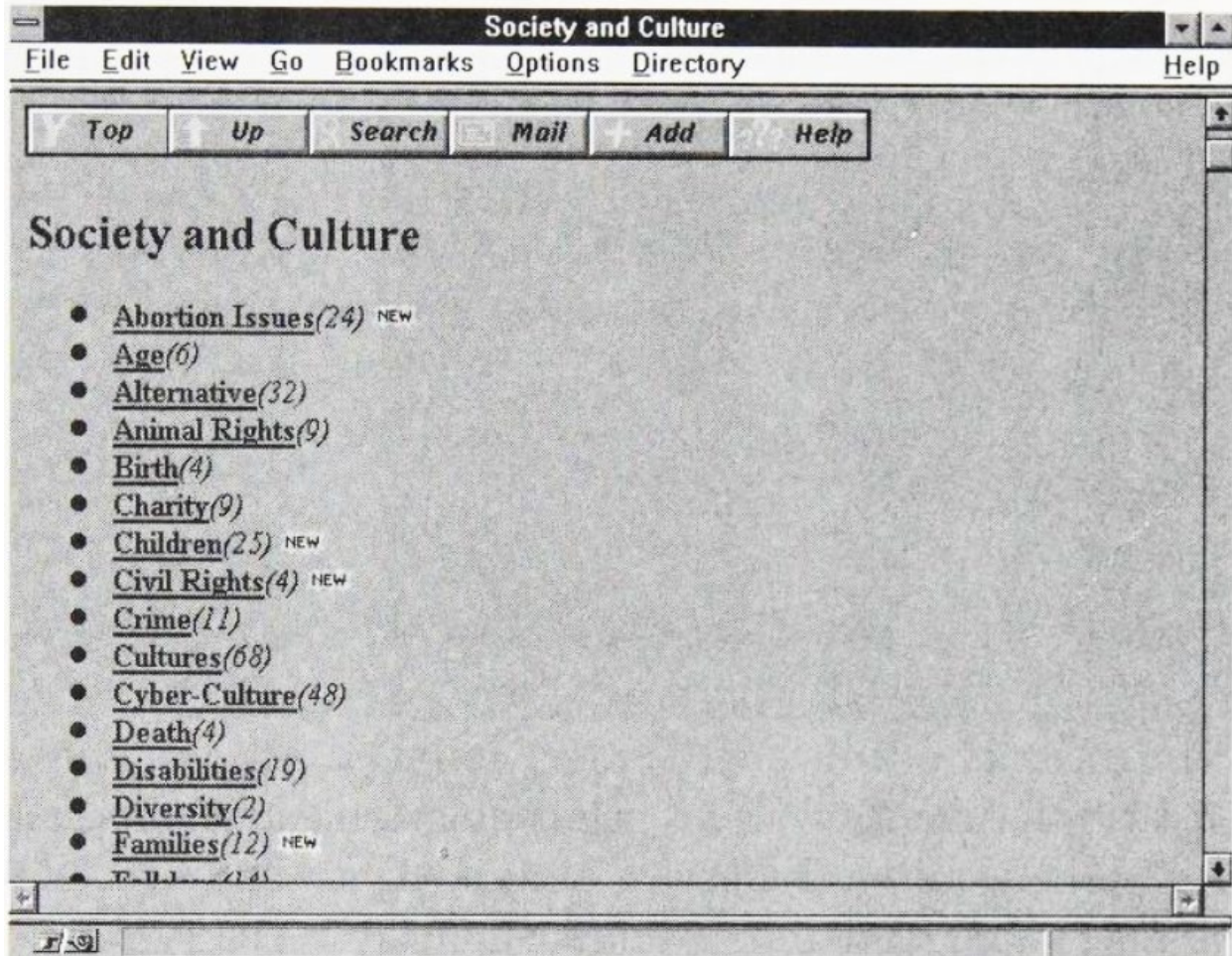


Figure 8-2 Yahoo

(Fox, 00205, Fig. 8-2.) But Fox does not disclose further details about Yahoo, such as the mechanism by which categories are selected for searching. Petitioner has therefore also cited to **Miller** here. As shown below, Miller discloses a technique for providing a predefined list of categories (referred to in Miller as “sections”), and

then conducting a search based categories the user selected.

