

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

DODOTS LICENSING SOLUTIONS LLC,
Patent Owner

Inter Partes Review Case No. IPR2024-00143
U.S. Patent No. 8,020,083

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 8,020,083**

TABLE OF CONTENTS

I.	REQUIREMENTS FOR IPR.....	1
A.	Grounds for Standing.....	1
B.	Challenge and Relief Requested	1
C.	Claim Construction	2
1.	“networked information monitor” (“NIM”)	3
2.	“networked information monitor template”	4
D.	Level of Ordinary Skill in the Art.....	5
II.	SUMMARY OF THE ’083 PATENT	6
A.	Brief Description.....	6
B.	Prosecution History.....	7
III.	THE CHALLENGED CLAIMS ARE UNPATENTABLE	8
A.	[GROUNDS 1A/1B] – Claims 1-5 and 14-16 are rendered obvious by Brown [1A] and Claims 1-16 are rendered obvious by Brown and Wecker [1B]	8
1.	Overview of Brown	9
2.	Overview of Wecker	10
3.	Combination of Brown and Wecker	12
4.	Analysis	17
a)	Ground 1A (Brown)	18
b)	Ground 1B (Brown-Wecker).....	26
c)	Ground 1A (Brown)	41
d)	Ground 1B (Brown-Wecker).....	42
B.	[GROUND 2] – Claims 1-16 are rendered obvious by Shimada and Buchholz	52
5.	Overview of Shimada	52
6.	Overview of Buchholz.....	53
7.	Combination of Shimada and Buchholz	54
8.	Analysis	56
IV.	PTAB DISCRETION SHOULD NOT PRECLUDE INSTITUTION	84
A.	The <i>General Plastic</i> Factors Favor Institution.....	85

1.	Factor 1: Petitioner’s Multiple Petitions Do Not Prejudice Patent Owner	85
2.	Factors 2 and 3: Petitioner’s Knowledge of the Prior Art in the Samsung Petition Did Not Prejudice Patent Owner and Does Not Implicate Road-Mapping or Playbooking Concerns	86
3.	Factors 4 and 5: Petitioner Diligently Prepared This Joinder Petition at the Appropriate Time	86
4.	Factors 6 and 7: Institution Efficiently Promotes Patent Quality	87
B.	The <i>Fintiv</i> Factors Favor Institution	88
C.	The <i>Advanced Bionics</i> Test Favors Institution	88
V.	CONCLUSION.....	89
VI.	MANDATORY NOTICES UNDER 37 C.F.R. § 42.8(a)(1)	90
A.	Real Party-In-Interest.....	90
B.	Related Matters	90
C.	Lead and Back-Up Counsel	91
D.	Service Information	91
E.	PAYMENT OF FEES.....	91

APPENDIX OF EXHIBITS

Exhibit 1001	U.S. Patent No. 8,020,083 to Kembel, et al. (“the ’083 Patent”)
Exhibit 1002	Excerpts from the Prosecution History of the ’083 Patent (“the Prosecution History”)
Exhibit 1003¹	Declaration of Dr. Douglas C. Schmidt
Exhibit 1004	Curriculum Vitae of Dr. Douglas C. Schmidt
Exhibit 1005	U.S. Patent No. 6,278,448 B1 (“Brown”)
Exhibit 1006	U.S. Patent No. 6,449,638 B1 (“Wecker”)
Exhibit 1007	U.S. Patent No. 5,793,368 (“Beer”)
Exhibit 1008	U.S. Patent No. 6,789,263 B1 (“Shimada”)
Exhibit 1009	U.S. Patent No. 6,088,340 (“Buchholz”)
Exhibit 1010	U.S. Patent No. 6,819,345 B1 (“Jones”)
Exhibit 1011	<i>HTML 4 Unleashed</i> (“Darnell”)
Exhibit 1012	IPR2019-01278 Final Written Decision
Exhibit 1013	U.S. Patent No. 6,342,907 B1 (“Petty”)
Exhibit 1014	<i>Lenovo Holding Company, Inc. v. DoDots Licensing Solutions LLC</i> , No. 2021-1247, 2021 WL 5822248 (Dec. 8, 2021).
Exhibit 1015	U.S. Patent No. 6,311,058 B1 (“Wecker 2”)
Exhibit 1016	U.S. Patent No. 5,737,560 (“Yohanan”)
Exhibit 1017	CNET News, “PointCast unveils free news service,” https://web.archive.org/web/20110616130215/http://news.cnet.com/PointCast-unveils-free-news-service/2100-1023_3-204658.html , last accessed Feb. 16, 2023
Exhibit 1018	Declaration of June Ann Munford
Exhibit 1019	<i>DoDots Licensing Solutions LLC v. Samsung Electronics Co., Ltd. et al.</i> , 6:22-cv-00535, W.D. Tex., filed May 24, 2022
Exhibit 1020	<i>DoDots Licensing Solutions LLC v. Apple Inc.</i> , W-22-CV-00533-ADA, W.D. Tex., Order Granting Defendant’s Motion to Transfer Issued July 25, 2023
Exhibit 1021	<i>DoDots Licensing Solutions LLC v. Apple Inc.</i> , W-22-CV-00533-ADA, W.D. Tex., Report to USPTO re Transfer Decision

¹ Petitioner notes that because Dr. Schmidt’s declaration remains unchanged, the citations within the declaration retain the same exhibit numbers but use the original prefixes (e.g., SAMSUNG).

Exhibit 1022	<i>DoDots Licensing Solutions LLC v. Apple Inc.</i> , W-22-CV-00533-ADA, W.D. Tex., DoDots Motion to Waive Confidentiality Requirements
---------------------	---

LISTING OF CHALLENGED CLAIMS

Claim 1	
[1pre]	A client device, the client device comprising:
[1.1]	electronic storage having stored thereon a plurality of networked information monitor templates defining a plurality of networked information monitors, the plurality of networked information monitor templates comprising a first networked information monitor template defining a first networked information monitor, wherein the first networked information monitor template comprises:
[1.2]	a content reference that comprises a network location at which content for the first networked information monitor is accessible via a TCP/IP protocol;
[1.3]	a definition of a graphical user interface of the first networked information monitor that lacks controls for manually navigating a network, and that includes a frame within which content received from the network location can be displayed, and frame characteristics defining one or more a color, a size, or a position on the electronic display of the frame; and
[1.4]	instructions configured (i) to cause the first networked information monitor to request content from the network location in the content reference via the TCP/IP protocol, and (ii) to cause the first networked information monitor to generate the graphical user interface of the first networked information monitor with the content received from the network location via the TCP/IP protocol within the frame;
[1.5]	an electronic display; and
[1.6]	one or more processors configured to access the first networked information monitor template, and to execute the first networked information monitor template such that the graphical user interface of the first networked information monitor is presented to a user on the electronic display having content received from the content reference therein.

Claim 2	
[2]	The client device of claim 1, wherein the first networked information monitor template further comprises control characteristics that define one or more controls that are usable by the user to interact with or control the first networked information monitor.
Claim 3	
[3]	The client device of claim 2, wherein the control characteristics define visual representations of the controls that are included in the graphical user interface of the first networked information monitor.
Claim 4	
[4.1]	The client device of claim 1, wherein the plurality of networked information monitor templates further comprises a second networked information monitor template defining a second networked information monitor, wherein the second networked information monitor template comprises:
[4.2]	a second content reference that comprises a second network location, which is different from the network location in the content reference of the first networked information monitor template, at which content for the second networked information monitor is accessible via the TCP/IP protocol; and
[4.3]	a definition of a graphical user interface of the second networked information monitor that lacks controls for manually navigating a network, and that includes a second frame within which content received from the second network location can be displayed; and
[4.4]	instructions configured (i) to cause the second networked information monitor to request content from the second network location in the second content reference via the TCP/IP protocol, and (ii) to cause the second networked information monitor to generate the graphical user interface of the second networked information monitor with the content received from the second network location via the TCP/IP protocol within the frame.

Claim 5	
[5]	The client device of claim 4, wherein the one or more processors are further configured to execute the second networked information monitor template such that the graphical user interface of the second networked information monitor is presented to the user on the electronic display separately and discretely from the user interface of the first networked information monitor, and having content therein received from the second content reference.
Claim 6	
[6]	The client device of claim 1, wherein the one or more processors are further configured to transmit a request to a server for a further networked monitor template responsive to reception of a user request for a further networked information monitor defined by the further networked information monitor template.
Claim 7	
[7]	The client device of claim 6, wherein the electronic storage is configured to electronically store the received further networked information monitor template, responsive to reception of the further networked information monitor template from the server.
Claim 8	
[8]	The client device of claim 7, wherein the one or more processors are further configured to execute the further networked information monitor template.
Claim 9	
[9pre]	A computer-implemented method of presenting Internet content to a user, the method being implemented in a client device comprising a electronic storage, an electronic display, and one or more processors, the method comprising:

[9.1]	storing to the electronic storage a plurality of networked information monitor templates defining a plurality of networked information monitors, the plurality of networked information monitor templates comprising a first networked information monitor template defining a first networked information monitor, wherein the first networked information monitor template comprises:
[9.2]	a content reference that comprises a network location at which content for the first networked information monitor is accessible via a TCP/IP protocol; and
[9.3]	a definition of a graphical user interface of the first networked information monitor that lacks controls for manually navigating a network, and that includes a frame within which content received from the network location can be displayed, and frame characteristics defining one or more a color, a size, or a position on the electronic display of the frame; and
[9.4]	instructions configured (i) to cause the first networked information monitor to request content from the network location in the content reference via the TCP/IP protocol, and (ii) to cause the first networked information monitor to generate the graphical user interface of the first networked information monitor with the content received from the network location via the TCP/IP protocol within the frame;
[9.5]	accessing the first networked information monitor template in the electronic storage; and
[9.6]	executing the first networked information monitor template on the one or more processors such that the graphical user interface of the first networked information monitor is presented to the user on the electronic display having therein content received from the content reference.

Claim 10	
[10]	The method of claim 9, wherein the first networked information monitor template further comprises control characteristics that define one or more controls that are usable by the user to interact with or control the first networked information monitor.
Claim 11	
[11]	The method of claim 10, wherein the control characteristics define visual representations of the controls that are included in the graphical user interface of the first networked information monitor.
Claim 12	
[12.1]	The method of claim 9, wherein the plurality of networked information monitor templates further comprises a second networked information monitor template defining a second networked information monitor, wherein the second networked information monitor template comprises:
[12.2]	a second content reference that comprises a second network location, which is different from the network location in the content reference of the first networked information monitor template, at which content for the second networked information monitor is accessible via the TCP/IP protocol; and
[12.3]	a definition of a graphical user interface of the second networked information monitor that lacks controls for manually navigating a network, and that includes a second frame within which content received from the second network location can be displayed; and

[12.4]	instructions configured (i) to cause the second networked information monitor to request content from the second network location in the second content reference via the TCP/IP protocol, and (ii) to cause the second networked information monitor to generate the graphical user interface of the second networked information monitor with the content received from the second network location via the TCP/IP protocol within the frame.
Claim 13	
[13]	The method of claim 12, further comprising executing the second networked information monitor template on the one or more processors such that the graphical user interface of the second networked information monitor is presented to the user on the electronic display separately and discretely from the user interface of the first networked information monitor, and having content therein received from the second content reference.
Claim 14	
[14]	The method of claim 9, further comprising transmitting a request to a server for a further networked information monitor template responsive to reception of a user request for a further networked information monitor defined by the further networked information monitor template.
Claim 15	
[15]	The method of claim 14, further comprising, responsive to reception of the further networked information monitor template from the server, storing the received further networked information monitor template to the electronic storage.
Claim 16	
[16]	The method of claim 15, further comprising executing the further networked information monitor template on the one or more processors.

Apple Inc. (“Petitioner” or “Apple”) petitions for *inter partes* review (“IPR”) of claims 1-16 (“the Challenged Claims”) of U.S. Patent No. 8,020,083 (“the ’083 Patent”).

I. REQUIREMENTS FOR IPR

A. Grounds for Standing

Apple certifies that the ’083 Patent is available for IPR. This petition is being filed within one month of Decision instituting Inter Partes Review in *Samsung Electronics Co., Ltd., v. DoDots Licensing Solutions LLC*, Inter Partes Review No. IPR2023-00621. Apple is not barred or estopped from requesting review of the Challenged Claims on the below-identified grounds.

B. Challenge and Relief Requested

Apple requests an IPR of the Challenged Claims on the grounds noted below. Dr. Douglas C. Schmidt provides supporting testimony in his Declaration. EX1003, ¶¶1-181.

Ground	Claims	Basis
1A	1-5, 9-13	§ 103: Obvious over Brown
1B	1-16	§ 103: Obvious over Brown in view of Wecker
2	1-16	§ 103: Obvious over Shimada in view of Buchholz

The '083 Patent claims priority to a U.S. patent application filed on April 26, 2000, as well as to a number of provisional applications, the earliest of which was filed on April 26, 1999. EX1001, Cover. Solely for purposes of evaluating prior art in this proceeding and without conceding the propriety of these priority claims, this Petition will treat April 26, 1999, as the earliest alleged effective filing date (“Critical Date”). The references relied on in the above grounds qualify as prior art to the '083 Patent at least under Pre-AIA §102(e) as indicated in the table below.

Reference	Publication Date	Filing Date
Brown	08/21/2001	02/17/1998
Wecker	09/10/2002	06/30/1998
Shimada	09/07/2004	06/18/1997
Buchholz	07/11/2000	06/23/1998

C. Claim Construction

Petitioner submits that all claim terms should be construed according to the *Phillips* standard. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005); 37 C.F.R. §42.100. Under the *Phillips* standard, the “words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Computer Entertainment America LLC*, 669 F. 3d 1362, 1366 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1313). Petitioner submits that all claim terms should be given their ordinary and customary meaning in the context of the

specification under the *Phillips* standard as detailed in the relevant sections below, except that Petitioner provides the following discussion to aid the Board in interpreting the following terms.²

1. “networked information monitor” (“NIM”)

For the purposes of the present proceeding, this term, which appears in claims 1-6 and 9-14, should be construed to mean “a fully configurable frame, with one or more controls, through which content is presented to the user.” EX1003, ¶28. This definition is consistent with the use of the term in the specification of the ’083 patent. *See, e.g.*, EX1001, 5:41-44 (“the term Application Media Package refers to a component which includes a **fully configurable frame** with **one or more controls**; the frame through which **content is optionally presented.**”); *see also id.*, 8:32-33; 12:12-13. Moreover, in IPR2019-01278, Patent Owner explained that “application media package” means “networked information monitor.” EX1012, Page 9. Thus, for purposes of this IPR, Petitioner adopts Patent Owner’s construction of networked information monitor, which was adopted in IPR2019-01278. EX1012, Page 10; EX1014, *3-4; EX1003, ¶28.

² Petitioner does not concede that the challenged claims meet all statutory standards. Patentability under §101 or compliance with §112 is not appropriate to resolve in IPR, and Petitioner reserves all rights to challenge claims for reasons out of scope for IPR.

2. “*networked information monitor template*”

For the purposes of the present proceeding, this term, which appears in claims 1-2, 4-10, and 12-16, should be construed to mean “a data structure that defines the characteristics of a NIM, including the NIM frame, view, and control characteristics, and that excludes executable applications/compiled code.” EX1003, ¶29. This definition is consistent with the use of the term in the specification of the ’083 Patent. *See, e.g.*, EX1001, 7:19-23 (“[e]ach Application Media Package template defines the characteristics of a specific Application Media Package, including fully configurable frame characteristics, viewer and control characteristics, and Application Media Package content references.”); *see also id.*, 24:12-14. Additionally, the ’083 Patent states, “[u]nlike a downloadable, custom, client-application (*e.g.*, for delivering custom web applications to users’ desktops), an Application Media Package is entirely content. That is, the entirety of a Dot package, referred to as its definition, is in a browser-readable language.” *Id.*, 8:53-57. The ’083 Patent further states that a Dot definition “is content, rather than For the purposes of the present proceeding, this term, which appears in claims 1-2, 4-10, and 12-16, should be construed to mean “a data structure that defines the characteristics of a NIM, including the NIM frame, view, and control characteristics, and that excludes executable applications/compiled code.” EX1003, ¶29. This definition is consistent with the use of the term in the specification of the ’083 Patent. *See, e.g.*,

EX1001, 7:19-23 (“[e]ach Application Media Package template defines the characteristics of a specific Application Media Package, including fully configurable frame characteristics, viewer and control characteristics, and Application Media Package content references.”); *see also id.*, 24:12-14. Additionally, the ’083 Patent states, “[u]nlike a downloadable, custom, client-application (e.g., for delivering custom web applications to users’ desktops), an Application Media Package is entirely content. That is, the entirety of a Dot package, referred to as its definition, is in a browser-readable language.” *Id.*, 8:53-57. The ’083 Patent further states that a Dot definition “is content, rather than compiled code.” *Id.*, 14:34-35. According to Patent Owner in IPR2019-01278, a networked information monitor template “is not compiled code, and cannot be an executable application or applet.” EX1012, Page 9. Thus, for purposes of this IPR, Petitioner adopts Patent Owner’s construction of networked information monitor template, which was adopted in IPR2019-01278. EX1012, Page 13; EX1014, *3-4; EX1003, ¶29.

D. Level of Ordinary Skill in the Art

A person of ordinary skill (“POSITA”) relating to the subject matter of the ’083 Patent would have had (1) a bachelor’s degree in computer science, computer engineering, electrical engineering, or a related field, and (2) at least three years of corresponding industry work experience. EX1003, ¶¶20-21. Additional graduate education could substitute for professional experience, or significant experience in

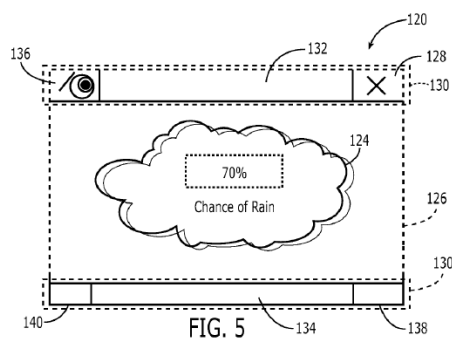
the field could substitute for formal education. *Id.* This definition is consistent with the previous definition of a POSITA adopted in IPR2019-01278.

