

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY INTERACTIVE ENTERTAINMENT LLC,
Petitioner,

v.

QUANTUM IMAGING LLC,
Patent Owner.

Case IPR2023-00954
Patent 8,458,028

**PATENT OWNER'S SUR-REPLY
TO PETITIONER'S REPLY**

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EXHIBIT LIST

Ex.	Description
2001	Petitioner's Preliminary Invalidity Contentions
2002	Memorandum from Katherine K. Vidal on Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022)
2003	Lex Machina, Patent Cases (All Judges) Time to Trial, U.S. District Court for the Western District of Texas, September 9, 2023
2004	Lex Machina, Patent Cases (Judge Alan D. Albright) Time to Trial, U.S. District Court for the Western District of Texas, September 9, 2023
2005	Declaration of Dr. Nenad Medvidović
2006	C.V. of Dr. Nenad Medvidović
2007	Microsoft Computer Dictionary, Copyright 2002, 5th edition, Microsoft Press, a Division of Microsoft Corporation, One Microsoft Way, Redmond Washington 98052-6399
2008	The IEEE Standard Dictionary of Electrical and Electronics Terms, 6th edition, 1996
2009	Transcript of Deposition of David Crane, Part 1, 02-24-2024.
2010	Transcript of Deposition of David Crane, Part 2, 02-29-2024.
2011	Claim Construction Order dated 10/20/2023, Quantum Imaging LLC v. Sony Group Corporation et al., No. 1:23-cv-01212-ADA-DTG (W.D. Tex.), Document 159.
2012	Prosecution File History of Robinson
2013	May 28, 2024 Teleconference Transcript regarding the deposition of Nenad Medvidovic, Ph.D.
2014	June 20, 2024 Teleconference Transcript – request to file motion to strike certain exhibits, and excess word count in petitioner reply
2015 ⁱ	Exhibit 2015 to July 1, 2024 Deposition of David Crane, “Excerpts from Microsoft Dictionary”

ⁱ This Exhibit was introduced during the cross-examination of Mr. Crane. PO does not rely on this Exhibit for any substantive argument, nor is this Exhibit cited in this Sur-Reply. PO includes this Exhibit “only for the limited purpose of allowing the

2016	Transcript of Deposition of David Crane, 07-01-2024
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Board to understand the context of the cross-examination.” *Edwards Lifesciences Corporation v. Cardiovalve Ltd.*, IPR2021-00383, Paper 60, 87 (July 18, 2022).

I. GROUND 1

A. Neither Petition nor Reply provide adequate rationale for motivation to combine Angles's embodiments.

Petitioner contends that it never “rel[ie]d on any combination” of Angles’s Figs. 1 and 9 “to meet the limitations.” Reply, 3, 16-18. Incorrect; Petition exclusively relied on Angles’s Fig.1 for limitation 1[d] and 1[e], (Response, 11-12 (citing Petition, 27-28)), and on Fig.9 for limitation 1[c] (Response, 10 (citing Pet. 24-25)).

For limitation 1[c], even the Board understood Petitioner to rely on Fig.9. Decision, 19 (“referencing the embodiment of Angles’s Figure 9” and “referencing Ex. 1007, 21:53–22:2”). The Board quoted Mr. Crane, which likewise cited Fig.9’s description. *Id.*, 20-21 (quoting Ex-1004, ¶117 (citing Ex-1007, 21:63-65)). The Board, citing Fig.9, reasoned when “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.” *Id.* Thus, Decision never referred to Fig.1—because Angles’s Fig.1 consumer first executes electronic page 32 and then is directed to establish communication link with advertisement provider, which in turn selects a customized advertisement to send to consumer’s computer. Response, 6-7 (citing Angles, 7:53-60; 7:59-65; 8:8-19). Therefore, in Fig.1, unlike Fig.9, the browser had executed

electronic page before consumer's computer receives the customized advertisement.
Ex-2005, ¶¶101-03.

