

IPR2023-00954 (US 8,458,028)

Sony Interactive Entertainment LLC

v.

Quantum Imaging LLC

September 13, 2024

Roadmap

- Overview of Claims
- Claim Construction
- Angles + POSITA's Knowledge (Ground 1)
- Robinson + POSITA's Knowledge (Ground 2)

Claim 1 of the '028 Patent

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

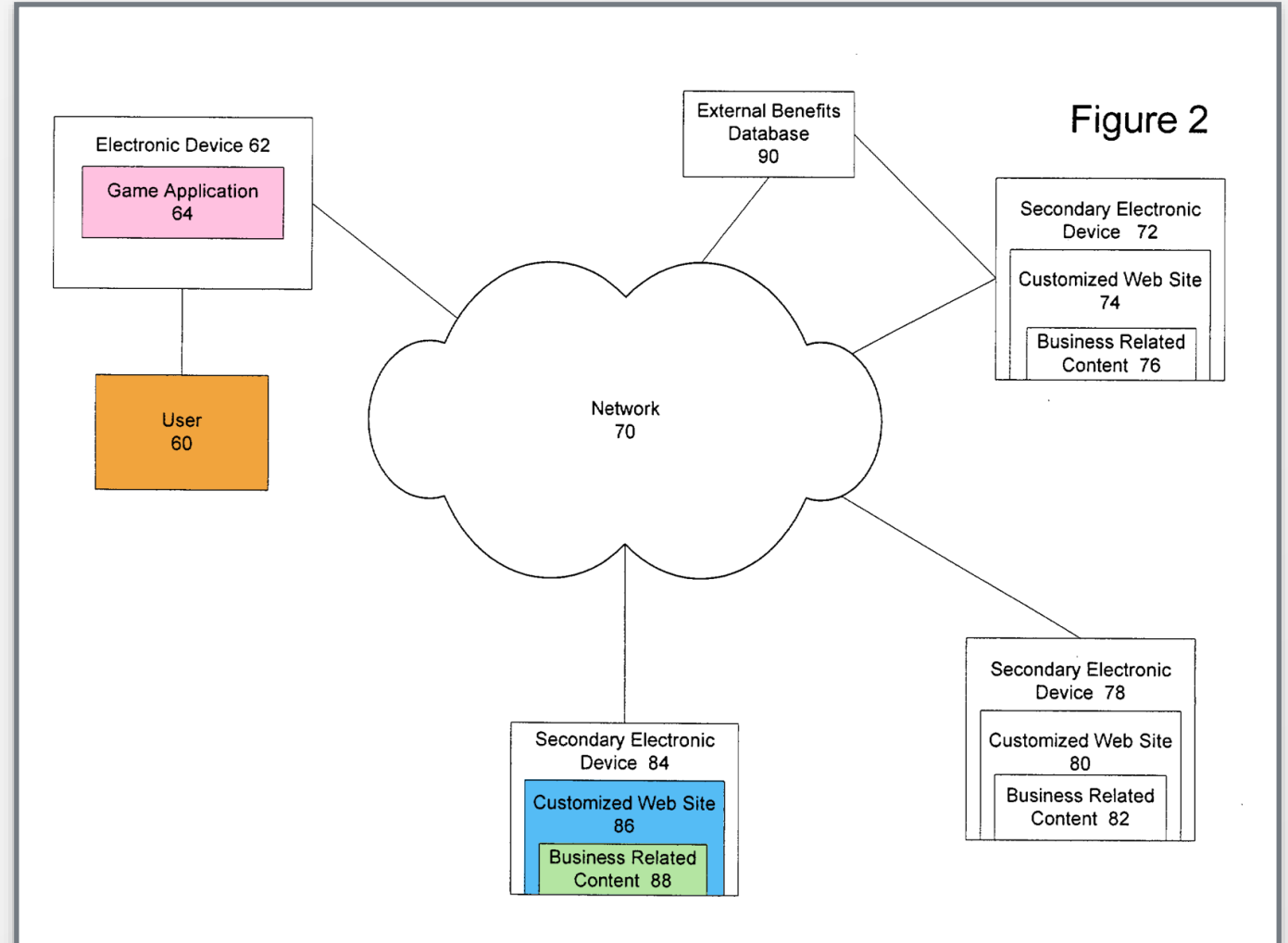
initiating said game application at said primary electronic device;

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1



'028 Patent (Ex. 1001), Fig. 2

Dependent Claims of the '028 Patent

3. The method of claim 1 wherein said game application displays branded business-related content to said user.

'028 Patent (Ex. 1001), Claim 3

4. The method of claim 3 wherein said branded business-related content is dynamically updated.

'028 Patent (Ex. 1001), Claim 4

5. The method of claim 1, comprising the further steps of: executing game-related user actions in said game application as a result of user choices; and generating a player profile based on said user choices made during said game application; wherein the player profile is specific to said user.

'028 Patent (Ex. 1001), Claim 5

6. The method of claim 5 wherein said player profile is disseminated to providers of business-related content used in said game application.

'028 Patent (Ex. 1001), Claim 6

Remaining Claims of the '028 Patent

7. A method of automatically integrating content into an electronic device over a computerized network, comprising:
receiving a request from a user at a primary electronic device to initiate at least one of a plurality of locally executed applications that are accessible to said primary electronic device interfaced with said network;
initiating said at least one of said plurality of applications at said primary electronic device;
providing at least one customized web page at a secondary electronic device, accessed over said computerized network by said primary electronic device, said web page being customized with content for use with said one of said plurality of applications;
automatically integrating said content from said secondary electronic device into said at least one of said plurality of locally executed applications during execution of said at least one of said plurality of applications;
automatically re-directing said user to one of said customized web pages at said secondary electronic device, from said primary electronic device, said re-direction being integrated into said one of said plurality of applications and said re-direction occurring as part of the user executing said one of said plurality of applications; and
executing a user action on said content from said secondary electronic device, said user action generating a benefit for said user relating to said content.

'028 Patent (Ex. 1001), Claim 7

8. The method of claim 7, wherein said content includes dynamic content.

'028 Patent (Ex. 1001), Claim 8

9. The method of claim 7, further comprising:
providing a virtual reality platform interfaced with said primary electronic device, said virtual reality platform providing a three-dimensional visualization in which the user interacts.

'028 Patent (Ex. 1001), Claim 9

Claim Construction

Claim Construction: Decision on Institution



“Petitioner believes that no express constructions of the claims are necessary to assess whether the prior art reads on the challenged claims.”
Pet. 13. Patent Owner does not raise any claim construction issues. Prelim. Resp. 4.

We determine that we need not expressly construe any claim terms to resolve the parties’ disputes on the record before us. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms that . . . are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). To the extent that the scope of any particular claim term requires discussion, however, we provide it in our assessment of the challenges, which we turn to next.

D.I. (Paper 11), 14-15

Level of Skill in the Art

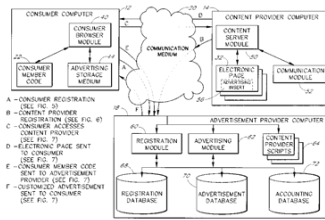
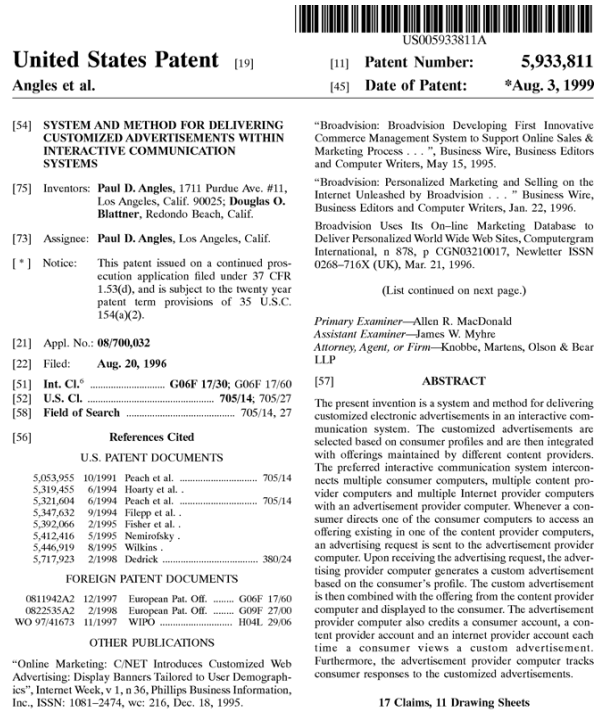
The parties agree as follows:

- A **bachelor degree** in **computer engineering, computer science**, or a similar discipline
- **Two years** of professional experience in the fields of **networking** and **network-based systems or applications**, such as **client-server** and **web-based systems**, in the **specific context of console and gaming** or an equivalent level of skill, knowledge and experience
- At least a general knowledge of **online and in-game advertising methods** prevalent in the field
- At least a general knowledge of **3D rendering and virtual reality**

Petition (Paper 2), 12; PO Response (Paper 23), 4

Angles + POSITA's Knowledge (Ground 1)

Angles (U.S. Patent No. 5,933,811)



Sony Exhibit 1007

The present invention is a system and method for delivering customized electronic advertisements in an interactive communication system. The customized advertisements are selected based on consumer profiles and are then integrated with offerings maintained by different content providers. The preferred interactive communication system interconnects multiple consumer computers, multiple content provider computers and multiple Internet provider computers with an advertisement provider computer. Whenever a consumer directs one of the consumer computers to access an offering existing in one of the content provider computers, an advertising request is sent to the advertisement provider computer. Upon receiving the advertising request, the advertising provider computer generates a custom advertisement based on the consumer's profile. The custom advertisement is then combined with the offering from the content provider computer and displayed to the consumer. The advertisement provider computer also credits a consumer account, a content provider account and an internet provider account each time a consumer views a custom advertisement. Furthermore, the advertisement provider computer tracks consumer responses to the customized advertisements.

Angles (Ex. 1007), Abstract

Petition (Paper 2), 22, 24, 32, 35, 37

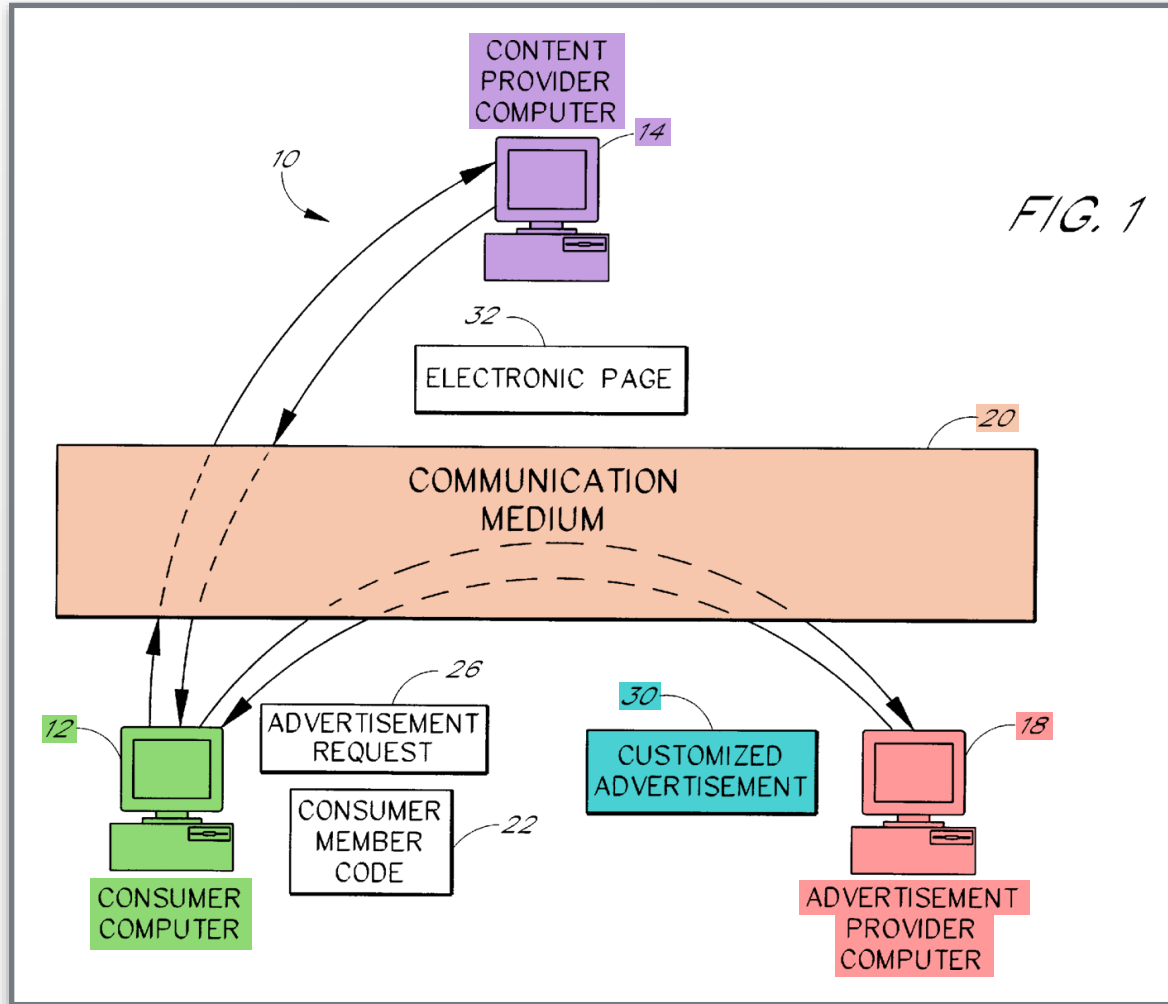
Demonstrative Exhibit – Not Evidence

Angles (Ex. 1007)