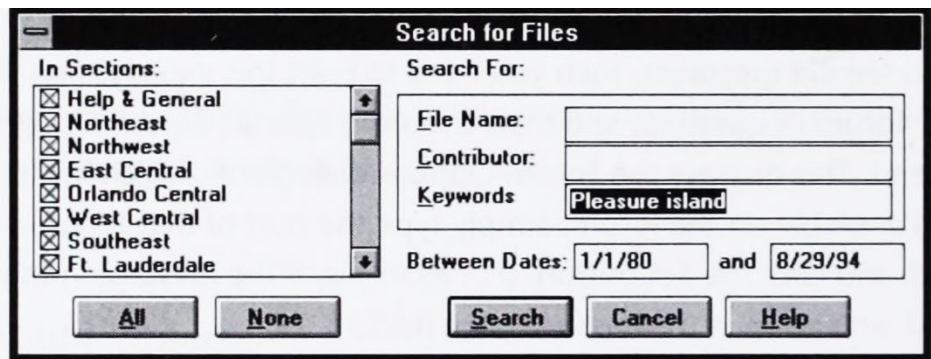
Miller describes various features of a commercial on-line service known as CompuServe which was popular in the mid-1990s. (Miller, 0020; Schmandt, ¶¶75, 227.) CompuServe provided a feature known as “forums,” which were on-line communities where members could exchange information and messages about particular topics of interest. (Miller, 0038-0039.) Forums included a message section, “where forum members exchange messages with each other,” and a file library, “where forum files are stored.” (Miller, 0043.)

Miller further discloses that, “[i]n addition, every forum’s message sections and file libraries are comprised of multiple *sections*. Each section represents a more focused area of interest within the forum topic.” (Miller, 0044 (*italics in original*).)

Miller discloses a feature allowing users to search based on sections:

Fig. 3.9

Use the Search for Files dialog box to search for specific forum files.



(Miller, 0051, Fig. 3.9.) The dialog box in Figure 3.9 includes an “**In Sections:**” area that allows the user to select from a list of predefined sections to search. (Miller, 0051 (“Select the sections you wish to search.”).) “When you click the Search

button, the forum’s libraries are searched for any and all files that match your search criteria.” (Miller, 0052; *see also id.*, 0062 (showing similar example).)

Miller thus discloses “**providing a predefined list of categories**,” *e.g.*, a predefined list of sections (“**categories**”) from which the user could select as shown in Figure 3.9 above. A section in Miller qualifies as a “**category**” because it represents a class of items that have particular characteristics, *e.g.*, that relate to a particular topic of interest. (Schmandt, ¶231.)

Rationale and Motivation to Combine (with Miller): Petitioner already provided an explanation of the rationale and motivation to combine Shimizu, Benedict, Fox, Guinan, and Wolfe for claim 22 above. (Schmandt, ¶¶110-115, 124-128, 143-148, 187-194.) It would have been obvious to adapt in the system based on the proposed combination to provide the further ability to provide a list of predefined categories and allow the user to select from that list, as disclosed in Miller. (Schmandt, ¶232.) Miller is an analogous reference in the same field of techniques for organizing, presenting and searching for content, and would have been pertinent to a number of problems facing the inventor. (Schmandt, ¶233.)

A skilled artisan would have been motivated to combine in the manner described above, as the ability to specify categories for a search would have allowed the user to focus the search on particular topics of interest – thus resulting in search results more relevant to the user. This would have been particularly useful for

searches that return a large number of results. (Schmandt, ¶234.) An ordinarily skilled artisan would have had at least a reasonable expectation of success and could have implemented these features using conventional techniques. (Schmandt, ¶235.)