Petitioner presents the “straw man” that Patent Owner (“PO”) argues “Figs. 1 and 9 cannot be physically combined.” Reply, 3. **PO never argued this; it argued Petitioner presented no evidence** of likelihood of success and motivation to combine Angles's embodiments. Response, 4-6, 9-10. “It is not sufficient to demonstrate that each of the components in a challenged claim is known in the prior art; **Petitioner must also explain why a POSITA would have combined** the elements disclosed in the separate embodiments described in [a single reference].” *Intel Corporation v. Tela Innovations*, IPR2019-01521, Paper 65, 25 (Mar. 9, 2021); Response, 4 (citing cases with same holdings). *Nowhere* has Petitioner offered evidence explaining why PHOSITA would juxtapose Angles's embodiments to achieve the challenged claims. But PO offered evidence why PHOSITA would *not* be motivated to combine Angles's embodiments.¹ Response, 5-10; Ex-2005, ¶¶126-129.

¹ Petitioner argues it can rely on a reference for all it teaches. Reply, 3-4. But “[t]hat the elements are disclosed in separate embodiments of the same reference **does not excuse this requirement**, [i.e., providing adequate rationale to combine them].” *Intel Corporation*, Paper 65, 25; *Ex parte Ito*, No. 2009-008457, 2010 WL 4378372, at *2 (Nov. 3, 2010) (rejecting that “any combination that can be produced from the

Petitioner argues Angles's Figs. 1 and 9 "illustrate two ways in which the advertisement 30 can be sent to the consumer computer 12," and thus meets the limitations, regardless of embodiment. Reply, 1-3. Wrong. Whether the advertisement is sent directly or indirectly is irrelevant. Per language of limitation 1[c], Petitioner must show "automatically integrating ... into said locally executed game application during execution of said game application." Showing the advertisement being sent to consumer's computer does not establish teaching 1[c].

B. Petitioner's new, belatedly presented argument based on Fig.1 is incorrect.

For the first time in Reply, Petitioner argues "claims are met by Fig.1 embodiment" alone (Reply, 4-5), and contends Angles's web browser is a game application. *Id.* For support, Petitioner for the first time cites portions of prosecution history never cited in Petition. *Id.*, 5-10. Additionally, Petitioner improperly proposes new construction for "game application" as "program designed to assist in the performance of a game." Reply, 9. *GCE Gas Control Equipment v. VBOX*, IPR2023-00326, Paper 27, 10-12 (June 18, 2024) ("Presenting a new proposed claim construction for the first time in a Reply does not fulfill [37 C.F.R. §42.104(b)(3)]").

elements of [a reference's] three separate embodiments is an obvious variation" unless it is "supported by an adequate rationale").

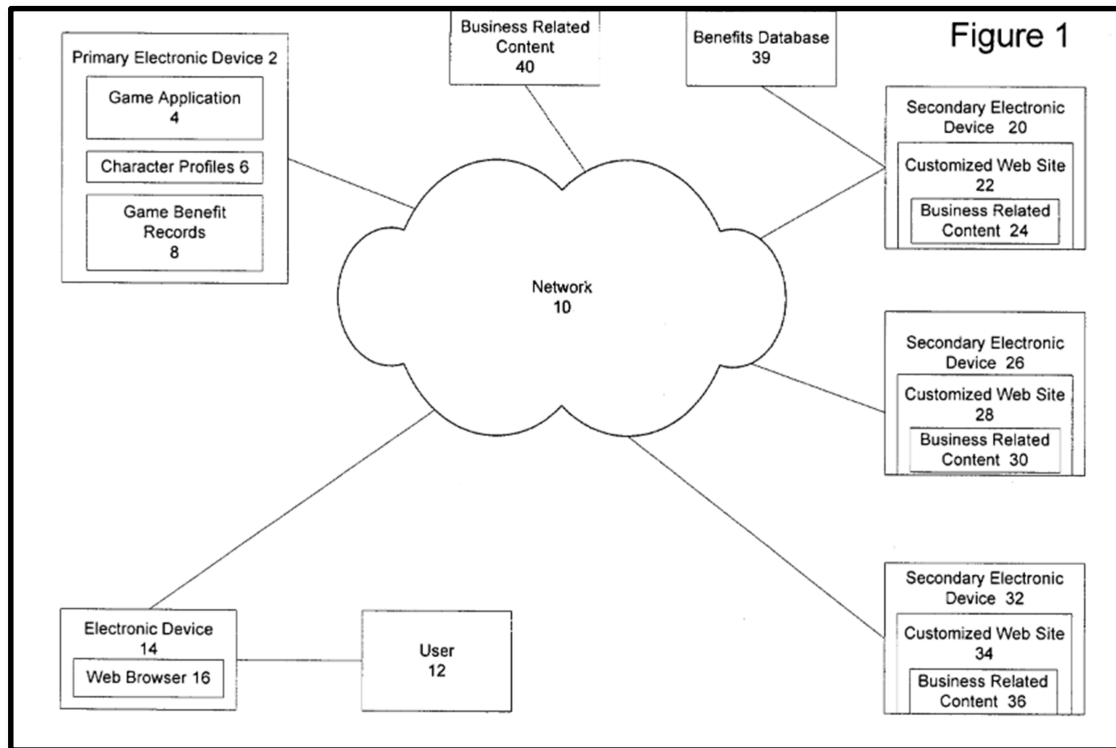
Petitioner introduces Dr. Medvidovic's textbook as new evidence in Reply to advance substantive arguments. Reply, 10-14, 29. Relying on *EmeraChem Holdings v. Volkswagen Grp. of Am.*, 859 F.3d 1341, 1348 (Fed.Cir.2017) ("The agency must ... allow a party 'to submit rebuttal evidence ... as may be required for a full and true disclosure of the facts.'"), PO emailed the Board, requesting for permission to file "rebuttal evidence" with Sur-Reply. The Board denied PO's request. This Sur-Reply does not include the intended "rebuttal evidence."

