UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC
Petitioner

v.

ROBOCAST, INC.
Patent Owner

IPR2022-01125
U.S. PATENT 8,965,932

PETITION FOR *INTER PARTES* REVIEW

TABLE OF CONTENTS

LIST OF EXHIBITS

Exhibit	Description
EX1001	U.S. Patent 8,965,932 ("the '932 Patent")
EX1002	Prosecution History of the '932 Patent
EX1003	Prosecution History of Abandoned U.S. Application 14/257,505
EX1004	Prosecution History of Abandoned U.S. Application 14/259,578
EX1005	Prosecution History of U.S. Provisional 60/025,360
EX1006	Prosecution History of U.S. Application 08/922,063
EX1007	Prosecution History of U.S. Patent 7,155,451 ("'451 Parent-Patent")
EX1008	Prosecution History of U.S. Patent 8,606,819 (child of '932 Patent)
EX1009	Prosecution History of U.S. Patent 8,606,820 (child of '932 Patent)
EX1010	Prosecution History of U.S. Patent 8,738,655 (child of '932 Patent)
EX1011	Claim Construction Order in *Robocast, Inc. v. Microsoft Corp.* and *Robocast Inc. v. Apple Inc.,* construing terms of the '451 Parent-Patent, June 28, 2013
EX1012	Declaration of Dr. Benjamin B. Bederson
EX1013	U.S. Patent 5,761,417 ("*Henley*")
EX1014	U.S. 6,594,692 ("*Reisman*")
EX1015	U.S. Patent 5,855,015 ("*Shoham*")
EX1016	U.S. Patent 5,809,247 ("*Richardson*")
EX1017	Claim Chart for Grounds 1-3
EX1018	Claim Chart for Ground 4
EX1019	Kraning, Casey et al., "Stays Pending IPR in Del. District Courts Are Here to Stay," *Law360,* March 11, 2022, available at https://www.fr.com/wp-content/uploads/2022/03/2022-03-11-Article-Law360-StaysPendingIPRInDelDistrictCourts-Craning-DelDotto.pdf
EX1020	Definitions of "Computer," "Internet," "Node," MICROSOFT PRESS COMPUTER DICTIONARY, Microsoft Press, 1991, pages 75, 194, 239-40.
EX1021	Acharya, Suzanne, "An Introduction to Microcomputers – The Microcomputer: Communication," McMaster University, 1995, available at https://www.humanities.mcmaster.ca/~hccrs/COMM.HTM
EX1022	Bederson, Benjamin et al., "Pad++: A Zoomable Graphical Interface System," Chi'95 Mosaic of Creativity, 1995, 23-24.
EX1023	Joseph, Anthony et al., "Rover: A Toolkit for Mobile Information Access," SIGOPS, 1995, 156-71

EX1024	Complaint, *Robocast, Inc., v. YouTube, LLC et al.,* 1:22-cv-304, Dkt. 1 (D. Del., Mar. 7, 2022).
EX1025	Complaint, *Robocast, Inc. v. Apple Inc.,* 1:11-cv- 235, Dkt. 1 (D. Del., Mar. 21, 2011)
EX1026	Memorandum Opinion, *Robocast v. Apple,* 1:11-cv-235, Dkt. 457 (D. Del., Apr. 22, 2014)
EX1027	Declaration of Kevin Jakel
EX1028	Bederson, B. et al., "Pad++: A Zooomable Graphical Sketchpad for Exploring Alternative Interface Physics," J. VISUAL LANGUAGES AND COMPUTING, Vol. 7, 1996, pp. 3-31.
EX1029	Bederson, B. et al., "A Zooming Web Browser," SPIE MULTIMEDIA COMPUTING & NETWORKING, IEEE, 1996, 260-271.

I. MANDATORY NOTICES

A. Real Party-in-Interest

Pursuant to 37 C.F.R. § 42.8(b)(1), Unified Patents, LLC ("Unified" or "Petitioner") certifies that Unified is the real party-in-interest and further certifies that no other party exercised control or could exercise control over Unified's participation in this proceeding, the filing of this Petition, or the conduct of any ensuing trial. In view of *Worlds Inc. v. Bungie, Inc*., 903 F.3d 1237, 1242-44 (Fed. Cir. 2018), Unified has submitted voluntary discovery in support of its certification. *See* EX1027 (Declaration of Kevin Jakel).

B. Related Matters

Robocast, Inc. ("Patent Owner") is the current assignee of record for the '932 Patent.

As of the filing date of this Petition, and to the best of Petitioner's knowledge, Petitioner is aware of the following pending cases involving the '932 Patent:

- *Robocast, Inc. v. Netflix, Inc.,* Case No. 1:22-cv-00305 (D. Del. March 7, 2022)
- *Robocast, Inc. v. YouTube, LLC et al.,* Case No. 1:22-cv-00304 (D. Del. March 7, 2022)

C. Lead and Back-up Counsel and Service Information

Petitioner identifies the following lead and back-up counsel:

Lead Counsel	Back-up Counsel
Jessica L.A. Marks (Reg. No. 67,451) Unified Patents, LLC 4445 Willard Ave., Suite 600 Chevy Chase, MD 20815 Phone: 202.847.5260 Email: jessica@unifiedpatents.com	David C. Seastrunk (Reg. No. 73,723) Unified Patents, LLC 4445 Willard Ave., Suite 600 Chevy Chase, MD 20815 Phone: 919.538.8602 Email: david@unifiedpatents.com

Petitioner consents to electronic service at the above email addresses.

II. CERTIFICATION OF GROUNDS FOR STANDING

Petitioner certifies under 37 C.F.R. § 42.104(a) that the '932 Patent is available for *inter partes* review, and Petitioner is not barred or estopped from requesting *inter partes* review challenging the patent claims on the grounds identified in this Petition.

III. RELIEF REQUESTED

Under 35 U.S.C. § 311, Petitioner Unified Patents, LLC requests *inter partes* review ("IPR") of claims 1-9, 13-15, 17-18, 20, 22-27, and 33-43; ("Challenged Claims") of U.S. Patent 8,965,932 (the "'932 Patent," EX1001).

A. Claims for Which Review Is Requested

Petitioner requests *inter partes* review and cancellation of Challenged Claims 1-9, 13-15, 17-18, 20, 22-27, and 33-43 of the '932 Patent under 35 U.S.C. § 311 based on the following grounds. This Petition is supported by the Declaration of Dr. Benjamin B. Bederson (EX1012).

B. Statutory Grounds of Challenge

The Challenged Claims are unpatentable as anticipated and/or obvious. The grounds for challenge include:

Ground	Reference(s)	Challenged Claims
1	Anticipated under 35 U.S.C. § 102 by U.S. Patent 5,761,417 ("*Henley*," EX1013)	1-2, 4-5, 7-9, 13-15, 20
2	Obvious under 35 U.S.C. §103 by *Henley*	1-2, 4-5, 7-9, 13-15, 20
3	Obvious under 35 U.S.C. §103 by *Henley* in view of U.S. Patent 6,594,692 ("*Reisman,*" EX1014)	3, 5-6, 17-18
4	Obvious under 35 U.S.C. §103 by U.S. Patent 5,855,015 ("*Shoham,*" EX1015) in view of U.S. Patent 5,809,247 ("*Richardson,*" EX1016)	22-27, 33-43

The '932 Patent claims priority, through a series of applications, to Provisional Application 60/025,360 filed September 3, 1996, which is not challenged for purposes of this Petition.[1] EX1001, 1. *Henley*, *Reisman, Shoham,* and *Richardson* qualify as prior art under § 102(e) as U.S. patents granted on applications filed September 8, 1994, April 29, 1996, May 12, 1995, and July 22 1996, respectively. EX1013-1016.

[1] The '932 Patent is subject to the pre-AIA provisions of 35 U.S.C. *et seq*.

IV. DISCRETIONARY DENIAL IS NOT WARRANTED

A. 314(a)

The *Fintiv* factors do not weigh in favor of denial. Unified is not a defendant in a related case, and Unified is aware of no overlap between the arguments presented here and those in the related litigations (other than allegations that the '932 Patent is invalid). The related litigations were filed less than four months ago, no trial date is set, and they are in Delaware, which often grants stays for IPRs. *See, e.g.,* EX1019. Therefore, denial is not warranted.

B. 325(b)

All grounds in this petition rely upon a reference or combination of references never before the examiner during the '932 prosecution.

Grounds 1-3 rely on *Henley* to challenge claim 1 and its dependents. *Henley* was discovered by the examiner when examining *child* applications, after the '932 Patent issued. EX1001-EX1010. After rejections based on *Henley* in the similar child application claims, the applicant abandoned those applications. *E.g.*, EX1003, 1-29. Ground 3 combines *Henley* with *Reisman,* and a relative of *Reisman* (U.S. 6,769,009) was considered during the '932 prosecution. *E.g.,* EX1002, 136-37. But *Henley* is the primary reference, the examiner never considered *Reisman's* teachings with *Henley* during the '932 prosecution, and *Reisman* is cited for either teachings not cited by the examiner or undisputed teachings.

Ground 4 relies on *Shoham*—a reference never considered during the '932 (or any family member's) prosecution—to challenge claim 22 and its dependents. EX1002-EX1010. *Shoham* is combined with *Richardson,* which was cited, but not substantively relied upon, by the examiner. EX1002, 588. The background section of *Richardson* was cited in the parent application for teaching online searching (EX1007, 185-86), but for Ground 4, *Shoham* is relied upon for that element. In an appeal for the parent application, the Board stated that "the *on-line search teachings* [*in the background section*][2] of Richardson…[does not teach] the automatic retrieval and display of the contents of a plurality of resources automatically without user input." EX1007, 74 (emphasis added). Another reference ("Hauck," not used in this Petition) was cited as teaching the "automatic retrieval and display" element, so the Board's statement is intentionally narrow and merely recognizes that *Richardson's* review of known search engines like Yahoo! and Alta Vista do not remedy the deficiencies of the primary reference. EX1007, 74. Petitioner, however, relies on the teachings of *Shoham* supported by *Richardson's* main description (*not* its background section) for the "automatically accessing and presenting" element of the '932 patent.

[2] Emphasis is demonstrated using **bold** or *italic* fonts. Claim language is designated using ***bold and italic*** font (other than this footnote).

Richardson was also cited in the abandoned grandparent application to reject a claim with many differences compared to claim 22. *Compare* EX1001 to EX1006, 71-73. Applicant did not dispute the application of *Richardson* in ways like how it is used in this Petition. EX1006, 85. Although applicant attempted to antedate *Richardson* in the grandparent application (EX1006, 87-90), the only evidence provided was a vague letter that "refer[red] to a software-implemented 'idea' for web browsing that doesn't include any specifics" and unsupported inventor statements (EX1006, 106). The examiner ultimately circumvented the issue by finding another reference (EX1006, 106), and the applicant did not attempt to antedate *Richardson* when it was presented again in the parent application (EX1007, 122-70 (appeal brief with no attempt at antedating). And again, the examiner never considered the teachings of *Shoham* with *Richardson.*

Therefore, the use of the *Reisman* and *Richardson*, each in combination with a new reference, and the additional Grounds 1-2 that rely entirely on a new reference, means there is not sufficient "overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art" to warrant denial. *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, 17-18 (PTAB Dec. 15, 2017) (precedential).

V. U.S. PATENT 8,965,932

A. Overview

The ’932 Patent describes systems and methods for presenting multimedia content such as videos or webpages from various resources to a user in a “show structure,” where the contents are presented to the user in a continuous fashion, one after another, without requiring user interaction. *E.g.,* EX1001, Abstract, 2:57-3:3. The Challenged Claims include two sets of claims for presenting a user with content in show structures: (1) claim 1 and its dependents allow the user to vary the duration of the contents presented; and (2) claim 22 and its dependents create a show structure based on a user’s online search.

As detailed below, two of the ’932’s child applications were subject to double patenting rejections based on claims of the ’932 Patent. All claims in those two child applications were rejected as anticipated and/or obvious using a new reference, *Henley*. *Henley* was never considered during the ’932 Patent’s prosecution (or during the prosecution of any of the allowed patents in the ’932 Patent’s family). Once *Henley* was applied, the applicant abandoned both child applications. *Henley* is the basis for Grounds 1-3.

B. Prosecution History[3]

1. The '932 Patent

The '932 Patent issued with 67 claims after several rejections. EX1002, 78-84, 122-67, 280-321, 548-87, 654-60.

During prosecution, claims 1 and 22 were amended to recite that the content was "automatically accessed and presented…such that during said presentation of at least some of said content…at least some of said other network accessible resources are being accessed" to overcome a reference that locally stored all content before presenting it. EX1002, 100, 103-04, 114-15.

During prosecution, claim 22 was amended to recite that the search was "a user defined search" to overcome a reference using an automated advertising scheduler for searching. EX1002, 238-39, 257-58.

To overcome double-patenting rejections, applicant filed terminal disclaimers tying this application to its parent and three of the five child applications that were pending at that time. EX1002, 263-68, 508.

[3] The prosecutions of all family members are filed as EX1002-EX1010. The most relevant portions of the prosecutions are reviewed here.

2. The abandoned child applications

The ’932 Patent is the parent of two abandoned continuation applications, U.S. Applications 14/257,505 and 14/259,578. EX1003, 110; EX1004, 112. All claims of both abandoned applications were subject to double-patenting rejections because each claim 1 was “not patentably distinct” from claim 1 of the ’932 Patent. Each of claims 2-20 was “identical to claims 2-18 and 21 of the [’932] Patent.”. EX1003, 15-17; EX1004, 21-23. The examiner rejected all child claims based on a newly identified reference: *Henley.* EX1003, 19-27; EX1004, 24-32. Most of the child applications’ claims were anticipated by *Henley*, and the rest were obvious over *Henley* combined with other references. EX1003, 19-27; EX1004, 24-32. *Henley* was specifically found to teach the recitation “that during said presentation of at least some of said content…at least some of said other network accessible resources are being accessed” (EX1003, 20, 27, 43; EX1004, 24, 32, 48), which was the recitation added to the ’932 claims before allowance (EX1002, 78, 100). But *Henley* was not considered during the prosecutions of any of the family’s issued patents. *See generally* EX1002, EX1007-EX1010.

After the *Henley* rejections, applicant abandoned the child applications without responding. EX1003, 1-2; EX1004, 1-2.

3. The ’451 Parent-Patent

The ’932 Patent is a continuation of U.S. Patent 7,155,451 (“’451 Parent-Patent,” EX1007). The ’451 Parent-Patent was subject to litigations with claim constructions relevant to the ’932 Patent. EX1011; Section VI.

C. The Level of Ordinary Skill in the Art

A person of ordinary skill in the art (“POSITA”) would have had a bachelor’s degree in electrical engineering, computer engineering, or a related subject and two or more years of experience working with computer networks and the accessing and presentation of networked resources to users in the 1996 timeframe. EX1012, ¶51. This description is approximate, and a higher level of education or specific skill might make up for less experience and vice-versa. *Id.*

All analysis in this Petition, unless otherwise stated, is made from the position of a POSITA as of the earliest possible priority date of the ’932 Patent. *Id.*

VI. CLAIM CONSTRUCTION

For this proceeding, the Challenged Claims do not require express construction, or alternatively, only require construction to the extent necessary to determine whether the prior art teaches the claims. EX1012, ¶¶52-54; *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co*., 868 F.3d 1013, 1017 (Fed. Cir. 2017). At least because a POSITA would have understood the claims to encompass the prior art, express constructions are not necessary. *Id*. Nevertheless, because some terms

in the '451 Parent-Patent were construed during litigations, a review of the shared terms is beneficial.