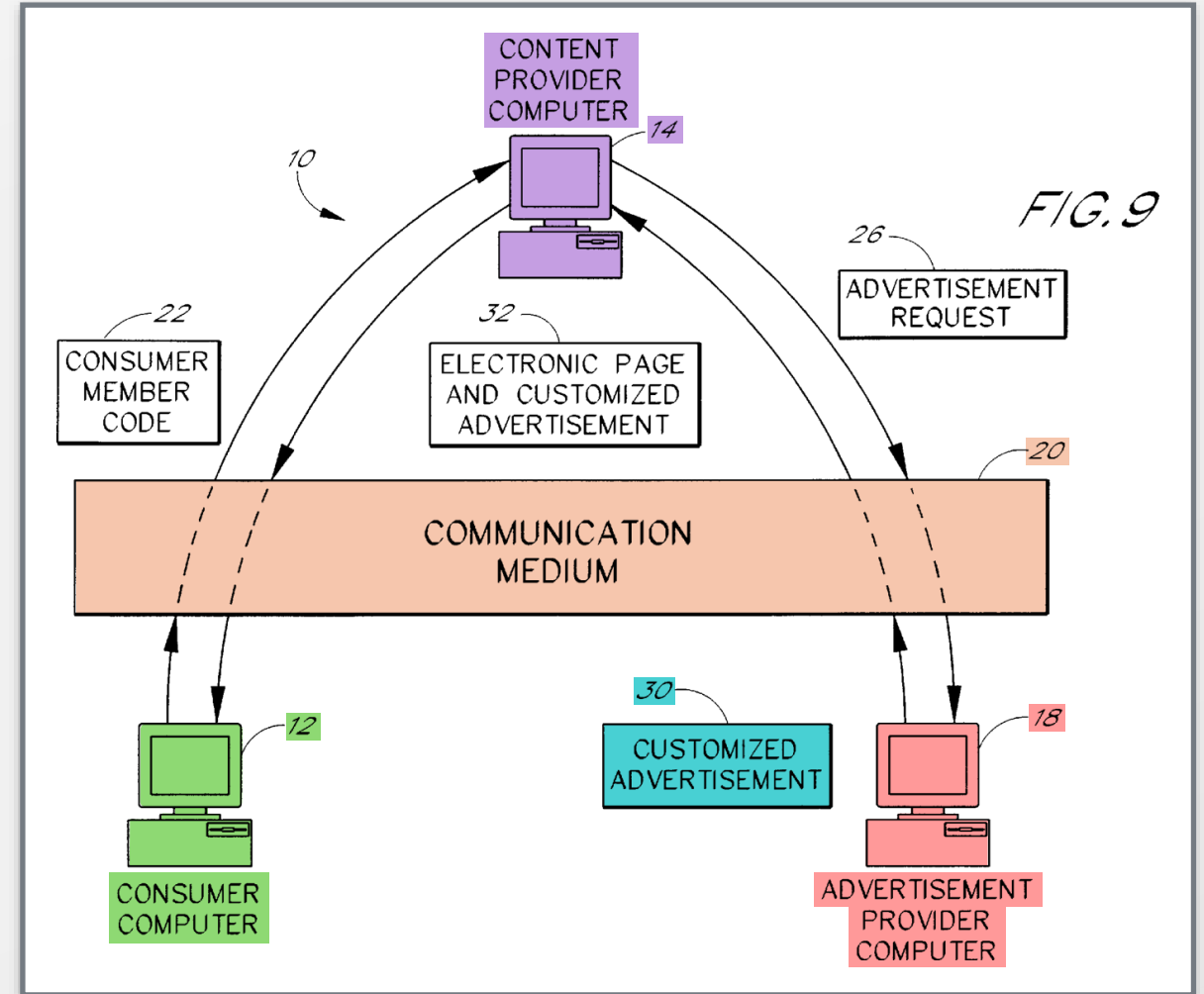
SONY

10

Angles

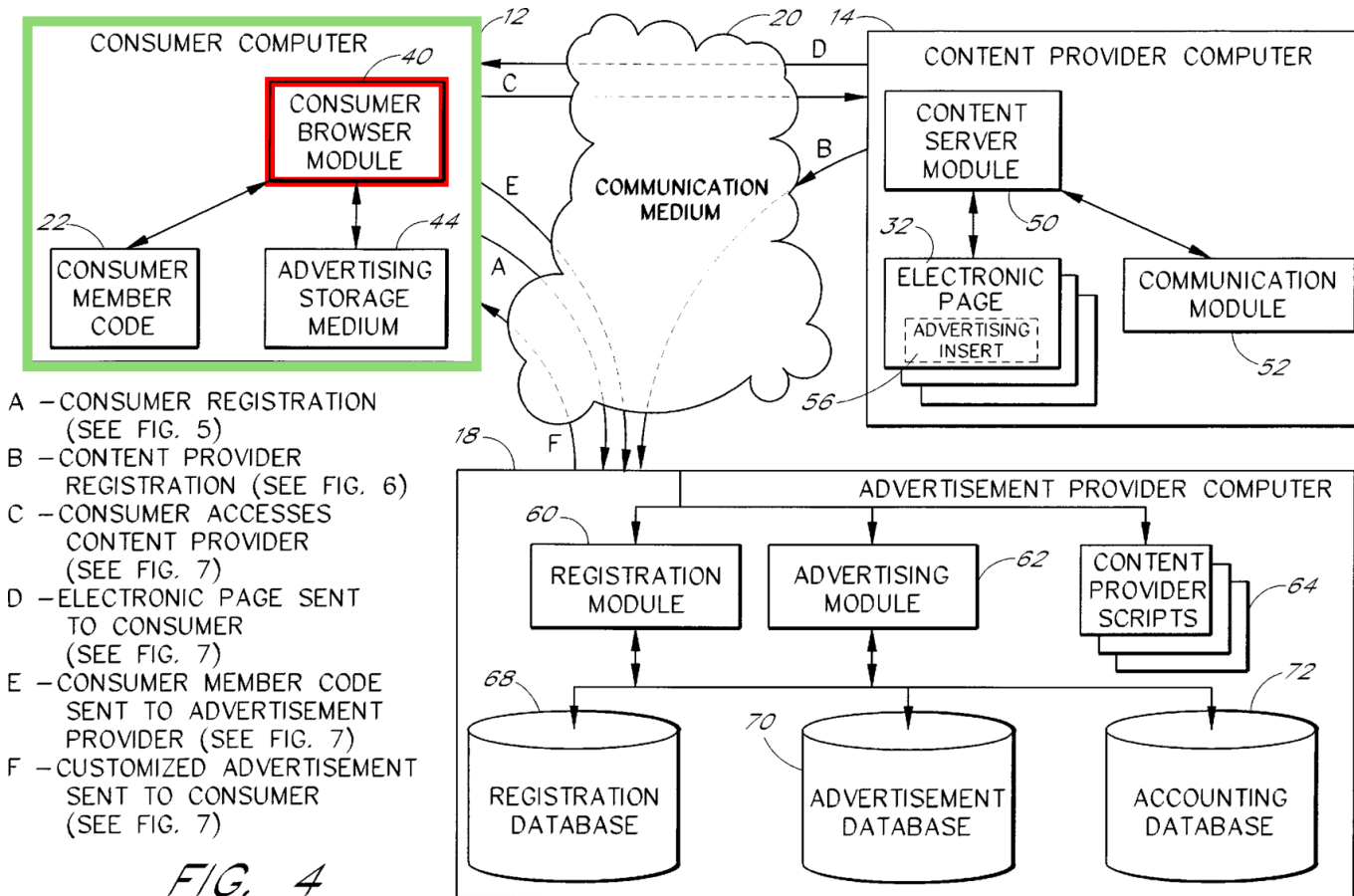


Angles (Ex. 1007), Fig. 1



Angles (Ex. 1007), Fig. 9

Angles



Angles (Ex. 1007), Fig. 4

In the preferred embodiment, the consumer computer 12 utilizes several operational modules including a consumer browser module 40, a consumer member code 22 and an advertising storage medium 44. The consumer browser module 40 (hereinafter referred to as the consumer browser) is a software program which allows a consumer to access different content providers through the communication medium 20. In the preferred embodiment, the consumer browser 40 is the Netscape® Navigator developed by Netscape, Inc. or the Microsoft® Internet Explorer developed by Microsoft Corporation. One of ordinary skill in the art, however, will recognize that numerous other types of access software could also be used to implement the present invention. These other types of access software could, for example, be other types of Internet browsers, custom network browsers, two-way communications software, cable modem software, point-to-point software and the like.

Angles (Ex. 1007), 10:43-59

Angles: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

2

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

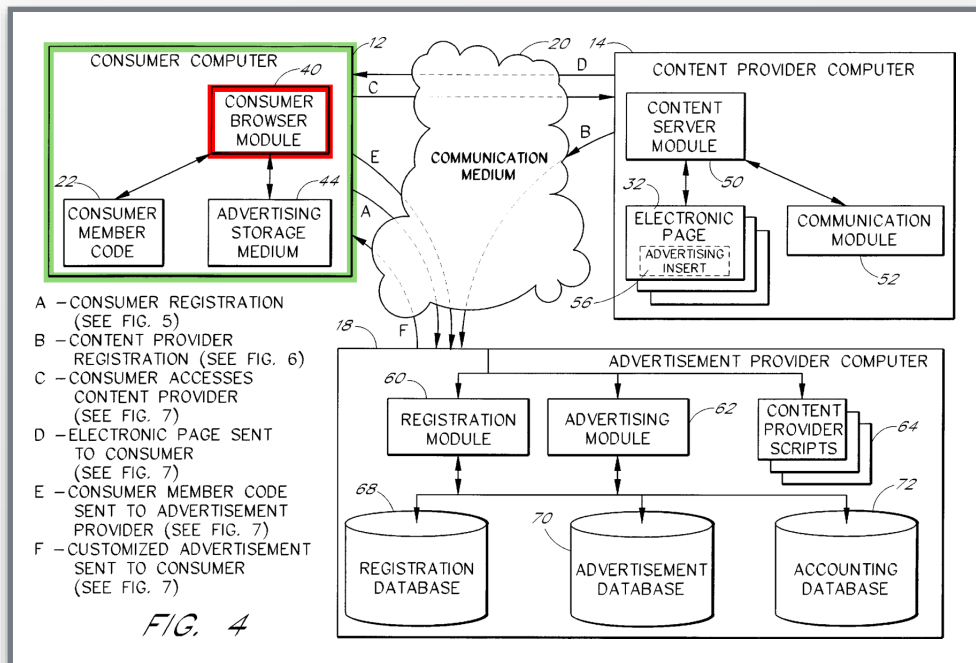
4

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

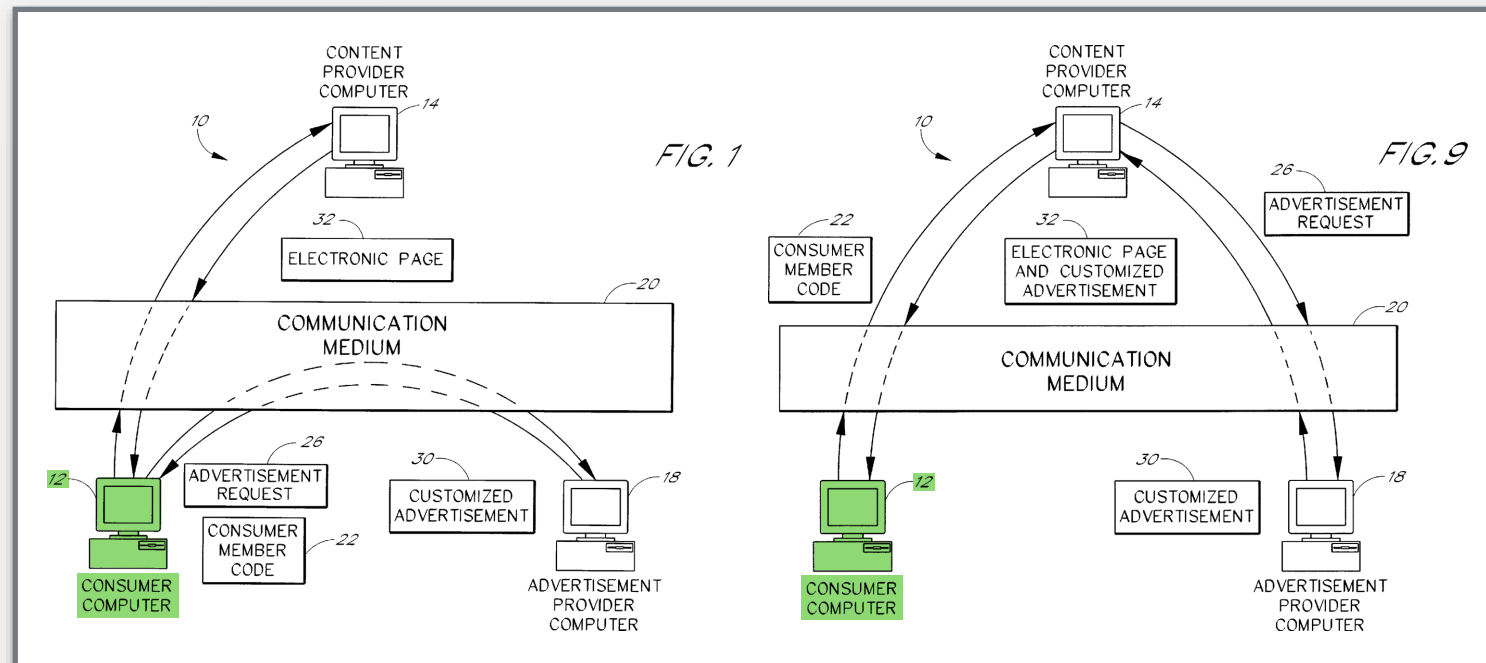
executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1

Locally Executed Game Application



Angles (Ex. 1007), Fig. 4



Angles (Ex. 1007), Figs. 1, 9

Locally Executed Game Application

As discussed in the prior section, the “offering” can be an online game accessible over the Internet and a consumer browser module running on the consumer computer can be a locally executed game application. *Id.*, 10:46-50 (“[T]he consumer browser module 40 (hereinafter referred to as the consumer browser) is a software program which allows a consumer to access different content providers through the communication medium 20.”).

Petition (Paper 2), 22

72. Note that a Web Browser is a computer program that resides locally on a player’s personal computer. The Shockwave and/or Flash plug-ins were downloaded from Macromedia and automatically installed as part of the browser program functionality. Prior to the priority date of the ’028 Patent, the Shockwave plug-in was installed in the browser programs on millions of computers, turning each browser program into a game-playing program. The playing of browser-based games was well known in the art, and a POSITA would have recognized that a browser program that resides on a game player’s computer served as a locally executed game application.

Crane Dec. (Ex. 1004), ¶ 72

Decision on Institution



With respect to Patent Owner’s argument that Petitioner does not explain how Angles is combined with the knowledge of a person having ordinary skill in the art to arrive at the subject matter of limitation 1[a], this argument fails to understand Petitioner’s position. Petitioner does not argue that a person having ordinary skill in the art would have modified Angles’s teachings with the knowledge of a person having ordinary skill in the art to arrive at the subject matter of limitation 1[a]. Instead, **Petitioner’s position explains what a person having ordinary skill in the art would have understood from Angles’s teachings—that initiating and accessing an online game with a browser would result in a locally-executed game application.**

D.I. (Paper 11), 18

⁷ Recognizing this, Mr. Crane contends that a browser located at the consumer computer is the game application. Ex-1004, ¶¶72, 84. Wrong; to a PHOSITA a browser is not a game application. Ex-2005, ¶¶140-142; *see also* Ex-2008, at 446 (defining “game”). Regardless, as explained, the Challenged Claims and the ‘028 Fig. 2 are not about online games (browser-based or otherwise).

PO Response (Paper 23), 25

① Dr. Medvidovic: A Web Browser Cannot Be a Game Application

141. This argument by Mr. Crane is over-reaching and leads to an implausible conclusion. Just because a Netflix application installed on a smart TV would enable a user to watch certain movies, neither the smart TV software nor the Netflix application is a movie. For the same reason, Mr. Crane is incorrect. Much like to be a movie requires a story or event recorded by a camera as a set of moving images, to be a game application, a software program must create a “mental competition in which the participants, called players, seek to achieve some objective within a given set of rules.” Ex. 2008 at 446 (definition of “game”). A browser does not meet this definition, and thus it cannot be a game application.

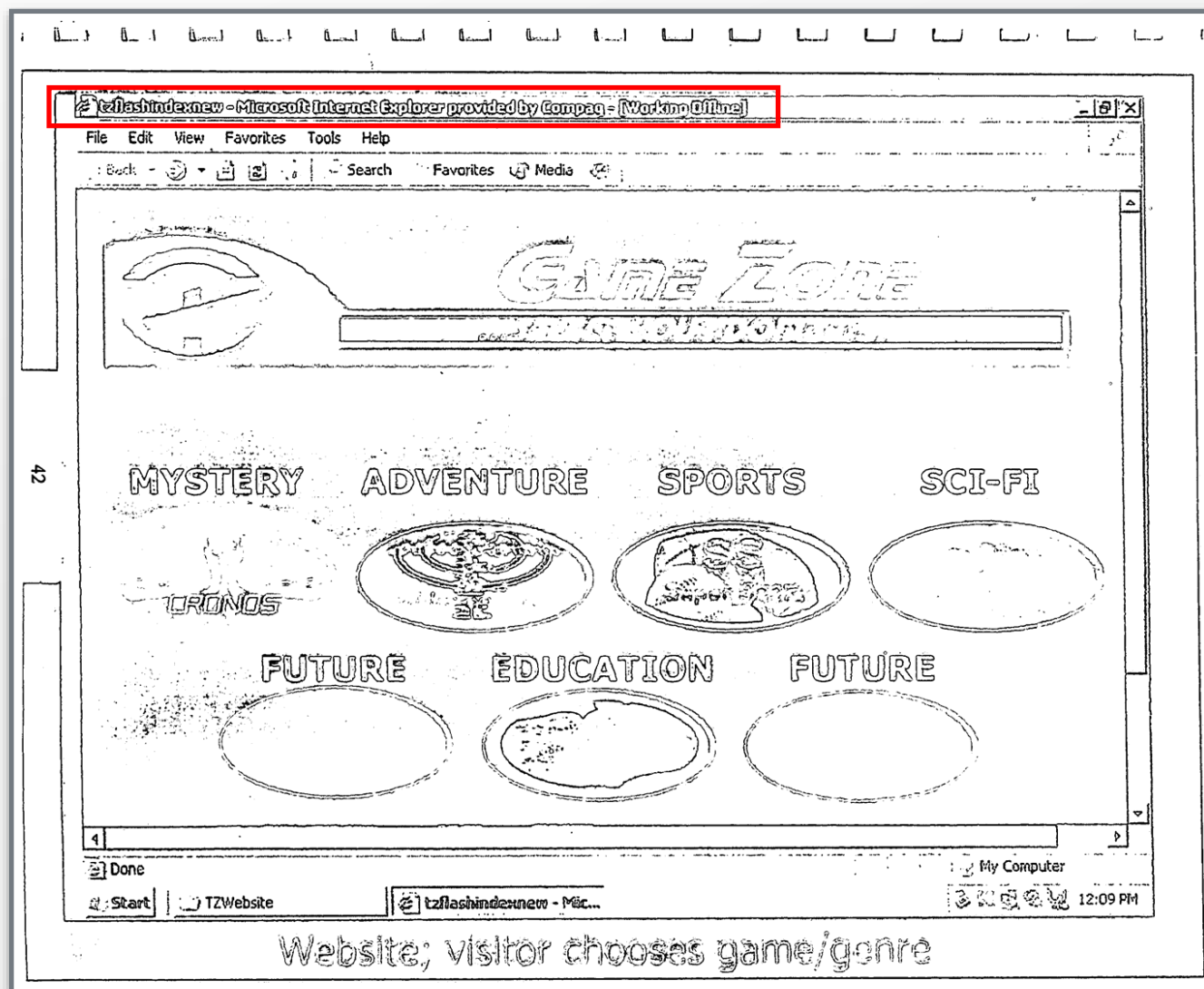
Medvidovic Dec. (Ex. 2005), ¶ 141

① The Applicant's "Storyboard Example of the Invention"

A storyboard example of the invention entitled "TerraZones Storyboard" was provided to the Examiners during the personal interview of October 8, 2008, and a copy of the pertinent portion is provide herewith and listed in the Evidence Appendix of this Appeal Brief. In use, a primary electronic device accesses a game application, to thereby locally execute the game application. Further, business related content, from a least one

Ex. 1003, 107-08

① The Applicant's "Storyboard Example of the Invention"