EX1012, Page 18.

II. SUMMARY OF THE '083 PATENT

A. Brief Description

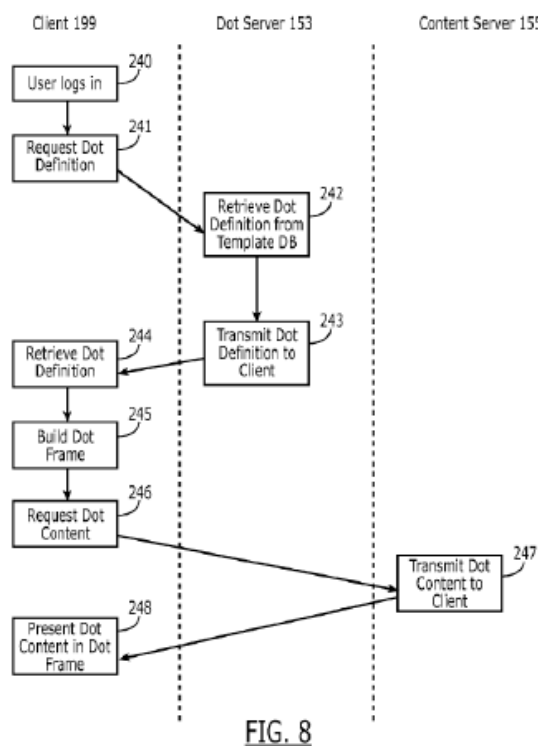
The '083 Patent is directed to “accessing and viewing internet content” through a plurality of software “application media packages,” which the '083 Patent also refers to as “networked information monitors” or “Dots.” EX1001, Abstract. The '083 Patent discloses that application media packages include “a definition for rendering a graphical user interface and a URL pointing to Internet content to be downloaded and presented within said user interface.” *Id.* Figure 5 below provides an example of an application media package according to the '083 Patent.



EX1001-FIG. 6

Application media packages are executed “on a non-browser-based installed client application.” EX1001, 3:52-53. This client application is referred to as an

“Application Media Viewer or Home Dot,” which “executes independently from a web browser.” EX1001, 3:54-55. The Application Media viewer “parses and executes the Application Media Package code to create the user experience.” EX1001, 3:56-57. Figure 8 provides an example process of downloading and parsing an application media package according to the ’083 Patent.



EX1001, FIG. 8

B. Prosecution History

The ’083 application was allowed after two Office Actions, which presented rejections over prior art references that are substantially different from those relied upon in this petition. EX1002, 105-119, 141-147. Indeed, during prosecution, the

examiner did not consider any of Brown, Wecker, Shimada, and Buchholz, which render the Challenged Claims obvious, as discussed below.

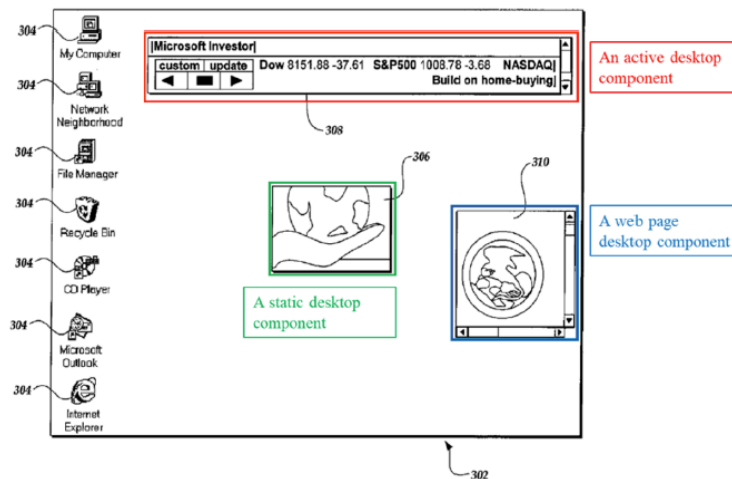
III. THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. [GROUNDS 1A/1B] – Claims 1-5 and 14-16 are rendered obvious by Brown [1A] and Claims 1-16 are rendered obvious by Brown and Wecker [1B]

Below, the Petition presents a first ground based on Brown alone and a second ground based on the combination of Brown and Wecker. In the first ground [1A], the Petition relies on the disclosure of Brown and explains why Brown's disclosure, when interpreted in view of the general knowledge of a POSITA, renders obvious claims 1-5 and 9-13. In the second ground [1B], the Petition relies on the same disclosure of Brown and explanation of obviousness as presented in the first ground [1A], but turns to Wecker's disclosure for a single feature of claim 1 (**“electronic storage having stored thereon a plurality of networked information monitor templates”**) and features of claims 6-8 and 14-16. Although all of the features of claim 1 are rendered obvious by Brown alone as explained below, Petitioner has advanced a combination of Brown and Wecker for claim 1 to the extent Patent Owner argues that the single feature of claim 1 is not explicit in Brown. Because the use of Brown's disclosure and corresponding obviousness arguments are similar for both grounds [1A/1B], the Petition discusses these grounds together for ease of presentation. EX1003, ¶43.

1. Overview of Brown³

Brown describes “a method of creating a composite desktop built from Web content retrieved from one or more Web sites.” EX1005, Abstract. Brown’s composite desktop includes components, which can be “a static image or an active desktop component providing dynamic content.” *Id.*, Abstract; EX1003, ¶30.



EX1005, FIG. 3A (annotated)

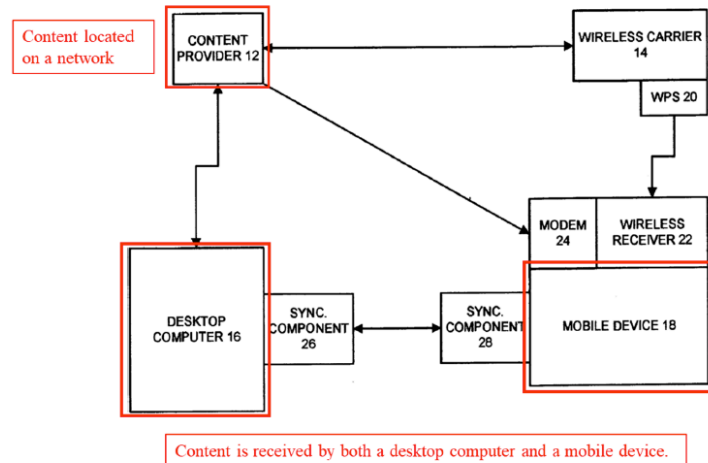
As shown in FIG. 3A (above), Brown’s “composite desktop 302 includes one or more desktop components,” where each “desktop component is a distinct geometric region that displays a single piece of Web-based content.” EX1005, 7:21-23. Brown describes that “the component may be selected from a Web page, within which the component is embedded.” EX1005, 7:40-41; EX1003, ¶31.

³ Descriptions of the references and combinations thereof are incorporated into each mapping that includes citations to these references. All emphasis is added unless otherwise indicated.

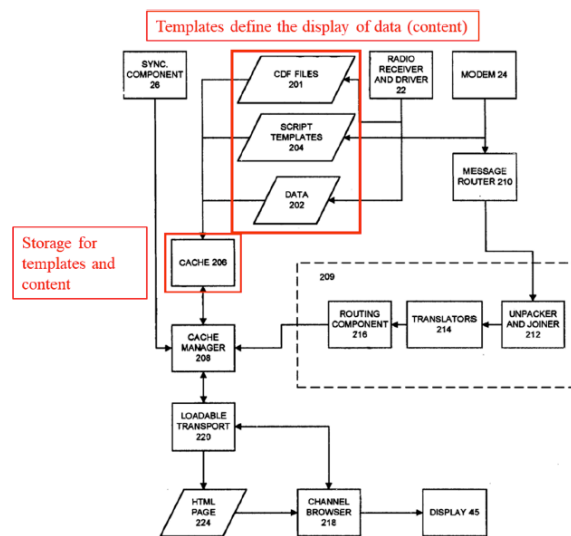
Brown also describes desktop component instructions, which “include a URL specifying an Internet location where additional HTML code corresponding to the active desktop component 308 resides.” EX1005, 13:1-4. In some cases, these HTML instructions include “a URL corresponding to a CDF file.” *Id.*, 13:4-5. Brown explains that Channel Definition Format (CDF) “files are used to implement ‘subscriptions’ in which information is regularly retrieved and updated within the active desktop component 308,” noting that “[t]he use of CDF files is known to those skilled in the art of Web page construction.” *Id.*, 13:5-9; EX1003, ¶32.

2. *Overview of Wecker*

Wecker describes “a method for rendering information,” the information including “a content structure file, a data file and a script file.” EX1006, Abstract; EX1003, ¶33. Wecker describes that “the content structure file is read to ascertain which script in the script file is associated with data to be rendered.” *Id.* Thereafter, “[t]he data from the data file is retrieved and the associated script file is executed to render the data.” *Id.*



EX1006, FIG. 1 (annotated)



EX1006, FIG. 6 (annotated)

Wecker describes that “the content is provided in a standard format, such as HTML, JPEG, GIF, WAV, etc.” and that “[t]he web content is also preferably described in a content structure file also known commonly as a channel definition format (CDF) file.” EX1006, 3:2-6; EX1003, ¶34. Wecker further describes:

“a single portion of content (such as a web page or a web site) is referred to herein as a mobile channel. A mobile channel is a self describing web site that contains all the information necessary for efficient download of web content to mobile device 18. Three components are provided in a preferable mobile channel. The components include a channel definition format (CDF) file, a set of script files to render the channel, and a set of data files to be rendered.” EX1006, 3:6-14; EX1003, ¶34.

3. *Combination of Brown and Wecker*

A POSITA would have found it obvious to combine Brown and Wecker (collectively the “Brown-Wecker combination”). EX1003, ¶35. Among other things, both Brown and Wecker are generally directed to “accessing and viewing internet content” and further describe the use of Microsoft’s channel definition format (CDF) to implement subscriptions to internet content, with Brown explicitly directing the reader toward additional references that discuss CDF. EX1005, Abstract, 13:4-13, 13:39-44; EX1006, Abstract, 3:1-16; EX1003, ¶35. Given the similarity of the disclosures, and spurred by Brown’s directive, a POSITA would have found it obvious to consider Wecker’s disclosure in the context of Brown’s system for multiple reasons. For example, as Dr. Schmidt explains, a POSITA would have found it obvious to leverage Wecker’s disclosure of a cache to store HTML style templates. A POSITA also would have found it obvious that Brown’s desktop components could be implemented as mobile channels, such that a user could

download desktop components, and their associated HTML instructions, to their composite desktop. EX1005, 7:21-23; EX1006, 3:6-14; EX1003, ¶35.

As Dr. Schmidt explains, a POSITA would have been motivated to combine Brown and Wecker for various reasons. EX1003, ¶36.

First, a POSITA would have recognized that Wecker's mobile channel "script files," also referred to as "templates," are data structures that are similar in objective to the "HTML instructions" that define Brown's "desktop components." EX1005, 12:61-62; EX1006, 3:17-20; EX1003, ¶37. Indeed, Wecker describes that "the users of **desktop 16** can preferably subscribe to channels in a standard fashion which provide the user with certain channel content" and that the desktop can "periodically retrieve or receive new and updated script, data and CDF files." EX1005, 3:63-66, 4:3-6; EX1003, ¶37. A POSITA would have recognized or found obvious that the "desktop," as contemplated by Wecker, would have possessed similar features to the "composite desktop" of Brown and that these features of Wecker's desktop could be incorporated into Brown with a reasonably high expectation of success. EX1003, ¶37.

A POSITA would have been prompted to pursue this combination because doing so is merely the application of known techniques (e.g., rendering content using templates/script files) to a known structure (e.g., Brown's composite desktop) to yield predictable results. EX1003, ¶38; see also *KSR Int'l Co. v. Teleflex Inc.*, 550

U.S. 398, 417 (2007) (a supposed invention that “simply arranges old elements with each performing the same function it had been known to perform” is obvious). Additionally, both Brown and Wecker describe the Windows 95 operating system as a suitable operating system that can implement their techniques. EX1005, 6:26-32; EX1006, 8:15-21. Finally, both Brown and Wecker are assigned to the “Microsoft Corporation” and, therefore, a POSITA would have reasonably expected their techniques to be compatible as the assignee would have been motivated by business reasons to provide commonality between their products. EX1005, Cover; EX1006, Cover. Thus, as Dr. Schmidt explains, a POSITA would have had a reasonable expectation of success in implementing Wecker’s techniques into the disclosure of Brown. EX1003, ¶38.

Second, a POSITA would have recognized or found obvious that, because Brown’s desktop components are retrieved from “remote computers,” such components would also be accessed via Wecker’s “wireless push server” or “remote computer.” EX1005, 4:16-21; EX1006, 3:34-38, 7:55-63; EX1003, ¶39. In fact, Wecker describes that a “user typically runs the same types of applications on both the desktop computer and on the mobile device.” EX1006, 1:39-44; EX1003, ¶39. A POSITA would have recognized or found obvious from this disclosure that the “composite desktop” taught by Brown would have been compatible with certain features of the interfaces running on mobile devices, as contemplated by Wecker.

EX1005, 4:13-19; EX1003, ¶39. Indeed, Brown describes that its techniques may be practiced in “other computer system configurations, including **hand-held devices**.” EX1005, 4:44-49; EX1003, ¶39.

A POSITA would have been prompted to pursue this combination because doing so is merely the application of known techniques (e.g., rendering content using templates/script files) to a known structure (e.g., Brown’s composite desktop) to yield predictable results. EX1003, ¶40; see also *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) (a supposed invention that “simply arranges old elements with each performing the same function it had been known to perform” is obvious). Additionally, Wecker describes that “Windows CE” is a suitable operating system upon which to implement its techniques, and that this operating system is made available by the “Microsoft Corporation” – the assignee of Brown. EX1005, Cover; EX1006, 5:30-32. Finally, both Brown and Wecker are assigned to the “Microsoft Corporation” and, therefore, a POSITA would have reasonably expected their techniques to be compatible as the assignee would have been motivated by business reasons to provide commonality between their products. EX1005, Cover; EX1006, Cover. Thus, as Dr. Schmidt explains, a POSITA would have had a reasonable expectation of success in implementing features of Wecker into Brown’s composite desktop. EX1003, ¶40.

The publications thus detail various aspects of the similar technology employed by Brown and Wecker and provide an explicit motivation to combine. *Cimline, Inc. v. Crafcro, Inc.*, 413 F. App'x 240, 245 (Fed. Cir. 2011) (for determining if there is a motivation to combine a “fact finder may rely on the prior art references themselves...”). Aside from the express teaching to combine, a motivation to combine may be found based on the “background knowledge, creativity, and common sense of [a] person of ordinary skill.” *Cimline Inc.*, 413 F. App'x 240, 245.

Moreover, a POSITA would have been motivated to combine Wecker with Brown to improve data transfer times, increase usability, standardize interfaces across different devices, reduce client-side storage requirements, and/or to capitalize on the growing need to display internet content in a customizable way. EX1003, ¶41. Wecker explains that, “[b]y separating the script from the data in the web content, web content can be transmitted to mobile device 18 over very low bit rate channels” and that, “since an individual file is typically much smaller than the script files, the data can be updated quite frequently, giving the user of mobile device 18 updated web content information, without transmitting new script.” EX1006, 4:53-62. Indeed, Wecker describes a co-pending application (now US Patent – hereafter referred to as “Wecker 2”) directed to “delivering data content over a low bit rate transmission channel.” EX1006, 3:26-31; EX1015, Cover. Wecker 2 describes:

“[t]he bit rate of conventional wireless channels is very low. Thus, the delivery of very large content ... is highly impractical. One conventional type of approach to delivering such information is to rewrite the content into a device friendly format, such as HTML.” EX1015, 2:3-9.

Wecker 2 also describes, like Brown and Wecker, that “[i]n some prior applications, [a] mobile device is used in conjunction with a desktop computer.” EX1005, 4:44-49; EX1006, 1:39-44; EX1015, 1:46-47; EX1003, ¶41. Additionally, Brown cites a U.S. Patent (hereafter referred to as “Yohanan”) directed to “accessing information on a communications network” that provides motivation to improve the usability of graphical displays that present internet content. EX1005, Cover; EX1016, Cover. Yohanan describes that “[i]ncreased accesses by individual users on a day-to-day basis demands a more efficient method for accessing network locations. What is needed is a convenient method to access network locations without having to open a browser and key-in the desired site's URL.” EX1016, 2:18-23.

For at least these reasons, a POSITA would have been motivated to combine Brown and Wecker and consider their disclosures together. EX1003, ¶42.

4. *Analysis*

[1pre]

To the extent the preamble is limiting, Grounds 1A and 1B render [1.pre] obvious. For example, Brown describes “a computer-based system for controlling

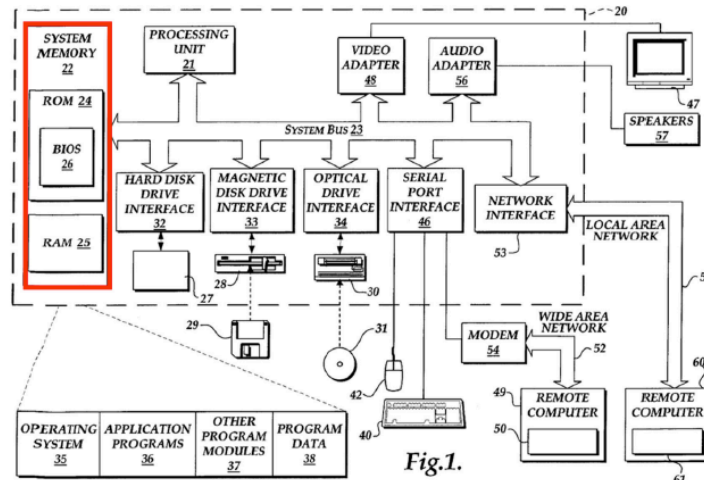
the display of elements on a desktop,” and a “computer-based method of creating a composite desktop built from Web content,” and also that “an operating system user interface shell program executes on a computer, preferably a general purpose personal computer.” EX1005, 2:54-57, 4:32-40, Claim 15. A POSITA would have understood or found obvious that “a computer-based system” includes a “client device,” as a computer is frequently referred to as a “client.” *Id.*; EX1003, ¶¶44-45. Indeed, the ’083 Patent refers to a “client computer.” EX1001, see at least 2:5, 2:29, 5:54, 6:9, 6:66.