A. *Show Structure of Nodes*

Unified does not dispute[4] the court's construction as "a structure that is arranged for the display of content by specifying one or more paths through a plurality of nodes. The show structure of nodes specifies the duration of any display" because the Petition's prior art meets this definition. EX1011, 2-13; EX1012, ¶¶56-59. This (1) encompasses lists of nodes because lists were not disclaimed during Prosecution (EX1012, ¶58, (citing EX1011, 3-5; EX1007, 305, 344)); (2) "requires a 'duration for which each node's content is to be displayed by default'" because some kind of durational component is necessary for the automatic transition between nodes (EX1011, 11; EX1012, ¶60 (citing EX1001, Abstract, 1:22-24, 3:30-33; EX1011, 5-11)); (3) does not require a specific showing of a "data structure" because this extraneous term is "nowhere to be found with the claims, specification, or patent history" (EX1011, 12; EX1012, ¶61 (citing EX1001, generally; EX1002-1010)); and

[4] Unified agrees with Robocast that this term does not require duration information (*see, e.g.,* EX1012, ¶59; EX1011, 2, 16 (Robocast's previous proposed constructions)), but Unified has considered the court's construction when mapping the prior art.

(4) does not require a "sequenced path" because some claims recite a "sequential arrangement" while others contemplate "a concurrent path" (EX1012, ¶62 (citing EX1001, claims 20-22, 43-44; EX1011, 12-13)).

B. *Nodes*

Unified does not dispute[5] the court's construction 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" because the Petition's prior art meets this definition. EX1011, 16-17; EX1012, ¶¶63-66. This (1) encompasses an "address" because a node may identify the location (i.e., address) of an online resource (EX1012, ¶64-65 (citing EX1020; EX1011, 16-17); and (2) includes a durational information because durational information is required for the proper display of a show structure of nodes, and it is possible to read the specification as contemplating nodes have such information (EX1012, ¶¶65-66 (citing EX1001, 3:30-33; EX1011, 17)).

C. *Online Search*

Unified does not dispute the court's construction as "an internet search" because the Petition's prior art meets this definition. EX1011, 20-22; EX1012, ¶67. This construction is not limited to only world-wide-web searches because online

[5] *See supra,* n. 5.

searches may return URL results, and URLs are not limited to world-wide-websites. EX1012, ¶67 (citing EX1001, 1:28-49, 16:15-17; EX1011, 20-22).

D. *Interactively Variable Duration Information*

Unified does not dispute the court's construction 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" because the Petition's prior art meets this definition. EX1011, 22-23; EX1012, ¶¶68-70. This construction acknowledges that duration information is provided during the creation of the show structure of nodes (how long to display a content by default) and demonstrates that the "interactive" component of the claims is the user's ability to "vary the duration of the content during show structure playback" because this is how the systems and methods operate in the disclosure. EX1011, 22-23; EX1012, ¶69 (citing EX1001, claim 1, 3:57, 9:21-27, 9:33-48, 10:29-33; EX1002, generally)). The term "parameter" is used as a synonym for "duration information" to avoid a circular definition and because parameter has a very broad meaning. EX1012, ¶70 (citing EX1011, 23).

E. Plain and Ordinary Meaning ("POM") Constructions

Finally, in the litigations involving the '451 Parent-Patent, Robocast argued that the terms ***content, without requiring user input, in accordance with said show structure, providing,*** and ***search results*** should be given their POMs, and the court

agreed. EX1011, 19-21, 26-29. Robocast argued that ***plurality of accessible resources*** should include additional limitations, but the court construed it as POM as well. EX1011, 17-19. Unified does not believe that a specific construction of any term is necessary and agrees with the court's POM determinations on these terms. EX1012, ¶¶71-72. Nevertheless, if Robocast wishes to reargue these terms, Unified requests the opportunity to address any such arguments.

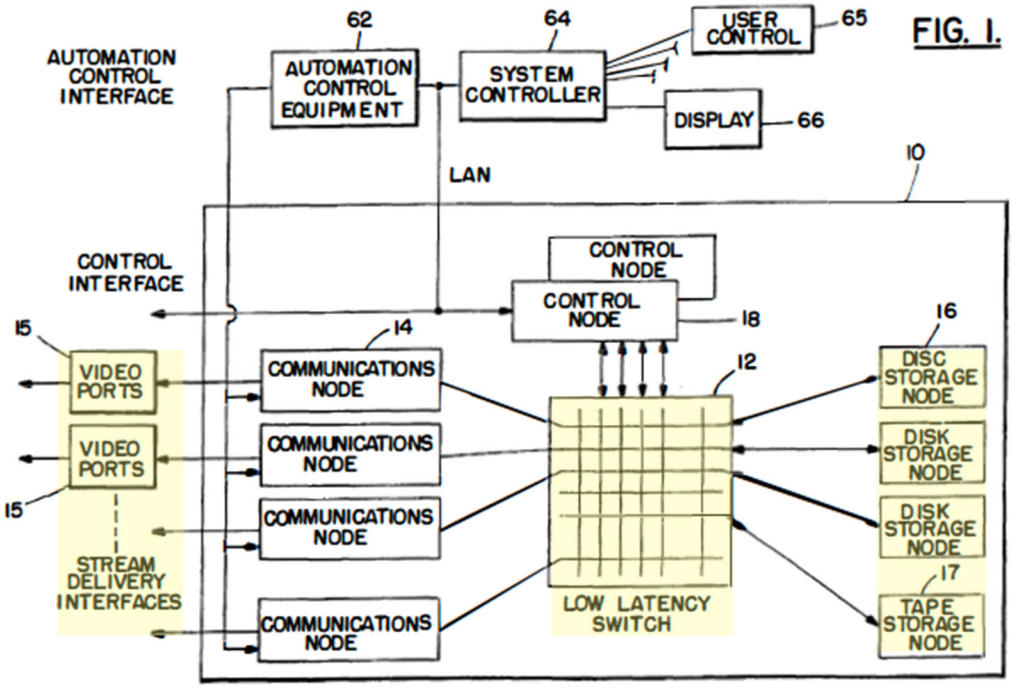
VII. GROUND 1: *HENLEY* ANTICIPATES CLAIMS 1-2, 4, 7-9, 13-15, AND 20

A. Overview of *Henley*

A POSITA would have looked to *Henley* because it is analogous to the '932 Patent: *Henley* is in the same field of computer networks and the accessing and presentation of networked resources to users, with teachings pertinent to providing users with "one or several topics of information from several sources in a continuous arrangement," in particular, "audio [and] video" topics of information. EX1001, 2:66-3:3; EX1013, Abstract, 2:54-60; EX1012, ¶¶74-84.

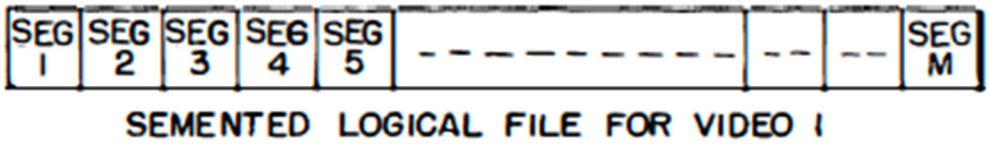
Henley recognized that storing various segments of programs in different network-accessible locations would "optimize the delivery of isochronous data streams," allowing for smooth program delivery. EX1013, 2:19-20, 2:54-60. Figure 1 (highlighted below) shows a generalized version of the networked system where

the user's displays (not shown) connected to video ports 15 access contents across various storage nodes 16 and 17 via switch 12.



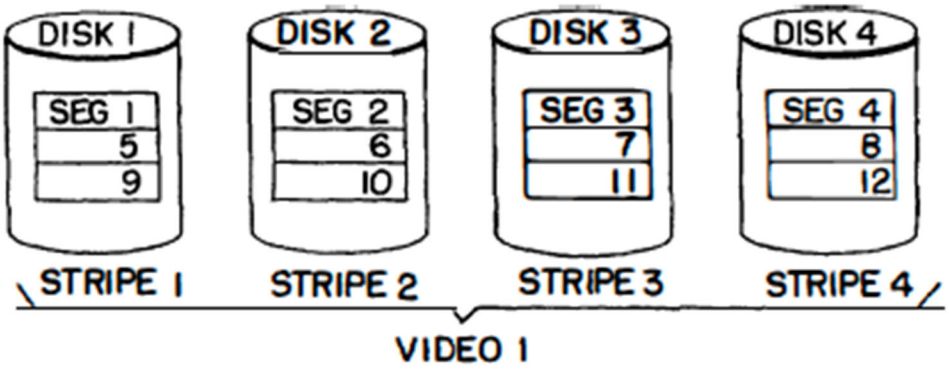
Henley contemplated the delivery of a lengthy program (e.g., a movie) that was "striped," or stored in segments (***contents***), across several storage devices (***resources***). For example, Figure 16 (below) shows the division of one program into several segments (***contents***), and Figure 17 (below) shows how those segments (***contents***) would be striped across locations on four disks (***resources***). The segments from each resource (***show structure of nodes***) would then be accessed and presented to the user sequentially, without requiring user interaction (beyond the user's selection to play that program).

FIG. 16.



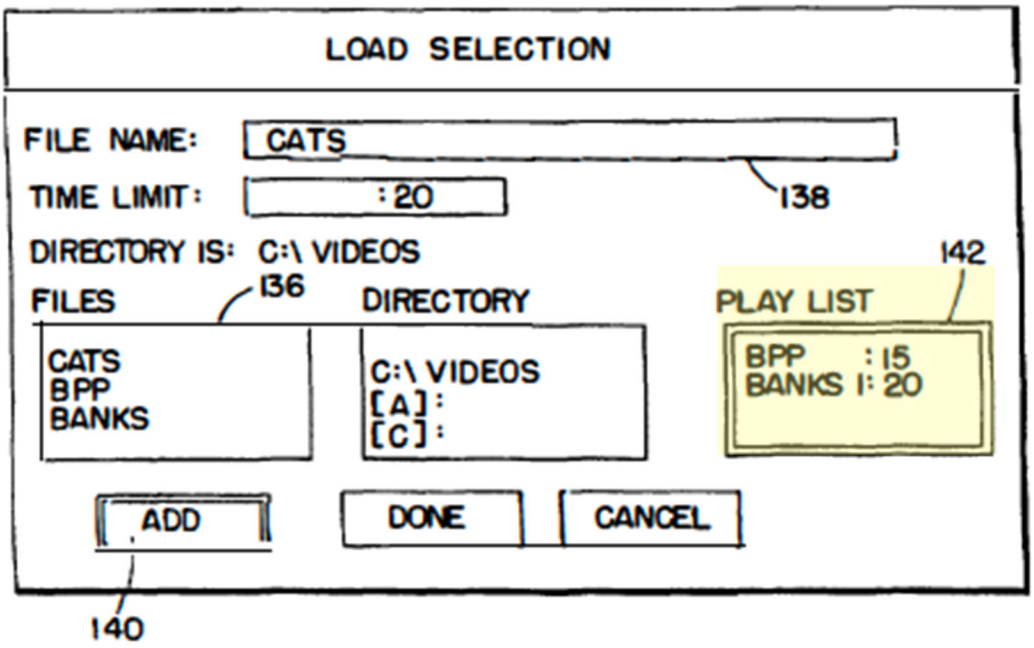
SEMENTED LOGICAL FILE FOR VIDEO 1

FIG. 17.



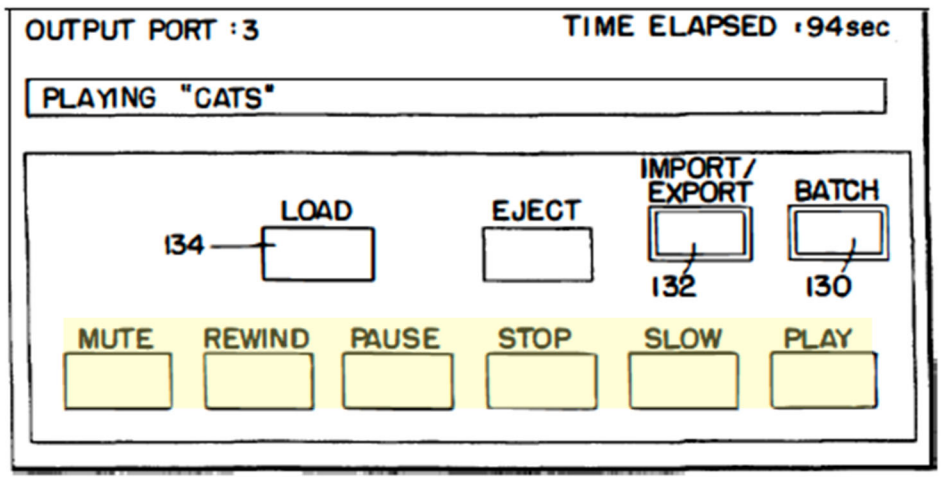
Henley also contemplated the presentation of different programs (***contents***), provided continuously as part of a playlist (***show structure***). For example, Figure 9 (below) shows a two-program playlist. *See also* EX1012, ¶¶80-82. To accomplish isochronous presentation, the system would "periodically check[] the elapsed playing time of each video against their specified time limit. If [the] video has reached its time limit, the video is stopped and disconnected and the next video in the wait queue…is started." EX1013, 21:66-3:3. The transitions were smooth because "[n]ear the end of the delivery of FILE1 [(the content being displayed)], the communication node 14 initiates the delivery of FILE2 [(i.e., accesses the subsequent content for presentation)]." EX1013, 10:14-41.

FIG. 9.



Henley also contemplates the user interactively varying the duration of the presented contents with functions like those highlighted in Figure 8.

FIG. 8.



B. Independent Claim 1

1. [1.0] *A method for providing content via a communications network on a user's computer, obtained from a plurality of resources in an organized arrangement comprising the steps of:*

If the preamble is limiting, *Henley* discloses this element. EX1012, ¶75 (citing EX1017). *Henley* discloses ***a method for providing*** isochronous data streams of video and/or audio content (***content***). *E.g.,* EX1013, 2:54-58, 3:3-41. The content is provided via "a network such as LAN, TAM, etc." with, for example, "nodes…connected by the cross-connect, low latency switch 12" (***via a communications network***). *E.g.,* EX1013, 12:48-59, 9:6-24, 11:14-17. The content is provided to a user's display using "various outputs such as TV sets and set top boxes attached via a network" (***on a user's computer***). *E.g.,* EX1013, 12:48-59, 8:45-48, 9:6-24; EX1012, ¶83 (citing EX1020, 4; EX1013, 8:30-32, 12:48-50; EX1003, 19-23). The content is ***obtained from*** distinct locations in storage nodes 16, 17 (***a plurality of resources***). EX1013, Fig. 1, 12:48-59, 3:3-41, 8:45-48, 9:6-24. The content is shown to the user as, for example, a series of contents, as shown in Figs. 16 and 17 (series of related contents striped across servers) and Fig. 9 (a playlist of unrelated contents) (***in an organized arrangement***). EX1013, Figs. 9, 16, 17, 10:14-41, 20:1-22.