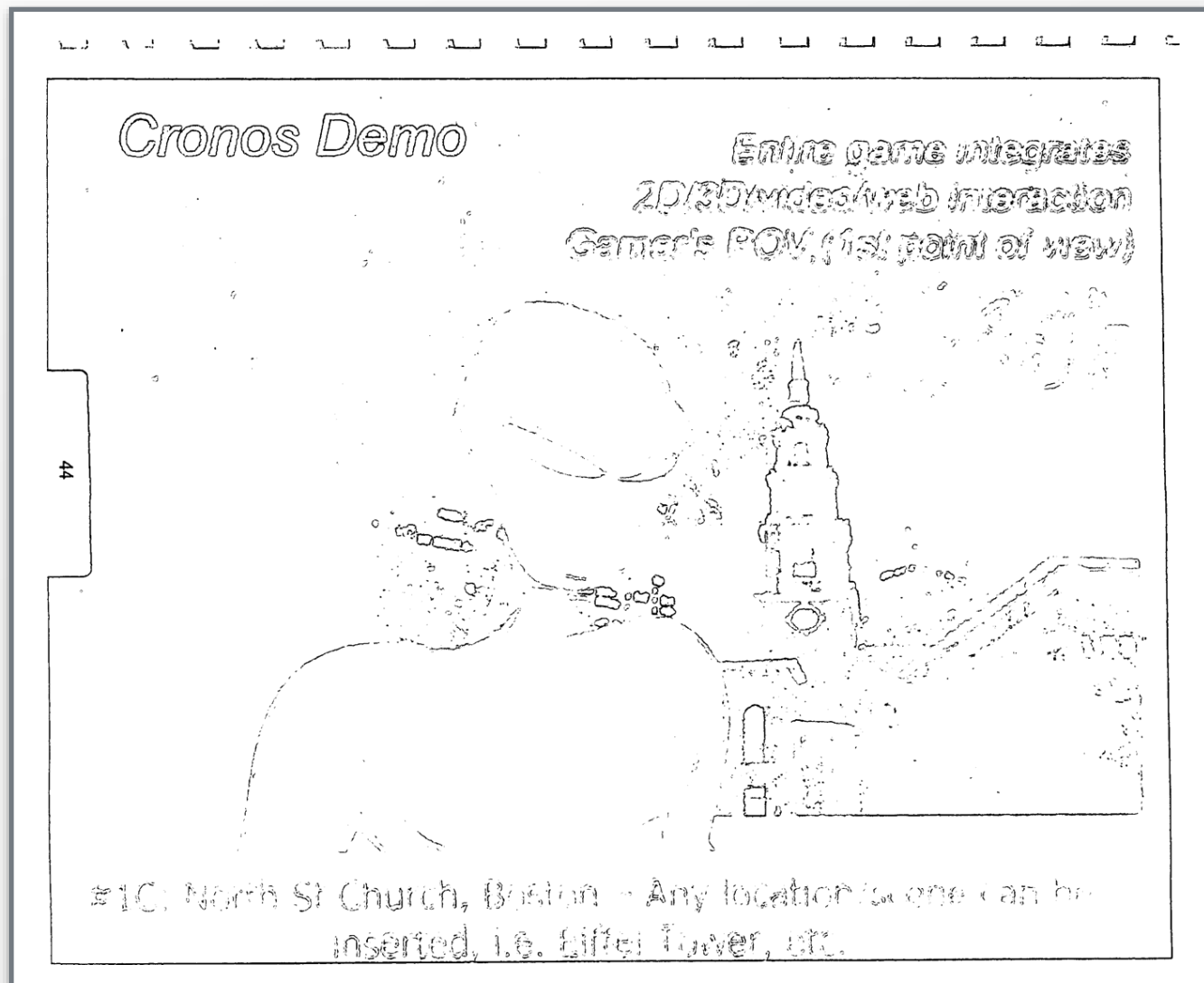


Ex. 1003, 123

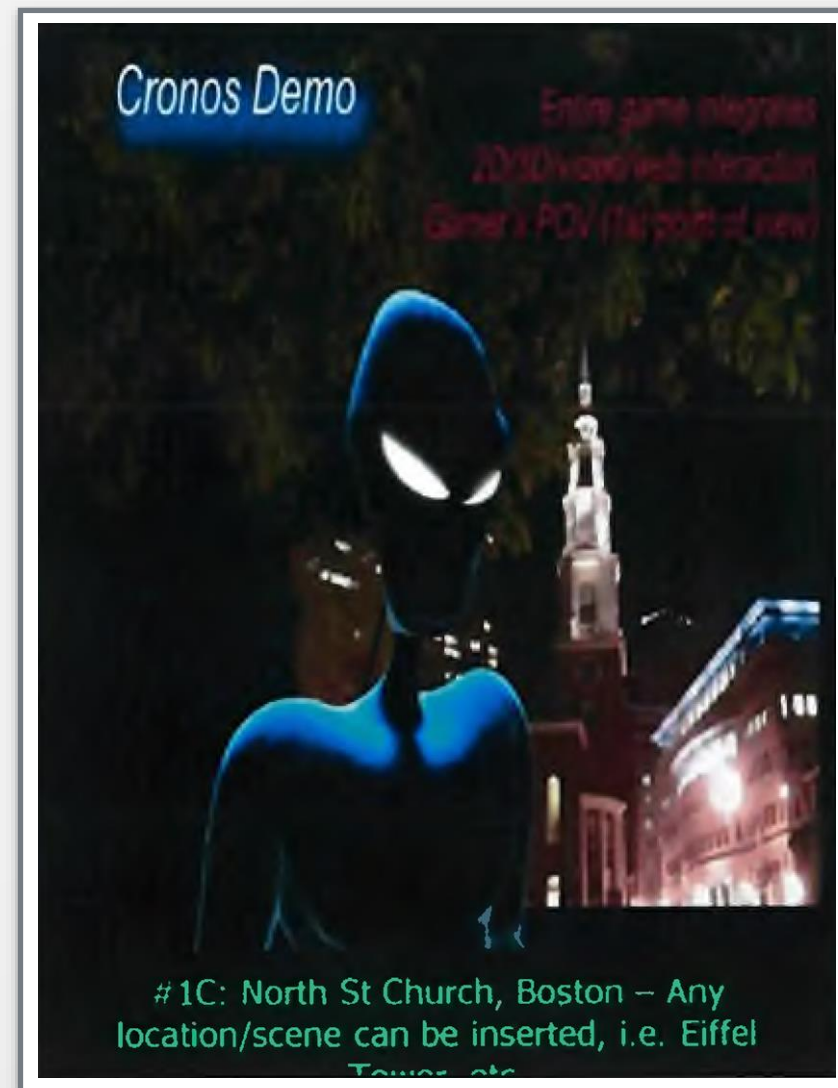


Ex. 1020, 3

① The Applicant's "Storyboard Example of the Invention"



Ex. 1003, 125

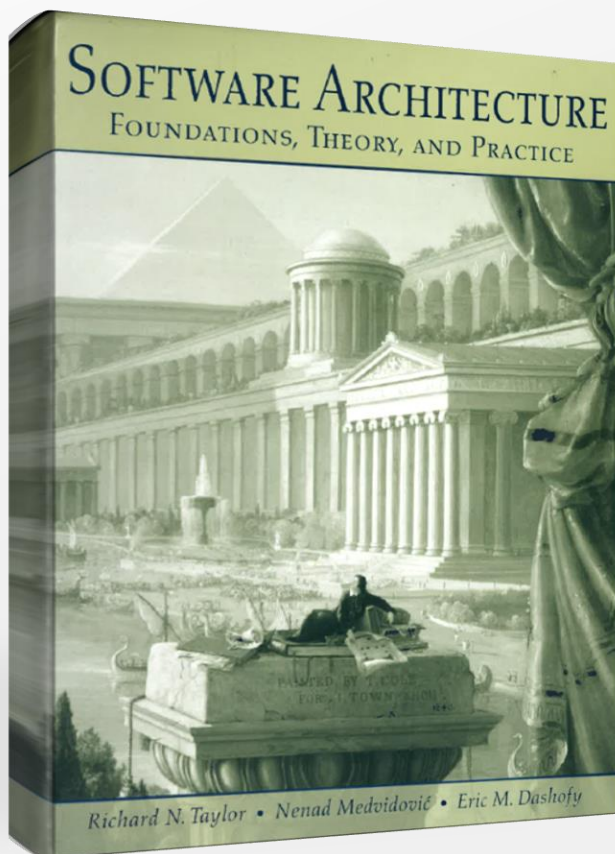


Ex. 1020, 5

① The Applicant's "Storyboard Example of the Invention"

12. For the reasons described below, the POSITA would understand this portion of the prosecution history to be consistent with a web browser meeting the limitation *locally executed game application that is accessible at said primary electronic device* that appears in claim 1 of the '028 patent. I believe the POSITA would understand this portion of the prosecution history to be inconsistent with what I'm informed is the Patent Owner's position that a web browser cannot meet that limitation.

Crane Supp. Dec. (Ex. 1025), ¶ 12



Ex. 1026, 3

18. I co-authored *Software Architecture: Foundations, Theory, and Practice*, a widely used textbook in the field of software systems architecture.

Medvidovic Dec. (Ex. 2005), ¶ 18

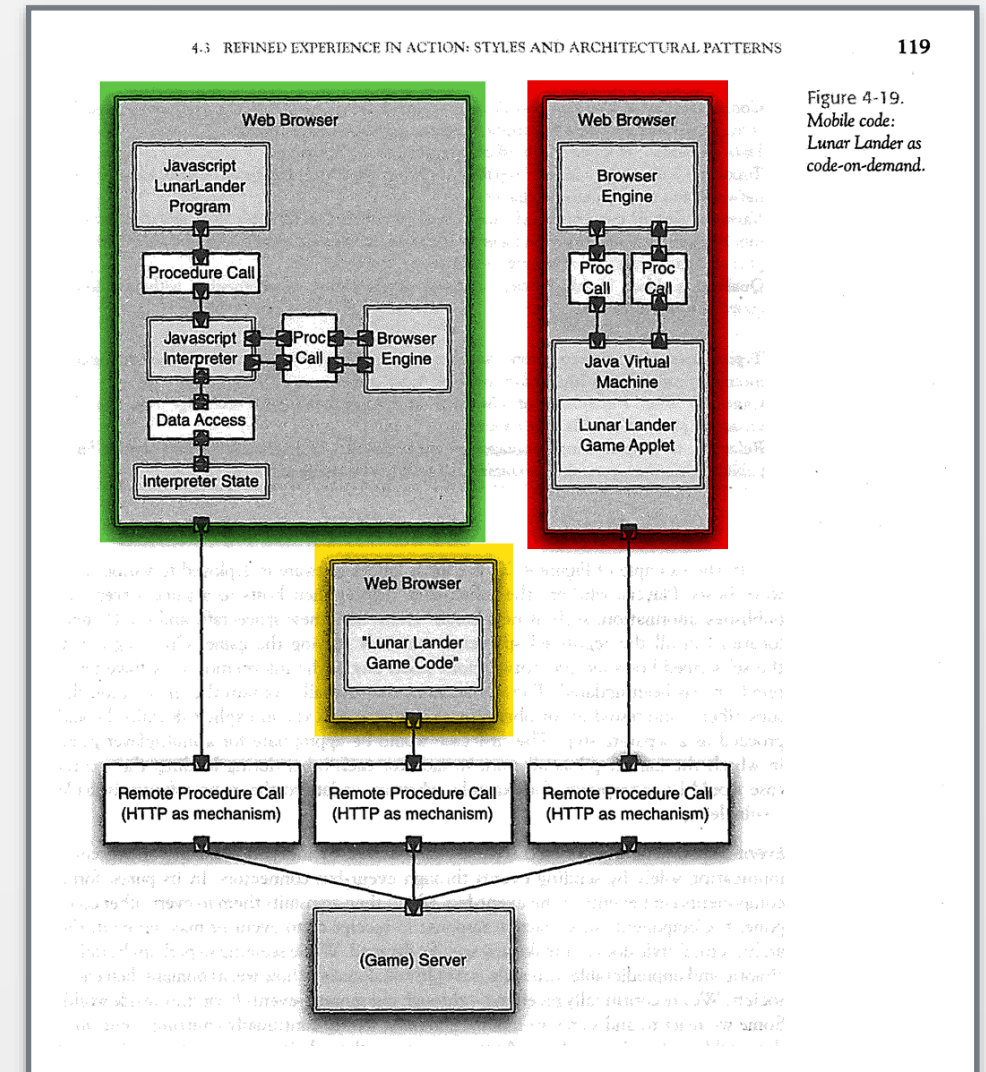
D. PHOSITA

For this proceeding, Patent Owner accepts Petitioner's definition of PHOSITA. Patent Owner's expert, Dr. Medvidović is a PHOSITA. *See* Ex-2005, ¶¶7-24; *see also* Ex-2006.

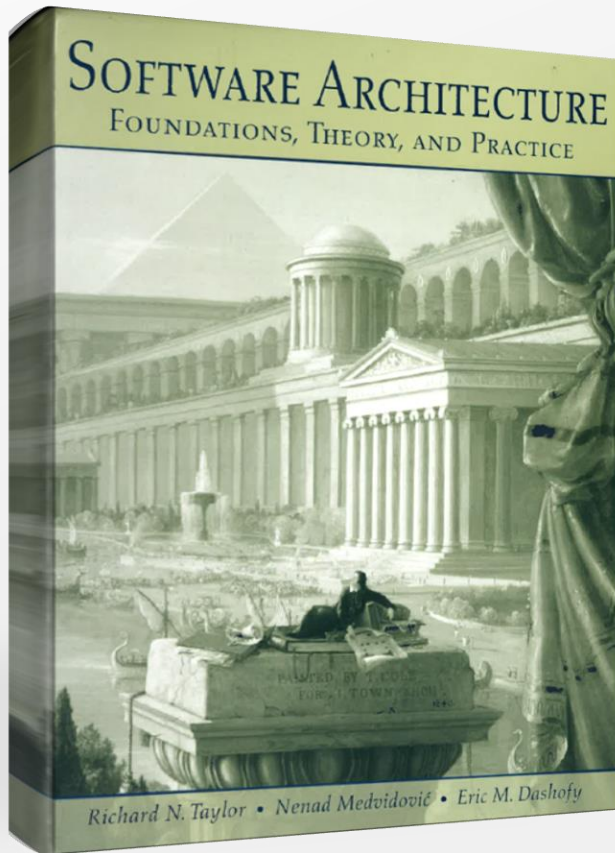
PO Response (Paper 23), 4

In Figure 4-19, one client Web browser downloads code-on-demand in the form of a Lunar Lander game applet via HTTP. A second browser loads a JavaScript Lunar Lander; a third uses some other form that is not detailed. Thus, all the game logic moves to the client machines, freeing the server's computing resources. In the figure as shown, each client machine maintains the game state independently of other clients.

Ex. 1018, p. 118



Ex. 1018, p. 119



Ex. 1026, 3

Q. Who's the audience for the book?

* * *

A. Advanced undergraduate and graduate students, as well as practitioners who may be looking to expand their palette of skills in software engineering.

Q. That group would include people of ordinary skill in the art; right?

A. Ordinary skill in the art as of 2002 as I defined it in my declaration. Such a person may find this book useful.

Q. When was your book published?

A. It came out in early 2009.

Medvidovic Tr. (Ex. 1023), 85:12-25 (objection omitted)

Q. Yes. And you agree with that?

* * *

A. I don't have any reason to disagree with that sentence in isolation. It just depends on what -- what specifically you want me to opine on there.

If you just want to read my book and ask me if I agree with it, divorced of this case, I agree with what the book says. I co-wrote the book.