[1.1]

a) Ground 1A (Brown)

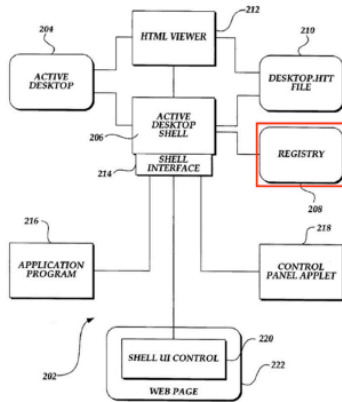
Brown discloses “a general purpose computing device” that includes a “system memory.” EX1005, 4:54-58. As Dr. Schmidt explains, a POSITA would have understood or found obvious that Brown’s system memory is a form of “**electronic storage**” because a POSITA would have understood that memory is an example of electronic storage. EX1003, ¶46. Indeed, the ’083 Patent refers to “memory 30” within “computer 20.” EX1001, see at least 6:30-38. Additionally, both Beer and Petty, two references directed to the display of content using style templates, refer to “memory” as a form of “storage.” EX1007, Abstract, 3:54-55, 13:30-32; EX1013, Abstract, 6:7-12, 7:60-61, FIG. 1. An annotated figure is

presented below that displays the different forms of electronic storage within Brown's computing device.

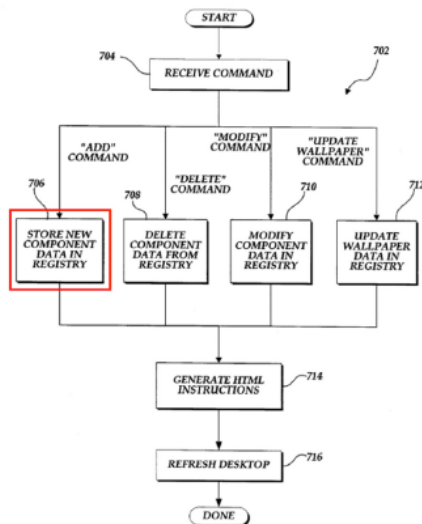


EX1005, FIG. 1 (annotated)

Brown's computing device also includes a "registry," which it describes as "a mechanism for storing program data, and preferably includes **one or more files on a persistent storage medium** and associated code for accessing the data." EX1005, 6:20-26, FIG. 2, FIG. 6. Brown describes that each of the HTML instructions are stored in the registry "in an HTML file, referred to as the desktop. htt file 210." EX1005, 6:35-36, 14:8-9; EX1003, ¶47. Annotated figures showing the registry in Brown's computing device are presented below.



EX1005, FIG. 2 (annotated)



EX1005, FIG. 6 (annotated)

A POSITA also would have understood or found obvious that these various forms of storage would be capable of storing files, like “templates,” because it was well known as of the critical date that HTML files could be stored in a form of “**electronic storage.**” EX1003, ¶48. For example, Beer describes a system for “allowing a user to retrieve a user interface and a visual style from a **local** or remote

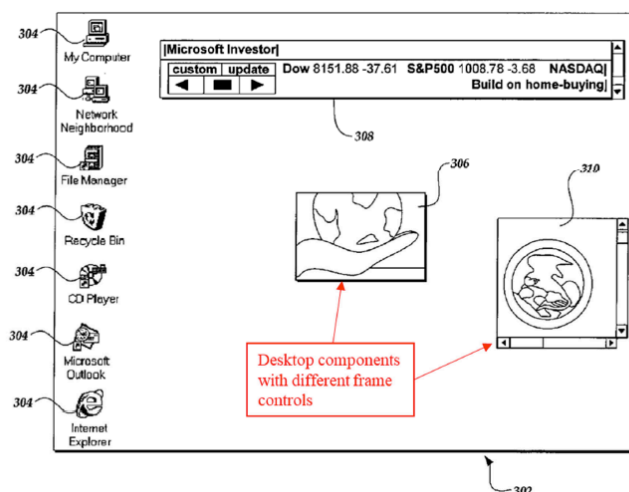
storage unit, [and] ... display the visual stylized user interface.” EX1007, 2:9-15. Beer describes “personal computers” running, for example, the “Windows 95 [operating system]” which a POSITA would have recognized or found obvious to be similar to Brown’s “general purpose computing device.” EX1005, 4:54-58; EX1007, 1:15-40; EX1003, ¶48. Beer discloses that its computers contain “**at least one data storage system** (including volatile and non-volatile memory and/or storage elements, any of **which may be local** or accessible via a network)” and that HTML styles “can be loaded from a **local storage unit**.” EX1007, 3:41-49, 3:54-55, 13:30-32.

Brown describes sets of “HTML instructions” that define a “composite desktop” containing a plurality of “desktop components.” EX1005, 6:34-36, 7:21-22, 11:1-67, 12:1-67, 13:1-54; EX1003, ¶49. Brown explains that a desktop component, examples of which are presented in the annotated version of Fig. 3A (below), is “a distinct geometric region that displays a single piece of Web-based content.” Id., 7:22-23.

As Dr. Schmidt explains, a POSITA would have understood or found obvious the “desktop components” of Brown to be “networked information monitors” because desktop components have similar features. EX1003, ¶50. Indeed, networked information monitors are “a fully configurable **frame**, with one or more **controls**, through which **content** is presented to the user,” and a POSITA would have

recognized that Brown's desktop component possesses all of these features. EX1001, 5:41-44; EX1003, ¶50; Section I.C.1, *supra*.

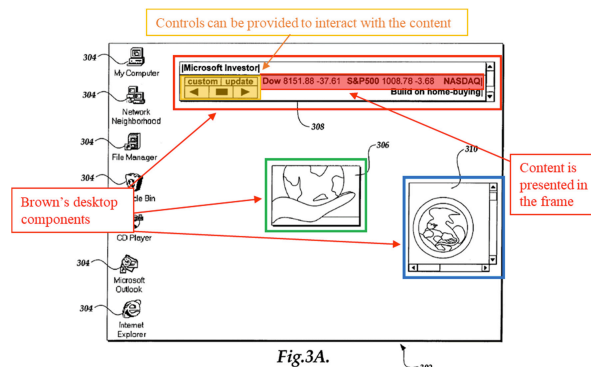
For instance, Brown describes that desktop components are “implemented as floating **frames**.” EX1005, 12:61-64; EX1003, ¶51; *infra* [1.3]. Brown also presents examples of desktop components with different frame “**controls**,” as annotated in Figure 3A below. EX1005, FIG. 3A. Brown further explains that floating frames “can be **positioned** anywhere on a screen” and that desktop components, and their frames, can be “**positioned at any location** on a composite desktop, and can be **resized** if desired.” EX1005, 7:24-26, 12:64-65. The above disclosures render Brown's desktop component frames “**fully configurable**” as this term is used by the '083 Patent (e.g., the user can specify frame characteristics and controls). EX1001, 2:45-59.



EX1005, FIG. 3A (annotated)

Finally, Brown describes that desktop components “[display] a single piece of Web-based **content**.” EX1005, 7:22-23; EX1003, ¶52. As described above, Brown’s desktop components are “fully configurable frames,” and as a result, the “**content**” is displayed “**through**” the “**fully configurable frame**.” EX1001, 2:45-59; EX1005, 7:24-26, 12:64-65, FIG. 3A.

Therefore, Brown’s desktop components are “networked information monitors,” as properly construed. EX1003, ¶53.



EX1005, FIG. 3A (annotated)

Additionally, a POSITA would have recognized or found obvious that the “HTML instructions” that define Brown’s “desktop components” are a “networked information monitor template” because these HTML instructions have similar features. EX1005, 11:39-67, 12:1-43; EX1003, ¶54. Indeed, a networked information monitor template is “a **data structure** that defines the **characteristics of a NIM**, including the **NIM frame, view, and control characteristics**, [which] excludes executable **applications/compiled code**,” and a POSITA would have

recognized or found obvious that a set of Brown’s HTML instructions includes all of these features. EX1001, 7:19-23, 8:53-57, 14:34-35; EX1003, ¶54; Section I.C.2, *supra*. Brown provides a set of HTML instructions as an example, which is reproduced and annotated below. Brown describes that these instructions are “generated from the **data** stored in the registry 208” (“**a data structure**”). EX1005, 14:7-8.

Brown describes that “lines 14-17 [in the example code] comprise HTML instructions that **describe the active desktop component 308**” (“**defines the characteristics of [the] NIM**”). EX1005, 12:61-62; EX1003, ¶55. Brown includes similar language for the other desktop components of this example set of HTML instructions. *Id.*, 12:44-46, 13:14-15.

For example, Brown describes that “[f]loating **frames** are designated by the ‘IFRAME’ tag.” EX1005, 12:65-66. Brown’s HTML instructions utilize the “IFRAME” HTML tag to **define the frame of the desktop component**, as shown in the annotated figure below. EX1005, 11:56-67, 12:1-10; EX1003, ¶56.

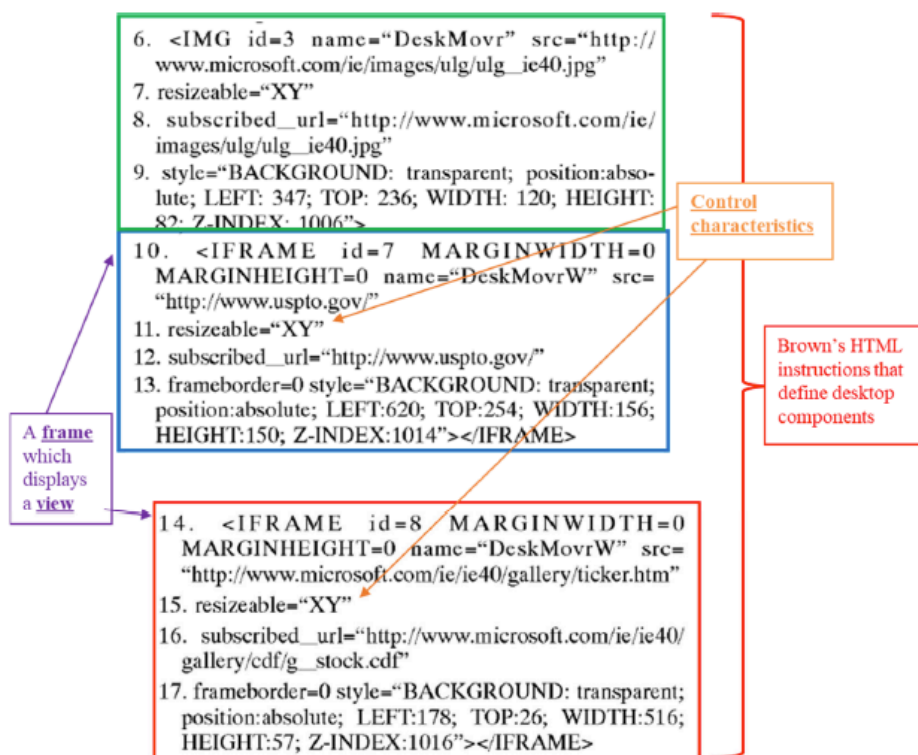
It can also be seen from the annotated figure that visual features of the desktop component (“**the view**”) are defined by the HTML instructions. EX1005, 11:56-67, 12:1-10; EX1003, ¶57. For example, the HTML instructions include a “frameborder” tag, as well as a “BACKGROUND” tag, that both define visual features of the desktop component. *Id.*

Additionally, Brown’s HTML instructions provide the ability to designate a desktop component as “resizable” as presented in the annotated figure below (“a **control characteristic**”). EX1005, 11:56-67, 12:1-10. The resizing of desktop components is enabled by “a windowed component manipulation **control** 326 and a windowless component manipulation **control** 328.” EX1005, 7:57-59; EX1003, ¶58.

Additionally, as it can be seen in the annotated instructions below, Brown’s HTML instructions do not contain “**applications**” or “**compiled code**.” EX1005, 11:56-67, 12:1-10; EX1003, ¶59. Indeed, Brown describes its HTML instructions are stored in “an HTML file, referred to as the desktop.htt file 210,” which, as Dr. Schmidt explains, a POSITA would have understood or found obvious to not include compiled code since HTML is known to be a markup language. *Id.*, 6:36-37; EX1003, ¶¶24, 59. This understanding is established in other references known in the art. *Id.* Indeed, Darnell, an academic reference directed to HTML, describes that HTML is “platform independent” (*i.e.*, not requiring specific hardware or software for interpretation). EX1011, Page 70. Darnell states that one of the advantages of a “platform independent” language is that “persons in different locations can exchange information, collaborate on authoring articles, publish data, and carry on a robust discourse without ... having to pay for specific hardware and software with proprietary schemes.” *Id.* A POSITA would have understood the advantages of a

platform independent language, like HTML, and would have been motivated to avoid including additional compiled code that would render these advantages moot. EX1003, ¶59.

Therefore, with the above disclosures, Brown's HTML instructions correspond to a "networked information monitor template." EX1003, ¶60.

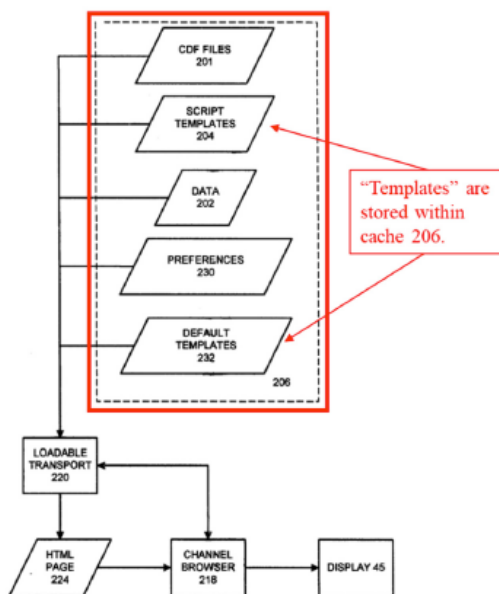


EX1005, 11:56-67, 12:1-10 (annotated)

b) Ground 1B (Brown-Wecker)

Additionally, Wecker also discloses the electronic storage of templates. EX1006, 8:34-39, Claim 1, Claim 13; EX1003, ¶61. Wecker discloses a "cache memory" used for holding "script templates" and that these files are "stored by the

computer.” *Id.* Indeed, Wecker describes that “CDF files 201 as well as **script templates** and data files ... [are] **provided to cache memory 206.**” EX1006, 8:31-39, FIG. 6, FIG. 7. An annotated figure 7 is reproduced below that shows that script templates included in cache 206.

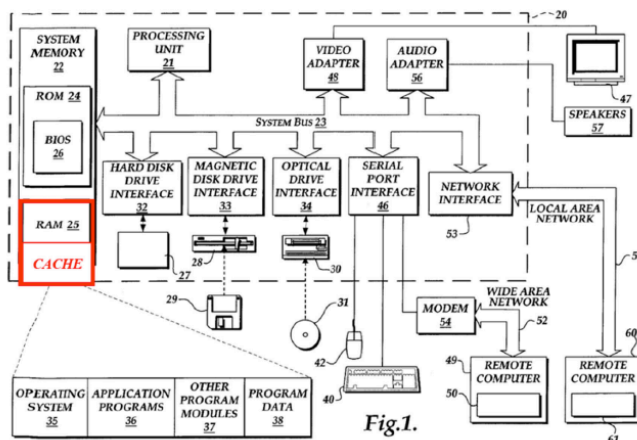


EX1006, FIG. 7 (annotated)

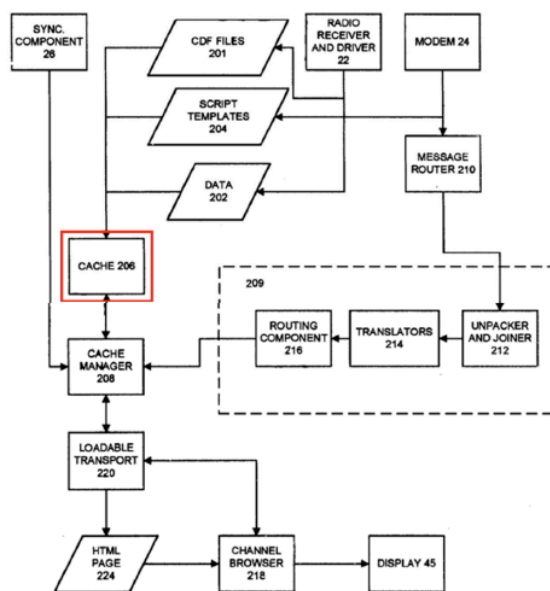
A POSITA would have recognized or found obvious from this disclosure that template files would be electronically stored (if this was not already rendered obvious by the disclosure of Brown). EX1003, ¶62. As Dr. Schmidt explains, a POSITA would have recognized or found obvious that the cache memory of Wecker is also a form of “**electronic storage**,” and that, in one example implementation of the Brown-Wecker combination, the “cache memory” of Wecker would be incorporated into the “system memory” of Brown to store templates associated with

the desktop components. EX1003, ¶62. An example illustration of the combination is provided below.

All other claim features are rendered obvious as discussed above. EX1003, ¶63, [1.1].A, *supra*.



EX1005, FIG. 1 (annotated)



EX1006, FIG. 6 (annotated)

[1.2]

For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized the CDF subscription to be a form of “content reference” because CDF subscriptions reference a URL, at which, content is available. EX1003, ¶¶25, 64. For example, one of Brown’s example desktop components includes “a URL corresponding to a CDF file.” EX1005, 13:4-5. Wecker also describes that “**web content** is also preferably described in a content structure file also known commonly as a channel definition format (CDF) file.” EX1006, 3:3-5.