If Robocast argues that a complete program must be contained within a single resource (e.g., that segmenting or "striping" does not disclose the claims), Unified disputes such an interpretation at least because the claim language does not require unrelated content in each resource and there is no disclosure on the '932 prohibiting the content from being unrelated. EX1012, ¶¶78-82. Moreover, *Henley* discloses a series of unrelated contents, each located at different resources, wherein the time provided for a single content represents the time for an entire program accessed at that resource, based at least on (1) *Henley's* disclosure of the Play list comprised of different contents (EX1013, Fig. 9, 20:5-6), (2) *Henley's* disclosure of segmentation considerations and striping calculations that contemplate no segmentation or striping (EX1013, 29:50-59, 30:49-62; EX1012, ¶81), (3) *Henley's* references to switching between videos (as opposed to segments of the same video) (EX1013, 21:59-22:3 ("If a video has reached its time limit, the video is stopped and disconnected and the next video in the wait queue…for the same output port is started"), and (4) *Henley's* disclosing instances where striping is **not** used (EX1013, 30:28-30 ("If striping is **not** used…")). EX1012, ¶78-82.[6]

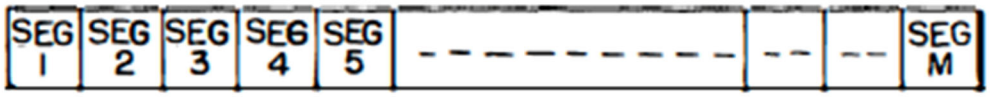
[6] This is an anticipation argument, and no modification of *Henley* is required. Dr. Bederson merely explains what *Henley* teaches a POSITA.

2. [1.1] *creating a show structure of nodes, each node identifying a resource from a plurality of accessible resources, at least some of which are network accessible resources;*

Henley discloses this element in at least two ways. EX1012, ¶¶75-77 (citing EX1017).

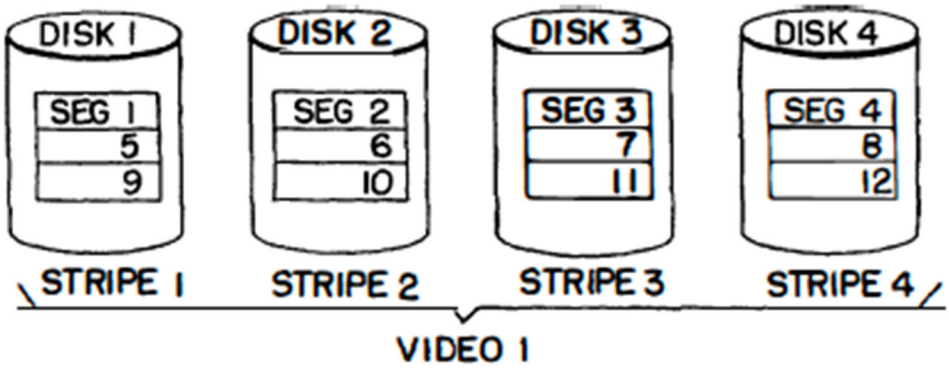
First, a single program may be segmented and "striped," with each segment (***content***) in a distinct server location (***resource***), e.g., as shown in Figures 16 and 17. EX1013, 9:6-14, 10:7-9, 14:51-61, 29:1-9, 18:60-67, 8:13-51, 29:66-30:3. The system is programmed to play the segments in a sequential manner (***a show structure***) so the user views an isochronous program. *Id.,* 10:14-41 ("VS-CONNECT-LIST command with play subcommands indicating that all or part of FILE1, FILE2 and FILE3 are to be played in sequence."), 18:60-67, 29:1-9, 14:51-61, 8:13-51, 9:19-22. This may be used, for example, for long-duration programs. EX1013, 30:65-67.

FIG. 16.



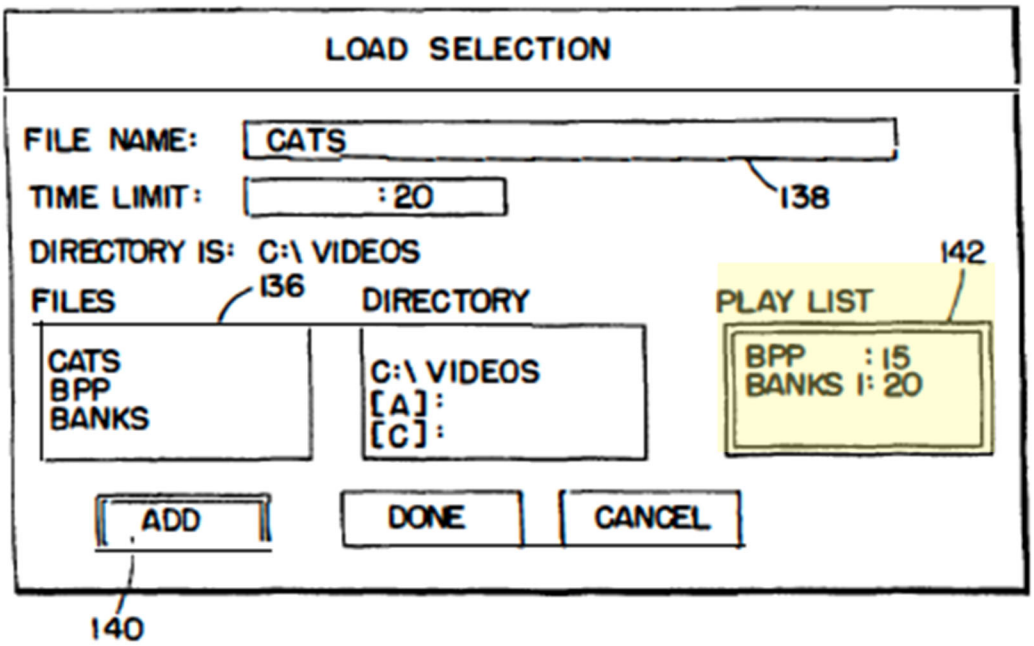
SEMENTED LOGICAL FILE FOR VIDEO 1

FIG. 17.



Second, each program (***content***) may be stored in a distinct server location (***resource***), and a play list of these programs (***show structure of nodes***) can be created as shown in Figure 9. EX1013, 20:1-22 ("Play list-set up multiple videos and their sequence to be played on a port), 10:14-41, 14:51-61, 18:60-67. This option may be used, for example, for short-duration programs (EX1013, 30:28-30), and, as discussed above (Section VII.A), *Henley's* broad disclosure confirms that each of these short duration programs may be wholly contained within a single content file. Section VII.B.1; EX1012, ¶¶78-82.

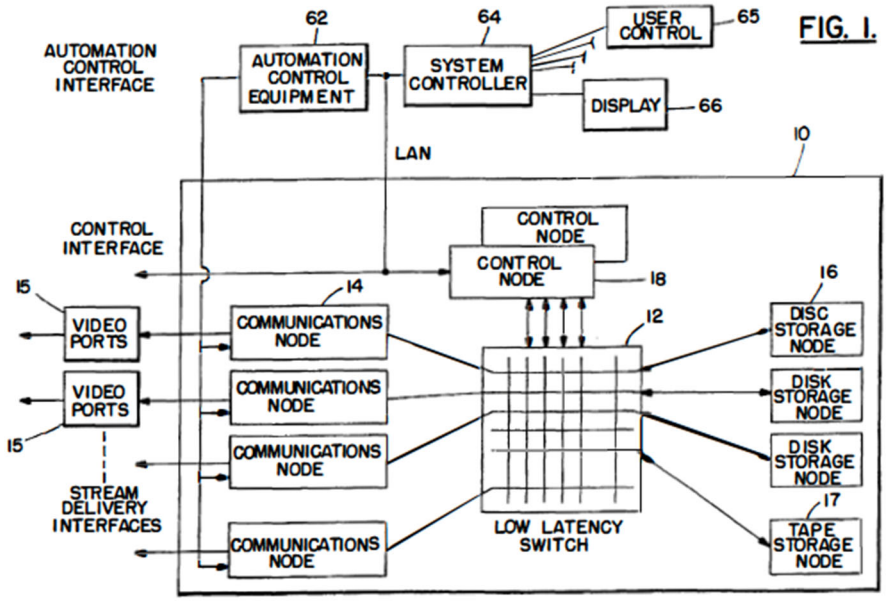
FIG. 9.



Henley discloses ***creating*** a sequential ***show structure*** with its "VS-CONNECT-LIST" or "Play list" that creates a "sequence of play commands" or "Batch operation" that allows the "transition between the delivery of one stream and the next seamlessly." *E.g.,* EX1013, 10:14-41, 20:1-22, 18:60-67, 14:51-61, 8:13-51, Figs. 9, 16, 17. The play list identifies the program (or program segment) (***content***) to be played by the address or location of the data file and the default time for the content (***node identifying a resource***). EX1013, 9:6-14, 10:14-41 ("communication node 14 is given the detailed play list and initiates the delivery of the isochronous stream…[n]ear the end of the delivery of FILE1, the communication node 14 initiates the delivery of FILE2."), 20:1-22 ("Each 'setup' command will

specify a video to be added to the Play list for a specific port. It also specifies a time limit that the video will be played."), 26:60-64, 21:66-67 ("A second process periodically checks the elapsed playing time of each video against their specified time limit").

The ***content***s are stored at separate server locations (***a plurality of accessible resources***), accessible via "a network such as LAN ATM, etc.," where for example, the nodes may be connected by "the cross-connect, low latency switch 12" shown in Figure 1 (***network accessible resources***). EX1013, 12:48-59, 8:13-51, 9:6-14, 14:51-61.



3. [1.2] *without requiring user input, automatically accessing a plurality of said network accessible resources identified by a corresponding node; and,*

Henley discloses this element. EX1012, ¶75 (citing EX1017).

Henley discloses "automation control systems" that automatically execute the instructions from the "VS-CONNECT-LIST" or "Play list" for accessing content from, for example, storage nodes 16, 17 via switch 12 (***plurality of said network accessible resources identified by a corresponding node*** (*see* element [1.1])), allowing the system to execute "each play command as if it were issued over the control interface but will transition between the delivery of one stream and the next seamlessly." EX1013, 10:14-41, Fig. 17. That is, "a command strip contains a series of video control commands" so that "a single batch command [can] start broadcasting without further operator intervention" (***automatically accessing without requiring user input*****).** EX1013, 18:60-67, 20:1-22, 10:14-41, Fig. 9. Thus, for example, "[n]ear the end of the delivery of FILE1, the communication node 14 initiates the delivery of FILE2" to "transition between the delivery of one stream and the next seamlessly." EX1013, 10:14-41.

4. [1.3] ***causing content from said network accessible resources corresponding to each of said accessed resources to be automatically accessed and presented through 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,***

Henley discloses this element. EX1012, ¶75 (citing EX1017).

Henley discloses "automation control systems" that automatically execute instructions from the "VS-CONNECT-LIST" or "Play list" (***show structure***) for accessing content from, e.g., storage nodes 16, 17 via switch 12 (***causing content from said network accessible resources corresponding to each of said accessed resources to be automatically accessed*** (*see* elements [1.1] and [1.2])), allowing the system to execute "each play command as if it were issued over the control interface but will transition between the delivery of one stream and the next seamlessly" (***causing…resources to be automatically…presented***). EX1013, 10:14-41, 7:12-14. The system further includes software for "the delivery of the video data…to a user display terminal" and notes that "various outputs such as TV sets and set top boxes attached via a network" act as the ***user's computer through*** which the ***content*** is ***presented***. EX1013, 8:13-51, 12:48-59; EX1012, ¶83. The segments or programs (***content***s) are presented sequentially according to the "VS-CONNECT-LIST" or "Play list," resulting in presentation of the "isochronous stream" of contents. EX1013, 8:13-51, 10:14-41, 20:1-22, 7:12-24, 18:60-67. Isochronicity is achieved

because "[n]ear the end of the delivery of FILE1 [(***during said presentation of at least some of said content from some of said network accessible resources***)], the communication node 14 initiates the delivery of FILE2" (***at least some of said other network accessible resources are being accessed***), and "[w]hen FILE1 completes,…the communication node 14 switches the output port to the second stream from the first." EX1013, 10:14-41, 3:18-41 (scheduler preparing buffer and storage node requests so the next sequential content is prior to when required).

5. [1.4] *wherein said step of creating further comprises the step of providing interactively variable duration information, representing the duration that said content corresponding to said resource is presented so as to enable a user to vary said duration*.

Henley discloses this element. EX1012, ¶75 (citing EX1017).

Henley explains that "communication node 14 is given the detailed play list [the ***show structure*** created in the ***step of creating***] and initiates the delivery of the isochronous stream," and it determines when to switch file streams by monitoring for "the end of the delivery of FILE1." EX1013, 10:14-41. The system "periodically checks the elapsed playing time of each video against their specified time limit [(***duration information***)]" that is ***provid***ed in the play list**.** EX1013, 21:59-22:3, 20:1-22 ("'Play List' box 142 with its time limit [(***duration information***)] and displays the current play list (with a time limit of each video on the play list)."). *Henley* confirms that information about the "length of the data" is provided for ***each***

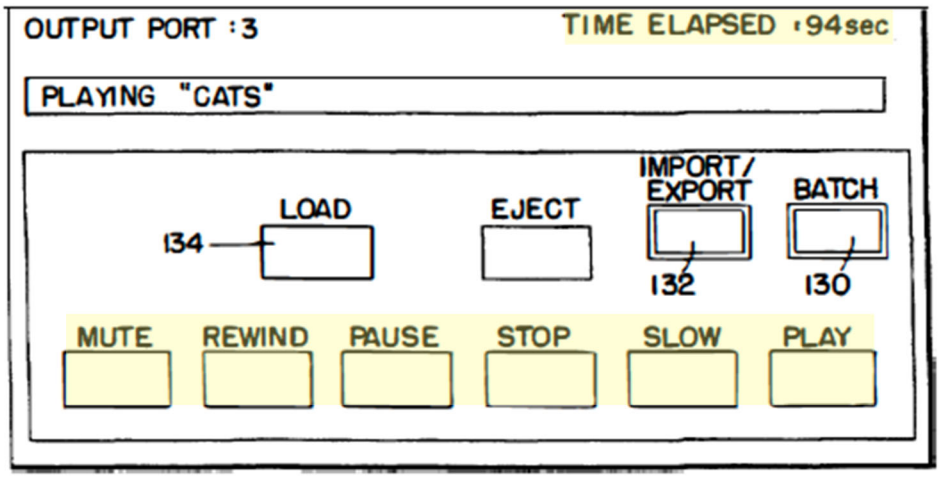
content corresponding to said resource because the system is required to handle "variable data block sizes," and it must "keep[] track of the length of data" to determine when "sufficient buffer space is free" to "accept the full data block." *Id.,* 37:27-31, 37:54-63. If Robocast argues the duration information must be for an entire content in a single resource (which Unified does not agree is appropriate), for the reasons discussed in Section VII.B.1, the "Play list" of contents does not require segmentation or striping. EX1012, ¶¶78-82. Thus, each content pulled from each resource would be accompanied with the duration for the entire program (e.g., the durations shown in Figure 9's play list would represent the duration information for the content at a single resource). EX1012, ¶80.

Henley also discloses an additional way that ***duration information*** is provided: by communication node 14's calculation of the duration of each data segment so that it knows the proper frequency to request data from the storage nodes. EX1013, 16:33-46 (example of each content being 1 second long), 29:1-19, 29:47-61 (example of contents being .5-2 seconds long), 15:34-63.

The ***duration information*** is the default time that the content is to be played. EX1013, 21:59-22:3 ("If a video has reached its time limit, the video is stopped and disconnected and the next video in the wait queue (if any) for the same output port is started."). It constitutes ***interactively variable duration information*** because a user is given "control over the playing of a video presentation." EX1013, 8:30-38.

With functions such as rewind, pause, stop, slow, and play (Figure 8) as well as fast forward, the system ***enable*s *a user to vary said duration***. EX1013, 35:35-37:14, Fig. 8.

FIG. 8.