- (b) **“providing a plurality of search results based on user selections and their corresponding URLs in response to a user request related to a category among said predefined list of categories;” (46[b])**

As explained for 22[b][1] above, based on the further combination with Guinan and Fox, it would have been obvious to provide a plurality of search results with their corresponding resource locators (“URLs”). These search results, as explained for claim 22[b][1], would have been provided in response to a user request comprising a query provided by the user. (Schmandt, ¶¶236, 187.)

With respect to the further requirement that the search results be based on “user selections” and in response to “a user request related to a category among said predefined list of categories,” this would have been obvious in further view of Miller discussed above, which specifically discloses limiting the search to the categories selected by the user. Under the proposed combination, therefore, the search performed in response to a search query as disclosed in Guinan and Fox (as explained for 22[a]-[b][1]) would have been further enhanced to search for hypertext nodes within the selected categories. As explained previously, this would have provided a distinct advantage of focusing the search on items more relevant to the user based on its selected categories. (Schmandt, ¶237.)

- (c) **“automatically creating a show structure of nodes based on said search results, each node identifying a resource from a plurality of accessible resources via said communications network, wherein said show structure is provided in response to said user request; ” (46[c])**

The limitations in 46[c] are substantially identical to 22[b][2] addressed above (in **Part VI.B.1(c)**), except that 46[c] concludes by further reciting that the show structure **“is provided in response to said user request.”** This adds nothing of significance because, under the proposed combination as explained for 22[b][2], the show structure would have been created and provided based on the search results, which in turn were obtained after and as a result of the user’s search query and category selections. The show structure under the proposed combination is thus provided **“in response to said user request.”** The proposed combination renders obvious 46[c] for the same reasons as 22[b][2].

- (d) **“without requiring user input automatically accessing a plurality of said resources; and” (46[d])**
- (e) **“automatically accessing and presenting content corresponding through said accessed resources to said user’s computer in accordance with said show structure such that during said presentation of at least [some of] said content from said accessed resources, at least some of said other network accessible resources are being accessed. ” (46[e])**

The final limitations of claim 46 are substantially similar to 22[c]-22[e], and are obvious for the same reasons provided above.

2. Claims 47-49

Dependent claims 47-49 are substantially similar to claims 24-26, respectively, addressed for **Ground 1** above. (Schmandt, ¶¶240-241.) These claims are obvious for the reasons previously provided.

3. Claims 50-51

Dependent claims 50-51 are substantially similar to claims 28-29, respectively, addressed for **Ground 1** above. (Schmandt, ¶¶242-243.) These claims are obvious for the reasons previously provided.

4. Claims 54-62

Claims 54-62 are substantially identical to claims 33-41, respectively, addressed for **Ground 1** above. (Schmandt, ¶¶244-251.) These claims are obvious for the reasons previously provided.

D. Grounds 3-4: Obviousness of Claims 30-31 and 52-53 In View of Filepp

Claim 30 depends from 29 and further recites that “**said dynamic content is an advertising message.**” Claim 31 also depends from 29 and further recites “**the step of providing said dynamic content in accordance with a user’s profile.**” Claims 52-53 are identical to claims 30-31, respectively, except that they depend from claims 51-52. **Ground 3** thus addresses claims 30-31, and **Ground 4** addresses claims 52-53. As explained, Fox discloses the ability to provide “**dynamic content**” as described for claim 29 (**Ground 2**) and claim 51 (**Ground 3**), but does not

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disclose the additional limitations of claims 30-31 and 52-53.

Filepp discloses an “interactive computer system that enables a user to display desired information, such as news, financial and cultural information, and perform desired transactional services, such as banking and shopping, through any of a plurality of types of personal computers.” (Filepp, Abstract.) The interactive system in Filepp displays “pages” to the user, with each page divided into a series of partitions as shown in Figure 3a:

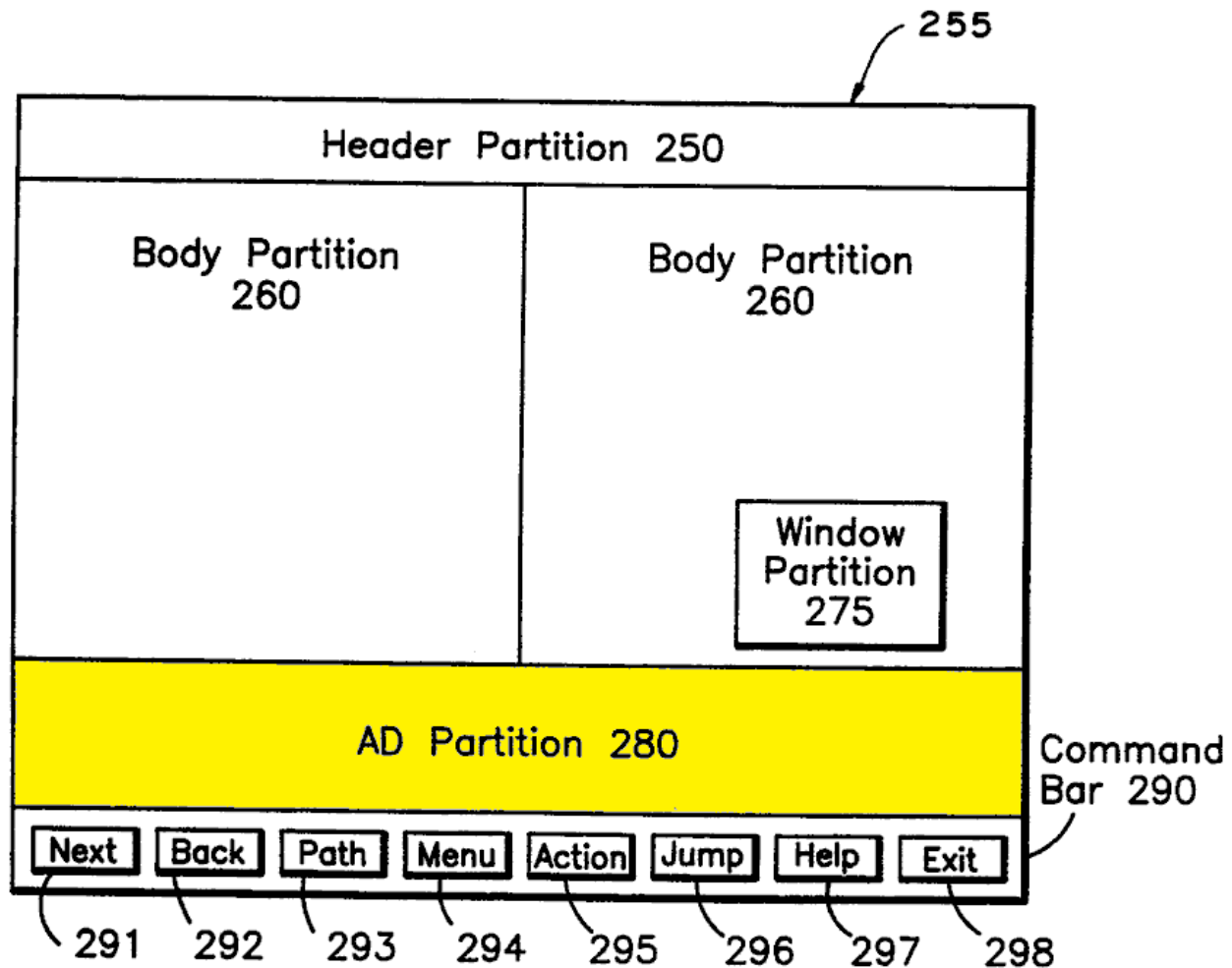


FIG. 3a

(Filepp, Fig. 3a.) “With reference to FIG. 3a, each page **255** is formatted into page partitions **250**, **260**, **280**, and **290** (not to be confused with applications partitions).”