Brown explains that “CDF files are used to implement ‘subscriptions’ in which **information is regularly retrieved and updated** within the active desktop component.” EX1005, 13:4-7; EX1003, ¶65. An annotated example of Brown’s “HTML instructions” and “CDF subscription” is provided below.

```
14. <IFRAME id=8 MARGINWIDTH=0
    MARGINHEIGHT=0 name="DeskMovrW" src=
    "http://www.microsoft.com/ie/ie40/gallery/ticker.htm"
15. resizable="XY"
16. subscribed_url="http://www.microsoft.com/ie/ie40/
    gallery/cdf/g_stock.cdf"
17. frameborder=0 style="BACKGROUND: transparent;
    position:absolute; LEFT:178; TOP:26; WIDTH:516;
    HEIGHT:57; Z-INDEX:1016"></IFRAME
```

A URL corresponding to a CDF file.

EX1005, 12:1-8 (annotated)

As Dr. Schmidt explains, a POSITA would have understood or found obvious that a Uniform Resource Locator (“URL”) to be a “network location” as this is the

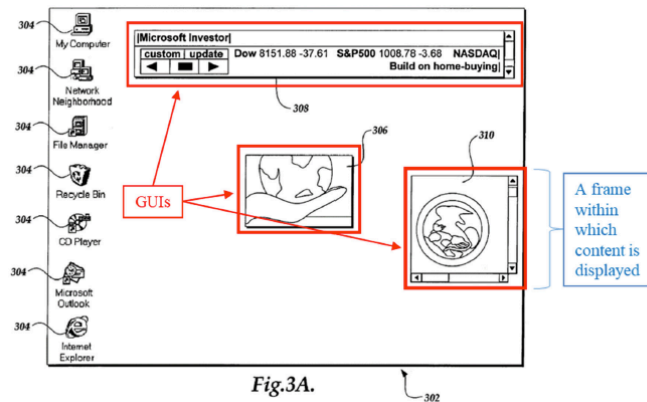
most common use of a URL. EX1003, ¶¶23, 66. Indeed, Darnell provides support and explains that “uniform (or sometimes *universal*) resource identifiers are strings of characters that **identify the location** of a resource available on the World Wide Web” and that “the most common use of a uniform resource identifier these days is to locate a Web page using a **URL**. URLs are commonly thought of as pointers to a filename in a directory **on a Web server**.” EX1011, 103; EX1003, ¶66.

Both Brown and Wecker describe operating over the “internet,” which a POSITA would have understood or found obvious to be a form of “TCP/IP protocol.” EX1005, 13:1-4; EX1006, 3:1-7; EX1003, ¶¶22, 67. Indeed, Darnell discloses that “HTTP [hypertext transfer protocol] operates **over the Internet**, where communication occurs between **computers via TCP/IP**.” EX1011, Page 88.

[1.3]

For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized that the desktop components are presented to the user as “graphical user interfaces” or “GUIs” as these terms are commonly used in the art to describe such visual components. EX1005, FIG. 3A; EX1003, ¶68. Example desktop components are presented in the annotated Figure 3A below. Indeed, Brown refers to its composite desktop (and all Windows-based desktops) as a “**GUI desktop**.” EX1005, 1:35-38, FIG. 3A; EX1003, ¶68. Because Brown’s HTML instructions define the desktop component, a POSITA would have recognized that, therefore, they contain

“a definition of a graphical user interface of the first networked information monitor.”



EX1005, FIG. 3A (annotated)

Referencing Brown’s FIG. 3A above, it can be seen that desktop components “[lack] controls for manually navigating a network.” EX1005, FIG. 3A; EX1003, ¶69. To the extent that it may be argued that a desktop component can be created with such controls, Dr. Schmidt explains that “the decision to include navigation controls in a desktop component would ultimately be a design decision for a POSITA, and, in networks where data transfer rates are limited or controls are not desired, a POSITA would be motivated to construct desktop components without extraneous features, such as navigation controls, to improve data transfer times or streamline use.” EX1003, ¶69. Indeed, Shimada provides support and describes that, “[w]hen the amount of data transmitted from the server to the client is reduced, the data access time can be reduced particularly when the transmission rate of the

network is low.” EX1008, 1:45-48. Additionally, Yohanan describes such an implementation lacking controls to specify a network location (“a more efficient method for accessing network locations” using “a convenient method to access network locations without having to open a browser and key-in the desired site's URL”). EX1016, 2:18-23.

Brown further describes that desktop components are “implemented as floating **frames**.” EX1005, 12:61-64; EX1003, ¶70. A POSITA would have understood or found obvious that the “floating frame” of Brown’s desktop components to be “**a frame within which content received from the network location can be displayed,**” as desktop components are described by Brown as displaying internet content. EX1003, ¶70; [1.2], *supra*.

A POSITA also would have recognized from the example HTML instructions, reproduced and annotated below, that Brown’s HTML instructions include “**frame characteristics**” that define both a “**size**” and a “**position on the electronic display of the frame**.” EX1005, 12:1-10; EX1003, ¶71. As displayed in the annotated figure, the “height” and “width” is specified for the desktop component (“**size**”), and the **position** is designated with the “left” and “top” instructions. EX1005, 12:1-10.

14. <IFRAME id=8 MARGINWII
 MARGINHEIGHT=0 name="DeskMovrW
 "http://www.microsoft.com/ie/ie40/gallery/tick
 15. resizable="XY"
 16. subscribed_url="http://www.microsoft.com/ie/ie40/
 gallery/cdf/g_stock.cdf"
 17. frameborder=0 style="BACKGROUND: transparent;
 position:absolute; LEFT:178; TOP:26; WIDTH:516;
 HEIGHT:57; Z-INDEX:1016"></IFRAME>

Size and position are defined for the frame

EX1005, 12:1-10 (annotated)

[1.4]

For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have understood or found obvious that Brown’s HTML instructions are “instructions” for executing features of the desktop component (“networked information monitor”) because features of the desktop component are defined by the HTML instructions. EX1005, 11:39-67, 12:1-43; EX1003, ¶72. For example, a POSITA would have understood or found obvious that a “CDF subscription,” as used in Brown’s desktop components, acts as **“instructions configured to cause the first networked information monitor to request content from the network location in the content reference via the TCP/IP protocol”** because, as described above, the CDF subscription requests content from an internet network location defined by a URL. EX1005, 11:39-67, 12:1-43, 13:1-13; [1.2], *supra*; EX1003, ¶72.

Additionally, a POSITA would have understood or found obvious that Brown’s “HTML instructions,” including a CDF subscription, includes instructions to **“cause the first networked information monitor to generate the graphical**

user interface of the first networked information monitor with the content received from the network location via the TCP/IP protocol within the frame” because CDF subscriptions are subscriptions in which “information is regularly retrieved and updated within the active desktop component.” EX1005, 13:6-7; EX1003, ¶73. A POSITA would have further understood or found obvious that “updating” the desktop component would require “[generating a] graphical user interface” and that this would be done “within the frame” of the desktop component. EX1003, ¶73.

```

14. <IFRAME id=8 MARGINWIDTH=0
    MARGINHEIGHT=0 name="DeskMovrW" src=
    "http://www.microsoft.com/ie/ie40/gallery/ticker.htm"
15. resizable="XY"
16. subscribed_url="http://www.microsoft.com/ie/ie40/
    gallery/cdf/g_stock.cdf"
17. frameborder=0 style="BACKGROUND: transparent;
    position: absolute; LEFT: 178; TOP: 26; WIDTH: 516;
    HEIGHT: 57; Z-INDEX: 1016"></IFRAME>

```

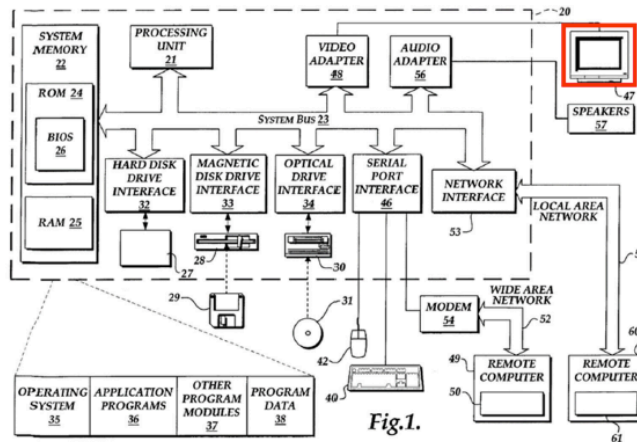
Instructions to generate the GUI to display the content within a frame.

Instructions requesting content from the network location.

EX1005, 12:1-8 (annotated)

[1.5]

As annotated below in Figure 1, Brown’s “computer-based system” includes an electronic display, which Brown refers to as a “monitor.” EX1005, 5:38-39. For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized or found obvious from this disclosure that a display would be used to present content to a viewer. EX1003, ¶74.



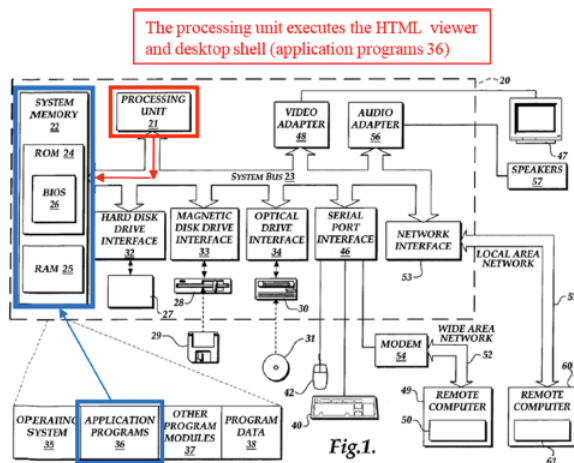
EX1005, FIG. 1 (annotated)

[1.6]

Brown discloses an “HTML viewer” and “composite desktop shell” that “execute” the HTML instructions and “present” the GUI that corresponds to the desktop component. EX1005, 6:26-40. For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have understood or found obvious that both the “HTML viewer” and “composite desktop shell” are run by **“one or more processors”** because processors were known in the art to execute such programs. EX1003, ¶75. Indeed, Petty describes a system for “defin[ing] platform independent user interface panels” with a “computer system 100 [that] comprises a processor 110 connected to a main memory 120” and that “[p]rocessor 110 **executes program instructions stored in main memory 120.**” EX1013, Abstract, 5:58-59, 7:58-59.

Brown discloses that the “HTML viewer 212 **reads** the desktop.htt file 210 (“[accesses] the first networked information monitor template”), interprets the

instructions, and **generates** a composite desktop display (“[executes] the first networked information monitor template such that the graphical user interface of the first networked information monitor is presented to a user on the electronic display having content received from the content reference therein”). EX1005, 6:39-41; [1.3], [1.4], *supra*. Additionally, Brown also explains that “the composite desktop shell 206 adds, deletes and modifies registry 208 data pertaining to the composite desktop 204.” EX1005, 6:30-32. Dr. Schmidt explains that, in order to perform these functions, the desktop shell would “**access**” the HTML instructions. EX1003, ¶76. Presented below are annotated copies of Brown’s Figures 1 and 2, where the terms “active desktop” and “composite desktop” are used interchangeably.



EX1005, FIG. 1 (annotated)

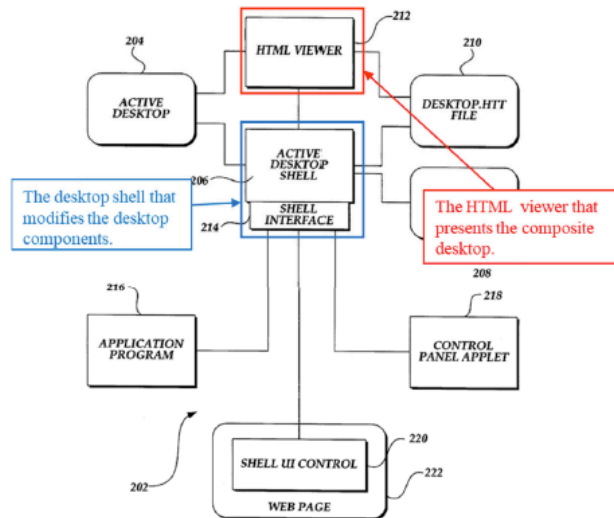


Fig.2.

EX1005, FIG. 2 (annotated)

For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized or found obvious that desktop components contain multiple features that **“define one or more controls that are usable by the user to interact with or control the first networked information monitor.”** EX1003, ¶77.

First, Brown discloses that its HTML instructions can also include a “windowed component manipulation control 326 and a windowless component manipulation control 328,” which allow the user to “move and resize desktop components. EX1005, 7:59-61; EX1003, ¶78. An example of a resizable desktop component is presented below in the annotated set of HTML instructions.

```

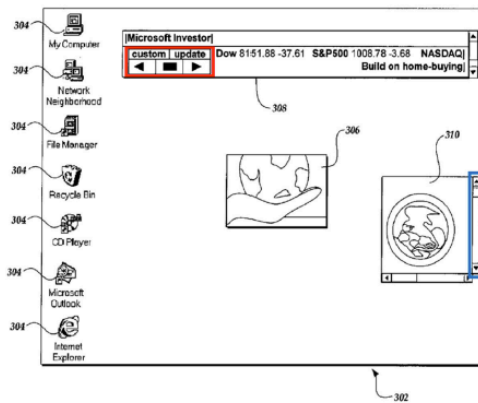
14. <IFRAME id=8 MARGINWIDTH=0
    MARGINHEIGHT=0 name="DeskMovrW" src=
    "http://www.microsoft.com/ie/ie40/gallery/ticker.htm"
15. resizable="XY"
16. subscribed_url="http://www.microsoft.com/ie/ie40/
    gallery/cdf/g__stock.cdf"
17. frameborder=0 style="BACKGROUND: transparent;
    position:absolute; LEFT:178; TOP:26; WIDTH:516;
    HEIGHT:57; Z-INDEX:1016"></IFRAME>

```

Control characteristics within
the HTML instructions

EX1005, 12:1-8 (annotated)

Second, Brown's Figure 3A (annotated below) depicts multiple forms of controls within desktop components. EX1005, FIG. 3A; EX1003, ¶79. As noted in the annotated figure, Brown's desktop components can be outfitted with scroll bars. EX1005, *see also* 9:13-27.



EX1005, FIG. 3A (annotated)

```

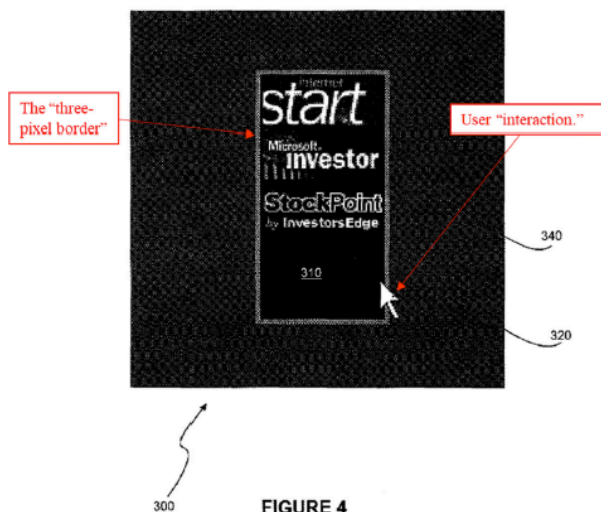
typedef struct_tagCOMPONENT
{
    DWORD dwSize;    //Size of this structure
    DWORD dwID;      //Reserved: Set it always to zero.
    int iComponentType; //One of COMP_TYPB_*
    BOOL fChecked;    // Is this component enabled?
    BOOL fDirty;      // Had the component been modified and
not yet saved to disk?
    BOOL fNoScroll;    // Is the component scrollable?
    COMPOS cpPos;      // Width, height etc.,
    WCHAR wszFriendlyName[MAX_PATH]; // Friendly
name of component.
    WCHAR wszSource[INTERNET_MAX_URL_
LENGTH]; //URL of the component.
    WCHAR wszSubscribedURL[INTERNET_MAX_URL_
LENGTH]; //Subscribed URL.
}

```

Scroll bars can
be implemented
for desktop
components.

EX1005, 9:13-27 (annotated)

Third, Brown additionally directs the reader to “Jones,” a co-pending application directed to “managing position and size for a desktop component.” EX1005, 13:39-44; EX1010, Cover. Jones discloses multiple methods of interacting with a desktop component, and states that “FIG. 4 depicts the desktop component 310 in a third state in which pointer 320 is in close proximity to, or actually intersecting, an edge of the desktop component. In this situation, a thick border 340 is displayed. In a present embodiment, a three-pixel border is used so that **the user may more easily interact** with the border, such as for **resizing the desktop element**.” EX1010, 5:1-7, FIG. 4. As Dr. Schmidt explains, a POSITA would have understood or found obvious that “mov[ing]” and “resizing” the desktop components to be a form of “interaction” as a user would need to direct the system to perform either. EX1005, 13:22-36; EX1003, ¶80.

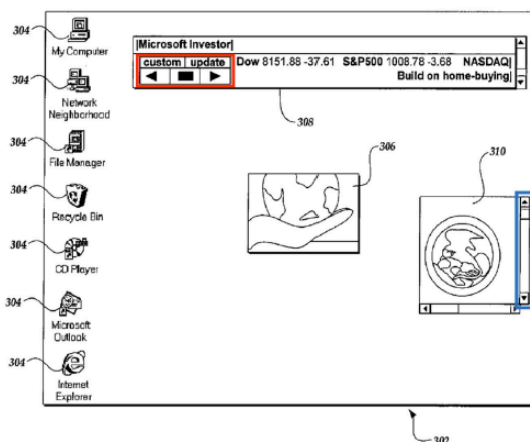


EX1010, FIG. 4 (annotated)

[3]

See [2] (incorporated here). For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized or found obvious that the “**control characteristics define visual representations of the controls.**” EX1003, ¶¶81-83.

As presented above in the annotated Figure 3A, Brown provides “**visual representations**” of the desktop component controls. EX1005, FIG. 3A; EX1003, ¶82.