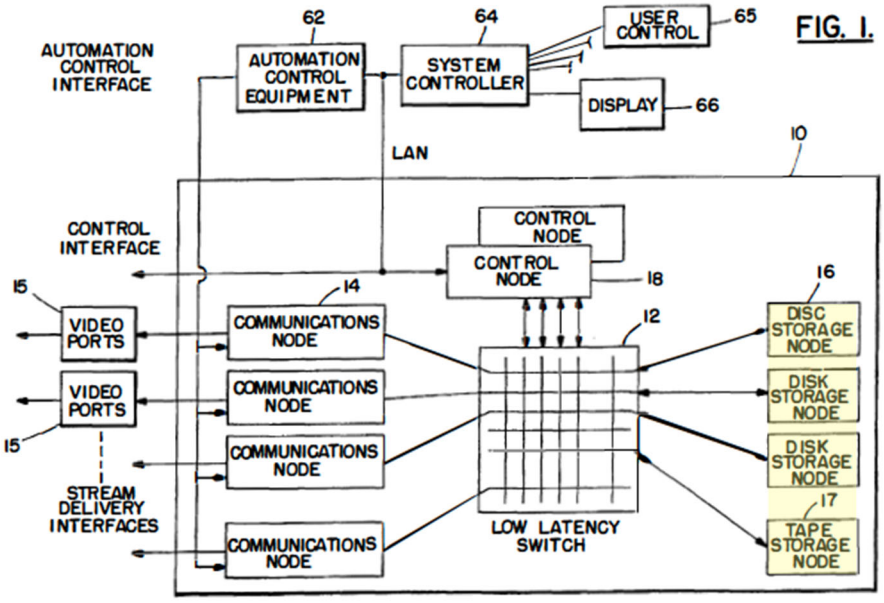
C. Claim 2

Henley discloses this claim. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1,*** including the ***step of providing interactively variable duration information.*** Section VII.B. *Henley* further discloses that step ***further comprises the step of providing interactively variable duration information for each of said accessed resources***. *E.g., supra,* Sections VII.B.5, VII.B.7; EX1013, 21:59-22:3 ("checks the elapsed playing time of each video against their specified time limit"), 20:1-22 (play list including each video's "time limit"), 16:33-46, 15:34-63 (calculating the length of each segment at "connection

time"). The "time limit" provided ***represent*s *the duration within which a corresponding content to said resource is presented*** before another content is provided. *See, e.g.,* EX1013, 21:59-22:3 ("If a video has reached its time limit, the video is stopped and disconnected and the next video in the wait queue (if any) for the same output port is started.").

D. Claim 4

Henley discloses this claim. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1*** (Section VII.B), and the ***nodes of said show structure of nodes identifies a network accessible resource*** (Section VII.B.2)**.** *Henley* further discloses that the storage locations comprise "disks [that] may either be local or ***remote***" (***located on a remote computer***). EX1013, 29:1-6, 8:38-51, 7:61-64 ("disc storage node 14 further has an internal PC44 which includes software modules 46 and 48"), 7:25-27, Fig. 1.



E. Claim 5

Henley discloses ***[t]he method in accordance with claim 1*** (Section VII.B) and further discloses ***one or more nodes*** that ***identifies a resource accessible via the Internet***. EX1012, ¶75 (citing EX1017). *Henley* discloses an ATM network. EX1013, 12:48-50. ATM is "[a] high speed switching and transport technology that can be used in a local or **wide area network** [WAN]." EX1013, 4:50-53. The internet is a WAN. EX1012, ¶84 (citing EX1021, 2). Furthermore, *Henley* discloses the control interface may execute TCP/IP protocol (EX1013, 8:52-56, 6:8-11), which is used for transmitting data over the Internet (EX1012, ¶84). *Henley's* broad description discloses that its network includes the internet, and ***nodes*** thus ***identify a resource accessible via the Internet***.

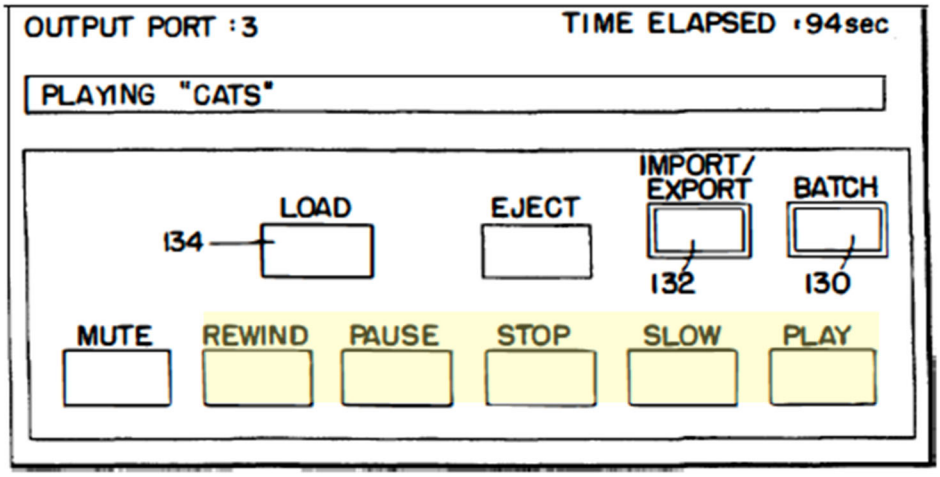
F. Claims 7-9

Henley discloses these claims. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1*** (Section VII.B), and that ***one or more of said nodes identifies*** "a video presentation" (***video content,*** claim 7), "an audio portion" (***audio content,*** claim 8), and/or "a video presentation" or "succe[s]sive images" (***displayable content,*** claim 9). *E.g.,* EX1013, 7:12-14, 3:3-17.

G. Claim 13

Henley discloses this claim. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1*** (Section VII.B). *Henley* further discloses ***providing*** a GUI with VCR-like play controls (***a play bar***), which ***enables the user to vary said duration that said content is being presented*** with stop, pause, slow play, fast forward, and rewind functionalities. EX1013, 19:11-19, 19:51-56, 36:35-37:14, Fig. 8. *Henley* also discloses that a play bar may include manual "hard" buttons. *Id.,* 8:33-38.

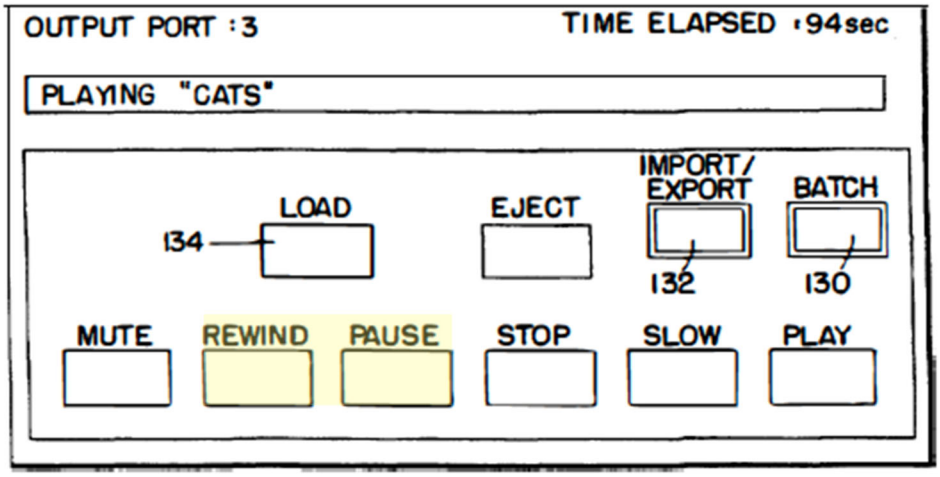
FIG. 8.



H. Claims 14-15

Henley discloses these claims. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1*** (Section VII.B). *Henley* further discloses ***providing*** hard or soft ***control buttons***, which ***enables the user to vary said duration that said content is being presented*** by using ***control buttons provide***d ***for*** stop, ***pause***, slow play, ***fast forward***, and ***rewind functions to be applied to said content being presented***. EX1013, 8:33-38, 19:11-19, 19:51-56, 36:35-37:14, Fig. 8.

FIG. 8.



I. Claim 20

Henley discloses this claim in two ways. EX1012, ¶75 (citing EX1017). *Henley* discloses ***[t]he method in accordance with claim 1*** (Section VII.B).

Henley discloses ***the show structure*** of a segmented program is ***a sequential path***, like the sequence of segments 1-12 striped over 4 disks in Figures 16 and 17. EX1013, 13:1-4, 13:66-14:2, 15:64-66. In this way, a long-duration program is accessed "from each of the storage nodes, in **sequence**" (EX1013, 16:33-43), with the system "work[ing] off a **queue** of requests" (EX1013, 14:28-40), so the "next ***sequential*** portion of the digital representation" (EX1013, 3:18-41) is provided in the appropriate order to appear as an isochronous program. EX1013, 13:1-4, 13:66-14:2, 15:64-66, 29:7-19, 29:29-30:3.

FIG. 16.

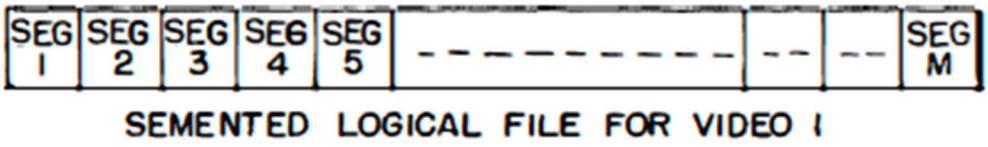
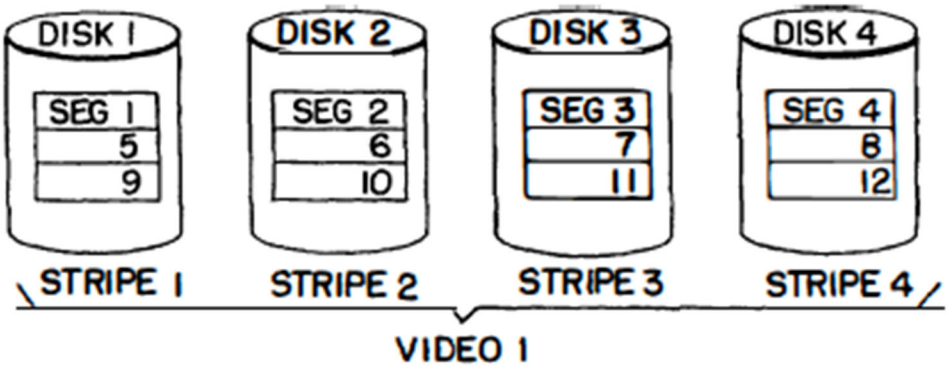
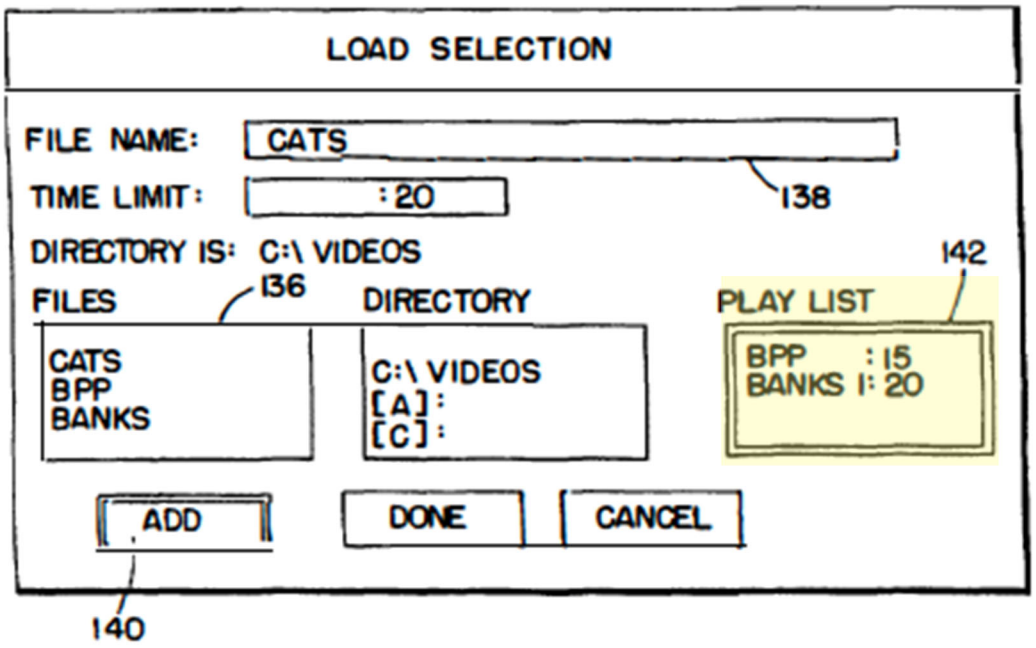


FIG. 17.



Henley also discloses ***the show structure*** of a series of unrelated programs is ***a sequential path***, describing the show structure as a "Play **list**" of programs, as shown in Figure 9. *Henley* discloses that once one video is concluded, "the next video in the wait **queue**" is provided. EX1013, 22:1-3, 3:18-41, 14:28-40, 16:33-43.

FIG. 9.



VIII. GROUND 2: *HENLEY* RENDERS OBVIOUS CLAIMS 1-2, 4-5, 7-9, 13-15, AND 20

A. Claims 1-2, 4, 7-9, 13-15, and 20

Henley discloses claims 1-2, 4, 7-9, 13-15, and 20. Section VII. If further disclosure is required for **claim 1 and its dependents,** a POSITA would have found it obvious to store unrelated contents, such as those in the "Play list" of Figure 9, in different locations at least because doing so would provide the benefits disclosed in *Henley* of striping across different servers, e.g., allowing the next video to be requested while the first is playing so the contents are played isochronously, and allowing more total data to be stored than could be stored at any one location. EX1012, ¶P86-89 (citing EX1013, 10:14-41, 30:65-67). The instructions for

switching between files apply equally to when content is related as to when it is unrelated (EX1013, 10:14-41), so a POSITA would have had a reasonable expectation of success in operating the system in this manner. EX1012, ¶88. Moreover, a POSITA would have found it obvious for each content, whether containing an entire program or a segment of a program, to be associated with duration information because even when long-duration programs were divided by the system, each segment would not have been exactly equal, e.g., "[t]he last segment may only be partially filled with data." EX1013, 29:7-12, 30:65-31:2, 37:27-31, 37:54-63 (buffer handling varying data block sizes), 29:34-38 (dividing content by "play segments," not "byte block"; EX1012, ¶89. A POSITA would have been motivated to create a show structure with nodes that contained both location and duration information because with durations, the system could properly monitor when the content was almost finished to retrieve the next content, thereby accomplishing *Henley's* goal of providing continuous programming. EX1012, ¶89.

B. Claim 5

A POSITA would have found it obvious to use the internet as the network such that ***nodes*** would ***identify a resource accessible via the internet*** because of the disclosures in *Henley* to use the internet (*see, e.g.,* citations in Section VII.E). Moreover, using the internet would have addressed market forces because it would open the market for *Henley's* content-providing system to users with internet-

connected devices. EX1012, ¶90. This furthers *Henley's* goals of providing "on-demand" access, allowing users to access content wherever they have internet access. *Id*. Using the internet would have constituted a simple substitution (to the extent not already disclosed) of switch 12 with the internet. The internet would have provided the same functionality as switch 12—connecting the devices with the stored content to the users' devices—so a POSITA would have had a reasonable expectation of success in that configuration. Moreover, as the '932 Patent recognizes, the internet had grown tremendously since 1993, several standards were created for its use, and commercial products for providing access to the internet existed by the 1996 timeframe (EX1001, 1:28-2:28), so a POSITA would have had a reasonable expectation of success in employing an internet-based system. EX1012, ¶90.