(Filepp, 8:68-9:3.) Header partition **250** “typically conveys information on the page’s topic or sponsor,” and body partitions **260** and window partition **275** “gives the information and transactional content of the page.” (Filepp, 9:10-16.) AD partition **280**, as its name implies, displays advertisements provided over the network for display to the user. (Filepp, 9:27-30, 9:30-34 (“Advertisements **280**

may be presented to the user on an individual basis from queues of advertisements that are constructed off-line by business system **130**, and sent to file server **205** where they are accessible to each RS **400**.”), 12:64-66.) Filepp therefore discloses displaying “**an advertising message**” as recited in claims 30 and 52.

Filepp also discloses that these advertising messages may be dynamically selected based on information about the user such past activities, demographic information, and other targeting criteria:

Individual queues of advertisements are constructed based upon data collected on the partitioned applications that were accessed by a user, and upon events the user generated in response to applications. The data are collected and reported by RS **400** to a data collection co-application in file server **205** for later transmission to business system **130**. In addition to application access and use characteristics, a variety of other parameters, such as user demographics or postal ZIP code, may be used as targeting criteria. From such data, queues of advertisements are constructed and targeted to either individual users or to sets of users who fall into certain groups according [sic; to] such parameters.

(Filepp, 9:35-47.) This renders obvious “**providing said dynamic content in accordance with a user’s profile**,” as recited in claims 31 and 53, because an advertising message (“**said dynamic content**”) would have been provided in accordance with the user’s interests (based on the previous information they accessed) and/or characteristics (such as demographics, ZIP code, and other criteria).

This is consistent with the '932 patent, which identifies similar information as examples of user profile information. ('932, 8:56-60.)

Rationale and Motivation to Combine (with Filepp): It would have been obvious to combine the prior art cited against claim 29 (for **Ground 2**) and claim 51 (for **Ground 3**) with Filepp, predictably resulting in “**said dynamic content**” including an “**advertising message**” (claims 30/52) that is provided “**in accordance with a user’s profile**” (claims 31/53). (Schmandt, ¶316.) Filepp is an analogous reference in the field of interactive services for displaying content to users, and would have been pertinent to problems facing the inventor. (Schmandt, ¶317.)

An ordinarily skilled artisan would have been motivated to combine for a simple reason – to make money. It was well-known long before the Internet that companies paid to display advertisements for their products or services across all forms of media (*e.g.* television, radio, newspapers, magazines, billboards, etc.). A skilled artisan would thus have been motivated to adapt the proposed combination to also display advertisement content as disclosed in Filepp. (Schmandt, ¶318.) For example, revenue earned from such advertisements could have been used to defray the costs of developing and deploying the system or for other purposes. (*Id.*)

As a further motivation to combine, as explained, advertisements based on Filepp could have been selected based on profile information about the user such as past activities and demographic information, which would have allowed the system

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to more accurately target products and/or services to the user thus increasing the utility and value of the advertisements. (Schmandt, ¶318.) A skilled artisan would have had a reasonable expectation of success and could have implemented the proposed combination using conventional techniques. (Schmandt, ¶319.)

VII. CONCLUSION

Petitioner respectfully requests IPR institution.

Dated: February 21, 2023

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this petition complies with the type-volume limits of 37 C.F.R. § 42.24(a)(1)(i) because it contains 13,299 words, according to the word-processing system used to prepare this petition, excluding the parts of this petition that are exempted by 37 C.F.R. § 42.24(a) (including the table of contents, a table of authorities, mandatory notices, a certificate of service or this certificate word count, appendix of exhibits, and claim listings).

DATED: February 21, 2023

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. Sections 42.6 and 42.105, that a complete copy of the attached **PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,965,932 B2**, including all exhibits (**Nos. 1101-1110, 1112-1113, 1116-1117, 1119-1131**) and related documents, are being served via Federal Express on the 21st day of February, 2023, the same day as the filing of the above-identified document in the United States Patent and Trademark Office/Patent Trial and Appeal Board, upon Patent Owner by serving the correspondence address of record with the USPTO as follows:

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And, via Federal Express upon counsel of record for Patent Owner in the litigation pending before the U.S. District Court for the District of Delaware entitled *Robocast, Inc. v. YouTube, LLC*, Case No. 1-22-cv-00304 (D. Del.) as follows:

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