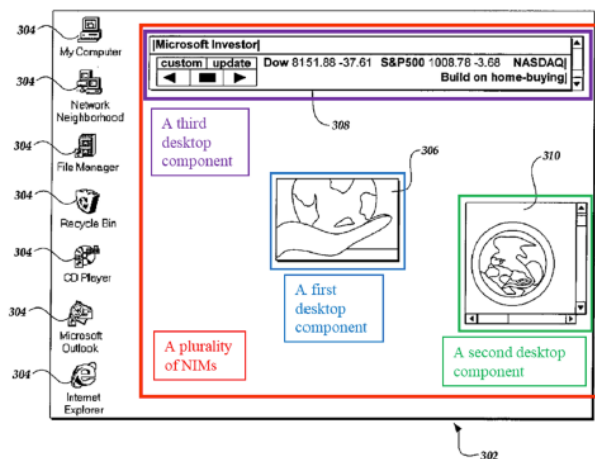
EX1005, FIG. 3A (annotated)

[4.1]

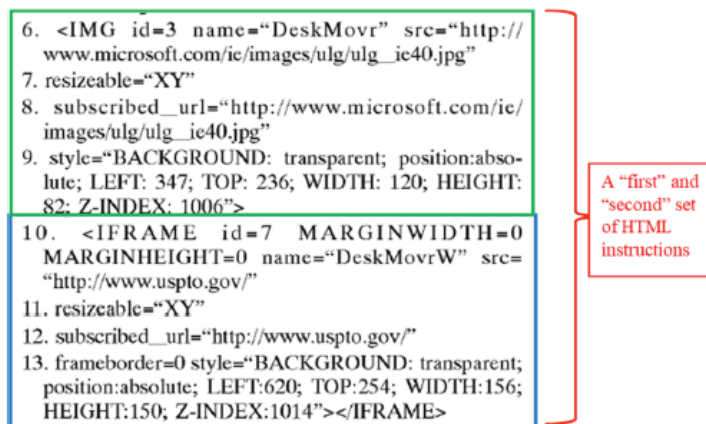
c) Ground 1A (Brown)

See [1.1] (incorporated here). As Dr. Schmidt explains, a POSITA would have recognized from reviewing the figures of Brown that the “composite desktop” is comprised of “one **or more** components,” which includes additional sets of “HTML instructions” that define the desktop “components.” EX1005, 4:13-19, FIG. 3A; EX1003, ¶¶84-85, see *In re Harza*, 274 F.2d 669, 671 (CCPA 1960) (holding that mere duplication of parts absent some unexpected result carries no patentable significance).

Brown renders obvious multiple (*e.g.*, first and second) networked information monitors because Brown discloses multiple desktop components, each with content reference and associated network location. FIG. 3A; EX1003, ¶¶84-85.



EX1005, FIG. 3A (annotated)



EX1005, 11:5-67 (annotated)

d) *Ground 1B (Brown-Wecker)*

All claim features are rendered obvious as discussed above. EX 1003, ¶86, [4.1].A, *supra*.

Additionally, Wecker refers to “script **files**” that define “**templates.**” EX1006, 3:17-20. Dr. Schmidt explains that a POSITA would have found this disclosure to disclose or render obvious a “second networked information monitor template,” and

that the Brown-Wecker combination would also allow for a plurality of “components” or “templates” because a POSITA would have recognized the need to display multiple pieces of internet content simultaneously. EX1003, ¶87; see *In re Harza*, 274 F.2d 669, 671 (CCPA 1960) (holding that mere duplication of parts absent some unexpected result carries no patentable significance).

[4.2]

See [1.2] (incorporated here). More specifically, Brown renders obvious multiple (*e.g.*, first and second) content references and network locations because Brown discloses multiple desktop components, each with content reference and associated network location. FIG. 3A; EX1003, ¶88. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.2] for the first template. EX1003, ¶88; see *In re Harza*, 274 F.2d 669, 671 (CCPA 1960). A POSITA also would have understood or found obvious that, in order to provide content distinct from the first template, the second template would need to reference a **“second network location, which is different from the network location in the content reference of the first networked information monitor template.”** EX1003, ¶88.

[4.3]

See [1.3] (incorporated here). More specifically, Brown renders obvious multiple (*e.g.*, first and second) frames because Brown discloses multiple desktop components, each with content reference and associated network location. FIG. 3A; EX1003, ¶89. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.3] for the first template. EX1003, ¶89; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960).

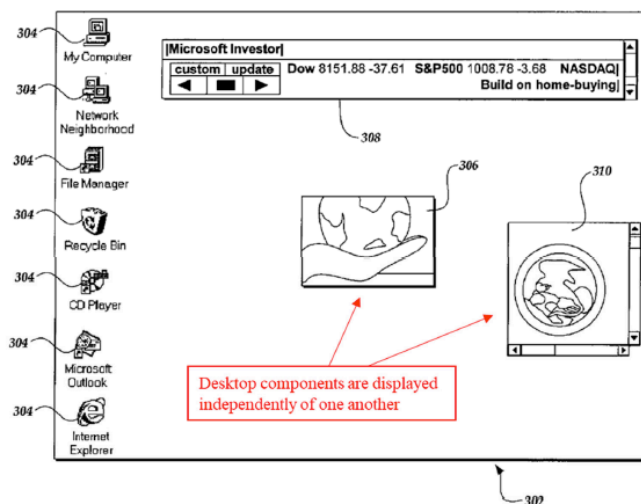
[4.4]

See [1.4] (incorporated here). More specifically, Brown renders obvious multiple (*e.g.*, first and second) sets of instructions because Brown discloses multiple desktop components, each with content reference and associated network location. FIG. 3A; EX1003, ¶90. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.4] for the first template. EX1003, ¶90; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960).

[5]

See [1.6] and [4] (incorporated here). For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized in reviewing Brown's figures that the "components" are displayed "separately and discretely" from each other. Indeed, as further illustrated below, Brown describes its "desktop components" as

“distinct geometric region[s]” (presented to the user on the electronic display separately and discretely from the user interface of the first networked information monitor). EX1005, 7:21-23, FIG. 3A; EX1003, ¶91.



EX1005, FIG. 3A (annotated)

[6]

Wecker discloses that the “desktop computer 16, through the transport, can **periodically** retrieve or receive new and updated **script, data and CDF files** either for further transmission to mobile device 18 or simply for rendering the data.” (“**transmit a request to a server for a further networked monitor template**”). EX1006, 4:3-6; EX1003, ¶92. As Dr. Schmidt explains, a POSITA would have understood or found obvious that “**one or more processors**” would have retrieved the script and CDF files after a “**user request**,” as desktop computers include processors that execute similar program functions. EX1003, ¶¶92-95; *supra* [1.6]. In

incorporating Wecker into Brown, a POSITA would have recognized that the multiple programs within Brown, for example, the HTML viewer or desktop shell, would execute these functions as directed by the processor. EX1003, ¶92. Indeed, Brown's desktop shell, operated by the processing unit (*see e.g., supra* [1.6]), includes a "shell interface 214, in order to add [a] corresponding component to the composite desktop," the component being selected "on [a] Web page." EX1005, 7:3-7. An annotated figure showing the interaction of the shell interface is presented below.

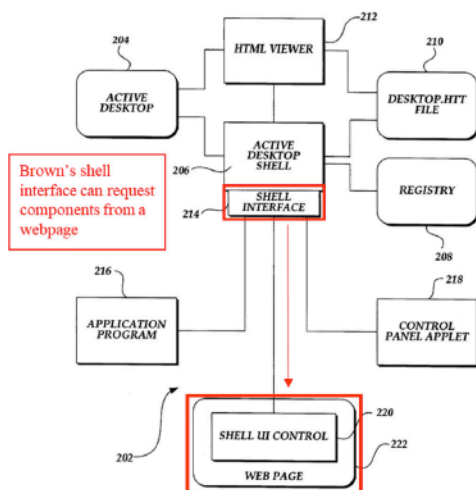


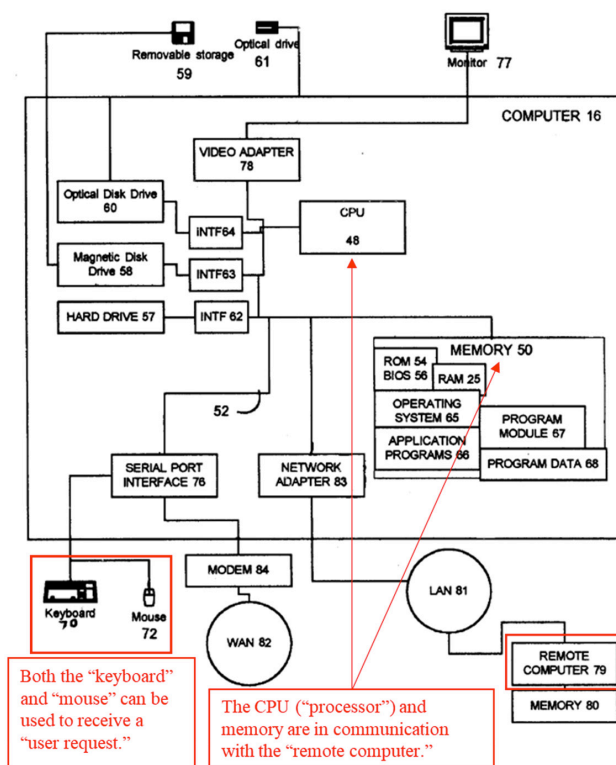
Fig.2.

EX1005, FIG. 2 (annotated)

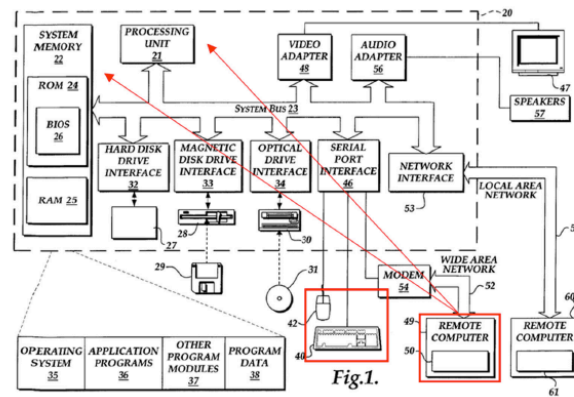
Wecker also discloses that “**users of desktop 16** can preferably **subscribe** to channels (“**reception of a user request**”) in a standard fashion which provide the user with **certain channel content** which can be browsed off-line or on-line.” EX1006, 3:63-66; EX1003, ¶93. In keeping with this disclosure, Wecker describes

that its “desktop” may be in communication with a “remote computer,” which can be a “server.” EX1006, 7:55-63, FIG. 5; Section I.A.3, *supra*; EX1003, ¶93.

The Brown-Wecker combination would be implemented such that the “subscriptions” as described by Wecker would be implemented for the “HTML instructions” of Brown. EX1003, ¶94. Indeed, Brown already describes subscriptions (also with relation to CDF). EX1005, 13:5-9. Allowing Brown-Wecker’s subscriptions to also receive style-related “templates” (as discussed in Wecker) would provide similar benefits as discussed in Wecker, such that the combination would “retrieve or receive new and updated script.” EX1006, 4:4-5; EX1003, ¶94.



EX1006, FIG. 5 (annotated)



EX1005, FIG. 2 (annotated)

[7]

See [1.1] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that a template would be stored for the same reasons as discussed in [1.1]. EX1003, ¶96. A POSITA also would have understood or found obvious that, after being received over the network, a “template” would be capable of being stored in the storage of the Brown-Wecker device (“**store the received further networked information monitor template**”) because Wecker provides such features for storing a received template. EX1003, ¶96. Indeed, Wecker describes a “cache manager” that “receives the CDF files 201, script templates 204 and data files 202, and provides them to cache memory 206.” EX1006, 8:47-49.

Wecker additionally provides motivation for a POSITA to store a requested template, and discloses that “scripting files typically need updating much less frequently than the data files, [which] provides the user with the ability to view the

web content on the desktop (off-line).” A POSITA would have understood or found obvious that “[viewing] the web content ... **off-line**” would require the “script” to be saved to the device. EX1006, 7:7-11; EX1003, ¶97.

[8]

See [1.6] and [7] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that “**execut[ing]**” the further networked information monitor template would result in similar operations as discussed in [1.6]. EX1003, ¶¶98-99. Wecker describes that, “in response to the user requesting to view information provided via the chosen channel, loadable transport 220 requests cache manager 208 to **retrieve the corresponding web content information** (in the form of **script templates** and data files) from cache 206.” EX1006, 9:30-34. A POSITA would have understood or found obvious that “**one or more processors**” in the Brown-Wecker combination would then execute the requested template using the HTML viewer or desktop shell, as discussed above. EX1003, ¶98, *supra* [1.6]. An example of the Brown-Wecker combination is presented as annotated copy of Brown’s Figure 2 below.

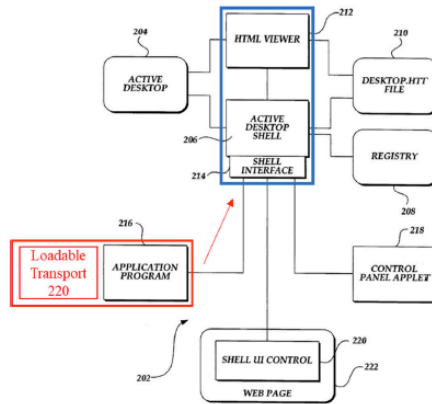


Fig.2.

EX1005, FIG. 2 (annotated)

[9.pre]

To the extent the preamble is limiting, Grounds 1A and 1B render [9.pre] obvious. For both Grounds 1A and 1B, as Dr. Schmidt explains, a POSITA would have recognized that Brown and the Brown-Wecker combination are also a **“computer-implemented method of presenting Internet content to a user”** because Brown describes “a computer-based method of displaying information on a graphical user interface composite desktop displayed on a computer monitor.” EX1005, Claim 19; EX1003, ¶100. A POSITA would have recognized that a “computer” and “desktop” are examples of a “client device” as these terms are used interchangeably in the art. EX1003, ¶100.

As discussed above, Brown’s “computer” includes **“electronic storage, an electronic display, and one or more processors”**). EX1003, ¶101; see [1.1], [1.5], [1.6], *supra*.

[9.1] – [16]

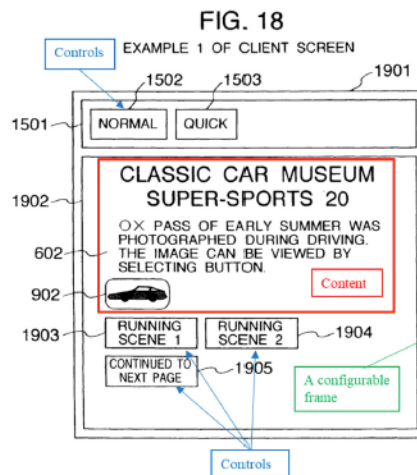
Grounds 1A and 1B render these claims obvious in the same manner as explained above for the corresponding claims listed in the following table. EX1003, ¶¶102-117.

Claim	Corresponding Claim
[9.1]	[1.1]
[9.2]	[1.2]
[9.3]	[1.3]
[9.4]	[1.4]
[9.5]	[1.6]
[9.6]	[1.6]
[10]	[2]
[11]	[3]
[12]	[4]
[13]	[5]
[14]	[6]
[15]	[7]
[16]	[8]

B. [GROUND 2] – Claims 1-16 are rendered obvious by Shimada and Buchholz

5. Overview of Shimada

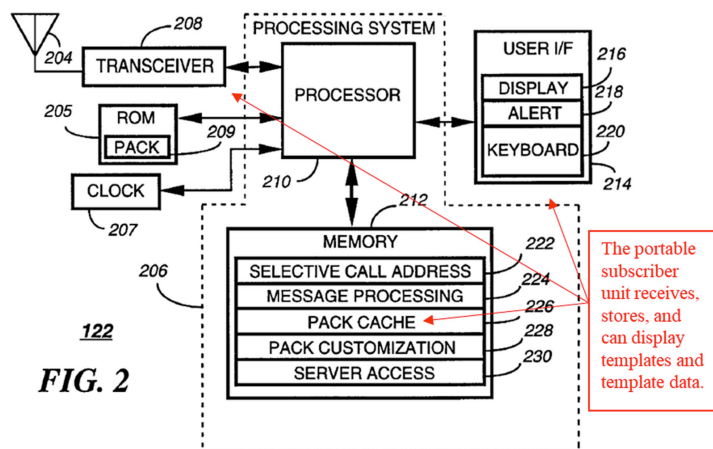
Shimada describes “a data conversion apparatus included an information input device” and “a convertor for executing the data in accordance with a predetermined rule.” EX1008, Abstract; EX1003, ¶118. Shimada further describes that, “when the kind of the data is screen configuration data describing configuration of the screen output of an information processing unit, the predetermined rule adds a display area of the screen configuration and converts it to a screen configuration data capable of displaying a plurality of screen configurations on the same screen.” *Id.* Annotated figure 18 below provides an example of a screen according to Shimada.



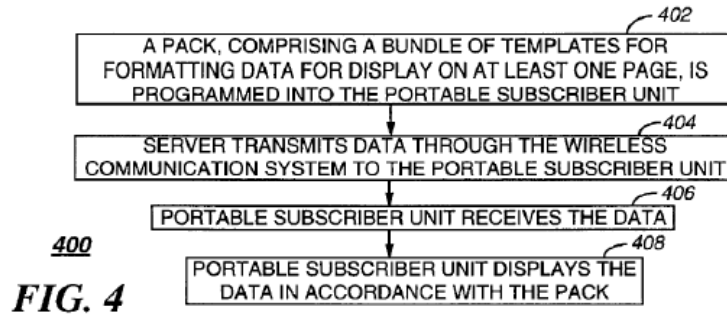
EX1008, FIG. 18 (annotated)

6. Overview of Buchholz

Buchholz describes “a method in a wireless communication system for controlling a display of template data by a portable subscriber unit.” EX1009, 1:57-59; EX1003, ¶119. Buchholz further explains that this method “comprises the steps of programming a pack into the portable subscriber unit, the pack comprising a bundle of templates for formatting the template data for display on at least one page, and transmitting the template data from a server in the wireless communication system. The method further comprises the steps of receiving the template data by the portable subscriber unit, and displaying the template data in accordance with the pack.” EX1009, 1:60-67. Annotated figure 2 provides an example of a portable subscriber unit according to Buchholz. Figure 4 outlines a process for transmitting data to a portable subscriber unit and displaying the data in accordance with a pack. Figure 8 outlines transmitting a pack to a portable subscriber unit.