IX. GROUND 3: *HENLEY* AND *REISMAN* RENDER OBVIOUS CLAIMS 3, 5-6, AND 17-18

A. Overview of the Prior Art

An overview of *Henley* is above. Section VII.A. *Reisman* is directed to delivering digital content to a user from multiple servers. EX1014, Abstract. *Reisman* provides explicit disclosures of accessing content like "entertainments with audio [and] video" using URLs (EX1013, 35:31-48) via an internet network (e.g., EX1014, 36:24-37:31) and displaying the content using web browser (e.g., EX1014, 37:32-38:6). It even provides the explicit use case of providing "content from

multiple sources to be assembled into a coherent work such as a television commercial, a training video or 'mini-movie', using moving video frames, text content, voice, photographs, special effects and so on, for highly interactive processes such as extended, free-flowing browsing and searching of relatively unbounded network content." EX1013, 31:27-44.

A POSITA would have looked to *Reisman* because it is analogous: *Reisman* is in the same field of computer networks and the accessing and presentation of networked resources to users, with teachings pertinent to providing users with "one or several topics of information from several sources in a continuous arrangement," in particular, "audio [and] video" topics of information. EX1001, 2:66-3:3; EX1014, Abstract, 34:51-67, 36:24-38:6; EX1012, ¶92.

Indeed, the examiner considered *Reisman* analogous, applying it for similar teachings as those cited below. *E.g.,* EX1002, 302-03, 318-19. During prosecution of the abandoned child applications, *Reisman* was combined with *Henley* for some of the same elements detailed below. *E.g.*, EX1003, 26-27.

B. Proposed Modification of *Henley* by *Reisman*

For Ground 3, Petitioner proposes modifying *Henley* with the explicit teachings in *Reisman* of using the internet, along with the related disclosures of URLs, web browsers, and websites (an "internet-based system"). *Reisman* also discloses the use of mobile devices for viewing the content.

A POSITA would have been motivated to use an internet-based system based on *Henley's* suggestions (if not explicit disclosures) to make its system internet compatible. *See, e.g.,* Sections VII.E, VIII.B; EX1012, ¶96. Moreover, a POSITA would have been aware of and motivated by the benefits that an internet-based system provides, such as providing access to content to a greater number of people over a large geographic area. EX1012, ¶96 (citing EX1021, 2). As the '932 Patent recognizes, the Internet had grown tremendously since 1993, several standards were available for its use, and commercial products for providing internet access existed by 1996 (EX1001, 1:28-2:28), so a POSITA would have had a reasonable expectation of success in employing an internet-based system. EX1012, ¶96.

Reisman also contemplates users with "mobile" devices, recognizing that a multitude of user devices could be connected to network to receive the content. EX1014, *passim* (referring to generic "computer" and "computer-implemented" aspects to providing content), 11:18-25 (networks utilized by mobile devices), 44:36-39, 56:59-61[7]. A POSITA would have been motivated to modify *Henley's* system (to the extent *Henley's* TVs and set top boxes are not themselves mobile devices) to address market forces because it would open the market for *Henley's*

[7] *Reisman* downloading content for offline viewing as an alternative to the primary disclosure of continuous access for downloading content. EX1012, ¶99.

content-providing system to mobile device users. EX1012, ¶97. This furthers *Henley's* goals of providing "on-demand" access, allowing users to access content wherever they are, without being tied to a particular location. EX1012, ¶¶97-98. A POSITA would have had a reasonable expectation of success because it would have been a simple substitution to use a mobile device-type computer as the user console instead of a TV and box-top set-type computer. EX1012, ¶98. This is especially true if the internet were used as the network—a POSITA would have been motivated to use a mobile device and have had a reasonable expectation of success because mobile devices were often already configured to access the internet. EX1012, ¶98.

C. Claim 3

Henley and *Reisman* render this claim obvious. EX1012, ¶93 (citing EX1017). *Henley* discloses or suggests ***[t]he method in accordance with claim 1*** and an internet-based system (Sections VII.E, VIII.B, VIII.A, IX.B). *Henley* discloses or suggests ***one or more of said nodes compris***ing information for identifying and/or locating a resource (Sections VII.B.2, VIII), and *Reisman* discloses or suggests such identifying or locating information would comprise ***a*** "***URL*** [that] identifies the location of a file on an Internet server by a server address," allowing the user to access "hyperlinked information objects accessible to network users" on an "Internet site or resource." EX1014, 37:34-40, 38:49-51, 39:33-37. *See also* Section IX.B.

D. Claim 5

Henley and *Reisman* render this claim obvious. EX1012, ¶93 (citing EX1017). *Henley* discloses or suggests ***[t]he method in accordance with claim 1*** and an internet-based system (Sections VII.E, VIII.B, VIII.A, IX.B). If further disclosure is required, *Henley* discloses or suggests ***one or more of said nodes identifies a resource accessible via a*** network (Sections VII.B.2, VIII.A), and *Reisman* discloses or suggests providing users "access to additional information products from such varied source facilities as the ***Internet.***" EX1014, 28:31-57, 32:1-13 and 34:51-67 (use of "Internet servers" to provide "content from multiple sources to be assembled in a coherent work such as a television commercial, a training Video or 'mini-movie', using moving video frames, text content, Voice, photographs, special effects and so on."), 37:34-40, 38:49-51, 39:33-37. *See also* Section IX.B.

E. Claim 6

Henley and *Reisman* render this claim obvious. EX1012, ¶93 (citing EX1017). *Henley* discloses or suggests ***[t]he method in accordance with claim 1*** and an internet-based system (Sections VII.E, VIII.B, VIII.A, IX.B). *Henley* further discloses or suggests ***one or more of said nodes identifies a resource accessible via a*** network (Section VII.B.2, VIII.A), and *Reisman* discloses or suggests that "***Web site***s" are "Internet sites using the World Wide Web…[to] present their resources." EX1014, 38:8-11, 39:33-37. *See also* Section IX.B.

F. Claim 17

Henley and *Reisman* render this claim obvious. EX1012, ¶93 (citing EX1017). *Henley* discloses or suggests ***[t]he method in accordance with claim 1*** (Sections VII.B, VIII.A) and a computer (Sections VII.B.1, VIII.A; EX1012, ¶83), and *Reisman* discloses or suggests ***said computer is a mobile device*** with its disclosure of using networks dedicated to mobile devices (e.g., "wireless common carriers" and "mobile telecommunications"), and its contemplation of optional modifications to its system for certain "mobile users." EX1014, 11:18-25, 44:33-39, 56:59-61; EX1012, ¶P97-99; *see also* Section IX.B.

G. Claim 18

Henley and *Reisman* render this claim obvious. EX1012, ¶93 (citing EX1017). *Henley* discloses or suggests ***[t]he method in accordance with claim 1*** is an internet-based system (Sections VII.E, VIII.B, VIII.A, IX.B) and that ***said content is presented through said user's computer*** (Sections VII.B.1, VIII.A), and *Reisman* discloses or suggests that the content may be presented ***using a web browser*** **(**EX1014, 37:34-48 ("one such particularly useful embodiment…is that of a web browser"); 39:33-372 ("at least one web browser…to retrieve and view information objects maintained locally or at said web sites")). *See also* Section IX.B.

X. GROUND 4: *SHOHAM* AND *RICHARDSON* RENDER OBVIOUS CLAIMS 22-27 AND 33-43

The two elements that were not found in the prior art during prosecution are disclosed in *Shoham* and *Richardson.* Claim 22 was amended to recite a user-defined online search (EX1002, 238-39, 257-58), and *Shoham* discloses that element (e.g., Section X.D.2). Claim 22 was also amended to make clear that the claims were directed to real-time systems that accessed content while the presentation was ongoing, as opposed to prior art systems that accessed and stored content locally and merely presented a stream of locally-stored content to the user. EX1002, 100, 103-04, 114-15. Both *Shoham* and *Richardson* present such real-time systems that access additional content for presentation while the current content is being shown. Section X.D.7.

A. Overview of *Shoham*

A POSITA would have looked to *Shoham* because it is analogous to the '932 Patent: *Shoham* is in the same field of computer networks and the accessing and presentation of networked resources to users, with teachings pertinent "the presentation of a series of resources" based on "the results of a Search initiated through…[a] search engine." EX1001, 2:59-65, 10:63-65; EX1015, Abstract, 3:56-59 ("retrieval of hyperlinked information resources which actively explores a

hyperlinked network to present interesting resources to a user"); 8:25-26 (based on a user-entered "specific or general query"); EX1012, ¶101.

To address the drawbacks of traditional search and retrieval techniques (*e.g.,* EX1015, 1:18-3:49), *Shoham* proposes taking the results of a search and (1) applying a first exploration heuristic to select particularly relevant resources and (2) presenting the selected resources to the user based on a second presentation heuristic (EX1015, 4:20-52). The exploration heuristic applies parameters like how long to search, where to begin the search, how often to revisit a node that's been previously searched, etc. EX1015, 8:39-54. The exploration process identifies relevant resources in a network, repeating the exploration process for as long as the pre-set parameters indicate. EX1015, 8:47-52. "Typically, only the location of the selected information resource is stored" as a result of the exploration process. EX1015, 10:42-46. Then, "[d]uring presentation to the user, the information resource is retrieved and displayed via the user interface." EX1015, 10:46-48.

The resources are presented according to a presentation heuristic. *Shoham* discloses that the presentation heuristic can be the same or different from the exploration heuristic. EX1015, 8:54-57. If the same, then the system "presents all of the information resources selected by the exploration heuristic to the user" at the same time. EX1015, 8:57-60. Although *Shoham* does not provide many details about how a different presentation heuristic presents contents, it does disclose that the

presentation allows for the user to provide feedback on "the relevance of the *currently presented* information resource into the system" and that "[p]assive feedback may be acquired by monitoring…the length of time which elapses while viewing a particular information resource." EX1015, 8:61-9:8 (emphasis added).

B. Overview of *Richardson*

A POSITA would have looked to *Richardson* because it is analogous to the '932 Patent: *Richardson* is in the same field of computer networks and the accessing and presentation of networked resources to users, with teachings pertinent "the presentation of a series of resources" to provide "next-level functionality" for "the internet and its Web." EX1001, 2:50-65; EX1016, Abstract, 1:47-49 (the problem in the prior art is it "requir[es] the user to make the connections to the identified web sites"), 1:66-2:2 (the disclosed solution is automatic "guided touring of internet/intranet web sites"); EX1012, ¶102.

In traditional web surfing, the user must select individual webpages to visit. EX1016, 1:47-49. To provide a "more efficient approach to locate and view information on the net," *Richardson* proposes "guided touring of websites,"

automatically connecting to a series of websites, one after another. EX1016, 2:5-9. To accomplish this, a tour stop definition is created for each website, and the tour stop definition includes both the address and the default duration for presenting the website. EX1016, 9:44-49, Fig. 14 (highlighted), claim 1.

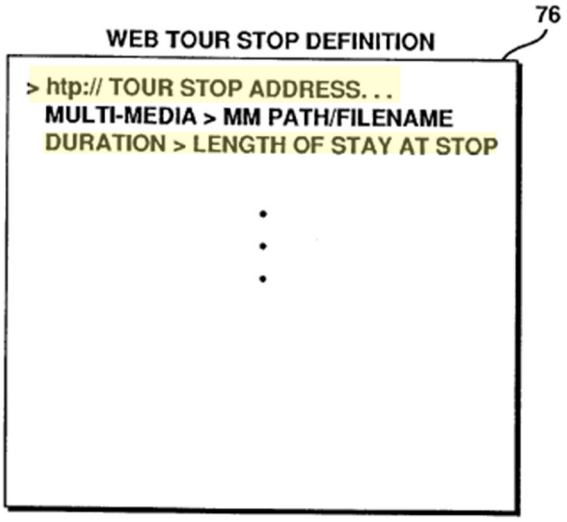


Figure 14

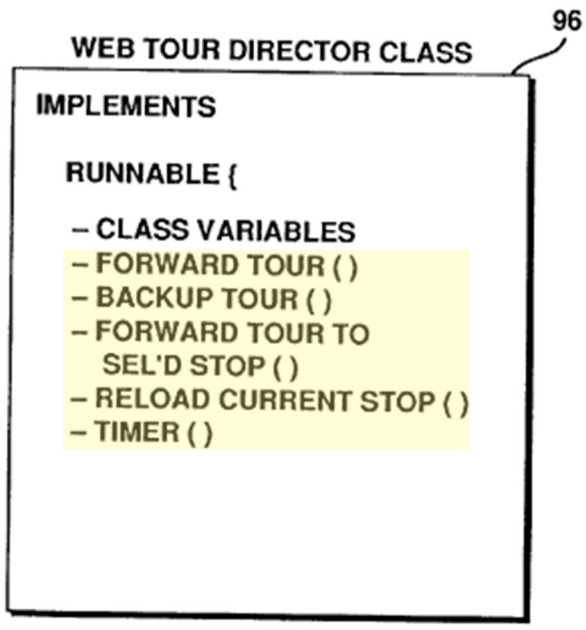


Figure 12

The system allows for "dynamic user modification," allowing the user to extend the visit to the current website, skip forward or back to immediately following or proceeding sites, or skip to any of the listed sites. EX1016, 2:15-23, Figs. 3-5 (Fig. 4's list of sites, control buttons, and current web tour stop highlighted), Fig. 12 (commands for user controls highlighted).

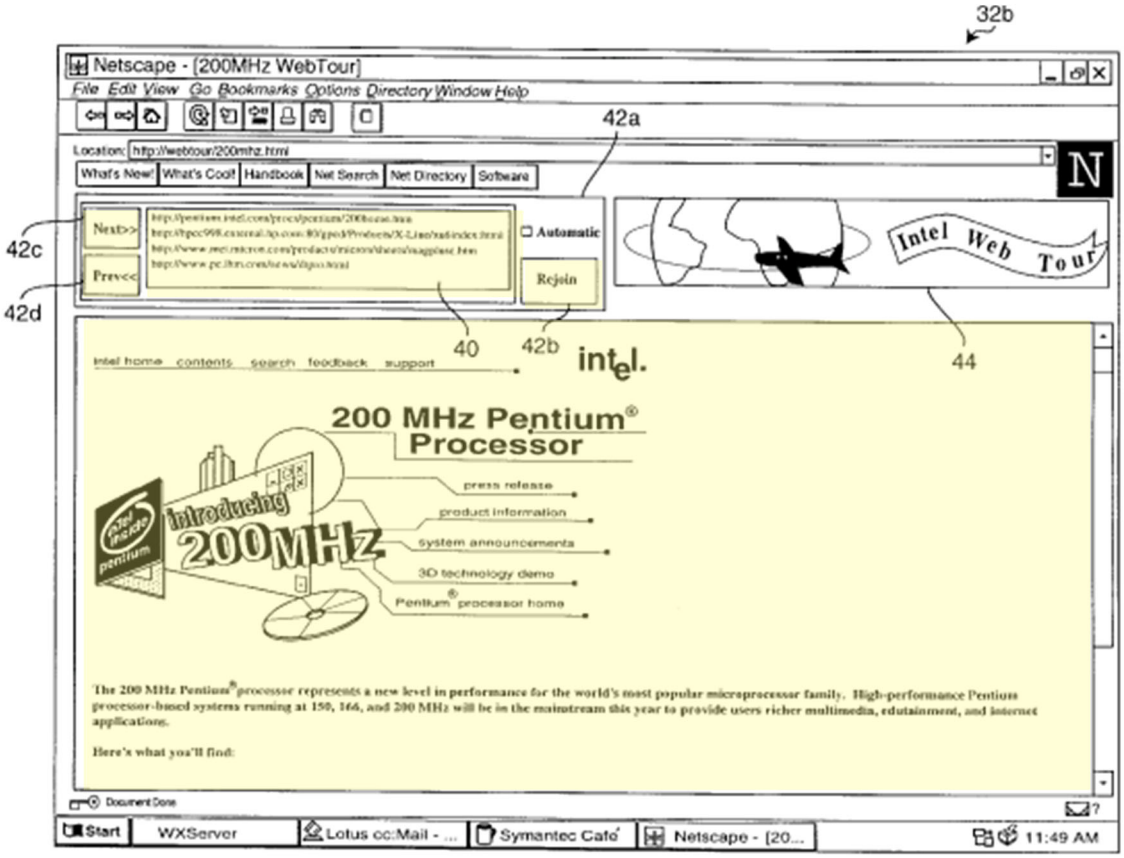


Figure 4

C. Proposed Modification of *Shoham* by *Richardson*

As detailed in below, Petitioner proposes modifying *Shoham* with the explicit teachings in *Richardson* for presenting content, e.g., associating a duration with each address, details of how to present one content after another, details of the types of content accessed and the user's interface for viewing the content. *Richardson* also discloses providing the user control over the presentation, e.g., providing users GUI interfaces with control buttons for pausing at a site, skipping forward or going back one site, and a list of content so the user can jump to the content they want to see.