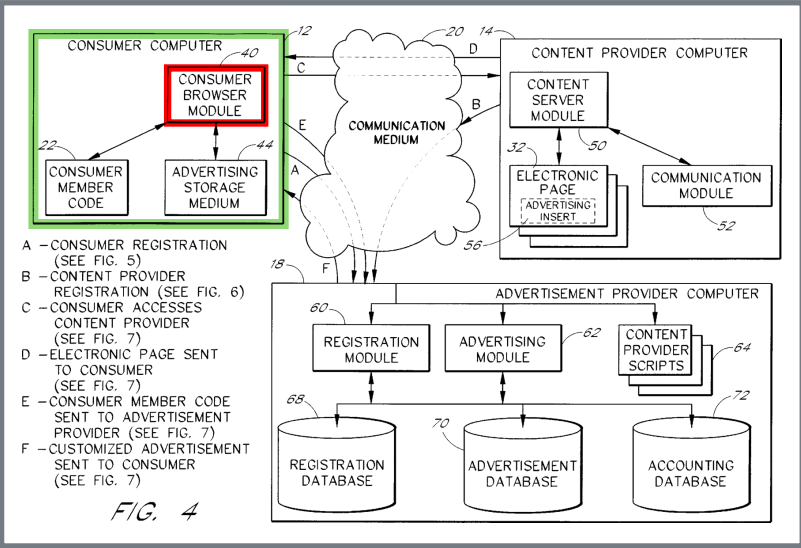
Medvidovic Tr. (Ex. 1023), 95:1-10 (objection omitted)

Q. Back when you wrote the book, is there anything in the book you disagreed with?

A. It would be highly unlikely.

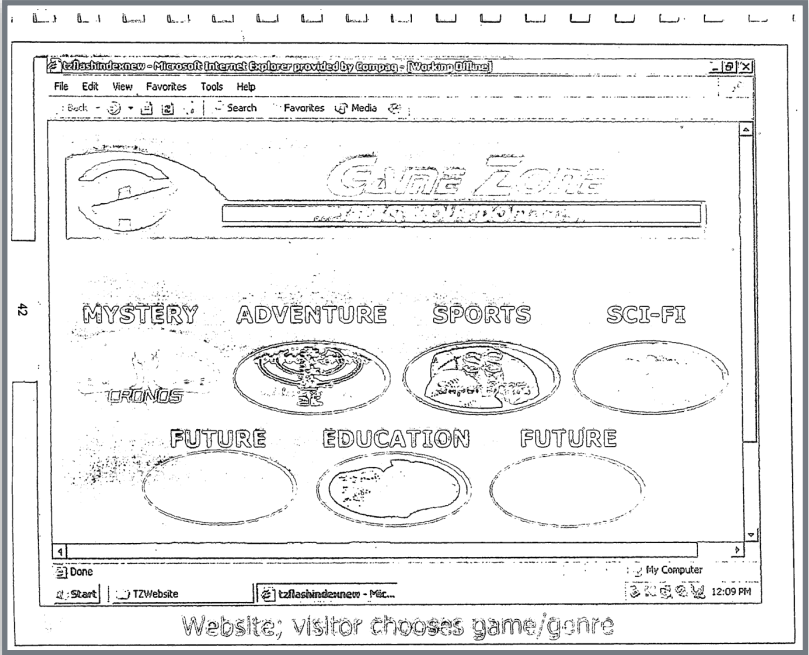
Medvidovic Tr. (Ex. 1023), 95:24-96:1

Angles



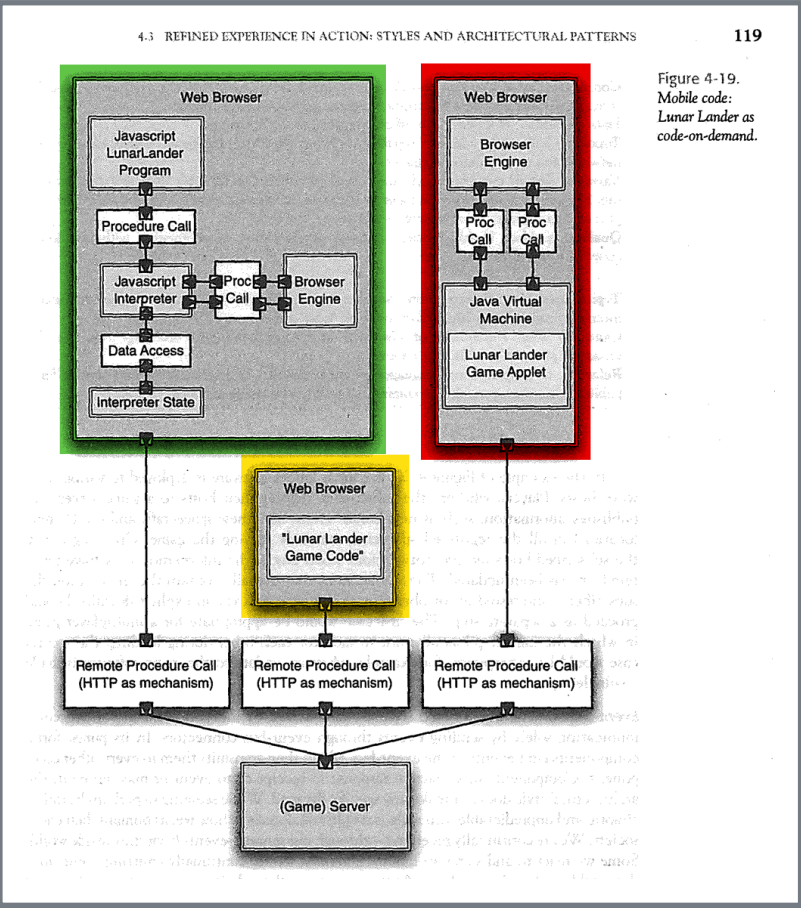
Angles (Ex. 1007), Fig. 4

“example of the invention”



Ex. 1003, 123

Medvidovic Textbook



Ex. 1018, p. 119; Ex. 1026, p. 119

Angles: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1 receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

2 initiating said game application at said primary electronic device;

3 automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

4 automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1

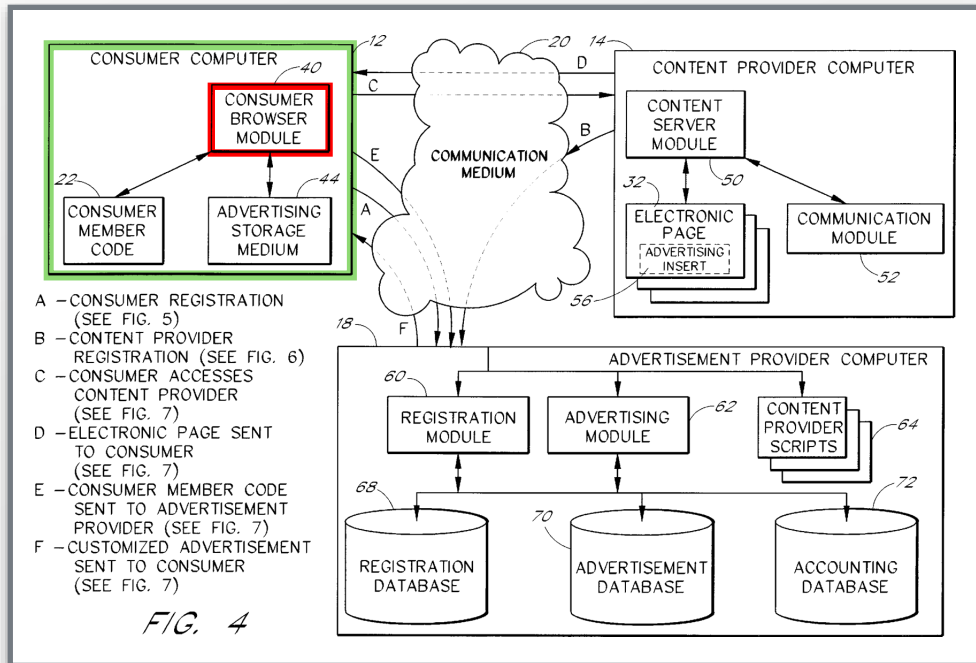
Accessible at Said Primary Electronic Device

Angles teaches this limitation. Angles discloses that a consumer computer can receive a request from a consumer to initiate/access an offering (“a consumer directs one of the consumer computers to access an offering existing in one of the content provider computers” wherein “the offering from the content provider computer” is locally accessible (See Ex-1004, ¶109) “and displayed to the consumer” by the consumer computer.) Ex-1007, Abstract.

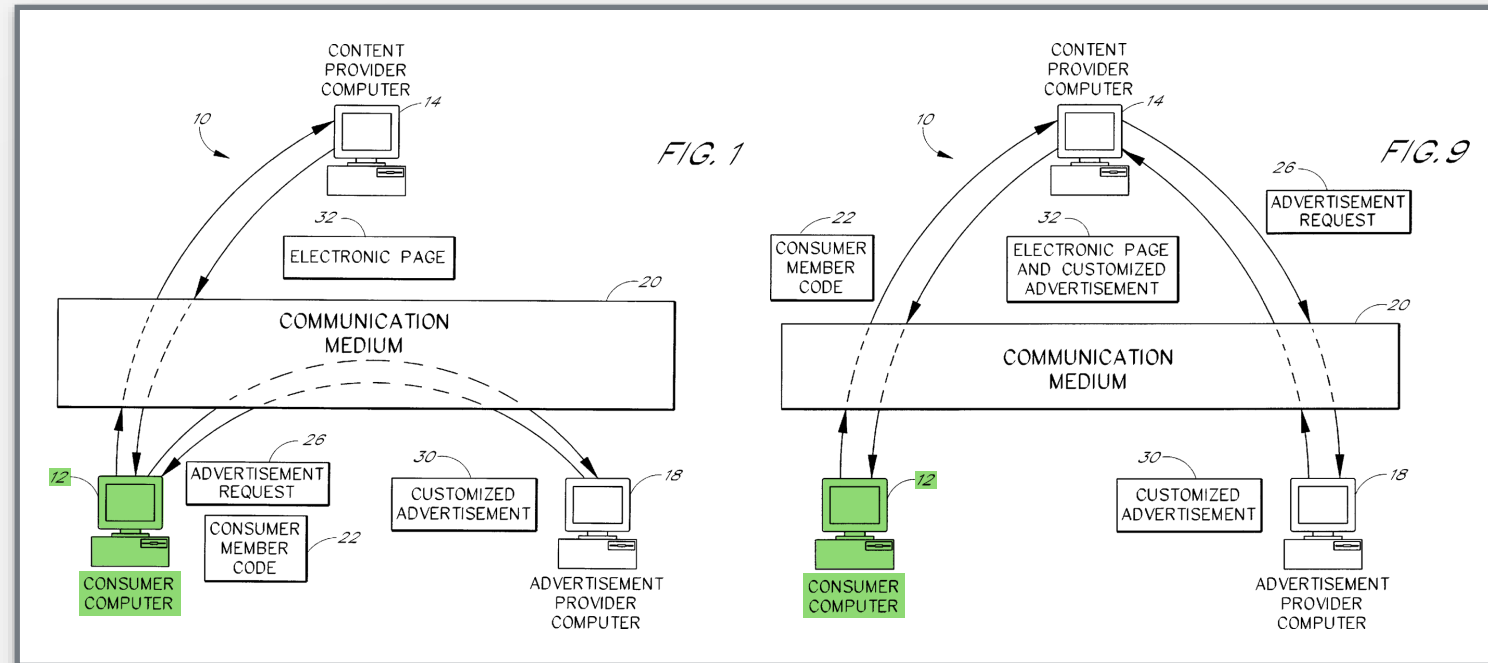
Petition (Paper 2), 21-22

109. Angles teaches **operating a locally executed game application that is accessible at said primary device** in the form of a Web Browser (See ¶84). As noted in section IX.A.3, a POSITA would have recognized a Web Browser to be a locally executed gaming application, and that the claimed **locally executed game application** would be, by definition **accessible at said primary electronic device**.

Crane Dec. (Ex. 1004), ¶ 109



Angles (Ex. 1007), Fig. 4



Angles (Ex. 1007), Figs. 1, 9

② Patent Owner: “Accessible at” Means “Entirely Held by”

Regarding the second requirement, the game application must be accessible at the primary electronic device—not merely from the primary electronic device via network communication. Ex-2005, ¶¶33-35. Given the plain and ordinary meaning of the preposition “at,” the claim unequivocally requires that the game application be entirely held by the same primary electronic device at which it is locally executed—the claim requires that the game application is both held and executed at the local device. Ex-2005, ¶¶44, 49. The specification underscores this understanding: “In one aspect of the illustrative embodiment of the present invention, a primary electronic device holding a game application is part of a network along with a secondary electronic device holding business-related content.” Ex-1001, 1:64-67; *see also id.*, 2:5-71.

PO Response (Paper 23), 20

② The Applicant Amended From “Held at” to “Accessible at”

This listing of claims replaces all prior versions, and listings, of claims in this application:

1. (Currently amended) A method of integrating business-related content over a computerized network, into a primary electronic device ~~holding that accesses~~ a game application, from at least one secondary electronic device ~~holding that accesses~~ business-related content on a plurality of web pages, the method comprising:

receiving a request at said primary electronic device to initiate said game application ~~held that is accessible~~ at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device; ~~and~~

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said game application during execution of said game application; and

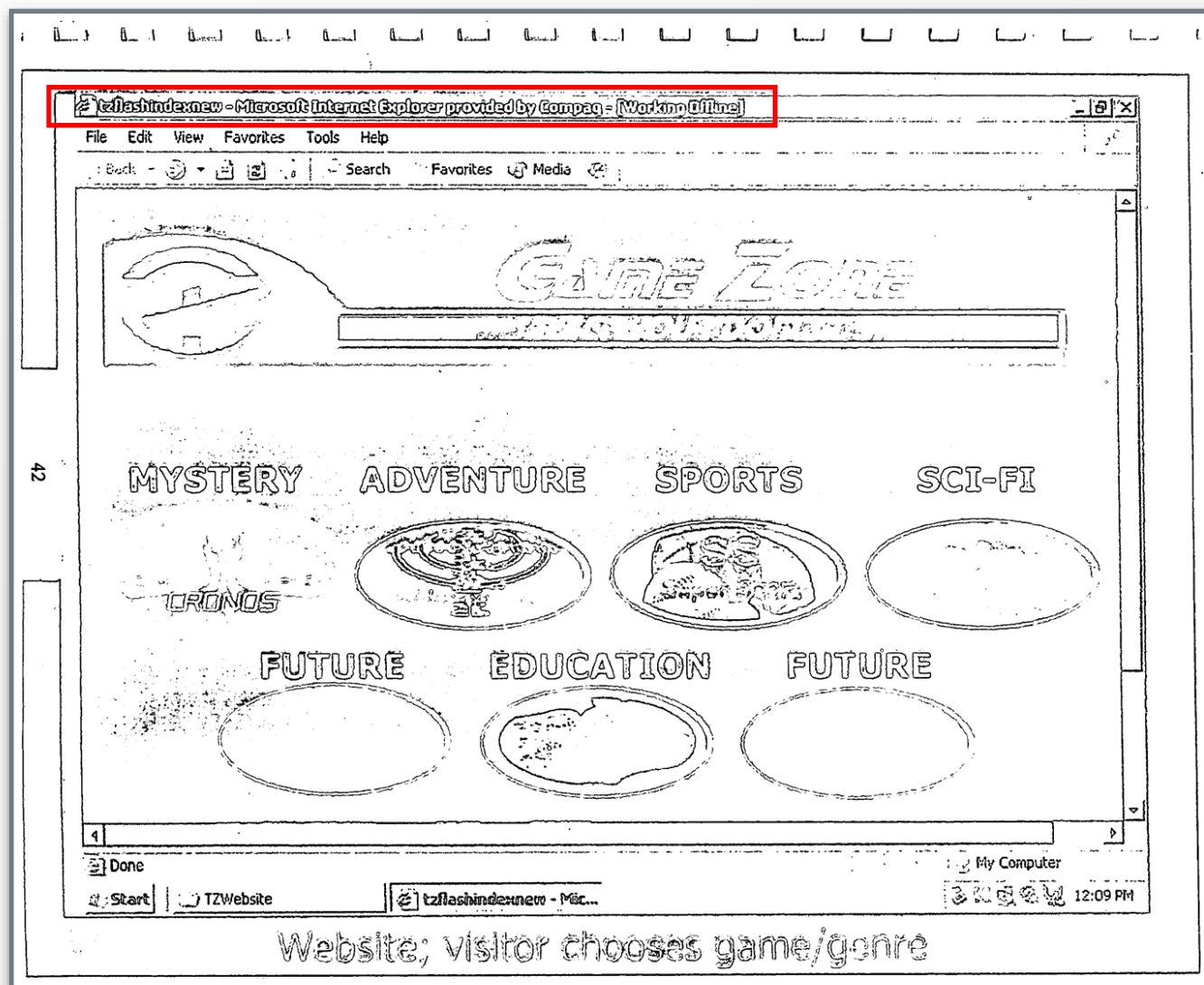
enabling the user to earn an incentive based on actions that are performed on the business-related content during execution of the game application.

② The Applicant's "Storyboard Example of the Invention"

A storyboard example of the invention entitled "TerraZones Storyboard" was provided to the Examiners during the personal interview of October 8, 2008, and a copy of the pertinent portion is provide herewith and listed in the Evidence Appendix of this Appeal Brief. In use, a primary electronic device accesses a game application, to thereby locally execute the game application. Further, business related content, from a least one secondary electronic device that accesses the business related content on a plurality of

Ex. 1003, 107-08

② The Applicant's "Storyboard Example of the Invention"



Ex. 1003, 123



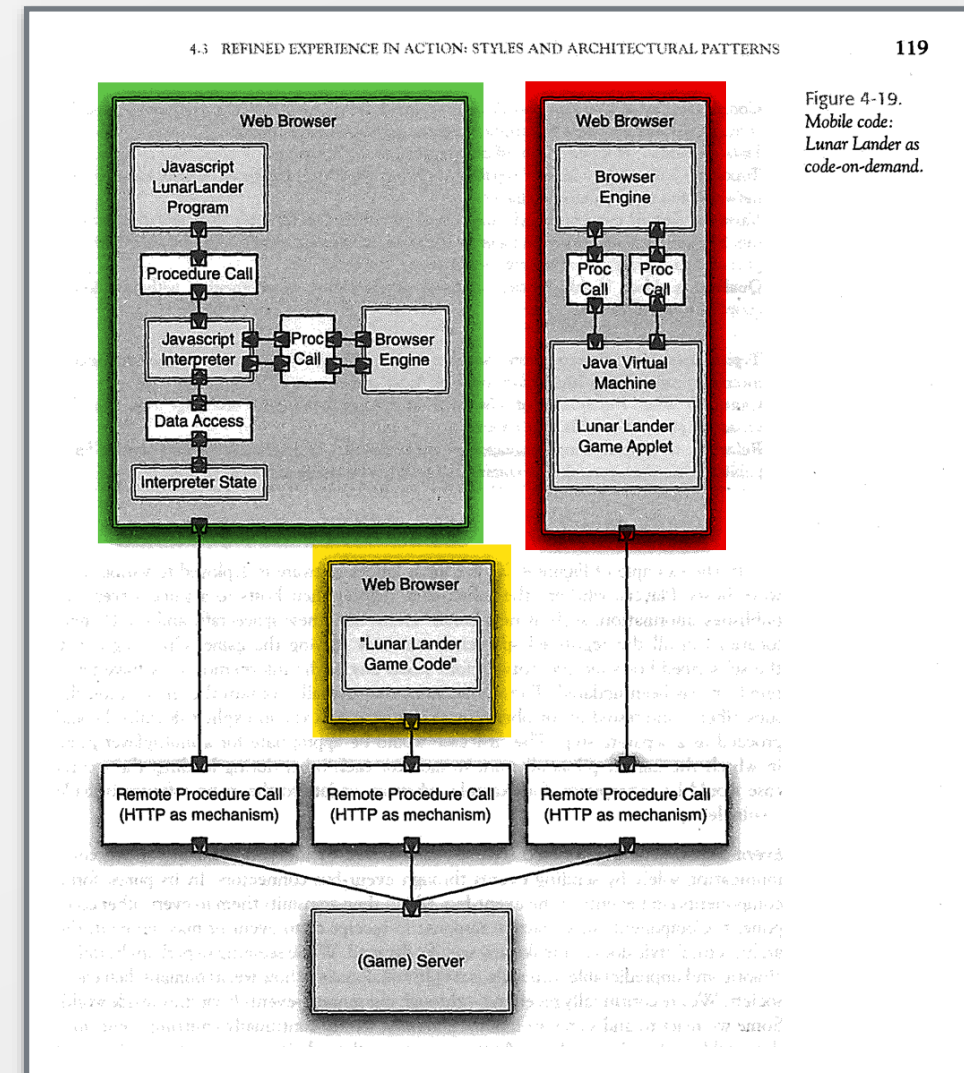
Ex. 1020, 3

② The Applicant's "Storyboard Example of the Invention"

31. I am informed that the Patent Owner suggests an interpretation of “locally executed” that would exclude an application executed “via a network connection to a remote server.” (Response, 20.) Although I disagree with Patent Owner’s interpretation of “locally executed,” it is consistent with the web browser application shown in the TerraZones storyboard. As the POSITA would understand, this web browser is executed via the user’s PC without reliance on any network connection to a remote server. For example, as shown in the TerraZones storyboard, the Microsoft Internet Explorer web browser title bar indicates that it is “working offline,” demonstrating that the web browser application can execute without any network connection at all. (Ex. 1003, 123-24; Ex. 1020, BT00014843-46.)