EX1009, FIG. 2 (annotated)



EX1009, FIG. 4

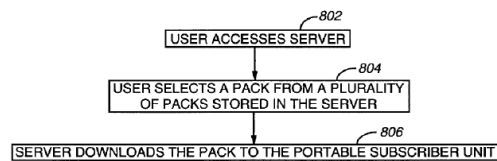


FIG. 8

EX1009, FIG. 8

7. *Combination of Shimada and Buchholz*

A POSITA would have found it obvious to combine Shimada and Buchholz (collectively the “Shimada-Buchholz combination”). EX1003, ¶120. Among other things, both references are directed to “accessing and viewing internet content” and are further specifically directed to “reducing data transfer times.” EX1008, Abstract, 1:34-55; EX1009, Abstract, 1:49-54; EX1003, ¶120.

As Dr. Schmidt explains, a POSITA would have combined Shimada and Buchholz for various reasons. EX1003, ¶121.

First, a POSITA would have recognized that both Shimada and Buchholz complement each other’s ability to mitigate long download times in networks with

“small network transmission capacity,” as described by Shimada. EX1008, 1:40-44; EX1003, ¶122. Indeed, Buchholz also contemplates such networks, for example, “wireless communication systems” that can experience “excessive latency” when requesting and displaying web pages. EX1009, 1:26-37; EX1003, ¶122. Thus, as Dr. Schmidt explains, a POSITA would have recognized that the techniques of these references were complementary, and each would enhance the abilities of the other. EX1003, ¶122.

Second, a POSITA would have recognized that the “screen configuration data” of Shimada and the “templates” of Buchholz are both implemented in HTML. EX1008, 6:59-62; EX1009, 5:9-13; EX1003, ¶123. Thus, as Dr. Schmidt explains, a POSITA would have had a reasonable expectation of success in implementing the “screen configuration data” of Shimada into the “subscriber units” of Buchholz since this would require little to no modification of both systems and would merely involve the application of a known technique to yield predictable results. EX1003, ¶123.

Moreover, a POSITA would have been motivated to combine Shimada and Buchholz to improve data transfer times, increase usability, reduce client-side storage requirements, and/or other relevant business or technical reasons. EX1003, ¶124. With these motivations, a POSITA would have found it obvious to consider the disclosures of Shimada and Buchholz together. EX1003, ¶124.

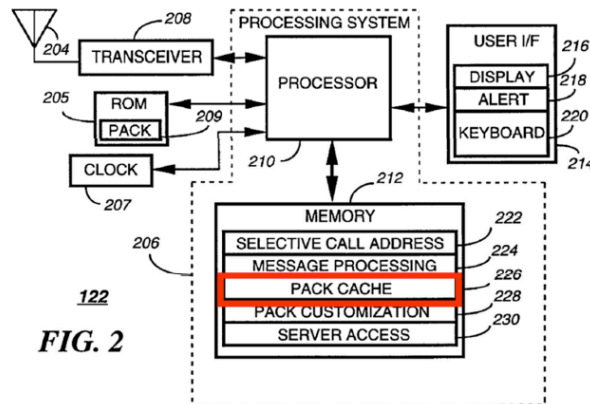
8. *Analysis*

[1.pre]

To the extent the preamble is limiting, the Shimada-Buchholz combination renders [1.pre] obvious. For example, Shimada describes “a system ... [comprising] a server 101, networks 102 and 104, a screen configuration expanding device 103 and a client 105.” EX1008, 5:48-51. A POSITA would have understood or found obvious that “a client” is a form of “client device” as the addition of “device” does not create any limitation. EX1003, ¶125.

[1.1]

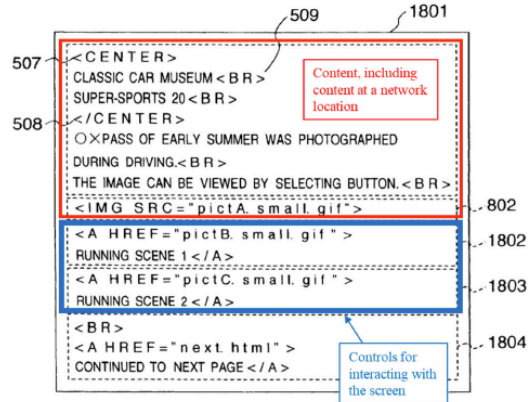
Buchholz discloses a “memory 212” that comprises “a pack cache 226 for **storing a pack** utilized by the portable subscriber unit 122.” EX1009, 4:23-25; EX1003, ¶126. Buchholz describes that a pack “comprises a **bundle of templates** for formatting template data for display on at least one page” and that a template is “a pattern utilized by the processing system 206 and the user interface 214 to lay out the presentation of information to the user.” EX1009, 5:4-9. An example portable subscriber unit is provided below.



EX1009, FIG. 2 (annotated)

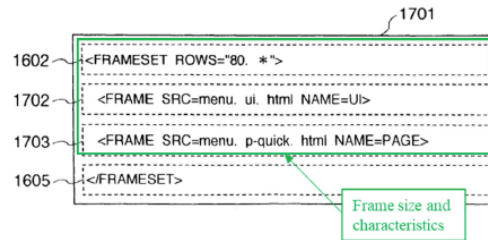
As Dr. Schmidt explains, a POSITA would have recognized or found obvious that the “pack cache” and “memory” of Buchholz’s portable subscriber units to be a form of **“electronic storage having stored thereon a plurality of networked information monitor templates”** as the terms “memory” and “electronic storage” are used interchangeably in the art. EX1003, ¶127. Indeed, the ’083 Patent frequently refers to “memory 30” within “computer 20.” EX1001, *see at least* 6:30-38. As discussed above, a POSITA also would have recognized or found obvious that the screen configuration data of Shimada to be a “template,” as this term is used by Buchholz, as screen configuration data is also an HTML data structure that defines the presentation of content. *See* Section I.B.3, *supra*; EX1003, ¶127. Annotated figures depicting screen configuration data and the associated screen are provided below.

FIG. 17
EXAMPLE OF CONVERTED SCREEN CONFIGURATION DATA
(QUICK MODE)

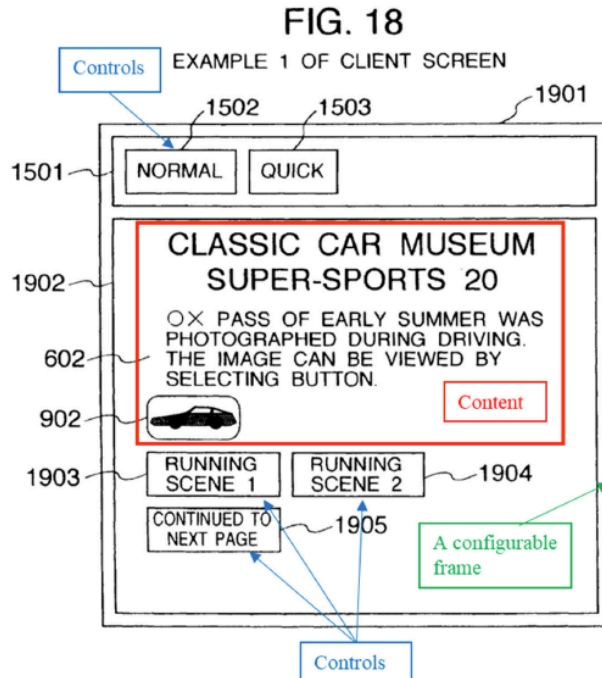


EX1008, FIG. 17 (annotated)

FIG. 16
EXAMPLE OF EXPANDED SCREEN CONFIGURATION DATA



EX1008, FIG. 16 (annotated)



EX1008, FIG. 18 (annotated)

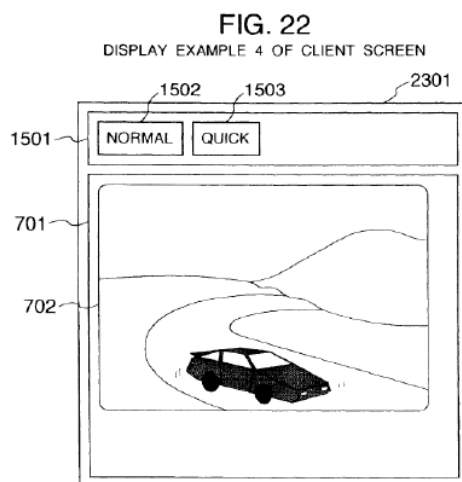
As Dr. Schmidt explains, a POSITA would have understood or found obvious that the “screens” of Shimada correspond to the claimed “networked information monitors” in view of their similar features. EX1003, ¶128. Indeed, networked information monitors are “a **fully configurable frame**, with one or more **controls**, through which **content** is presented to the user,” and a POSITA would have recognized or found obvious that Shimada’s screens possess all of these features. EX1001, 5:41-44; EX1003, ¶128; Section I.C.1, *supra*.

For example, Shimada’s screens present multiple anchor tags that allow the user to download additional content, as well as controls that allow the user to interact with displayed content (“**one or more controls**”). EX1008, 6:39-51, FIG. 18.

Shimada describes “[]0 and [] in the description 504 are referred to as ‘anchor tags’, and the portion encompassed by these tags becomes **a button on the screen** of the client 105. When the user clicks this button, the client 105 transmits the transfer request of the data designated by [HREF=“ ”] in the anchor tag to the server.” *Id.* Shimada also describes that “**control can be made** so that when the client 105 first gains access to the data or when the **user selects the QUICK button**, all the static images transferred to the client 105 are reduced, and when the **user selects the NORMAL button**, the static image data are not reduced in the same way.” *Id.*, 13:12-18. A POSITA would have recognized or found obvious that these buttons are “**one or more controls**” as describing a feature as a button implies user control. EX1003, ¶129.

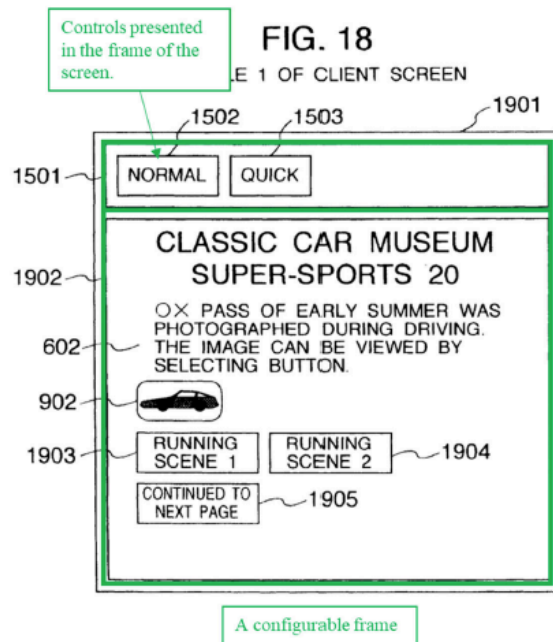
A POSITA also would have recognized or found obvious that the text and images (.gifs) presented to the user within the frame of the screen are “**content ... presented to the user**,” as .gifs are a common form of image file. EX1008, FIG. 18; EX1003, ¶130. Additionally, a POSITA would have recognized or found obvious that the content locations referenced by the anchor tags correspond to additional content locations, as the addresses of these network locations also correspond to .gif files. *Id.* Indeed, Shimada describes, “[w]hen the user clicks this button, the client 105 transmits the transfer request of the data designated by [HREF= “ ”] in the anchor tag to the server. [pictB.gif] is the address representing the **static image 702**.”

Id., 6:42-45, FIG. 7, FIG. 10, FIG. 19, FIG. 22. An example of this additional content is provided below as component 702.



EX1008, FIG. 22

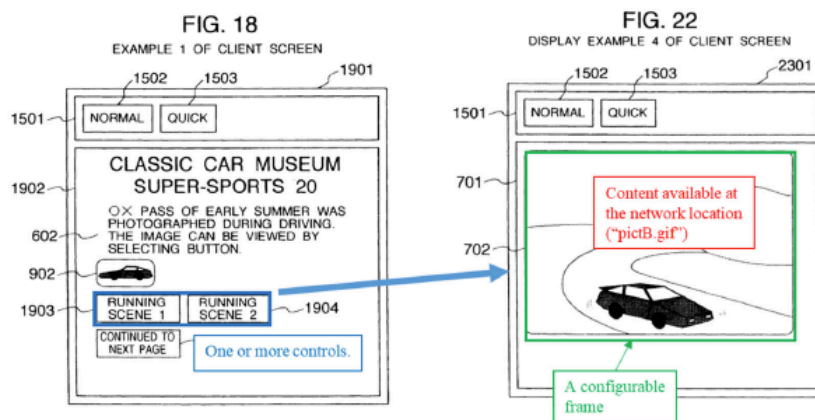
Finally, a POSITA would have recognized or found obvious that this content is presented to a user as a “**fully configurable frame**” from reviewing, at least, Figure 18 of Shimada which presents the content referenced by screen configuration data in a “**frame**.” EX1008, FIG. 18; EX1003, ¶131. Additionally, the size of this frame can be defined (“dividing the screen display”) and controls can be specified to control the frame. EX1008, 7:21-22, 8:65-67, FIG. 15, FIG. 16, FIG. 18; see [2] *infra*. The above disclosures render Shimada’s screens “**fully configurable**” as this term is used by the ’083 Patent (*i.e.*, the user can specify frame characteristics and controls). EX1001, 2:45-59. An annotated figure is presented below which shows the frame of Shimada’s screen, along with the associated controls.



EX1008, FIG 18 (annotated)

Alternatively, as Dr. Schmidt explains, a POSITA would have further recognized or found obvious that multiple features within Shimada's screen configuration data can also correspond to the NIMs as claimed. EX1003, ¶132. For example, Dr. Schmidt explains that Shimada's anchor tags, like Shimada's screens, also possess all of the features of a NIM ("a **fully configurable frame**, with one or more **controls**, through which **content** is presented to the user"). *Id.* Shimada describes that an anchor tag "becomes a **button** on the screen of the client." EX1008, 6:41-42, FIG. 18. A POSITA would have understood or found obvious that this button is "**one or more controls**" as a "button" implies user such control. EX1003, ¶132. A POSITA also would have recognized or found obvious that the .gif image referenced by the anchor tag, visible in the annotated Figure 22 below, is "**content**

... presented to the user” as .gifs are a common form of image file. EX1008, FIG. 22; EX1003, ¶132. A POSITA also would have recognized or found obvious that this content is presented in “a fully configurable frame” as Shimada presents many options for the display of the content referenced by the anchor tag. EX1008, *see at least* FIG. 7, FIG. 10, FIG. 19, FIG. 22, FIG. 25; EX1003, ¶132.



EX1008, FIGS. 18 and 22 (annotated)

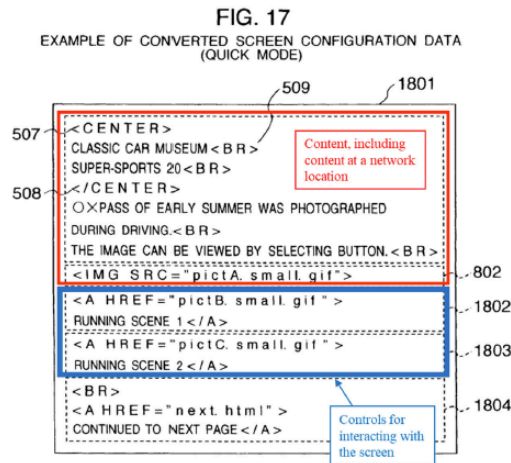
Therefore, both Shimada’s screens and anchor tags correspond to “networked information monitors.” EX1003, ¶133.

Additionally, a POSITA would have recognized or found obvious that the “screen configuration data” that defines Shimada’s screens and anchor tags is a “networked information monitor template” because screen configuration data has similar features. EX1008, 6:7-51; EX1003, ¶134. An annotated example of screen configuration data is provided below. Indeed, because networked information monitor templates are “a data structure that defines the **characteristics of a NIM**,

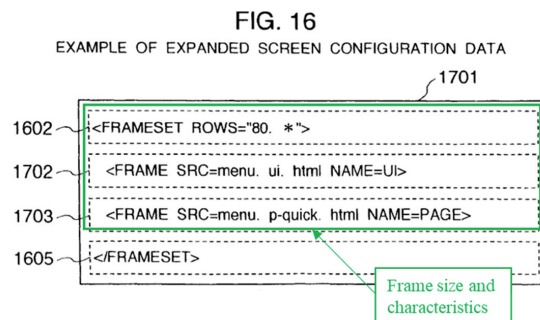
including the NIM **frame, view, and control characteristics**, [which] excludes executable **applications/compiled code**,” a POSITA would have recognized or found obvious that a set of Shimada’s screen configuration data possesses all of these features. EX1001, 7:19-23, 8:53-57, 14:34-35; EX1003, ¶134; Section I.C.2, *supra*. As seen in annotated Figure 17 below, Shimada’s screen configuration data contains multiple pieces of content and buttons (“**defines the characteristics of a NIM, including the NIM frame, view, and control characteristics**”). EX1008, FIG. 17; EX1003, ¶134. Additionally, as can be seen from the annotated Figures 16 and 17 below, screen configuration data also specifies the content frame (“**NIM frame [and] view**”). EX1008, FIG. 16, FIG. 17; EX1003, ¶134. Therefore, Shimada’s screen configuration data corresponds to a “networked information monitor template.” EX1003, ¶134.