A POSITA would have been motivated to modify *Shoham* with *Richardson* because *Shoham* discloses a system for presenting users with online search results that uses an exploration heuristic to identify results and a presentation heuristic to present results to users, but *Shoham* focuses on how to improve the exploration heuristic to address drawbacks of traditional searching, and it does not provide many details on how to implement the presentation heuristic. EX1012, ¶105. *Shoham* explains that the exploration heuristic and the presentation heuristic may be the same or different, and if they are the same, then all content will be presented to the user at once (EX1015, 8:54-60), but *Shoham* does not provide details on how to present content when the presentation heuristic is different from the exploration heuristic. EX1012, ¶¶105-06. *Shoham* discloses separating the exploration and presentation heuristic functions to create a list of search results that the presentation heuristic can display to the user. EX1015, 7:39-43, 10:42-48 ("only the location of the selected information resource is stored….During presentation…the information resource is retrieved"). *Shoham* also suggests that content should be presented to the user one-at-a-time so that the system can determine "the relevance of the *currently* presented information resource" based on passively monitoring "the length of time which elapses while viewing a particular information source." EX1015, 8:61-9:8 (emphasis added). *Shoham* also states that any number of processing strategies could be used, including "sequential" or "sequential/parallel implementation" (EX1015, 7:44-64)

that would provide for the smooth presentation of sequential identified resources by obtaining the next resource in parallel with displaying the current resource. EX1012, ¶107.

A POSITA would have been motivated to employ a "sequential" or "*sequential*/parallel" presentation method to accomplish *Shoham's* stated functions of monitoring how long a user views a particular information resource to the user. *Id.*. *Shoham* also states that it is an object of the invention to "present[] a reasonable number of relevant resources to the user" (EX1015, 4:1-4), and a POSITA would have understood that a reasonable number of resources to present when monitoring how long a user is viewing a particular resource is one because providing more than one reference at a time would confuse the feedback data. EX1012, ¶106. A POSITA would have been motivated to use the "sequential/*parallel*" presentation methods because it would permit a smooth transition from one resource to the other, which would improve user friendliness because users do not like to wait for content to load. EX1012, ¶¶106-07. A POSITA would have also understood that the current webpage should be displayed to the user while accessing another webpage because a user would prefer to continue viewing a current page rather than a blank screen or other nonce page. EX1012, ¶108 (citing EX1022; EX1023, 11). *Shoham* also recognized that the websites from which a set of search results may be pulled might contain "single, one-way link(s)" (EX1015, 6:40-59, Fig. 2), and exploration heuristics using

such links would return a sequential set of results. EX1012, ¶109. A POSITA would have had a reasonable expectation of success in presenting content to a user sequentially because there were already several known methods for doing so. EX1012, ¶109 (citing EX1013; EX1014; EX1016). Indeed, *Shoham's* general advice that "any number of processing strategies could be utilized" and that the disclosure could "obviously be extended" to implementations reflect the high level of POSITA knowledge in accessing and presenting internet content to a user. EX1015, 7:44-64; EX1012, ¶110.

Motivated by *Shoham's* suggestion of a different presentation heuristic that would accomplish *Shoham's* goals of obtaining user feedback by monitoring how much time a user views currently presented information, a POSITA would have turned to *Richardson.* EX1012, ¶111. A POSITA would have selected *Richardson* in particular because of the overlapping and complementary disclosures – *Shoham* discloses creating a list of websites based on the search results and then presenting the content for those results to the user and monitoring how much time the user spends at each site (described above), and *Richardson* discloses using a list of websites to present content at those websites for default durations that the user can vary. *Id*. In particular, *Richardson* discloses that each resource is presented for "a predetermined duration" (EX1016, 5:27-28), provides detailed information on how to implement such timed presentations (EX1016, 9:11-12:48), and even describes

how to allow the user to pause, restart, or skip the current content (EX1016, 11:15-34), which would allow the system to accomplish *Shoham's* stated functions of monitoring how long a particular information resource is viewed. Moreover, if *Shoham's* disclosure did not provide sufficient details and/or was ambiguous (*e.g.*, "remote user" for element [22.1], user's computer for claim 23, "video" for claim 33), *Richardson* provides implementation details. EX1012, ¶112.

A POSITA would have had a reasonable expectation of success in modifying *Shoham* with *Richardson's* teachings at least because of the overlapping and complementary disclosures described above. EX1012, ¶113. Moreover, *Shoham* and *Richardson* largely rely on basic computer hardware and software (e.g., computers with browsers, internet networks, browsers, etc.). *Id*. For the additional methods *Richardson* discloses, it provides particularly detailed descriptions of the applets used to accomplish its presentations and describes how different functions call each other, etc., making it easy for a POSITA to have configured *Richardson's* presentation methods into *Shoham's* system. *Id*.

D. Independent Claim 22

1. [22.0] *A method for providing in a sequential arrangement to a user's computer, content derived via a communications network from a plurality of resources, the method comprising the steps of:*

Shoham and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). *Shoham* discloses the "presentation of a manageable amount of information resources to a user" (***a method for providing...content***) on "a first local computer 10" or "mobile computer 20" (***to a user's computer***). EX1015, Abstract, 4:10-15, 4:33-41, Fig. 1. The ***content*** is ***derived via a communications network,*** for example, "network 16, such as the well-known internet." EX1015, 5:45-61, Fig. 1. By traversing this network, ***a plurality of resources*** ("hyperlinked information resources") are retrieved. EX1015, Abstract, 4:10-15, 4:33-41, Fig. 1.

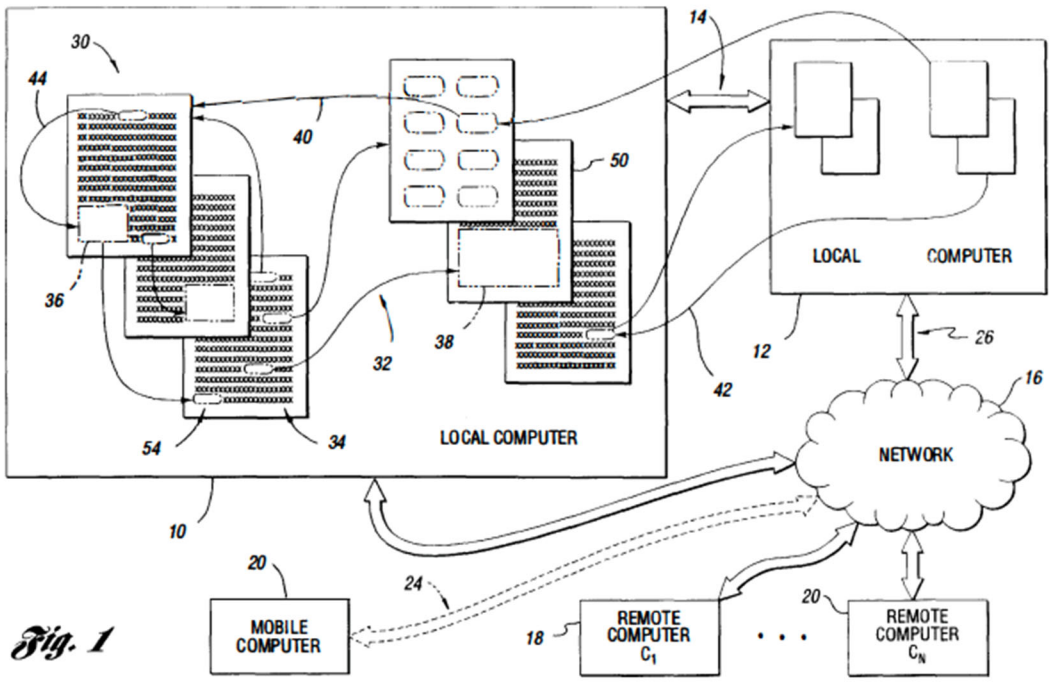


Fig. 1

Shoham at least suggests providing the content in ***a sequential arrangement*** with its disclosures of (1) separating the exploration and presentation heuristic functions to store a set of search results for later presentation to the user (EX1015, 7:39-43, 10:42-48), (2) "presentation heuristics…based on…*ranking* functions" (EX1015, 8:13-18 (emphasis added)), (3) presenting the resources to the user in a way that allows the system to monitor "the length of time which elapses while viewing a particular information resource," (EX1015, 8:61-9:9) and (4) permitting any number of processing strategies could be used, including the "sequential/parallel implementation" that would provide for the smooth presentation of sequential identified resources by obtaining the next resource in parallel with displaying the

current resource (EX1015, 7:44-64). EX1012, ¶¶106-08. A POSITA would have been motivated to employ "sequential" or "*sequential*/parallel" presentation methods to accomplish *Shoham's* stated functions of monitoring how long a user views a particular information resource to the user. EX1012, ¶107. *Shoham* also states that it is an object of the invention to "present[] a reasonable number of relevant resources to the user" (EX1015, 4:1-4), and a POSITA would have understood that a reasonable number of resources to present when monitoring how long a user is viewing a particular resource is one because providing more than one reference at a time would confuse the feedback data. EX1012, ¶106. *Shoham* also recognizes that sites may contain "single, one-way link(s)" (EX1015, 6:40-59, Fig. 2), and exploration heuristics using such links would return a sequential set of results for presentation. EX1012, ¶109.

If further disclosure of ***sequential presentation*** is required, *Richardson* discloses a web tour that presents a list websites one at a time. EX1016, 5:37-47, 7:36-44, Figs 3-5. A POSITA would have made such modifications for the reasons in Section X.C.

2. [22.1] *receiving a request for a user defined online search from a remote user;*

Shoham and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). *Shoham* discloses that microprocessor 80 and memory 82 are in

communication with user interface 98 (***a remote user***) to provide its "system for retrieval of hyperlinked information." EX1015, 8:25-31. That system performs steps including ***receiving*** the user-entered "specific or general query" (***a request for a user defined…search***) for information available over a network like the "internet" (***online search***). EX1015, 6:60-7:6, 5:52-53, 8:25-31 ("The user may also enter a specific or general query at Block 120."), 8:45-53 ("Block 124 begins exploring the hyperlinked network using the exploration heuristic established at block 120.").

If *Shoham* does not explicitly disclose a remote user, a POSITA would have found it obvious to have the method performed on a device separate from the user's device, such that the user is "remote," at least based on Figure 3, which shows "user interface 98" as the user's computer and that the user's computer is connected to the device containing microprocessor 80 and memory 82 via a port 94. EX1012, ¶114 (citing EX1015, Fig. 1). A POSITA would have found it obvious, therefore, to have implemented the search result algorithm at a centralized, remote device or system of devices. EX1012, ¶114 (citing EX1016, 1:11-33 (describing well known search sites like Yahoo or Alta Vista, which receive search queries from remote users). Moreover, there were only a finite number of locations for receiving a user query: 1. locally on the user's computer, 2. remotely at a remote device or system of devices, or 3. a combination of remote and local devices. EX1012, ¶115. A POSITA would have been motivated to receive the query at a remote device or system at least

because *Shoham* is disclosed as an advance over known querying methods, and it was well-known at the time to use a remote device or system for receiving queries and providing query results. EX1012, ¶115. Providing the query operations at a centralized location would allow the system operator to have more and easier control over the querying algorithms (e.g., an update to a centralized querying system under the operator's control is easier than to requiring each individual user to update their local systems). EX1012, ¶115.

If further disclosure is required, *Richardson* discloses its tour operator website receives requests from the user's remote web touring station. EX1016, 5:65-6:38 (remote touring station 12 sending requests for content to tour operator website 16), 1:11-13, Fig. 6. A POSITA would have been motivated to make modifications to receive the request (e.g., *Shoham's* search query) at a central, remote device (like where *Richardson's* tour requests are received) because it would have provided the operator control over the querying algorithms. EX1012, ¶116. A POSITA would have had a reasonable expectation of success because it was common—and well within a POSITA's capabilities—at the time to use a remote device or system of devices for receiving queries. *Id.*

3. [22.2] *providing a plurality of search results and their corresponding resource locators in response to said request;*

Shoham discloses or suggests this element. EX10112, ¶103 (citing EX1018).

Shoham discloses using the "first heuristic," which is the exploration heuristic, where the user enters "a specific or general query" (***in response to said request***) to "select[] at least one information resource for presentation to a user" (to ***provid[e] a plurality of search results***). EX1015, 7:16-21, 8:24-27, 7:39-43 ("a predetermined number of information resources have been selected"), 8:32-38 (noting heuristic search techniques are "well established"), 8:39-55. *Shoham* discloses that "[t]ypically, only the location of the selected information resource is stored [(***providing…corresponding resource locators***)]" as a result of the search. EX1015, 10:42-48.

If ***providing*** is interpreted as "presenting" or "displaying"—which is not correct at least because the patentee chose "providing," and "providing" is a broader term (EX1012, ¶117, *see also* ¶120)—*Shoham* and *Richardson* disclose or suggest this element. EX1012, ¶¶103, 118 (citing EX1018). A POSITA would have been motivated to display search results and their corresponding locators because it would provide the user with benefits such as giving the user a preview of upcoming content so that the user could exercise informed control over the presentation by going directly to a certain result, skipping a result, determining if their search query needs refinement, etc. EX1012, ¶118. Moreover, it was common to display query results at the time. *Id.* (citing EX1016, 1:11-33 (describing prior art search sites like Yahoo or Alta Vista that showed the user search results)).

It would have been within a POSITA's ability to make such modifications because *Shoham* discloses that the list of search results and their corresponding locators were already stored by its system, and it would simply be a matter of displaying the set of *Shoham's* search results like the tour stops are displayed in *Richardson*. EX1016, 4:58-5:8 (describing the four two stops shown in Fig. 4), 5:37-47, 7:36-44, Fig. 4 (highlighted below); EX1012, ¶119. The list of *Richardson's* displayed tour stops includes resource locators because this allows the user to "forward a guided tour to a specific stop selected by the user." EX1016, 5:37-47, EX1012, ¶119. That is, in the modification proposed, the displayed address would constitute displaying the search result, and the functionality provided demonstrates that the search result includes the corresponding locator. EX1012, ¶120.