In Figure 4-19, one client Web browser downloads code-on-demand in the form of a Lunar Lander game applet via HTTP. A second browser loads a JavaScript Lunar Lander; a third uses some other form that is not detailed. Thus, all the game logic moves to the client machines, freeing the server's computing resources. In the figure as shown, each client machine maintains the game state independently of other clients.

Ex. 1018, p. 118



Ex. 1018, p. 119

Angles: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1 receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

2 initiating said game application at said primary electronic device;

3 automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

4 automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1

Automatically integrating business-related content ... into said locally executed game application

Angles teaches this limitation. As discussed above, Angles discloses an “advertisement provider computer 18” having a plurality of web pages, wherein the advertisement provider computer 18 generates business-related content such as “customized advertisements 30.” “The customized advertisements are selected based on consumer profiles and are then integrated with offerings maintained by different content providers.” Ex-1007, Abstract.

As Mr. Crane explains in his declaration, the integration of the customized advertisements with the offerings happens automatically without human initiation or intervention.³ Ex-1004, ¶117.

Petition (Paper 2), 24

As Mr. Crane explained in his declaration, a POSITA would have recognized that a browser program that resides on a consumer/game player’s computer served as a locally executed game application. Ex-1004, ¶¶72, 84, 109, 112. Here, the consumer interfaces with the consumer computer. Ex-1007, 10:21-23 (“the consumer computer 12 is a device which allows a consumer to interact with the communication medium 20”). As shown by FIG. 1 reproduced above, the “consumer computer 12” and the “content provider computer 14” “communicate with each other by use of a communication medium 20.” *Id.*, 7:49-52. As Angles

Petition (Paper 2), 22

3 The Applicant's "Storyboard Example of the Invention"

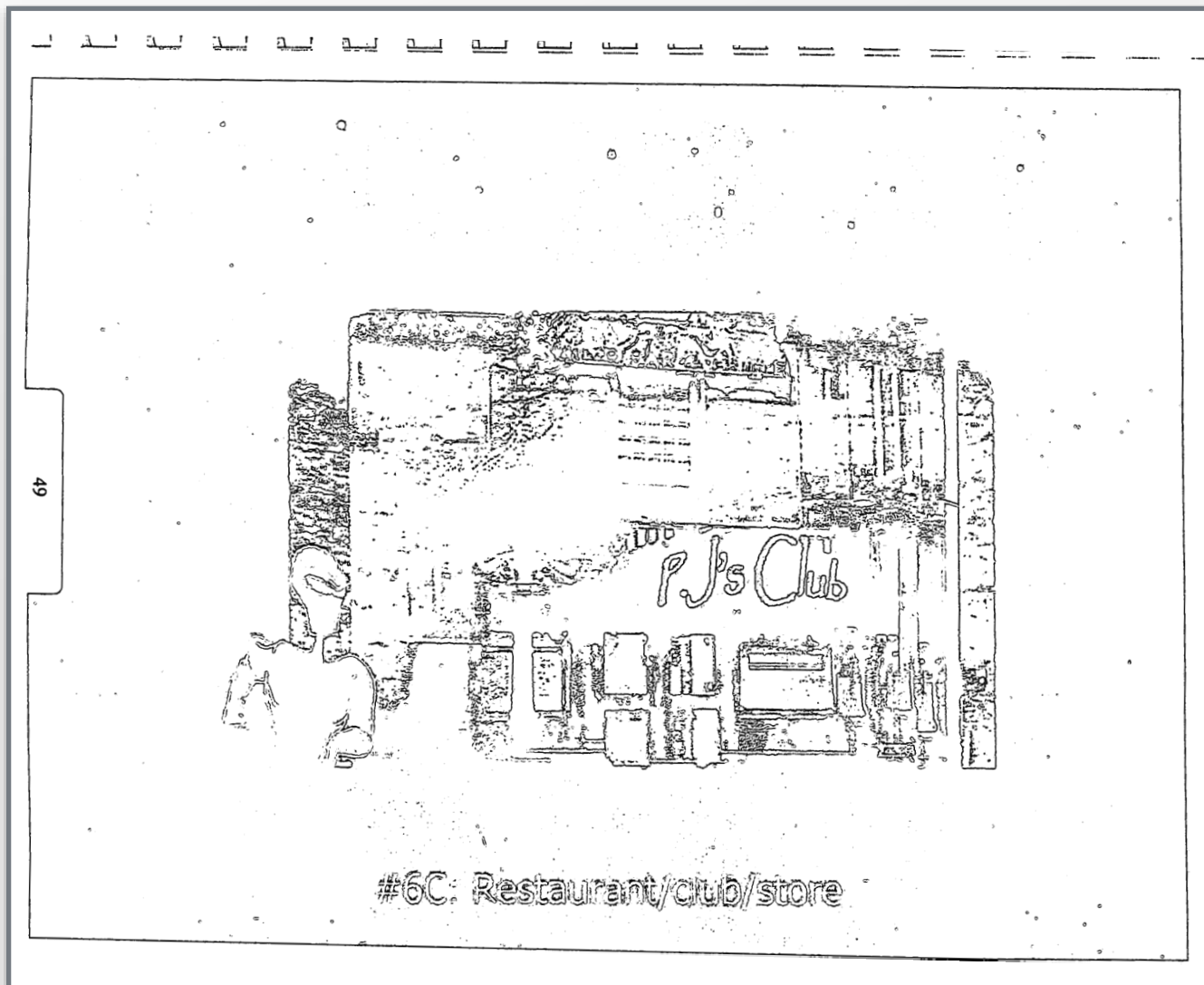
A storyboard example of the invention entitled "TerraZones Storyboard" was provided to the Examiners during the personal interview of October 8, 2008, and a copy of the pertinent portion is provide herewith and listed in the Evidence Appendix of this Appeal Brief. In use, a primary electronic device accesses a game application, to thereby locally execute the game application. Further, business related content, from a least one secondary electronic device that accesses the business related content on a plurality of

Ex. 1003, 107-08

locally execute the game application. Further, business related content, from a least one secondary electronic device that accesses the business related content on a plurality of web pages, is *automatically* integrated into the locally executed game application during execution of the game application. The method/system of the present invention then *automatically* redirects the user to one of the web pages of the secondary electronic device from the primary electronic device (see, for example, slides #6C and #7C where the user is automatically redirected into "PJ's Club" while playing the game and can actually see a live view of the club), the redirection being integrated into the application and the redirection occurring as part of the user executing the application (i.e., transparent to the user). The user can then execute a user action on the content from the secondary electronic device (the user can, for example, execute a user action at the club such as purchase a gift certificate).

Ex. 1003, 108

③ The Applicant's "Storyboard Example of the Invention"



Ex. 1003, 130



Ex. 1020, 10

Decision on Institution



We have considered Patent Owner’s arguments and determine, on the current record, that they do not demonstrate a deficiency in Petitioner’s position. We understand Petitioner to argue that invoking the browser initiates and accesses the content offering, such as an online game. *See* Pet. 20–23. As such, when the browser accesses electronic page 32, the customized advertisement 30 is automatically integrated into the online game, that is, automatically integrated into the game as the web browser executes electronic page 32. *See* Ex. 1004 ¶ 117 (“Note that such integration of customized advertisements into the signs and billboards happens automatically without human initiation or intervention, since ‘the content provider computer 14 can integrate the customized advertisements 30 into signs and billboards which appear in the interactive game.’” (citing Ex. 1007, 21:63–65)); *see also id.* ¶ 109 (“A [person having

③ Patent Owner: Improper Combination of Embodiments

Petition exclusively relied on Angles's Fig.9 for limitation 1[c], also evidenced by Decision, whereas it used Angles's Fig.1 for other limitations. *See* §I.A. PO argued exclusively based on Angles's Fig.9 for limitation 1[c], (Response, 26-28), but flagged a deficiency in Petitioner's analysis for not offering evidence of motivation to combine Angles's embodiments, (Response, 4-6; 9-10). Instead of curing this, Petitioner advances a new theory based on Angles's Fig.1 in Reply, *utilizing portions of Angles never cited in Petition* for 1[c].⁶ *Compare* Reply, 15-

PO Sur-Reply (Paper 44), 16

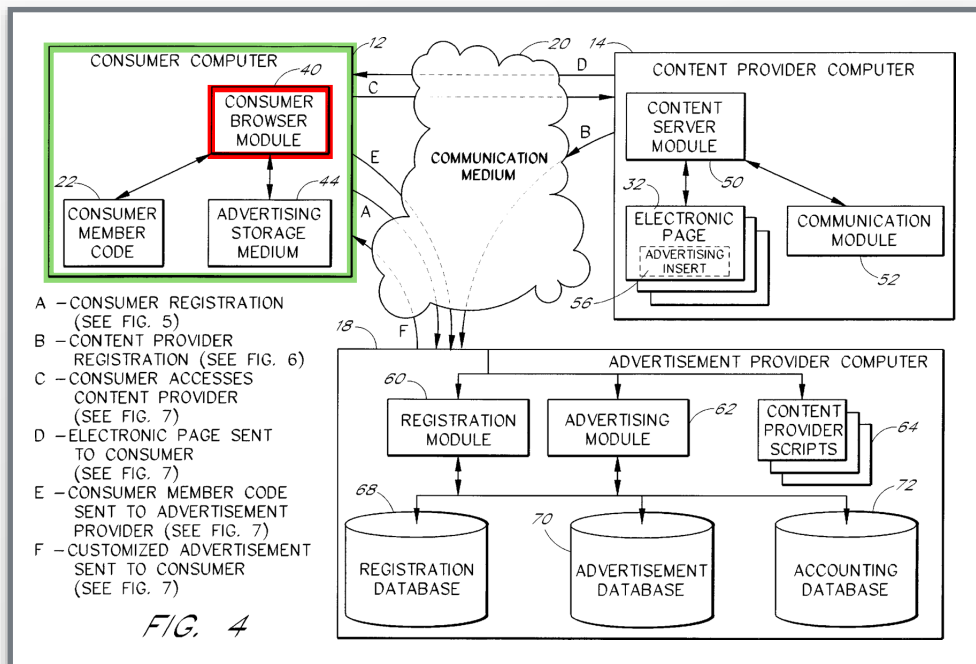
No Combination of Embodiments

Fig. 1 embodiment), the advertisement is “combined with the offering from the content provider computer and displayed to the consumer.” (Ex. 1007, Abstract.)

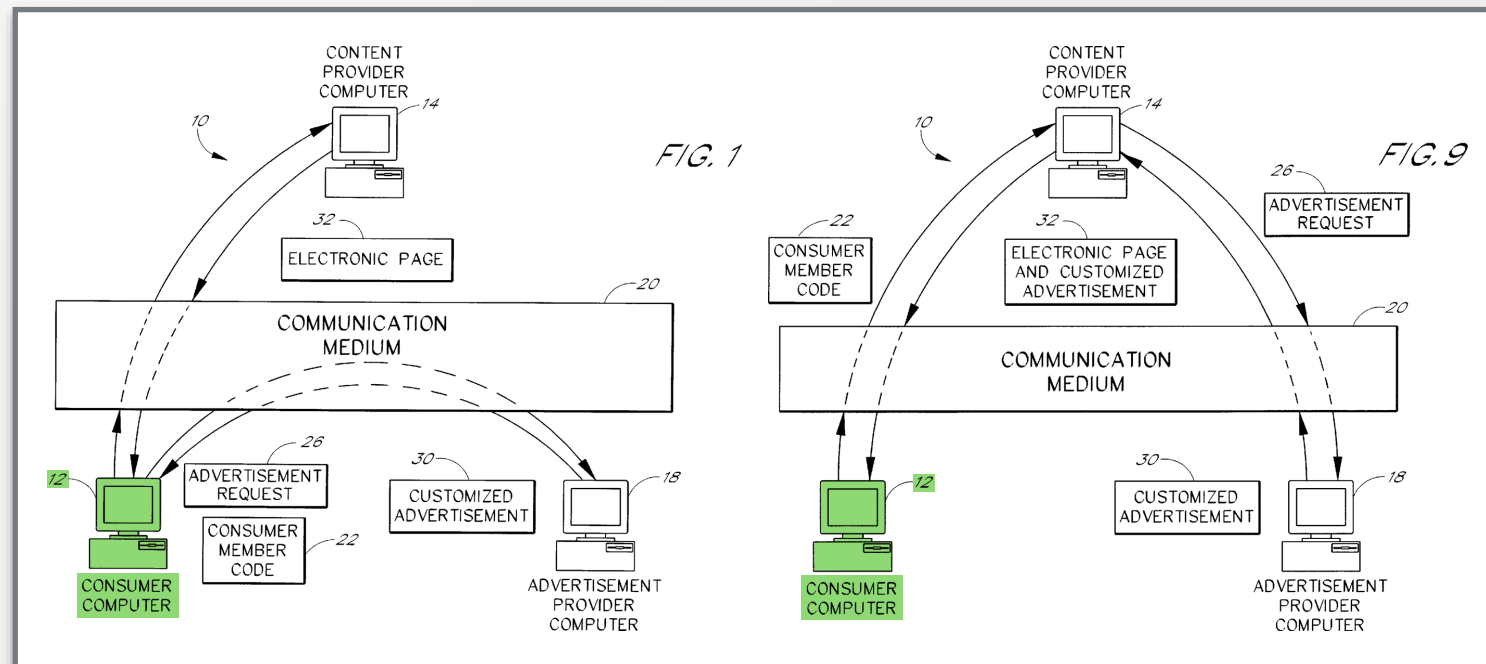
In the preferred embodiment, a browser of the consumer computer 12 performs this integration as part of its execution.⁶ (Ex. 1007, 8:33-67, 10:43-59, Fig. 3.)

Petitioner also described how, in the Fig. 9 embodiment, the integration can be performed by content provider computer 14. Because the claim does not require the automatic integration to be performed by any particular entity, the automatic integration is met by either the Fig. 1 or Fig. 9 embodiment.

No Combination of Embodiments



Angles (Ex. 1007), Fig. 4



Angles (Ex. 1007), Figs. 1, 9

Q. So just to confirm, would a POSITA reading Angles understand that the customized advertisements could be integrated into an online game at the consumer computer shown in Figure 9 of Angles?

A. That's where that would take place.

Crane Tr. (Ex. 2010), 424:2-6; PO Sur-Reply (Paper 44), 17-19

Angles: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

2

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

4

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1

Automatically Redirecting Said User

In Angles, the user is being automatically re-directed to web pages containing business-related content as part of the user executing said game application while the game is being run. *See* Ex-1007, 4:6-16 (“The invention also supports custom **advertisements which can contain hyper-links to other information.** The hyper-links typically direct the user’s Internet browser to access different websites on the Internet. For example, if a consumer wishes to obtain additional information about an advertised product or service, the consumer may simply use a mouse to **select an embedded hyper-link in the custom advertisement and be immediately transported to an advertiser’s website.** At the advertiser’s website, the user may receive a directed sales pitch, more information or a purchase order request form.”).

Petition (Paper 2), 26

119. A POSITA would understand that re-directing a user to a web page means displaying the web page to the user on a computer associated with the user, e.g., the consumer computer 12 associated with a consumer as shown in FIGs. 1 and 9 of Angles. It was well known in the art that in the context of viewing a web page or operating a Web Browser, “re-directing” simply meant to direct the user’s electronic device to display a different web page - basically re-directing the attention of the user, through the computer’s display, to a different page. As stated, this was well known, also referred to as “linking” such as when activating a “hyperlink.”