Additionally, as it can be seen in the annotated instructions below, Shimada’s HTML screen configuration data does not contain “**applications**” or “**compiled code**.” EX1008, 6:59-62, FIG. 16, FIG. 17; EX1003, ¶135. Dr. Schmidt explains that a POSITA would have understood or found obvious that the screen configuration data does not include compiled code (or, at a minimum, would have been obvious to implement without compiled code) since HTML is known to be a markup language. *Id.*, 6:36-37; EX1003, ¶¶24, 135. Indeed, Darnell describes that HTML is “platform independent” (*i.e.*, not requiring specific hardware or software

for interpretation). EX1011, Page 70. Darnell states that one of the advantages of a “platform independent” language is that “persons in different locations can exchange information, collaborate on authoring articles, publish data, and carry on a robust discourse without ... having to pay for specific hardware and software with proprietary schemes.” *Id.* A POSITA would have understood the advantages of a platform independent language, like HTML, and would have been motivated to avoid including additional compiled code that would render these advantages moot. EX1003, ¶135.

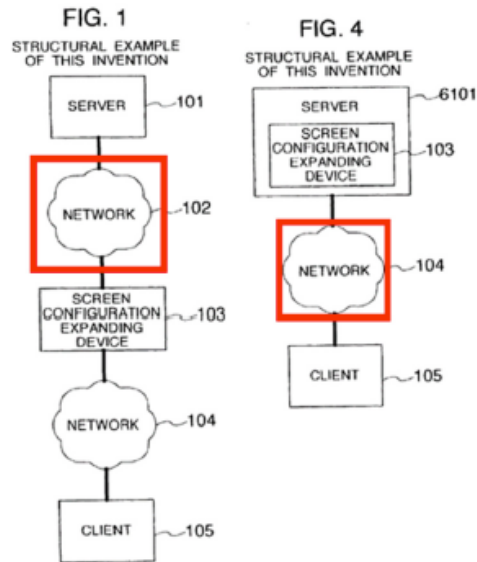


EX1008, FIG 17 (annotated)



[1.2]

Shimada discloses that screen configuration information is received from a server, and describes that “the addition of a new screen display area to the screen configuration information which is **received from the server** 101 and contains **data to be displayed** and information on the configuration of the screen for displaying this data.” EX1008, 5:52-65. Shimada also discloses that the server is connected to the client via a “network.” *Id.* As Dr. Schmidt explains, a POSITA would have understood or found obvious that the network could be the internet, which is the most common example of a “**TCP/IP protocol.**” EX1003, ¶¶22, 136. Indeed, Shimada states that “such a multimedia network system has spread in **world wide networks** and access to world-wide information can be acquired by making access to the **servers in the world.**” EX1008, 1:34-36; EX1003, ¶136. Additionally, Darnell discloses that “HTTP [hypertext transfer protocol] operates **over the Internet**, where communication occurs between computers via **TCP/IP.**” EX1011, Page 88. Two examples of Shimada’s system are provided below.



EX1008, FIG. 1 and FIG. 4 (annotated)

Additionally, a POSITA would have recognized or found obvious that both Shimada's IMG and anchor tags include a URL that **"comprises a network location at which content ... is accessible"** because Shimada describes these tags as including an "address representing a static image" which is obtained from a "server." EX1008, 6:30-5134; EX1003, ¶¶23, 137.

Buchholz also describes that "server 124 comprises a conventional communication interface 304 for communicating with the portable subscriber unit 122 through the Internet." EX1009, 4:34-36; EX1003, ¶138.

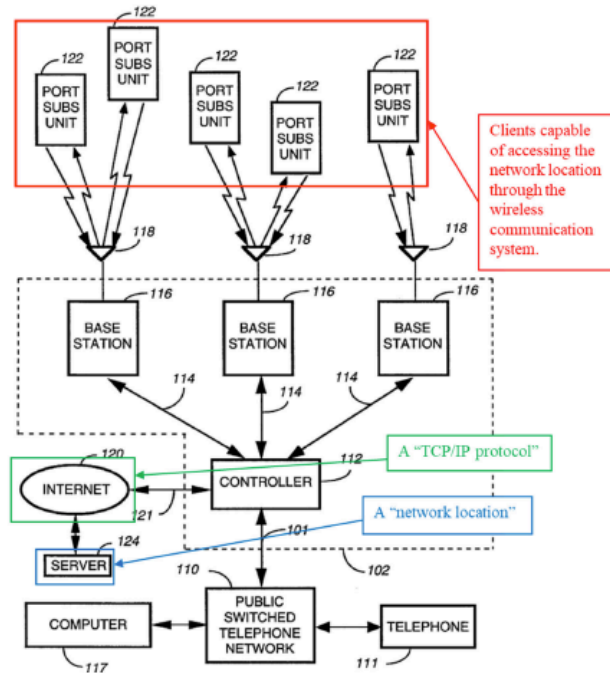


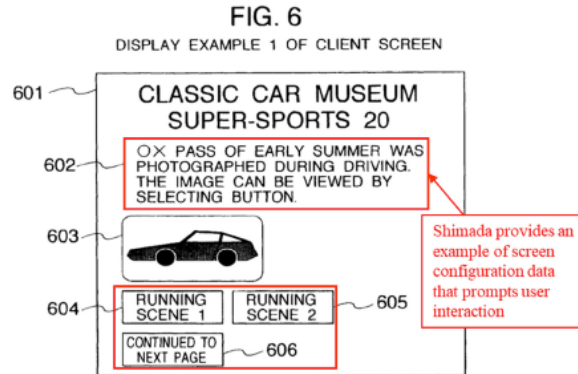
FIG. 1

EX1009, FIG. 1 (annotated)

[1.3]

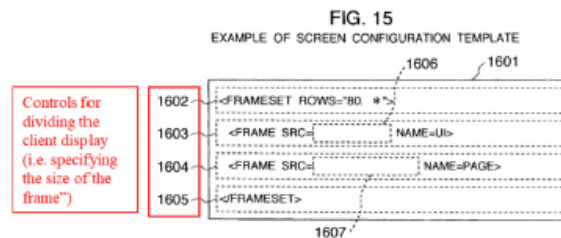
As Dr. Schmidt explains, a POSITA would have recognized that Shimada's screens are **"a definition of a graphical user interface"** or, "GUIs," as the screens both present content and allow user interaction. EX1003, ¶139. Indeed, Shimada describes that the "expansion of the screen configuration in this embodiment means the addition of an interface, which accomplishes interactive communication between a user at the client 105 and the client screen, to the screen configuration information of the server 101." EX1008, 5:66-67, 6:1-3, FIG. 6, FIG. 7. In further support, the examples of screen configuration data presented in Shimada provide controls to the user. See [2] and [3], *infra*; EX1003, ¶139.

As indicated in FIG. 6, Shimada's screen configuration data **"lacks controls for manually navigating a network."** EX1008, *see at least* FIG. 6, FIG. 7, FIG. 17, FIG. 22; EX1003, ¶140. To the extent that it may be argued that screen configuration data can be created with such controls, Dr. Schmidt explains that "the decision to include navigation controls in a desktop component would ultimately be a design decision for a POSITA, and, in networks where data transfer rates are limited or controls are not desired, a POSITA would be motivated to construct desktop components without extraneous features, such as navigation controls, to improve data transfer times or streamline use." EX1003, ¶140. Indeed, Shimada describes that, "[w]hen the amount of data transmitted from the server to the client is reduced, the data access time can be reduced particularly when the transmission rate of the network is low." EX1008, 1:45-48. Additionally, Yohanan describes such an implementation lacking controls to specify a network location ("a more efficient method for accessing network locations" using "a convenient method to access network locations without having to open a browser and key-in the desired site's URL)." EX1016, 2:18-23.



EX1008, FIG. 6 (annotated)

Shimada's screen configuration data also defines a "size" of the frame within which content is presented ("includes a frame within which content received from the network location can be displayed"). EX1008, FIG. 15; EX1003, ¶141. Shimada states that, "in FIG. 16 (*sic* FIG. 15), reference numerals 1602, 1603 and 1604 denote description for **dividing the screen display of the client 105.**" EX1008, 8:65-67, FIG. 15, FIG. 16. Provided below is FIG. 15 of Shimada which includes the cited components.



EX1008, FIG. 15 (annotated)

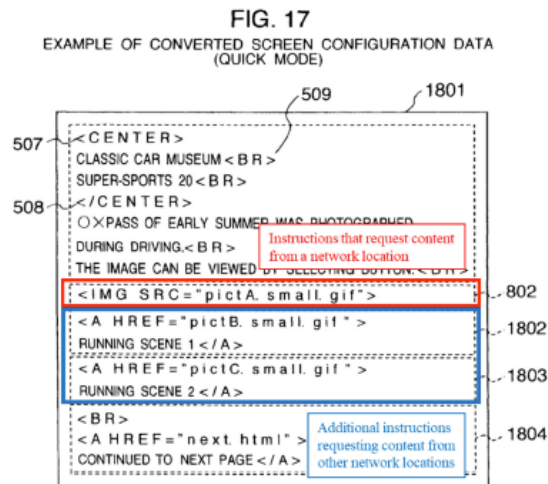
Buchholz also elaborates on the disclosure of frame characteristics and states that “a template can, for example, define **where**, and in what **size** and **color**, the corresponding template data is to be displayed.” EX1008, 5:11-13; EX1003, ¶142.

A POSITA would have recognized or found obvious from the above disclosure that Shimada’s anchor tags also define “**a graphical user interface**” that “**lacks controls for manually navigating a network**” as the content from the anchor tag is presented in a frame that lacks such controls. EX1003, ¶143. The “**size**” of this “**frame**” can be determined by the user (a “**frame characteristic**”). EX1003, ¶143; *supra* [1.1].

[1.4]

Shimada’s screen configuration data includes “instructions” in the form of a URL that “[**requests**] **content from the network location ... via the TCP/IP protocol.**” Indeed, Shimada describes that “[] in the description 503 is a tag referred to as ‘imaging.’ Here, this tag describes that the data designated by [SRC= “ ”] is buried at this portion in the text. [pictA.gif] designated here is the address representing a static image. The client 105 **requests the server 101 to transfer this pict A.gif**, receives this data from the server 101 and **displays it on the screen** in succession to the text 602, so that the static image 603 is finally **displayed on the screen of the client 105** as shown in FIG. 6.” EX1008, 6:30-51,

FIG. 17, FIG. 18, FIG. 22; EX1003, ¶144. Shimada’s anchor tags include similar instructions for requesting content referenced by the anchor tag. *Id.*



EX1008, FIG. 17 (annotated)

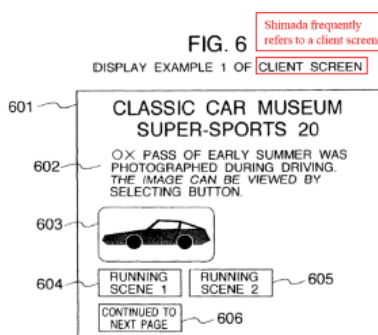
As Dr. Schmidt explains, a POSITA also would have understood or found obvious from the above disclosure that the “instructions” for requesting the content in Shimada also cause the client to **“generate the graphical user interface of the first networked information monitor with the content received from the network location via the TCP/IP protocol”** because the tags that request content also define the presentation of the content on the screen. EX1003, ¶145.

Alternatively, a POSITA also would have understood or found obvious that Shimada’s anchor tags serve as **“instructions”** to both **“request content from the network location”** and **“generate the graphical user interface of the first networked information monitor,”** as selecting the anchor tag results in the

execution of both of these tasks. EX1008, 6:39-51, *see at least* FIG. 22; EX1003, ¶146.

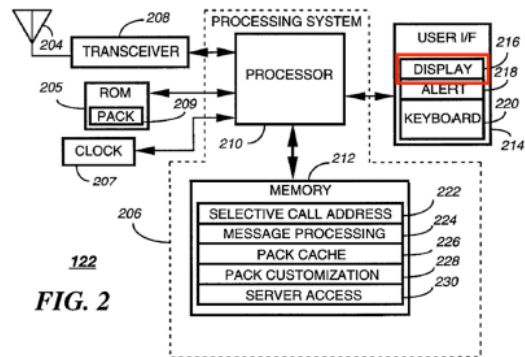
[1.5]

Shimada frequently refers to a “client screen display,” which a POSITA would have understood or found obvious to be “**an electronic display.**” EX1008, *see at least* 6:4-9, FIG. 6, FIG. 7, FIG. 17, FIG. 18; EX1003, ¶147. An example of Shimada’s client display is provided below.



EX1008, FIG. 6 (annotated)

Buchholz also describes such features, and discloses that portable subscriber devices include a “conventional display 216.” EX1009, 4:1-2; EX1003, ¶148. An example portable subscriber device is provided below.



EX1009, FIG. 2 (annotated)

[1.6]

Shimada discloses that “processing” occurs on the client side of its system and states that the “information **processing** unit on the service requesting side is referred to as a ‘client.’” EX1008, 1:26-28, FIG. 6, FIG. 7; EX1003, ¶149. As Dr. Schmidt explains, a POSITA would have understood or found obvious from this disclosure that a “processor” would execute the basic functions of the screen configuration data, to include “accessing” and “executing” the screen configuration data, as these are basic functions that were known to be executed by a generic processor. EX1003, ¶149.

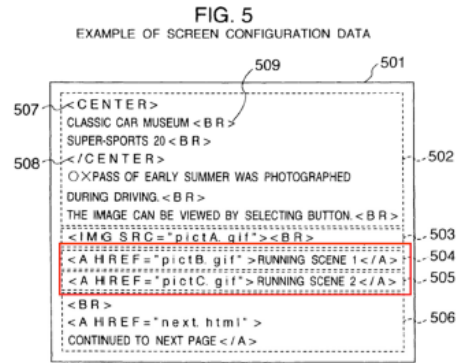
Consistent with this disclosure, Buchholz describes that its portable subscriber units contain a “processing system 206” (“**one or more processors**”) which comprises a “conventional processor 210 and a conventional memory 212,” where the memory 212 further comprises “a server access element 230 for programming the processing system 206 to allow a user to **access the server 124** (“**access the first**

networked information monitor template”) for creating, modifying (“**execute the first networked information monitor template**”), and **downloading** a pack.” EX1009, 4:14-31, FIG. 2; EX1003, ¶150.

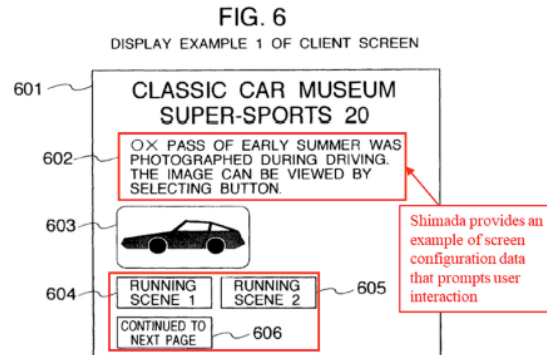
Additionally, Buchholz describes a template (“**networked information monitor template**”) as “a pattern utilized by **the processing system 206** and the user interface 214 to **lay out the presentation of information to the user.**” EX1009, 5:7-9. Dr. Schmidt explains that, from this disclosure, it would have been obvious to a POSITA that the processing system “**execute[s] the first networked information monitor template such that the graphical user interface ... is presented to a user on the electronic display having content received from the content reference therein,**” as Buchholz describes that templates are for “**presentation of information to the user.**” EX1009, 5:7-9; EX1003, ¶151.

[2]

Shimada discloses that “text partitioned by [<] and [>] in the screen configuration data is referred to as a ‘tag.’ This tag is used for putting an **effect to the text**, or for representing burying of the data other than the text such as a static image, or for describing burying of the button which can be **operated by the user of the client 105**” (“**control characteristics that define one or more controls that are usable by the user**”). EX1008, 6:14-22, FIG. 5 (below), FIG. 6 (below); EX1003, ¶152.



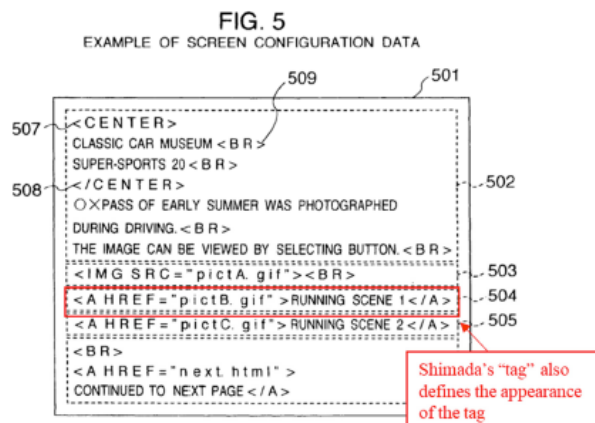
EX1008, FIG. 5 (annotated)



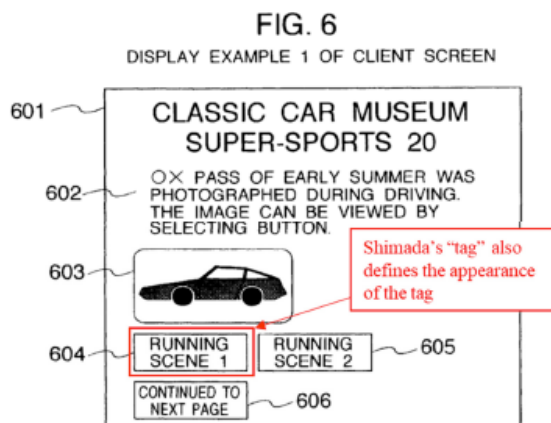
EX1008, FIG. 6 (annotated)

[3]

See [2] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that the anchor tags disclosed by Shimada allow for visual customization (“**visual representations of the controls**”). Indeed, the anchor tags of Shimada define the appearance of the controls in the “screen configuration data.” EX1008, FIG. 5 (below), FIG. 6 (below); EX1003, ¶153.