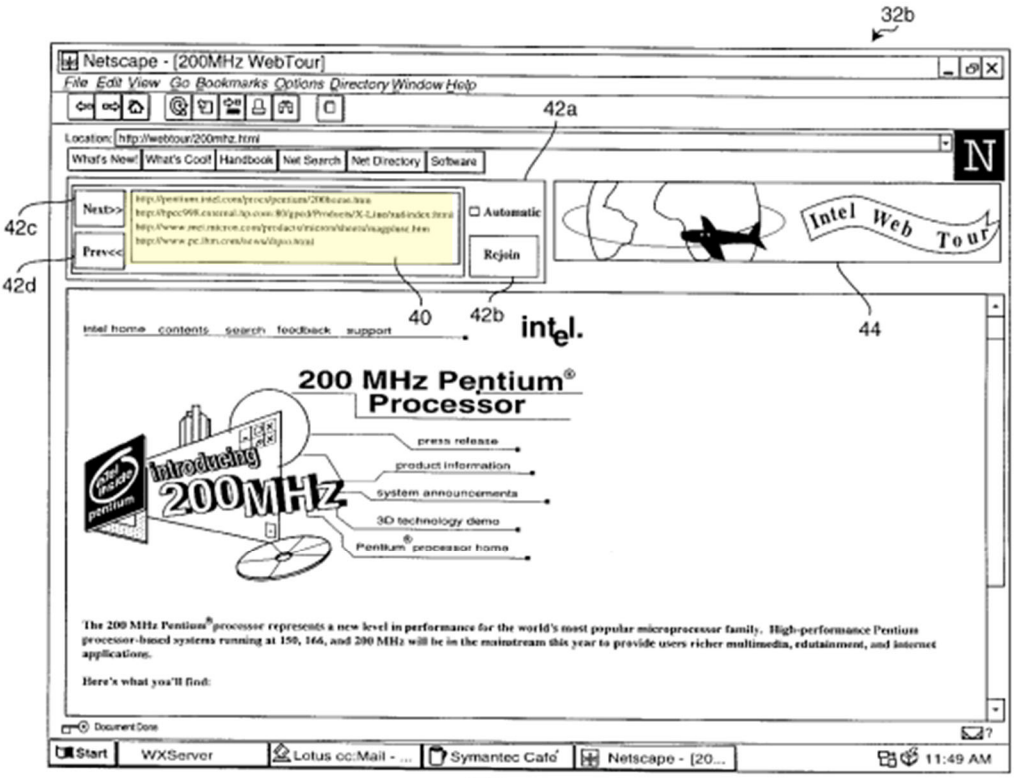


Figure 4

If Robocast argues the displayed address cannot constitute the search result and the locator, *Richardson* discloses that the websites may be "enumerated" so that the user can "skip to any one of the defined tour stops." EX1016, 5:54-58. Thus, for example, the displayed "1" through "4" would constitute the search results, and the displayed addresses would constitute the associated locators. EX1012, ¶120.

4. [22.3] *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;*

Shoham discloses or suggest this element. EX1012, ¶103 (citing EX1018).

Shoham discloses using the "first heuristic," which is the exploration heuristic where the user enters "a specific or general query" to "select[] at least one information resource for presentation to a user" (***automatically creating a show structure of nodes based on said search results***). EX1015, 7:16-21, 8:39-55 (describing the automatic continuation of the search until "a fixed number of resources" are identified or an amount of time for the search has elapsed in order to "present[] selected information resources to the user based on a presentation heuristic"), 7:39-43 (search continues based on predetermined factors), 9:35-42, 10:61-67. The structure of the presentation is based on the presentation heuristic, which includes organizational elements such as ranking the results. EX1015, 8:13-18.

The search results returned are the "location[s] of the selected information resource[s]," which are stored so that "[d]uring presentation to the user, the information resource is retrieved and displayed via the user interface." EX1015, 10:42-48. Each search result/stored location (***each node***) is a hyperlink like "hyperlink 42," ***identifying a***n information ***resource*** selected ***from a plurality of accessible resources via said communications network*** such as the Internet. EX1015, 6:4-20, 6:40-59 (reviewing the structure of the hyperlinked resources from which the disclosed system creates its set of nodes for presentation to the user).

Unified disagrees that ***show structure of nodes*** requires specifying the duration of display at least because claim 24 *adds* the limitation of "providing duration information," so it is not a requirement of claim 22. EX1012, ¶59. Nevertheless, *Shoham* and *Richardson* disclose or suggest this element. EX1012, ¶¶103, 112, (citing EX1018). *Shoham* suggests that the presentation heuristic may be different from the exploration heuristic, and that the presentation would passively monitor "the length of time which elapses while viewing a particular information source." EX1015, 8:61-9:8; *see also element [1.0] regarding further suggestions for the exploration heuristic to provide results for a sequential presentation heuristic*. But without details on how to accomplish these goals, a POSITA would have been motivated to look for implementation details in *Richardson*. EX1012, ¶¶105-13. A POSITA would have been motivated to turn to *Richardson*, in particular, given the overlap in technologies and *Richardson's* direct pertinence to the functions disclosed in *Shoham*. EX1012, ¶111.

Richardson discloses that its sequential show structure presents each resource for "a predetermined duration" (EX1016, 5:27-28, Fig. 4), provides detailed information on how to implement such timed presentations (EX1016, 9:11-12:48), and even describes how to provide the user the ability to pause, restart, or skip the current content (EX1016, 11:15-34), which would allow the system to accomplish *Shoham's* stated functions of monitoring how long a particular information resource

is viewed. In particular, *Richardson* discloses that each tour stop on its list has a tour stop descriptor that includes the domain address (corresponding to the *Shoham's* hyperlink) and "the durations of the stay at the stop and/or the durations of the associated media complements." EX1016, 9:46-49, 10:26-44 (reviewing the timer that is "used to track the duration of stay at each stop"), 11:35-44 (further details on the timer functions), claim 1 ("tour stop definitions, each of which includes a duration of stay at each tour stop"), Fig. 14 (highlighted below). A POSITA would have made such modifications (using *Richardson's* implementation details) for the reasons in Section X.C.

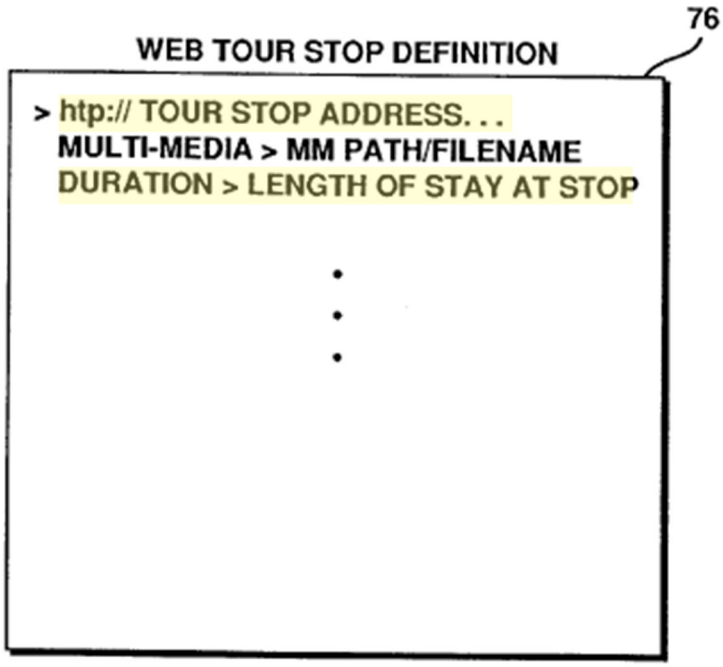


Figure 14

5. [22.4] *without requiring user input automatically accessing a plurality of said resources;*

Shoham discloses or suggests this element. EX1012, ¶103 (citing EX1018).

Shoham discloses ***automatically accessing a plurality of said resources*** with its disclosure of accessing resources to "present[] selected information resources to the user *based on a presentation heuristic,*" i.e., ***without user interaction.*** EX1015, 8:54-60 (emphasis added), 4:1-4, 10:45-48. *Shoham* provides the example that when the exploration and presentation heuristics are the same, it "presents all of the information resources selected by the exploration heuristic to the user." EX1015, 8:54-60*,* Fig. 1. *Shoham* also discloses that the exploration heuristic, which may be "the same [or] similar to" the presentation heuristic, executes "without intervention from the user." EX1015, 7:36-41, 8:54-60. *Shoham* also provides the example in Figure 4 of the entire process for accessing resources—after the entry of the user query at block 120 and setting of parameters at block 122—can be performed without user interaction, instead basing execution of its processes on "a predetermined number of selected resources, a predetermined time," or until receiving "an interrupt generated by the user of the system." EX1015, 8:63-9:42; 4:33-41 ("presenting resources to the user "based on a second heuristic").

If further disclosure is required, *Shoham* and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). *Richardson* provides implementation

details for ***automatically accessing a plurality of said resources*** using its "GuidedTour" controls that access resources to present content to the user based on processes that rely on timer functions to operate, i.e., ***without user interaction.*** EX1016, 11:35-44, 10:22-25, 11:56-12:11, 10:26-44, 12:49-59 (regarding the tokenization each tour stop definition to create a stream of tokens that continues "until all tokens have been processed," i.e., until each website in the list has been accessed and the content presented to the user according to the interactively variable default duration information), claims 1 and 3 (confirming claim 1 encompasses automatic web tours). A POSITA would have made such modifications for the reasons in Section X.C.

6. [22.5] *retrieving content corresponding to each of said accessed resources; and*

Shoham discloses or suggests this element. EX1012, ¶103 (citing EX1018).

Shoham discloses that "[d]uring presentation to the user, the information resource [(***content corresponding to each of said accessed resources***)] is ***retriev***ed and displayed via the user interface." EX1015, 10:45-48, 9:43-45 ("method for retrieval of hyperlinked information"), 4:1-4 ("retrieval of hyperlinked information resources"), 4:33-41, 8:54-60, 8:61-9:8.

If further disclosure is required, *Shoham* and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). *Richardson* provides implementation

details for its guided tour that describes how to forward the tour to the next stop to present the user with the information from that website, i.e., to ***retrieve content corresponding to each of said accessed resources***. EX1016, 11:35-44, 10:22-25, 11:56-12:11, 10:26-44, 12:49-59. A POSITA would have made such modifications for the reasons in Section X.C.

7. [22.6] ***automatically accessing and presenting said retrieved content through 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.***

Shoham and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). As described in Sections X.C, X.D.1, X.D.5, X.D.6, the ***automatically accessing and presenting said retrieved content through said user's computer*** is disclosed or at least suggested by *Shoham* and/or *Shoham* and *Richardson*. *E.g.,* EX1015, 10:45-48 ("[d]uring presentation to the user, the information resource is retrieved and displayed via the user interface"), 6:4-20, 8:39-55; EX1016, 2:5-14 ("connecting a client system to one or more websites in accordance with a web tour stop vector").

Shoham discloses that the information resources (***content***) identified by the exploration heuristic are ***access****ed* ***and present****ed* based on the presentation heuristic (***in accordance with said show structure***). EX1015, 4:33-41, 10:45-48, 8:54-60,

8:13-18. *Shoham* provides a real-time system where "[d]uring presentation to the user, the information resource is retrieved and displayed via the user interface," and discloses using "sequential" or "sequential/parallel" implementations as described in Section X.D.1 (***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*).** EX1015, 10:45-48, 7:44-64.

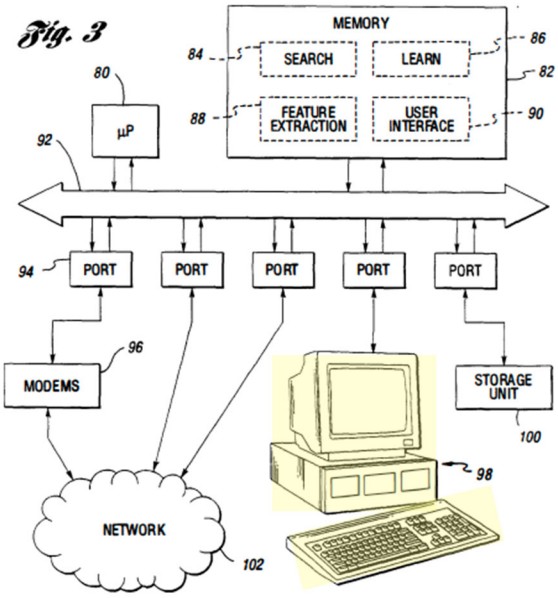
If further disclosure is required, *Shoham* and *Richardson* disclose or suggest this element. EX1012, ¶103 (citing EX1018). *Richardson* discloses "connecting a client system to one or more web sites in accordance with a web tour stop vector identifying the one or more web sites as tour stop(s) of a web guided tour" (***automatically accessing and presenting said retrieved content through said user's computer in accordance with said show structure***). EX1016, 2:5-14, 3:39-57, 9:46-49, Sections X.C, X.D.1, X.D.5, X.D.6. *Richardson* further discloses details of forwarding the tour from the current stop to the next stop (EX1016, 11:35-44, 10:22-25, 11:56-12:11, 10:26-44), and the tokenization each tour stop definition to create a stream of tokens that continues "until all tokens have been processed," i.e., until each website in the list has been accessed and the content presented to the user (EX1016, 12:49-59) (***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***). Furthermore, a POSITA would have been motivated to

continue to present the current webpage while accessing the next webpage because it would permit a smooth transition from one resource to the other, which would improve user friendliness because users do not like to wait for content to load. EX1012, ¶107. A POSITA would have understood that the current webpage should be displayed while accessing another webpage because a user would prefer to viewing a current page rather than a blank screen or other nonce page. EX1012, ¶108. Moreover, a POSITA would have recognized this to be one of a finite set of obvious options to try: (1) replace the current page with some kind of loading page, blank screen, or other nonce page while the next page is being accessed or (2) continue to display the current page while the next page is accessed and is ready to be displayed. *Id*. A POSITA would have proceeded with the second option. *Id*.

A POSITA would have made such modifications for the reasons in Section X.C.

E. Claim 23

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that "the information resource is retrieved and displayed [***causing said content to be presented***] via the user interface ***through said user's computer***. EX1015, 10:45-48, Fig. 3; EX1012, ¶103 (citing EX1018); *see also supra,* Section X.D.2 (regarding the disclosure of a remote user's computer).



EX1014, Fig. 3 (highlighting the user interface 98 shown as a computer).

If further disclosure is required, *Richardson* discloses that "a particular example of client web touring station 12 is a desktop ***computer***." EX1016, 3:49-57. A POSITA would have been motivated to combine *Shoham* and *Richardson* with a reasonable expectation of success for the reasons in Section X.C, and a POSITA would have been motivated to use the computer of *Richardson* for the user interface of *Shoham* at least because a computer interface is disclosed in *Richardson* as being capable of "accessing websites 16 on the Internet 10" and would include a "monitor" for presenting the content, allowing it to accomplish the goals of *Shoham* of presenting internet-accessed resources to the user. EX1016, 3:49-57; EX1012, ¶¶114, 116.

F. Claim 24

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 23*** (Sections X.D, X.E). *Shoham* and *Richardson* disclose or suggest the ***step of presenting said content*** (Section X.D.7) ***further comprises the step of providing duration information representing the duration that corresponding content to said resource is presented*** (Sections X.D.4, X.D.7) at least with *Richardson's* disclosure of providing "web tour definition 76," which includes "the durations of the stay at the stop and/or the durations of the associated media complements" to "web touring station 12." EX1016, 7:67-8:3, 9:44-49, 10:26-44, 11:35-44, claim 1, Fig. 14; EX1012, ¶103 (citing EX1018). A POSITA would have made such modifications for the reasons in Section X.C.