Crane Dec. (Ex. 1004), ¶ 119

4 PO: Angles' Hyperlinks Are Not Automatically Re-Redirecting

First, Angles does not disclose “automatically re-directing said user to one of said web pages of said secondary electronic device.” Angles teaches hyperlinking that requires a mouse click for re-directing the user. *Id.*; see also Ex-1004, ¶¶120-121. However, Petitioner’s expert characterized a hyperlink click as a manual redirection: “If I want more information, I can certainly manually click on that advertisement and go somewhere else.” Ex-2009, 232:7-21. He also averred that something happening manually cannot be described as happening automatically. *Id.*, 231:10-13 (“I understand the term automatically meaning the opposite of manually.”); Ex-2005, ¶¶155-157. Thus, to the extent Angles’s hyperlink click re-directs a user to another website, such re-direction is not automatic—but is *manual* per the express admission of Petitioner’s expert.⁹ Ex-2005, ¶¶156-157. Unlike the express teaching of Claim 1, Angles never discloses that the game application automatically re-directs the user because of a game event or the user’s game-related actions. *Id.*, ¶¶52; 157.

*PO Response
(Paper 23), 32-33*

Decision on Appeal



Independent claims 10, 15, 16, 21, and 25-27¹ however do not contain the *automatically integrating business-related content* limitation listed above, but contain the limitation of *automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application.*

Here, we agree with the Examiner that Czepluch discloses the automatic re-directing feature with respect to Figure 4². In this embodiment we find that the act of clicking on the puzzle item activates the associated link (as part of a game related action- puzzle assembly) redirecting the user from the catalog page to the game page. (FF 2). We find no error in the Examiner's

¹ The phrase "is capable" used for example in claims 26 and 27 does not equate to the same positive language used to cover the automatically integrating feature recited in claim 1.

² Czepluch discloses only in the context of its disclosure concerning Figure 3 that there are no hyperlinks between the game page and product page.

Angles: Remaining Limitations Not Disputed

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device;

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

'028 Patent (Ex. 1001), Claim 1

Angles: Claims 3, 4

3. The method of claim 1 wherein said game application displays branded business-related content to said user.
4. The method of claim 3 wherein said branded business-related content is dynamically updated.

'028 Patent (Ex. 1001), Claims 3, 4

Angles: Claims 3, 4

As Mr. Crane explains in his declaration, displaying the web page to the user is the same as “automatically re-directing” the user as part of the game execution.

Ex-1004, ¶119. As discussed above, Angles discloses the “advertisement provider computer 18” has a plurality of web pages and generates business-related content such as “customized advertisements 30.”

Petition (Paper 2), 26

127. Additionally, and as noted above, Angles disclosed displaying

advertisements to a user. Advertisements are a form of branded content.

Advertisements are also business-related content, intended to promote a company’s business. Thus, Angles disclosed **display[ing] branded business-related content to said user.**

Crane Dec. (Ex. 1004), ¶ 127

Level of Skill in the Art

The parties agree as follows:

- A **bachelor degree** in **computer engineering, computer science**, or a similar discipline
- **Two years** of professional experience in the fields of **networking** and **network-based systems or applications**, such as **client-server** and **web-based systems**, in the **specific context of console and gaming** or an equivalent level of skill, knowledge and experience
- At least a general knowledge of **online and in-game advertising methods** prevalent in the field
- At least a general knowledge of **3D rendering and virtual reality**

Petition (Paper 2), 12; PO Response (Paper 23), 4

“Dynamically updated”

Angles teaches this limitation. Angles discloses that a consumer may advertisement can be dynamically updated for the consumer to see on the consumer's computer 12. Ex-1007, 20:11-17 (“[I]f the consumer continues to view the electronic page 32, the advertising module 62 **continues to update the customized advertisements** 30 that are seen on the consumer's computer 12. For example, if a consumer views a particular electronic page 32 for more than a minute, the advertising module 52 can send a new customized advertisement 30.”).

Petition (Paper 2), 28-29

67. The illustration below created by me from images found in public domain illustrates an example where the branded business-related content is dynamically updated within the meaning of the ‘028 Patent. Suppose a game application displays a front-side-view image of Honda Civic vehicle at $t = t_i$ to the user (left image). Now suppose at $t = t_j$ the game application displays a rear-side-view image of the same vehicle. In this case, a POSITA reading the ‘028 Patent would conclude that the displayed branded business-related content is dynamically updated.



Medvidovic Dec. (Ex. 2005), ¶ 67

Angles: Claim 5

5. The method of claim 1, comprising the further steps of: executing game-related user actions in said game application as a result of user choices; and generating a player profile based on said user choices made during said game application; wherein the player profile is specific to said user.

'028 Patent (Ex. 1001), Claim 5

Angles: Claim 5

provider 34, the consumer can direct the browser to access information provided by one of the content provider computers 14.”). A POSITA would understand that **executing game-related user actions in said game application as a result of user choices** is inherent in playing any game. Ex-1004, ¶135.

Accordingly, Angles discloses “executing game-related user actions in said game application as a result of user choices.” *Id.*, ¶¶135-141.

Petition (Paper 2), 30

Angles teaches this limitation. Angles discloses tracking consumer responses to the customized advertisements while accessing an offering and to update the consumer profile accordingly. Ex-1007, 3:7-17 (“The advertisement provider's computer stores demographic information about consumers, and sends customized advertisements to the consumers based on the consumers demographic profile and tracks consumer responses to the customized advertisements. For example, when accessing a content provider's website, a consumer with a demographic profile indicating an interest in farming would be sent customized advertisements for farm products by the advertisement provider. Customer requests for more information about the advertised farm products are also monitored.”).

Petition (Paper 2), 30

Angles: Claim 5

Patent Owner argues that the claimed “player profile” must be “tied” to a game character, not to the person playing the game. (Response, 46-47.) The specification does not mention “player profiles,” and Patent Owner instead offers only a passage describing “character profiles.” (Response, 46.) But the ’941 patent describes “players” logging in “using a player ID and password,” which is an operation that only people (not game characters) can do. (Ex. 1001, 5:56-57; Ex. 1025, ¶¶45-46.) The POSITA would understand, consistent with dictionary definitions, that the “player profile” refers simply to the person who plays the game, who may be represented by an in-game character. (Ex. 1025, ¶¶45, 47; EX. 1027, 191, 890.) Patent Owner concedes that Angles’ profiles uniquely identify this individual. (Response, 47.)

Reply (Paper 30), 21

play·er \ˈplā-ər/ *n* (14c) : one that plays: as **a : a person who plays a game** **b** : MUSICIAN **c** : ACTOR **d** : a device that reproduces recorded material (as video images or music) from a usu. specified medium **e** : one actively involved esp. in a competitive field or process : PARTICIPANT

Ex. 1027, 5

Angles: Claim 6

6. The method of claim **5** wherein said player profile is disseminated to providers of business-related content used in said game application.

'028 Patent (Ex. 1001), Claim 6

Angles: Claim 6

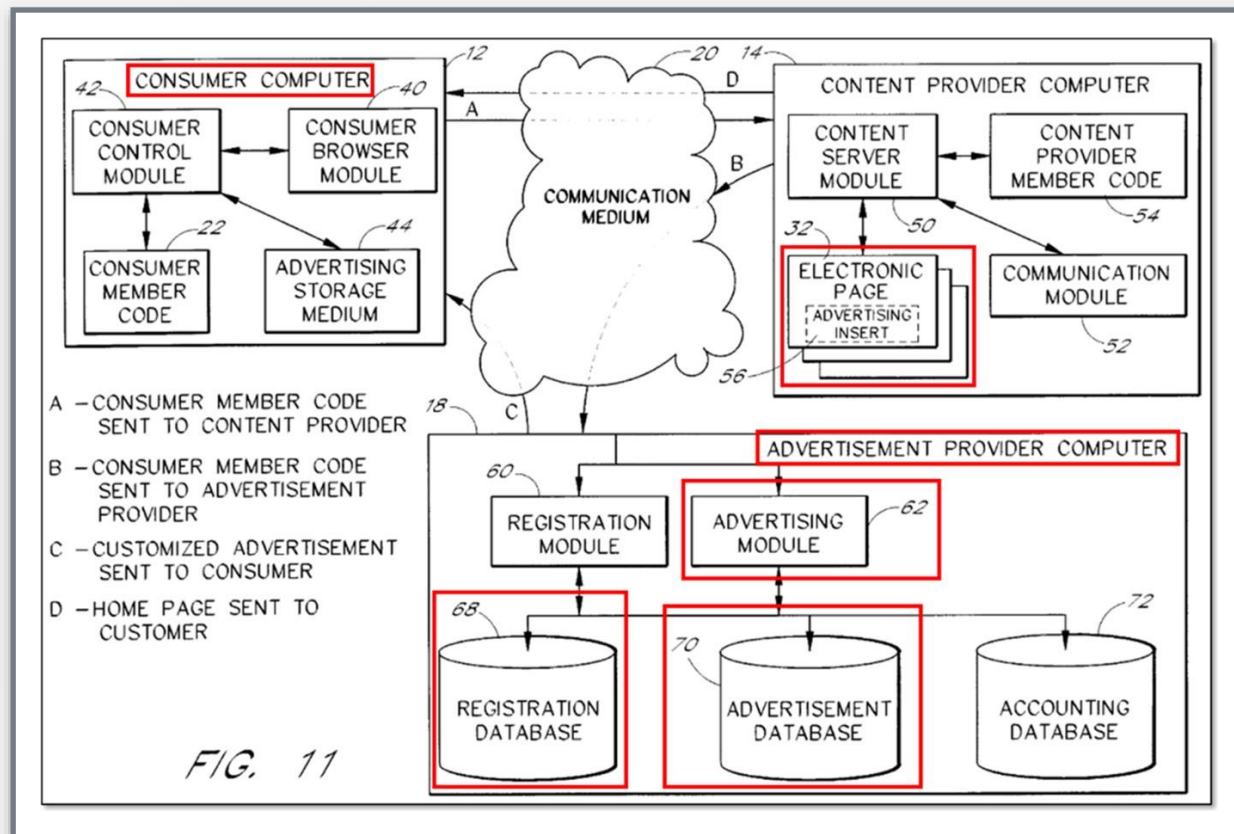
database 68. As discussed in more detail below, the advertising module 62 then uses the consumer profile to select an appropriate advertisement from the advertisement database 70.”). As Mr. Crane explained in his declaration, in order for module 62 to provide advertisements customized to a particular user, said user’s demographic information must be sent (disseminated) from the REGISTRATION DATABASE 68 using the consumer member code 22. Using the unique user code, said user’s demographic information is obtained from the database and disseminated to the provider of business-related content. Ex-1004, ¶151.

Petition (Paper 2), 33

PO: Remaining on Computer 18 Is Not Disseminating

Referring to Angles's Fig. 11, the registration database 68 stores all demographic profiles. Importantly, all modules/databases that use the consumer profile are on one computer (Advertisement Provider Computer 18). The demographic profile in the Registration Database 68 never leaves the database, let alone the Computer 18. Ex-2005, ¶176. Indeed, the only thing that leaves the Advertisement Provider Computer 18 is the selected customized advertisement 30.

PO Response (Paper 23), 50



PO Response (Paper 23), 50

Disseminate: “to disperse throughout”

Patent Owner argues that the player profile is not *disseminated* under an implicit construction that specifically requires the player profile to leave a first device. (Response, 50.) The POSITA would not recognize any such limitation. (Ex. 1025, ¶48.) Instead, the POSITA would understand the term to be consistent with the dictionary definition circa 2002: “to disperse throughout.” (Ex. 1027, 335; Ex. 1025, ¶48.) To disperse throughout encompasses dispersing within a device, without necessarily leaving it. (Ex. 1025, ¶48.)

Reply (Paper 30), 22

dis·sem·i·nate \di-'se-mə-'nāt\ vt **-nat·ed; -nat·ing** [L *disseminatus*, pp. of *disseminare*, fr. *dis-* + *seminare* to sow, fr. *semin-*, *semen* seed — more at SEMEN] (1603) **1** : to spread abroad as though sowing seed <~ ideas> **2** : to disperse throughout — **dis·sem·i·na·tion** \-,se-mə-'nā-shən\ n — **dis·sem·i·na·tor** \-'se-mə-'nā-tər\ n

Ex. 1027, 4

Claims 7-9

7. A method of automatically integrating content into an electronic device over a computerized network, comprising: receiving a request from a user at a primary electronic device to initiate at least one of a plurality of locally executed applications that are accessible to said primary electronic device interfaced with said network; initiating said at least one of said plurality of applications at said primary electronic device; providing at least one customized web page at a secondary electronic device, accessed over said computerized network by said primary electronic device, said web page being customized with content for use with said one of said plurality of applications; automatically integrating said content from said secondary electronic device into said at least one of said plurality of locally executed applications during execution of said at least one of said plurality of applications; automatically re-directing said user to one of said customized web pages at said secondary electronic device, from said primary electronic device, said re-direction being integrated into said one of said plurality of applications and said re-direction occurring as part of the user executing said one of said plurality of applications; and executing a user action on said content from said secondary electronic device, said user action generating a benefit for said user relating to said content.

'028 Patent (Ex. 1001), Claim 7

Petition (Paper 2), 34-39; Reply (Paper 30), 22-23

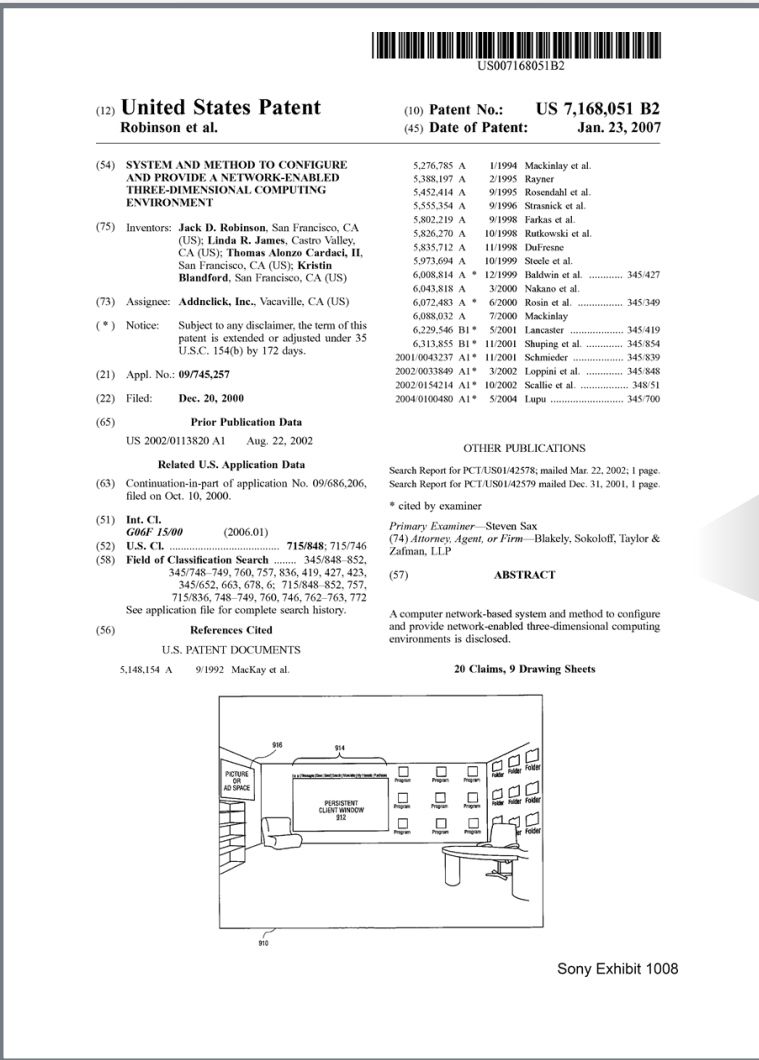
8. The method of claim 7, wherein said content includes dynamic content.

9. The method of claim 7, further comprising: providing a virtual reality platform interfaced with said primary electronic device, said virtual reality platform providing a three-dimensional visualization in which the user interacts.

'028 Patent (Ex. 1001), Claims 8-9

Robinson + POSITA's Knowledge (Ground 2)

Robinson (U.S. Patent No. 7,168,051)



(57)

ABSTRACT

A computer network-based system and method to configure and provide network-enabled three-dimensional computing environments is disclosed.