EX1008, FIG. 5 (annotated)



EX1008, FIG. 6 (annotated)

[4.1]

See [1.1] (incorporated here). More specifically, Shimada-Buchholz renders obvious multiple (*e.g.*, first and second) networked information monitors because Buchholz discloses multiple templates, each with content reference and associated network location. EX1003, ¶154. As Dr. Schmidt explains, a POSITA would have recognized or found obvious that multiple instances of “screen configuration data”

or “templates” would be downloaded to the device of the Shimada-Buchholz combination, as it was known that a user would want the flexibility to request multiple pieces of content (each requiring a template). EX1003, ¶154. Indeed, Buchholz discloses that the template “pack” comprises “**a bundle of templates (“a second networked information monitor template”)** for formatting the template data for display on at least one page.” EX1009, 2:26-27; EX1003, ¶154; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960) (holding that mere duplication of parts absent some unexpected result carries no patentable significance).

[4.2]

See [1.2] (incorporated here). More specifically, Shimada-Buchholz renders obvious multiple (e.g., first and second) content references and network locations because Buchholz discloses multiple templates, each with content reference and associated network location. EX1003, ¶155. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.2] for the first template. EX1003, ¶155; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960). A POSITA also would have understood or found obvious that, in order to provide content distinct from the first template, the second template would need to reference a “**second network location, which is different from the**

network location in the content reference of the first networked information monitor template.” EX1003, ¶155.

[4.3]

See [1.3] (incorporated here). More specifically, Shimada-Buchholz renders obvious multiple (*e.g.*, first and second) frames because Brown discloses multiple templates, each with content reference and associated network location. FIG. 3A; EX1003, ¶156. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.3] for the first template. EX1003, ¶156; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960).

[4.4]

See [1.4] (incorporated here). More specifically, Shimada-Buchholz renders obvious multiple (*e.g.*, first and second) sets of instructions because Buchholz discloses multiple templates, each with content reference and associated network location. EX1003, ¶157. As Dr. Schmidt explains, a POSITA would have understood or found obvious that a second networked information monitor template would possess these features for the same reasons as discussed in [1.4] for the first template. EX1003, ¶157; *see In re Harza*, 274 F.2d 669, 671 (CCPA 1960).

[5]

See [1.6] and [4] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that multiple instances of “screen configuration data” or “templates” would be displayed simultaneously in the Shimada-Buchholz combination, as it was well known in the art that multiple GUIs, or “frames,” would be displayed on a user display. EX1011, 338; EX1003, ¶158. For example, the Microsoft Windows operating system, one of the most common operating systems as of the critical date, possessed such capability. EX1011, 115, 338; EX1003, ¶158. Indeed, Buchholz discloses that the template pack comprises “a bundle of templates for formatting the template data for display on **at least one page.**” EX1009, 2:26-27; EX1003, ¶158.

[6]

Buchholz discloses a process for downloading a pack of templates, and discloses that the process “begins with the user accessing 802 the server 124 (**“transmit a request to a server”**) to choose a pack. The user then selects **804 a pack (“reception of a user request for a further networked information monitor defined by the further networked information monitor template”)** from a plurality of packs stored in the mass medium 314 of the server 124. The server 124 then **downloads 806 the pack to the portable subscriber unit 122.**” EX1009, 6:48-52, FIG. 8 (below); EX1003, ¶159. As Dr. Schmidt explains, a POSITA would have understood or found obvious that the “process” disclosed in Buchholz would be

executed by a “processor,” as this was known to be a basic function capable of being executed by a processor. Indeed, Buchholz discloses “a **server access element 230** for programming **the processing system 206** (“one or more processors”) to allow a user to access the server 124 for creating, modifying, and downloading a pack.” EX1009, 4:29-31, FIG. 2 (below); EX1003, ¶159.

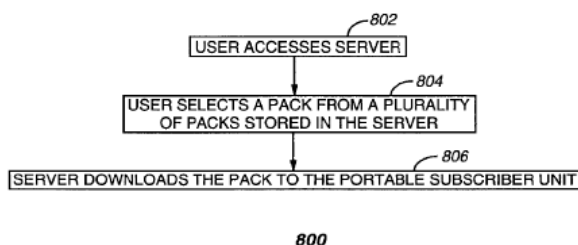


FIG. 8

EX1009, FIG. 8

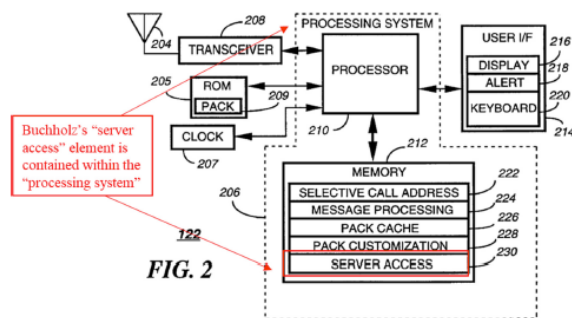
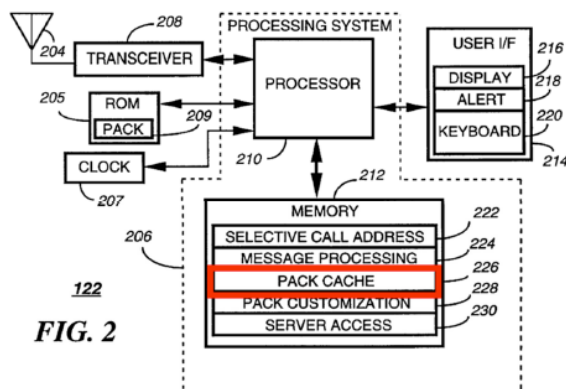


FIG. 2

EX1009, FIG. 2 (annotated)

See [1.1] and [6] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that a template would be stored for the same reasons as discussed in [1.1]. EX1003, ¶160. A POSITA also would have understood or found obvious that a pack downloaded (“**reception of the further**

networked information monitor template from the server”) from the server would be stored in the memory of the “subscriber unit,” as this would enable the portable subscriber unit to utilize the received templates when away from the network. EX1003, ¶160. Indeed, Buchholz discloses that “memory 212 further comprises a pack cache 226 for storing a pack utilized by the portable subscriber unit 122” (“**electronic storage ... configured to electronically store the received further networked information monitor template**”). EX1009, 4:23-24, FIG. 8 (below); EX1003, ¶160. The Shimada-Buchholz combination would incorporate similar features. EX1003, ¶160.



EX1009, FIG. 2 (annotated)

[8]

See [1.6] (incorporated here). As Dr. Schmidt explains, a POSITA would have understood or found obvious that “**execut[ing]**” the further networked information

monitor template would result in similar operations as discussed in [1.6]. EX1003, ¶161.

[9.pre]

To the extent the preamble is limiting, a POSITA would have recognized or found obvious that the Shimada-Buchholz combination is also a “**computer-implemented method of presenting Internet content to a user, the method being implemented in a client device**” because Shimada describes “a data transmission method of a network system having a data relay apparatus connected to a client device through a first network and to a server device through a second network.” EX1008, Claim 14; EX1003, ¶¶162-163.

As discussed above, the Shimada-Buchholz “client device” includes “electronic storage, an electronic display, and one or more processors”). *See* [1.1], [1.5], [1.6], *supra*.

[9.1] –[16]

The Shimada-Buchholz combination renders these claims obvious in the same manner as explained above for the corresponding claims listed in the following table. EX1003, ¶¶164-179.

Claim	Corresponding Claim
[9.1]	[1.1]
[9.2]	[1.2]

[9.3]	[1.3]
[9.4]	[1.4]
[9.5]	[1.6]
[9.6]	[1.6]
[10]	[2]
[11]	[3]
[12]	[4]
[13]	[5]

IV. PTAB DISCRETION SHOULD NOT PRECLUDE INSTITUTION

On February 22, 2023, Samsung Electronics Co., Ltd. (“Samsung”) petitioned for *inter partes* review of the ’083 patent (“the Samsung Petition”) in IPR2023-00621 (“the Samsung Proceeding”). The Board instituted review in that proceeding on October 11, 2023. On May 23, 2023, Petitioner petitioned for IPR of the ’083 patent (“the Original Petition”) in IPR2023-00938 (“the Apple Proceeding”). The Board has yet to render an institution decision based on the Original Petition. Petitioner presently submits this Petition (“the Joinder Petition”) with a conditional motion to join Petitioner to the Samsung Proceeding **if, and only if**, the Board declines to institute the Original Petition in the Apple Proceeding.

This Joinder Petition and its accompanying conditional motion avoids (1) duplicative litigation in different forums on the same printed publication prior art grounds, and (2) potentially inconsistent decisions from different forums. If the

Board were to deny both Apple’s Original Petition and this Joinder Petition, Apple would have no choice but to pursue its invalidity defenses in district court in parallel with the Samsung Proceeding. Against that outcome, institution of one petition or the other promotes judicial efficiency.

A. The *General Plastic* Factors Favor Institution

The Board’s “intent in formulating the [*General Plastic*] factors was to take undue inequities and prejudices to Patent Owner into account” when evaluating second-in-time petitions. *General Plastic Indus. Co. v. Cannon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16 (PTAB Sept. 6, 2017) (precedential). The Board has applied this framework to the joinder petition of a petitioner that previously filed its own petition. *Apple Inc., v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9 (PTAB Oct. 28, 2020) (precedential). And while the Board denied institution in *Apple v. Uniloc*, the facts here are quite different and serve the Board’s goals of promoting fairness and efficiency for both parties.

1. Factor 1: Petitioner’s Multiple Petitions Do Not Prejudice Patent Owner

The fact that Petitioner previously filed a petition (the Original Petition) against overlapping claims of the ’083 patent does not reveal prejudice to Patent Owner. Indeed, it is not uncommon for petitioners to submit more than one petition against the same patent with an understanding that the Board will typically institute no more than one of them. *See* CTPG at 59-61 (discussing “parallel petitions”). Just

as a parallel petitioner does not introduce prejudice by requesting institution of multiple petitions **in the alternative**, Petitioner also does not introduce prejudice by filing this Joinder Petition with a conditional request for joinder.

2. Factors 2 and 3: Petitioner's Knowledge of the Prior Art in the Samsung Petition Did Not Prejudice Patent Owner and Does Not Implicate Road-Mapping or Playbooking Concerns

Entirely independent of Samsung, Apple was concurrently preparing the Original Petition based on different prior art when it learned of the Samsung Petition at the time it was filed, and Apple filed the Original Petition **before** Patent Owner submitted its preliminary response to the Samsung Petition. Given that this Joinder Petition mirrors the prior art grounds from the Samsung Petition without alteration, Petitioner also has not gained any advantage over Patent Owner here in this proceeding. Moreover, the patentability analysis of this Joinder Petition was not modified in any way to account for the Board's analysis and/or Patent Owner's arguments made in the Samsung Proceeding.

3. Factors 4 and 5: Petitioner Diligently Prepared This Joinder Petition at the Appropriate Time

As a matter of statutory law, under 35 U.S.C. § 315(c), Petitioner could not have been joined to the Samsung Proceeding any earlier than the Board's institution of the Samsung Petition. And the filing date of this Joinder Petition is within the one-month timeline set by the Board's rules. The facts here are in stark contrast to *General Plastic* where the petitioner "provided no meaningful explanation" for a nine-month

delay filing its follow-on petition. *General Plastic* at 10; *see also Apple v. Uniloc* at 5-6, 10-11 (noting the follow-on petition was filed long after the original petition had been denied institution).

4. Factors 6 and 7: Institution Efficiently Promotes Patent Quality

The Board’s finite resources are well spent here. Institution will allow *inter partes* review to serve its intended function as a true alternative to district court litigation on the subject of validity over certain printed publication prior art grounds. *See, e.g., General Plastic* at 16 (“In exercising discretion...we are mindful of the goals of the AIA—namely, to improve patent quality and make the patent system more efficient by the use of post-grant review procedures”); *OpenSky Industries, LLC v. VLSI Technology LLC*, IPR2021-01064, Paper 102 at 28 (PTAB Oct. 17, 2022) (precedential) (“Congress intended AIA proceedings to be a less-expensive alternative to district court litigation to resolve certain patentability issues.”).

Both parties will benefit from confining adjudication on certain invalidity grounds to a single forum. As to the capacity of the Board to issue a final written decision within one year, Petitioner’s willingness to serve as an “understudy” in the Samsung Proceeding is fully consistent with the Board’s statutory goal.

B. The *Fintiv* Factors Favor Institution

On July 25, 2023, the district court granted Apple’s Motion to Transfer Venue to the Northern District of California, closing the litigation in the Western District of Texas. EX1020 (Redacted Order Granting Transfer); EX1021 (Report to USPTO re Transfer Decision). Patent Owner has filed a Petition for Writ of Mandamus, challenging the transfer ruling, and no matter has yet been opened in the Northern District of California. *See, e.g.*, EX1022 (DoDots’s motion seeking to waive confidentiality with respect to its petition for a writ of mandamus, which challenges transfer order). Accordingly, there is no active parallel litigation between the parties. In the event that Patent Owner argues the *Fintiv* favors denying institution, Apple reserves its right to address the *Fintiv* factors in a preliminary sur-reply based on the then-existing state of the litigation.

C. The *Advanced Bionics* Test Favors Institution

This Petition presents new prior art and arguments against the Challenged Claims. None of Wecker, Shimada, and Buchholz were previously cited or applied in a rejection during prosecution of the ’083 Patent. While Brown is listed on the face of the ’083 Patent, it was not applied or discussed by the Examiner in any capacity during prosecution. *See generally* EX1002. Simply citing a reference on an information disclosure statement, without more, does not favor denial of institution.

See Navistar, Inc. v. Fatigue Fracture Tech., LLC, IPR2018-00853, Paper 13 at 16-17 (PTAB Sept. 12, 2018).

V. CONCLUSION

The Challenged Claims are unpatentable.

Respectfully submitted,

BY: /s/ Paul R. Hart

Paul R. Hart, Reg. No. 59,646

Adam P. Seitz, Reg. No. 52,206

Kevin Rongish, Reg. No. 78,716

COUNSEL FOR PETITIONER

VI. MANDATORY NOTICES UNDER 37 C.F.R. § 42.8(a)(1)

A. Real Party-In-Interest

Apple Inc. is the real party-in-interest. 37 C.F.R. § 42.8(b)(1).

B. Related Matters

Pursuant to 37 C.F.R. § 42.8(b)(2), Apple identifies the following matters related to the '083 Patent:

- Samsung Electronics Co., Ltd. v. DoDots Licensing Solutions LLC, IPR2023-00621
- DoDots Licensing Solutions LLC v. Apple Inc. et al, 6:22-cv-00533, (W.D.Tex. May 24, 2022), terminated pursuant to transfer, but not yet re-filed in transferee court
- DoDots Licensing Solutions LLC v. Samsung Electronics Co., Ltd. et al, 6:22-cv-00535, (W.D.Tex. May 24, 2022)

C. Lead and Back-Up Counsel

Petitioner provides the following designation and service information for lead and back-up counsel. 37 C.F.R. § 42.8(b)(3) and (b)(4).

Lead Counsel	Back-Up Counsel
Paul R. Hart (Reg. No. 59,646) paul.hart@eriseip.com PTAB@eriseip.com <u>Postal and Hand-Delivery Address:</u> ERISE IP, P.A. 717 17 th St., Ste. 1400 Denver, Colorado 80202 Telephone: (913) 777-5600 Fax: (913) 777-5601	Adam P. Seitz (Reg. No. 52,206) adam.seitz@eriseip.com Kevin Rongish (Reg. No. 78,716) kevin.rongish@eriseip.com PTAB@eriseip.com <u>Postal and Hand-Delivery Address:</u> ERISE IP, P.A. 7015 College Blvd., Suite 700 Overland Park, Kansas 66211 Telephone: (913) 777-5600 Fax: (913) 777-5601

D. Service Information

Please address all correspondence to the lead and back-up counsel as shown above. Petitioner consents to electronic service by e-mail at the e-mail addresses provided above.

E. PAYMENT OF FEES

The PTO is authorized to charge any fees due during this proceeding to Deposit Account No. 50-6159.

Respectfully submitted,

BY: /s/ Paul R. Hart
Paul R. Hart, Reg. No. 59,646
Adam P. Seitz, Reg. No. 52,206

Kevin Rongish, Reg. No. 78,716

COUNSEL FOR PETITIONER

CERTIFICATION OF WORD COUNT

The undersigned certifies pursuant to 37 C.F.R. §42.24 that the foregoing Petition for *Inter Partes* Review, excluding any table of contents, mandatory notices under 37 C.F.R. §42.8, certificates of service or word count, or appendix of exhibits, contains 13,630 words according to the word-processing program used to prepare this document (Microsoft Word).

Dated: November 13, 2023

Respectfully submitted,

BY: /s/ Paul R. Hart

Paul R. Hart, Reg. No. 59,646

Adam P. Seitz, Reg. No. 52,206

Kevin Rongish, Reg. No. 78,716

COUNSEL FOR PETITIONER

CERTIFICATE OF SERVICE ON PATENT OWNER
UNDER 37 C.F.R. § 42.105

Pursuant to 37 C.F.R. §§ 42.6(e) and 42.105, the undersigned certifies that on November 13, 2023, a complete and entire copy of this Petition for *Inter Partes* Review including exhibits was provided via Federal Express to the Patent Owner by serving the correspondence address of record for the '083 Patent as listed on PAIR:

PK PATENT LAW
213 S. Payne Street
Alexandria, VA 22314

Further, a courtesy copy of this Petition for *Inter Partes* Review was sent via electronic mail to Petitioner's and Patent Owner's counsel in *Inter Partes* Review IPR2023-00621:

W. Karl Renner (IPR39843-0148IP1@fr.com)
Jeremy J. Monaldo (PTABInbound@fr.com)
Copy to: PTABInbound@fr.com, axfptab@fr.com,
jjm@fr.com, and in@fr.com

Jason S. Charkow (jason.s.charkow@gmail.com)
Richard Juang (richard.juang@gmail.com)
Chandran B. Iyer (cbiyer@daignaultiyer.com)
Ronald M. Daignault (rdaignault@daignaultiyer.com)
dodotslit@daignaultiyer.com

Respectfully submitted,

BY: /s/ Paul R. Hart
Paul R. Hart, Reg. No. 59,646
Adam P. Seitz, Reg. No. 52,206
Kevin Rongish, Reg. No. 78,716

COUNSEL FOR PETITIONER