If ***providing*** duration information requires "presenting" or "displaying"—which is incorrect (*see* Section X.D.3)—a POSITA would have been motivated to present the duration information because it would allow the user to determine whether they wanted to skip to the next content (*e.g.*, if the current content was especially long and/or not particularly relevant) or finish watching (*e.g.*, if the current content was almost over). EX1012, ¶122. *Richardson* discloses that both the web stop address and the duration are provided to the user's web touring station as parts of the web tour stop definition (*e.g.*, EX1016, 7:67-8:3), and *Richardson* discloses that the tour stop address is displayed to the user (EX1016, 4:58-5:3, 7:36-

41, Figs. 4, 5, 14). Therefore, it would be a simple modification to display the duration information to the user as well, like the address is displayed. EX1012, ¶122; *see also* Section X.C.

G. Claim 25

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 24*** (Sections X.D-X.F). *Shoham* and *Richardson* further disclose or suggest ***providing duration information…representing the duration that corresponding content to said resources is presented.*** Section X.F; EX1012, ¶103 (citing EX1018). *Richardson* further discloses the duration information is ***interactively variable duration information*** because the system ***enable*****s** ***a user to vary said duration*** by using controls such as "pause" or "reload current stop" to stay longer, or to return the previous stop, skip to the next stop, or skip any other stop to shorten the stay at the current content. EX1016, 9:23-36, 9:46-49, 10:26-44, 10:45-53, Figs. 4, 12 (highlighted below). A POSITA would have made such modifications for the reasons in Section X.C.

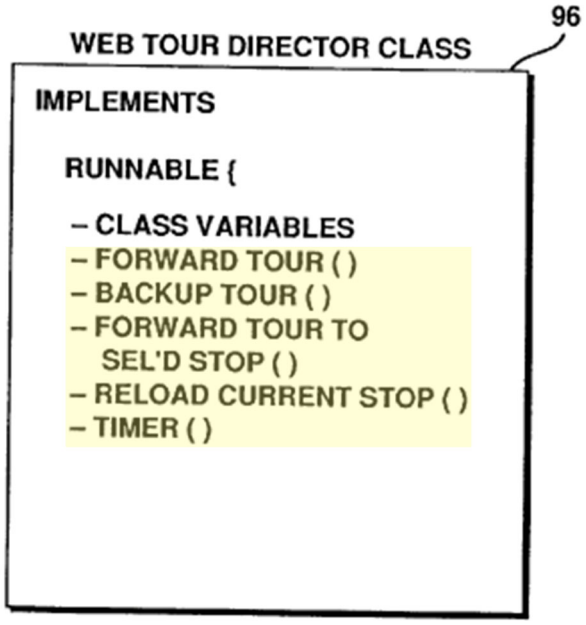


Figure 12

If ***providing*** requires "presenting" or "displaying"—which is incorrect (*see* Section X.D.3)—a POSITA would have presented ***interactively variable duration information*** for the reasons described in Section X.F (regarding the presentation of duration information).

H. Claim 26

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 25*** (Sections X.D-X.G). *Richardson* discloses ***providing an interactively variable duration information*** (Section X.G), and that such ***duration information…represent[s] the duration that corresponding content to said resource is presented*** (Sections X.F, X.D.4, X.D.7). EX1012, ¶103 (citing EX1018). *Richardson* discloses that ***duration information*** is provided ***for each of said***

accessed resources because "*[e]ach* tour stop descriptor entry includes…the durations of the stay at the stop." EX1016, 9:46-49, 10:26-44, Fig. 14, claim 1 ("each of which includes a duration of a stay at each tour stop"). A POSITA would have made such modifications for the reasons in Section X.C.

I. Claim 27

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D).

Shoham and *Richardson* disclose or suggest accessing internet webpages (***content***) from the internet. *See, e.g.,* Section X.D.5-X.D.7. As the '932 Patent recognizes, the process of accessing an internet webpage involves "downloading it from a server" before "presenting it to the user." EX1001, 13:50-51; EX1012, ¶123. Indeed, that would have been how internet webpages were accessed with a browser in the 1996 time-frame—to be displayed for the user, it must at least be downloaded into the browser's memory. EX1012, ¶123. *Shoham* similarly discloses "an actual implementation" that showed ***accessing said resources*** (Section X.D.5) using the internet to access a "proxy HTTP ***server***" (***residing within said communications network***) from which pages were accessed (***the file*** was ***downloaded***). *See, e.g.,* EX1015, 11:1-12:55. *Shoham* discusses accessing information from "various connected computers," "remote computers," and "computers accessed via network 102," which a POSITA would have understood to include servers in the context of

the disclosed internet network because content resources were often servers. EX1015, 5:54-55, 6:4-35; 6:27-29, 6:30-39, 7:14-15; EX1012, ¶124. And *Shoham* contemplates its accessed resources to include ***file***s. EX1015, 1:40-42.

If further disclosure is required, *Richardson* also describes how "media files…get rendered [at the user's computer] when stopping at tour stops," and a tour stop is accessed from a "web ***server***." EX1016, 6:20-36, 10:26-36, claim 1; EX1012, ¶¶103 (citing EX1018), 124-25. A POSITA would have understood that to render a file at the user's computer, it must be downloaded. EX1012, ¶125. A POSITA would have made such modifications for the reasons in Section X.C.

J. Claims 33-35

As shown above, *Shoham* and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that its hyperlinks [***nodes***] point to "various types of multimedia information [e.g., claim 33's ***video***], such as text 34 [i.e., claim 35's ***displayable content***], images 38 [e.g., claim 33's ***video*** and, i.e., claim 35's ***displayable content***], [claim 34's] ***audio***, and the like." EX1015, 5:66-6:4; EX1012, ¶103 (citing EX1018).

If further disclosure is required, *Richardson* discloses or suggests that its tour stops will identify "media files, such as [claim 34's] ***audio,*** [claim 35's] ***video*** [and claim 35's ***displayable content***], graphics [claim 35's ***displayable content***], and/or animation files [claim 35's ***displayable content***]." EX1016, 6:36-38; EX1012, ¶103

(citing EX1018). A POSITA would have made such modifications for the reasons in Section X.C.

K. Claim 36

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* discloses that ***said computer is a*** "mobile computer" (***mobile device***) (EX1015, 4:66, 5:54-58, 13:1-3; EX1012, ¶103 (citing EX1018)), and *Reisman* discloses that computers include "PDAs" connected to "wireless networks" (EX1016, 2:1-6). A POSITA would have made such modifications for the reasons in Section X.C.

L. Claim 37

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that the information ***resources*** (content) it accesses "on the Internet" is presented through said "user interface" (***user's computer***) using "an appropriate browser" (***a web browser***). EX1015, 12:37-39, 2:31-38, 4:20-32, 6:30-33, 6:64-67; EX1012, ¶103 (citing EX1018); *see also* Section X.D.2 (user's remote computer).

If further disclosure is required, *Richardson* discloses or suggests that its "***web*** touring station 12 is equipped with ***browser*** 52." EX1016, 6:1-3; EX1012, ¶103 (citing EX1018); *see also* Section X.D.2 (user's remote computer). A POSITA would have made such modifications for the reasons in Section X.C.

M. Claim 38

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that ***said user request comprises a*** "specific or generally query" (***search***) for content on "the hyperlinked network" such as the "internet" (***of accessible Internet content***). EX1015, 8:25-31, 8:45-47, 5:52-53, 6:30-33, 12:37-39; EX1012, ¶103 (citing EX1018).

N. Claim 39

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that ***said user request comprises a search of a website*** because a user can "enter specific or general query" to initialize the "exploration heuristic," which then searches the "internet," which includes "the World Wide Web," and the exploration heuristic returns results that enables its system to create nodes directed to "a web page." EX1015, 8:25-31, 8:45-47, 5:52-53, 6:30-33, 11:38-41; EX1012, ¶103 (citing EX1018).

O. Claim 40

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). *Shoham* further discloses that ***said user request comprises a search of a remote server*** because a user can "enter specific or general query" to initialize the "exploration heuristic," which then will search for collections that are "remotely accessed via a network," e.g., from "various connected computers" like

"computers 18 and 20." EX1015, 6:4-35, 5:54-55, 2:13-17, Fig. 1; EX1012, 103 (citing EX1018). A POSITA would have understood "various connected computers" to encompass servers at least because remote computers providing content on the internet were commonly servers. EX1012, ¶124 (citing EX1016, claim 1).

If further disclosure is required, *Richardson* discloses that its web tour stops (i.e., containing content provided via the internet) were accessed from "web ***servers***." EX1016, claim 1; EX1012, ¶103 (citing EX1018). A POSITA would have made such modifications for the reasons in Section X.C.

P. Claim 41

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 22*** (Section X.D). In one embodiment, *Shoham* discloses presenting all contents at one time (EX1015, 8:56-60), which gives users control over content order (allowing the user to pick which content to bring to the forefront). EX1012, ¶126. But when presenting individual contents and monitoring how much time the user spends at each (as *Shoham* discloses), a POSITA would have recognized that the benefits of providing users control over the presentation (similar to the control offered by presenting all content at once) could be accomplished with ***said show structure…presented to said user***. EX1012, ¶¶103 (citing EX1018), 126-27.

Indeed, *Richardson* provides its list of tour stops to give users control, which "facilitate[es] dynamic user modifications to how the tour is taken." EX1016, 7:36-

44. *Richardson* discloses the GUI "having a displayed list of the tour stops" (***show structure is presented to said user***) (EX1016, 7:36-44, 4:67-5:3, 10:18-19, Figs. 3-5), which allows the user to see the stops and make a informed choices when using the provided "next," "previous," "pause," and "forward" functionalities (*see, e.g.,* Section X.G). EX1012, ¶103 (citing EX1018).

A POSITA would have made such modifications for the reasons presented here and in Section X.C.

Q. Claim 42

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 41*** (Sections X.D and X.P). At least Figure 4 of *Richardson* (below) discloses that ***said show structure is presented to said user while said content is being delivered.*** EX1012, ¶103 (citing EX1018); EX1018, Fig. 4, 4:67-5:3 ("end user screens…of the user taking the first tour," "include[ing] four stops…40.").

A POSITA would have made such modifications for the reasons presented here and in Sections X.P and X.C.

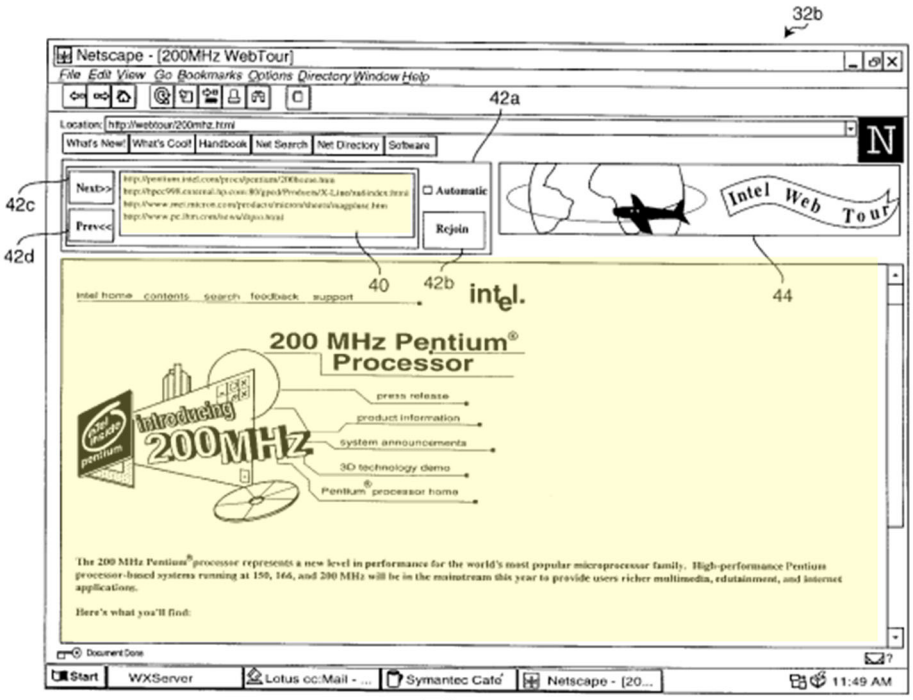


Figure 4

R. Claim 43

Shoham and *Richardson* disclose or suggest ***[t]he method in accordance with claim 41*** (Sections X.D and X.P). *Shoham* discloses its ***show structure includes a sequential path of nodes*** (Section X.D.1), e.g., using "sequential" or "sequential/parallel" processing to present results according to a presentation heuristic based on ranking such that the system can accomplish stated functions like passively acquiring feedback based on "the length of time which elapses while viewing a particular information resource." EX1015, 7:44-64, 8:13-18, 8:61-9-9, 6:40-59, Fig. 2; EX1012, ¶103 (citing EX1018); *see also* Section X.D.4 (show structure of nodes).

Richardson discloses further implementation details, describing its web tour (***show structure***) as a list of stops (***include***[ing] ***a sequential path of nodes***) so that the user is brought to "one tour stop at a time." EX1016, 5:37-47, 7:36-47, Figs. 3-5; EX1012, ¶103 (citing EX1018); *see also* Sections X.D.1, X.D.4 (disclosure of show structure of nodes).

A POSITA would have made such modifications for the reasons presented here and in Section X.C.

XI. SECONDARY CONSIDERATIONS

Secondary considerations are irrelevant to the anticipation Ground 1. *In re Wiggins*, 488 F.2d 538, 543 (C.C.P.A. 1973)

Unified is unaware of any evidence of secondary considerations.

Unified is aware,[8] however, that Robocast has made allegations that evidence exists. In publicly available documents for litigations involving the '932 Patent, Robocast has alleged that a 2001 Microsoft press release says that Robocast is "a 'pioneering Web company offering viewing automation tools for a variety of display devices.'" EX1024, 4. Robocast has made similar allegations in a litigation involving the '451 Parent-Patent. *E.g.,* EX1025, 3. Robocast did not include a copy of the press

[8] Unified does not concede that it had any duty to search for evidence, that its efforts were necessary, or that it has conducted an exhaustive search.

release and the link cited in the '451 complaints does not provide the release. *See, e.g.,* EX1024, EX1025. Moreover, the judge in '451 litigation called Robocast's arguments "thin." EX1026, 18. Therefore, even if Robocast's truncated quote about the *company* being pioneering is accurate, it fails to show any nexus to the claims, much less overcome the case for obviousness provided above. EX1012, ¶¶128-30.

XII. CONCLUSION

Petitioner respectfully requests that the Board institute trial and cancel Challenged Claims 1-9, 13-15, 17-18, 20, 22-27, and 33-43 as unpatentable.

Date: June 30, 2022

Respectfully Submitted,

/*Jessica L.A. Marks*/
Jessica L.A. Marks (Reg. No. 67,451)

Counsel for Petitioner

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

This Petition complies with the requirements of 37 C.F.R. § 42.24. As calculated by the word count feature of Microsoft Word, it contains 13,921 words, excluding the words contained in the following: Table of Contents, Table of Authorities, List of Exhibits, Mandatory Notices, Certification Under § 42.24(d), and Certificate of Service.

/*Jessica L.A. Marks*/
Jessica L.A. Marks (Reg. No. 67,451)

Counsel for Petitioner

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Petition for *Inter Partes* Review, the associated Power of Attorney, and Exhibits 1001-1029 are being served on June 30, 2022, by USPS Priority Express Mail at the following address of record for the subject patent.

Joseph Sofer, Esq.
IPSILON USA
110 W 40th Street
Suite 2001
New York, NY 10018

/Ashley F. Cheung/
Ashley F. Cheung
Paralegal
Unified Patents, LLC