Robinson (Ex. 1008), Abstract

Robinson: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

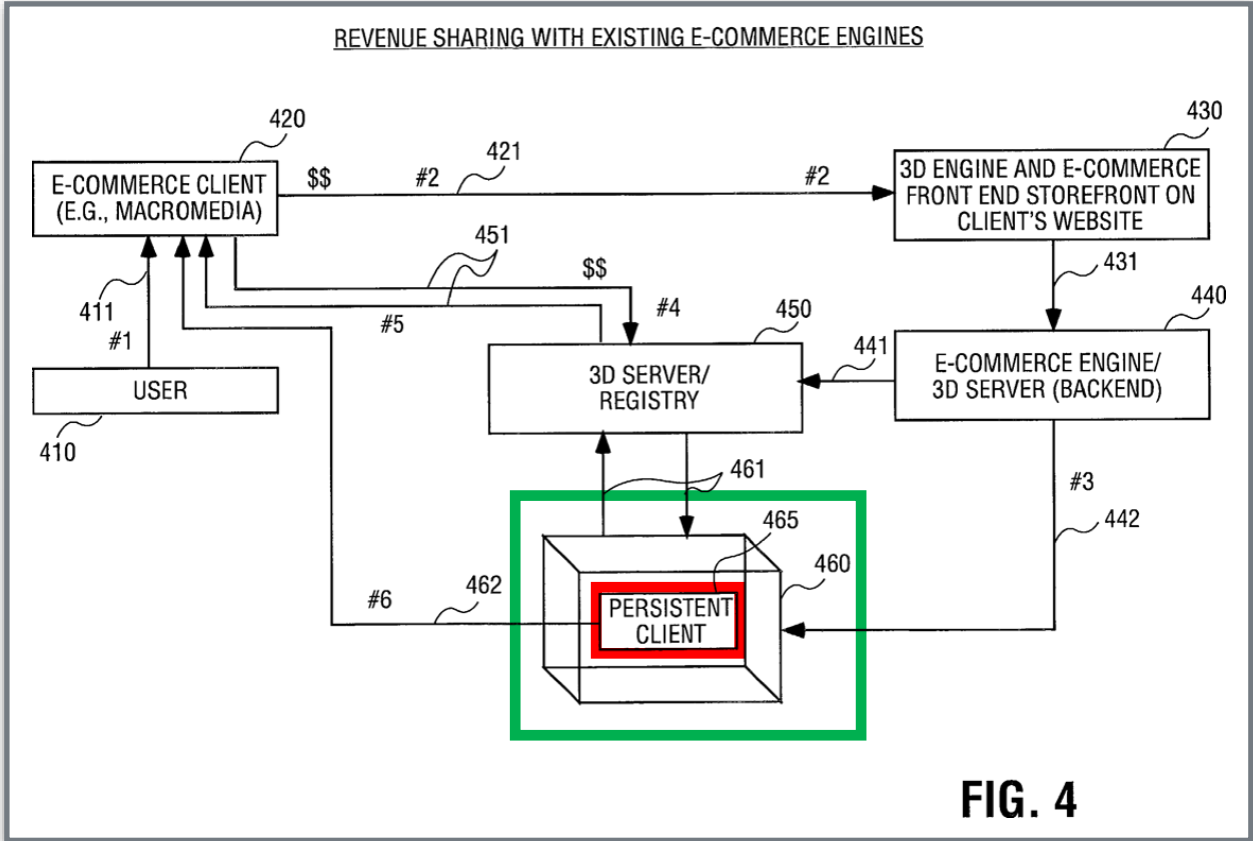
executing a user action on said business-related content from said secondary electronic device.

2

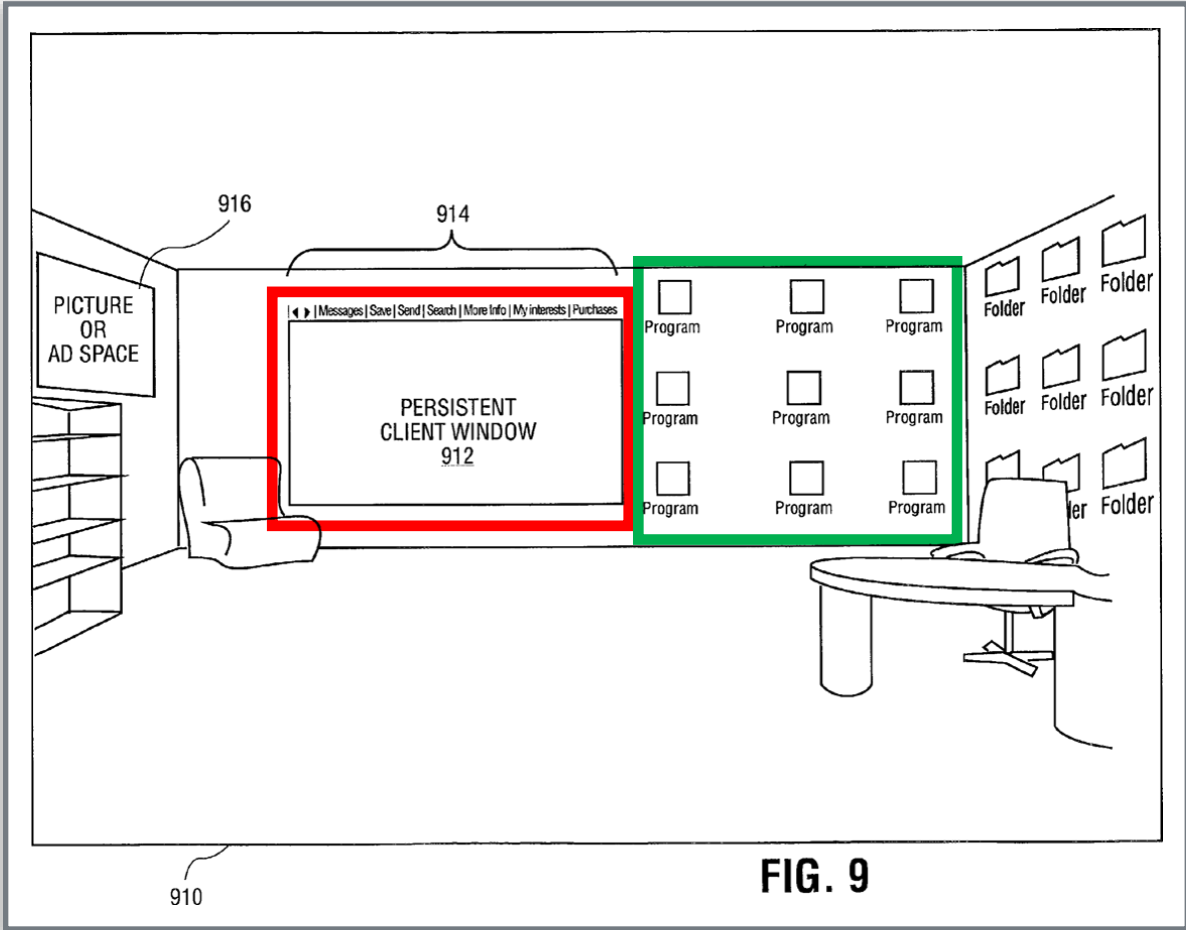
4

'028 Patent (Ex. 1001), Claim 1

Locally Executed Game Application

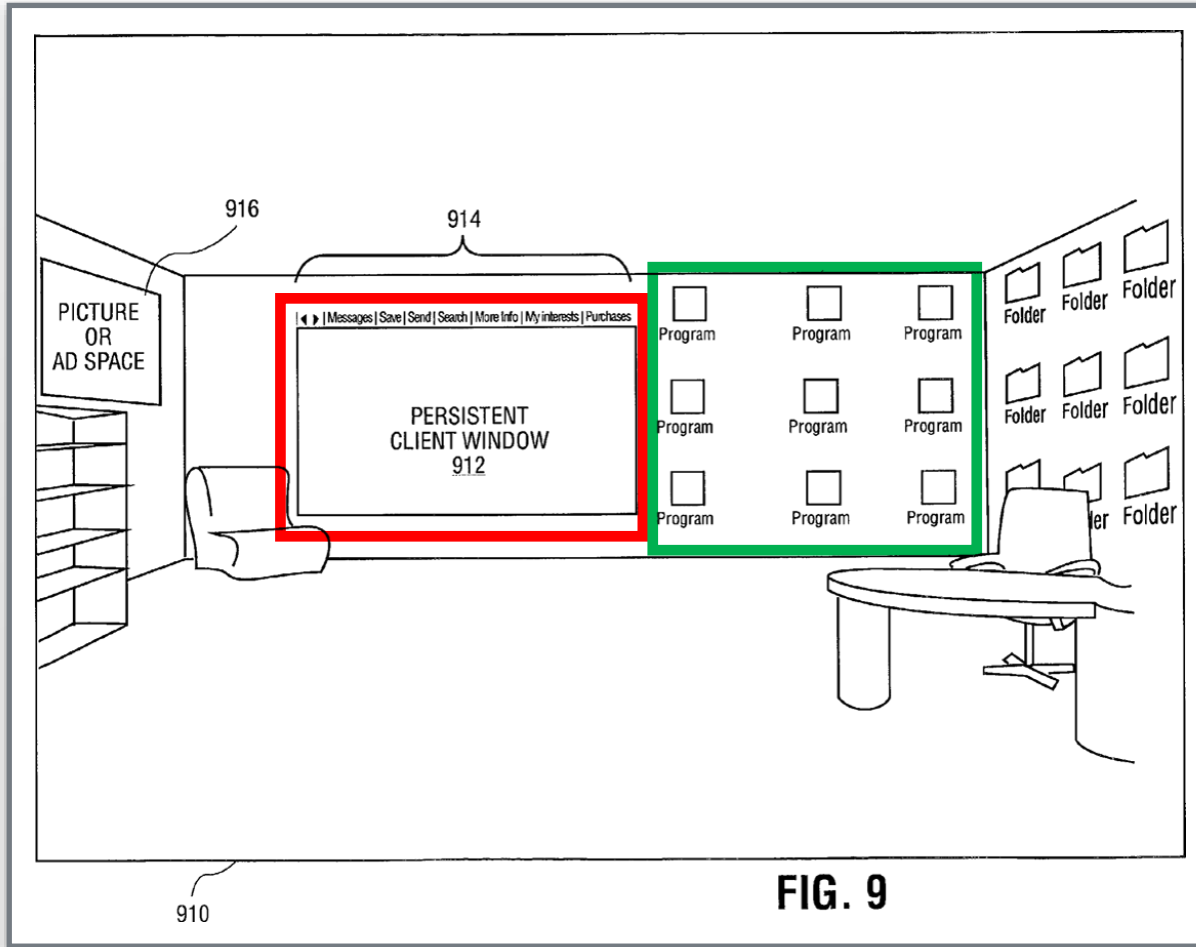


Robinson (Ex. 1008), Fig. 4

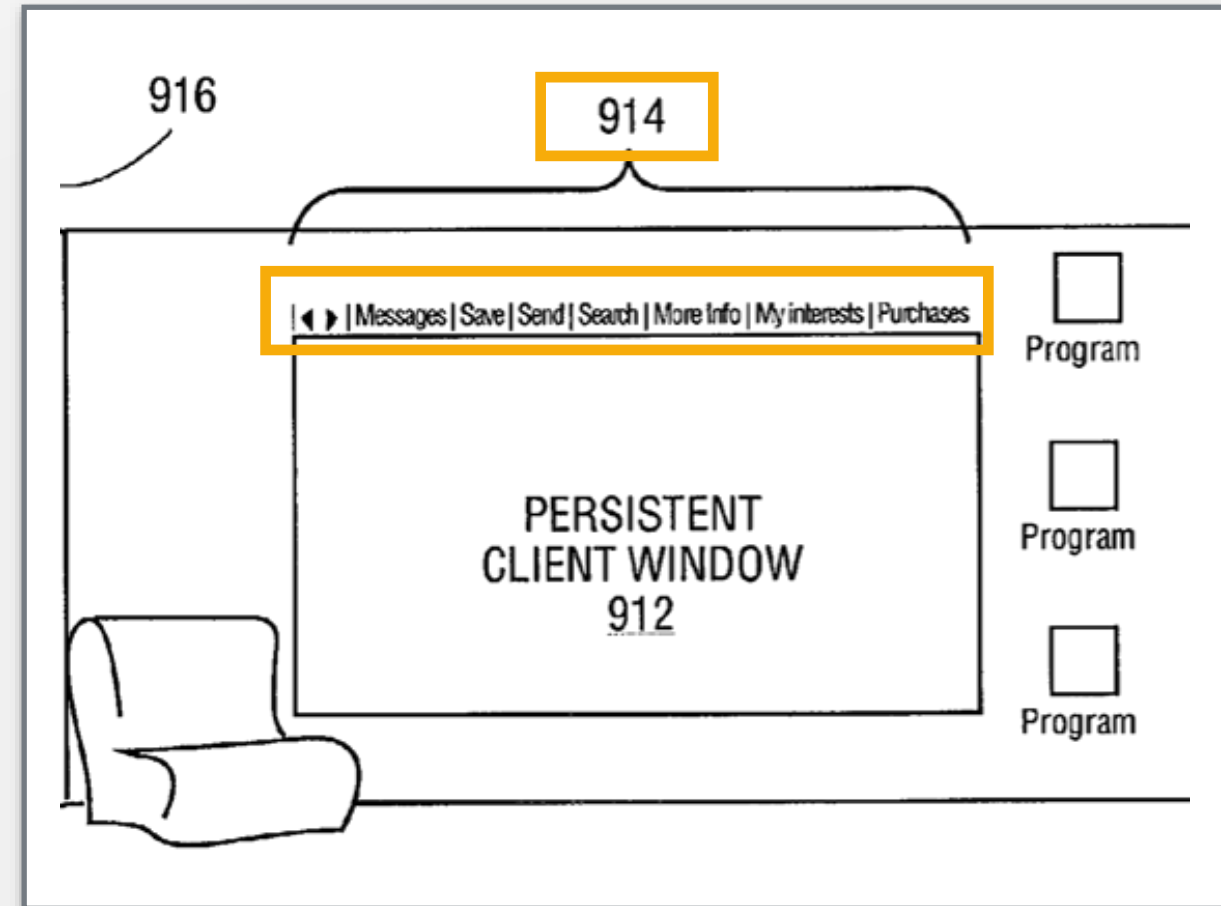


Robinson (Ex. 1008), Fig. 9

Locally Executed Game Application



Robinson (Ex. 1008), Fig. 9



Robinson (Ex. 1008), Fig. 9

Robinson: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

2

4

'028 Patent (Ex. 1001), Claim 1

Initiating Said Game Application

Robinson teaches this limitation. Robinson discloses that, once the 3D persistent client kernel 465 is downloaded and installed on the client machine 460, the 3D persistent client kernel 465 may be activated on the client machine 460 to initiate and create a 3D computing environment (which can be a game application) locally on the client machine. Ex-1008, 10:36-41 (“Upon automatic installation of the 3D Persistent Client kernel 465, the user is given a demonstration of the 3D environment software and given the choice to activate a full three-dimensional computing environment on the user's desktop at client machine 460.”).

As discussed in §II.B.2.a.i, Robinson does not teach a “game application,” and its 3D computing environment is merely a 3D desktop. Further, to the extent that Petitioner incorrectly equates Robinson’s kernel 465 with a game application, (Pet. 47-48), Petitioner’s argument fails, because Robinson’s kernel has “a persistent presence on the user’s desktop” regardless of whether the user requests initiation, as discussed in §II.B.2.a.i.

PO Response (Paper 23), 62

42. Moreover, the POSITA would understand all executable applications, including demonstration versions of applications, to teach “initiating.” This is because an application must at some point be initiated in order to begin execution.

Crane Suppl. Dec. (Ex. 1025), ¶ 42

② PO: Demonstration of Software Does Not Initiate the Software

Petitioner advances another argument: “Upon automatic installation of the 3D Persistent Client kernel 465, the user is given a demonstration of the 3D environment software and given the choice to activate a full three-dimensional computing environment on the user’s desktop at client machine 460.” Pet. 48 (citing Robinson, 10:36-41). Wrong, because Petitioner equates “demonstration of the 3D environment software” with “initiating said game application.” Ex-2005, ¶¶212, 200-201. First, the 3D environment software is merely a 3D desktop, as discussed; thus, its demonstration merely shows how the 3D desktop works. *Id.* Second, demonstration is not equivalent to initiation—as discussed above, Robinson explicitly states the demonstration on kernel 465 is beyond the user’s control. *Id.*

PO Response (Paper 23), 62

By isolating and codifying variation points, a large number of product architectures can be described compactly by exploiting the different combinations of variations. Consider a hypothetical product line of Lunar Lander games that consists of three slightly different Lunar Lander products: Lunar Lander Lite, Lunar Lander Demo, and Lunar Lander Pro.

Lunar Lander Lite is intended as a freely distributed Lunar Lander game with a text-based user interface. It resembles the Lunar Lander games discussed in earlier chapters, such as those implemented in Chapter 9. Lunar Lander Pro is intended as a commercially sold Lunar Lander game with a fancier graphical user interface. Internally, the data store and game logic are identical to Lunar Lander Lite's; the only difference is in the user interface component. Lunar Lander Demo is a freely distributed but time-limited version of Lunar Lander Pro. It has the same graphical user interface as Lunar Lander Pro, but it expires and is not playable thirty days after installation. Periodically, it reminds users that if they want to continue playing beyond the thirty-day limit, they are required to purchase or upgrade to Lunar Lander Pro.

The architectural structures of all three Lunar Lander products are shown in Figure 15-22.² Figure 15-22(a) shows Lunar Lander Lite, consisting of a data store and game logic component, along with a text-based UI. Figure 15-22(b) shows Lunar Lander Demo, with a graphical UI component in place of the text-based UI, and an additional demo reminder and system clock that plug into the user interface to remind the user to register. Figure 15-22(c) shows Lunar Lander Pro, identical to Lunar Lander Demo but missing the Demo Reminder and System Clock components.

Ex. 1018, p. 595; Ex. 1026, p. 595

Table 15-1
Elements present
in each Lunar
Lander
product-line
member.

Components and Connectors	Product		
	Lite	Demo	Pro
Data Store	X	X	X
Data Store Connector	X	X	X
Game Logic	X	X	X
Game Logic Connector	X	X	X
Text-Based UI	X	X	
UI Plug-Ins Connector	X	X	X
Graphical UI		X	X
System Clock		X	
System Clock Connector		X	
Demo Reminder		X	

Ex. 1018, p. 596; Ex. 1026, p. 596

Initiating Said Game Application

39. Dr. Medvidovic's textbook also includes a description of demonstration software. (Ex. 1018, 595.) The POSITA would understand Dr. Medvidovic's description of demonstration software to be inconsistent with the Patent Owner's position that demonstration software is "not a working copy of the software" and cannot meet the limitation "initiating" in claim 1 of the '028 patent.

Crane Suppl. Dec. (Ex. 1025), ¶ 39

As the POSITA would recognize, a primary purpose of demonstration software was to entice potential customers to purchase a paid version of the software. Accordingly, the demonstration software would frequently include many or all features of the paid version, to demonstrate the value of those features to the potential customer. As described in the textbook, such demonstration software would frequently include a time-limiting feature, preventing the user from making use of those features outside of a limited time window, thus encouraging the user to purchase the paid version. Even if the demonstration software is only a partial version of a game, the POSITA would understand demonstration software to teach a working version of a game application, including the ability to "initiate" the game application.

Crane Suppl. Dec. (Ex. 1025), ¶ 41

Robinson: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

2

4

'028 Patent (Ex. 1001), Claim 1

Automatically Integrating

¶187), a server “contains everything needed to serve up webpages and/or applications to the network-enabled 3D computing environment-enabled user.”

Ex-1008, 7:11-13. The business-related content retrieved from the server in

Robinson is then automatically integrated/displayed within a Persistent Client

Window on the client machine to the user⁴. *Id.*, 12:62-66 (“The computer will

periodically display a different advertisement or message within the Persistent

Client Window per a predefined cycling period for rotating the advertisements or

messages that are being displayed.”), 13:5-11 (“In this way, when the user first

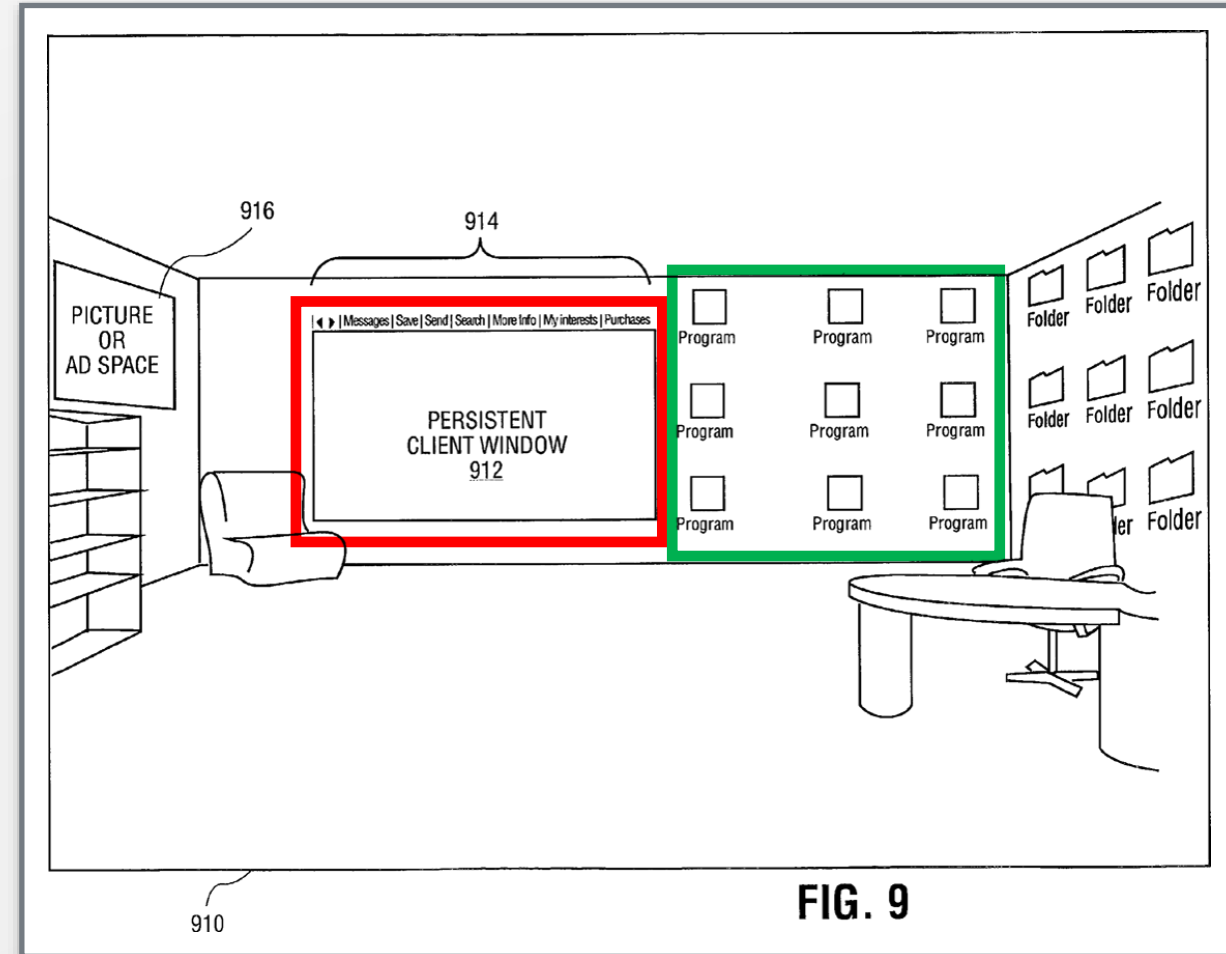
turns the computer on, the computer will **automatically display an advertisement**

or message in the Persistent Client Window and it will periodically display other

advertisements or messages to the user as long as the Persistent Client Window can

be displayed or **while the enter desktop is being displayed.”).**

Petition (Paper 2), 49



Robinson (Ex. 1008), Fig. 9

Robinson: Limitations in Dispute

1. A method of integrating business-related content over a computerized network, into a primary electronic device that accesses a game application, from at least one secondary electronic device that accesses business-related content on a plurality of web pages, the method comprising:

1

receiving a request at said primary electronic device to initiate a locally executed game application that is accessible at said primary electronic device, from a user interfaced with said network;

initiating said game application at said primary electronic device;

3

automatically integrating business-related content from at least one of said web pages of said secondary electronic device into said locally executed game application during execution of said game application;

automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device, said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application; and

executing a user action on said business-related content from said secondary electronic device.

2

4

'028 Patent (Ex. 1001), Claim 1

Automatically Re-Directing

Robinson teaches this limitation. Robinson discloses that a user is re-directed to an external website when the user clicks a link embedded in the advertisement presented in the Persistent Client Window while the user browses through the persistent client desktop environment 910. Ex-1008, 15:5-11 (“The present invention includes functionality to place 2D or ‘3D/spatial’ advertisements, promotions, or messages in the Persistent Client Window 912 that, when clicked on by a user/viewer, will activate full or partial-screen interactive 3D virtual reality environment advertisements that can also be equipped with e-commerce capabilities, such as links to product/service ordering websites.”), 15:31-40

Petition (Paper 2), 50

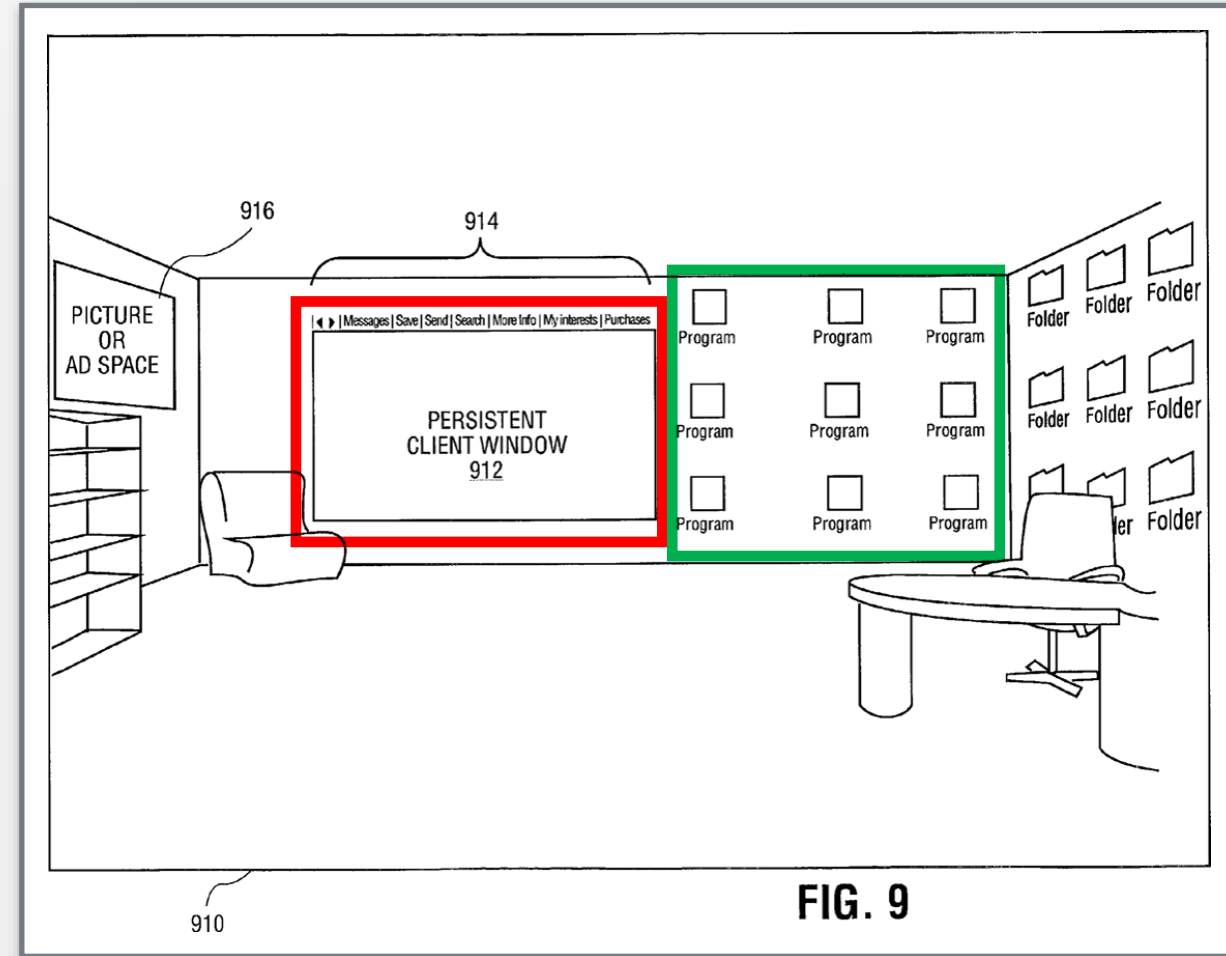


FIG. 9

Robinson (Ex. 1008), Fig. 9

④ Robinson is an enabling reference (but it doesn't matter)

Patent Owner incorrectly argues that Robinson is inapplicable as a non-enabling reference. (Response, 52-55.) First, Patent Owner incorrectly faults Robinson for providing “no direction or guidance.” (Response, 54.) But a reference “need not teach, and *preferably omits*, what is well known in the art.” *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986). Moreover, Patent Owner disregards evidence of the *Wands* factors. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988); Response, 52. For example, the agreed-upon level of skill includes two years of professional experience “in the specific context of console and gaming.” (Response, 4; Petition, 12.) This POSITA is thus familiar with game development and thus does not require instruction from Robinson on that topic, including with the integration of avatars, a common gaming feature. (Ex. 1025, ¶50.) These are among the features that are “preferably omitted” from the reference. *Hybritech* at 1384. Patent Owner

Second, even if Robinson is non-enabling (which it is not), “a non-enabling reference may qualify as prior art for the purpose of determining obviousness under § 103.” *Symbol Techs. Inc. v. Opticon Inc.*, 935 F.2d 1569, 1578 (Fed. Cir. 1991). Thus, Patent Owner’s argument is irrelevant.

Reply (Paper 30), 25

Reply (Paper 30), 24

Level of Skill in the Art

The parties agree as follows:

- A **bachelor degree** in **computer engineering, computer science**, or a similar discipline
- **Two years of professional experience** in the fields of **networking** and **network-based systems or applications**, such as **client-server** and **web-based systems**, **in the specific context of console and gaming** or an equivalent level of skill, knowledge and experience
- At least a general knowledge of **online and in-game advertising methods** prevalent in the field
- At least a general knowledge of **3D rendering and virtual reality**

Petition (Paper 2), 12; PO Response (Paper 23), 4

Presence of Working Examples

which is sent to and retained by the 3D server/registry. The avatar can engage the user in chat to deliver the advertiser's message, perhaps acquire more data through questions that could be asked of the user, and then present the user with interactive options to engage them further, if they are interested. This approach enables one to capitalize on the use of recognizable characters (i.e. corporate mascots) to 1) enrich the user's experience and 2) reinforce the message of the advertiser through further branding. In some instances, something as simple as the clothing style of the avatar can be used to make a connection with the user. Some examples of how this can be implemented follow.

Robinson (Ex. 1008), 17:17-20

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interface of the present invention can be augmented to use specially designed avatars as a vehicle for advertisement delivery. As a user navigates through the virtual 3D landscape, certain use patterns or information from the 3D server/registry database triggers a targeted message to be delivered through the use of a 3D character (avatar). The Persistent Client module on the user's database can be used to capture the user's use pattern and other information, which is sent to and retained by the 3D server/registry. The avatar can engage the user in chat to deliver the advertiser's message, perhaps acquire more data through questions that could be asked of the user, and then present the user with interactive options to engage them further, if they are interested. This approach enables one to capitalize on the use of recognizable characters (i.e. corporate mascots) to 1) enrich the user's experience and 2) reinforce the message of the advertiser through further branding. In some instances, something as simple as the clothing style of the avatar can be used to make a connection with the user. Some examples of how this can be implemented follow.

Scenario A

A sports fan exits a "room" where he/she has previously been engaged in a multi user chat with other sports fans on the topic of their favorite basketball team, the Golden State Warriors. Through the 3D interface of the present invention, the users have been swapping their favorite images of team members using conventional peer-to-peer file transfer functionality. The database of the present invention recognizes this exchange that has taken place, because Golden State has signed on with the provider of the present invention, sends out a 3D representation (e.g. avatar) of the Warrior's mascot to greet the user as he/she continues on their virtual "walk". The avatar offers the user \$5 off on game tickets in exchange for joining their mailing list, filling out a survey, etc., and then informs the user about the Warrior's Persistent Client-enabled virtual locker room where they can chat with certain players during scheduled special events.

Scenario B

A college student orders a new computer online via their Persistent Client-enabled 3D desktop. The 3D server/registry recognizes this event and responds by sending an avatar by to greet the user and inform them of the large line of peripherals available from Company A that are compatible with the system they are purchasing. The avatar wishes the user well with their new computer and leaves them with a virtual coupon for 15% off their first purchase with Company A. The user is informed of hardware options they had not previously been aware of and heads off to Company A's Persistent Client-enabled web site to make another purchase.

Scenario C

A user that frequently downloads hip hop music is exploring the automatically generated landscape via their Persistent Client-enabled 3D desktop. They soon cross paths with an avatar styled out in baggy jeans, ball cap, tennis shoes and headphones. The avatar approaches the user and offers him the opportunity to check out the new track he's listening to on his portable mp3 player. The avatar tells the user that the track is authored by a new artist on Solid Player records, an affiliate of the provider of the present invention. The user is intrigued so he clicks on the avatar's headphones and the mp3 begins to stream through to his machine, thus turning him on to a track he may otherwise have never heard. The avatar then offers the user a direct link to Solid Players Persistent Client-enabled site where he can purchase a license for the album and download it in its entirety.

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Scenario D

A young woman has been using her Persistent Client-enabled 3D desktop to gather information on a specific model Toyota she was interested in purchasing. The 3D server/registry recognizes the numerous search queries run on that specific vehicle and responds by dispatching an avatar. While Toyota has not yet partnered with the provider of the present invention, their competitor, Mazda, has. As the user steps outside of her virtual "room" to explore, a 3D representation of a 2001 Mazda Protege pulls up and the avatar steps out to greet her. The avatar informs her of how the Mazda is a far superior vehicle for the money compared to the Toyota. The avatar then offers to show her the features of the car online as well as set up an appointment to see test drive the car in person at her nearest dealer. Thus, the woman is interested and Mazda has used the present invention to gain market share away from their competition.

Thus, the variations on the use of the present invention are endless. Using the present invention, the advertisement moves from being a flat texture map on a flat surface to an engaging, interactive, media rich experience that goes hand in hand with the whole 3D concept of the present invention. In the process, the advertisement weary consumer barely recognizes or even minds the fact that they have just received targeted advertising. By implementing this novel concept, the present invention provides more effective marketing strategies to their clients as well as avoiding the trap of simply adapting the tired banner advertisement concept to a 3D environment.

Thus, a computer network-based system and method to configure and provide network-enabled three-dimensional computing environments is disclosed. Although the present invention is described herein with reference to a specific preferred embodiment, many modifications and variations therein will readily occur to those with ordinary skill in the art. Accordingly, all such variations and modifications are included within the intended scope of the present invention as defined by the following claims.

What is claimed is:

1. A method comprising:

providing a three-dimensional (3D) computing environment representing a 3D desktop of a first computer system in a 3D environment, wherein one or more icons of the desktop are displayed on a plurality of surfaces of the 3D desktop;

receiving a two-dimensional web page from a Web server over the Internet;

converting the two-dimensional web page to a form useable in the three-dimensional computing environment; and

presenting the converted web page in the 3D desktop to allow a first user of the first computer system to navigate content of the converted web page in a 3D manner, including displaying at least a portion of the content of the converted web page in a persistent client window of the 3D desktop that is persistent even if a connection between the first computer system and the Internet has been terminated.

2. The method of claim 1, further comprising:

the first user navigating the content displayed within the persistent client window in a 3D manner; and

communicating within the persistent client window with a second user who is navigating the same content from a second computer system over the Internet.

Robinson (Ex. 1008), 17:22-18:39

CERTIFICATE OF SERVICE

I hereby certify that the attached PETITIONER'S DEMONSTRATIVES was served as of the below date via email (by agreement) on the Patent Owner to the following counsel of record:

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