1. Limitation 1[a]

Contrarily, (Reply, 4), PO never construed "game application." Before Reply, parties agreed no construction was required, including for "game application." Response, 2; Petition, 13; Decision, 15. The claim language requires "game application" be "locally executed" and "accessible at ... primary electronic device." PO merely stated that game applications not "locally executed" nor "accessible at said primary electronic device" cannot meet the claim's requirements. Response, 18-23. Otherwise, "locally executed" and "accessible at ... primary electronic device" would be superfluous.

Petitioner argues that claiming game applications as not being the same as web browsers contradicts intrinsic record. Reply, 4. Incorrect; intrinsic record shows web browsers are not game applications. Consider '028 Fig.1 below, showing game

application 4 residing on primary device 2, whereas browser 16 resides on device 14 (user's device).



Specification explains “user is accessing the game application through a local web browser *with the game application being stored on a remote site on the network.*” Ex-1001, 6:43-45. Thus, intrinsic record confirms that game applications are not web browsers.

Petition never contended that web browsers are game applications. The Board has repeatedly summarized Petitioner’s position: “Petitioner contends that [PHOSITA] would have understood that a browser residing on a local computer makes the accessed game application locally execute.” Decision, 17-18

(“Petitioner’s position explains ... initiating and accessing an online game with a browser would result in a locally-executed game application.”). PO explained that online games—while locally executable via browser at a user’s device—**are not accessible at the user’s device**. Response, 24 n.5; Ex-2005, ¶¶30-40 (describing game types based on “locally executed” and “accessible at” criteria).

Unable to distinguish between “locally executed” and “accessible at” for game applications—fatal to Petitioner’s case (Response, 19)—Petitioner offers a new theory: web browser is “a locally executed game application accessible at the user’s device.” Reply, 14; 4-5; 8-9. The Board should not allow Petitioner’s second bite at the apple.

a. The TerraZones Slides (“TerraZones”)

First, Petitioner’s scope-broadening use of prosecution history to argue “web browsers are game applications” is impermissible. *Lemelson v. United States*, 3 Cl.Ct. 161, 166 (1983) (“[T]he prosecution history of the patents would not serve to expand the scope of the claims, but only to narrow them.” (citing *Cutter Laboratories v. Lyophile-Cryochem Corp.*, 179 F.2d 80 (9th Cir.1949))). Given Petitioner’s new construction for game application as “program designed to assist in the performance of a game,” Petitioner broadens limitation 1[a] to include *any* applications, “assist[ing] in the performance of game.” For support, Petitioner, *for the first time*, exploits prosecution history to pick web browsers as an example—

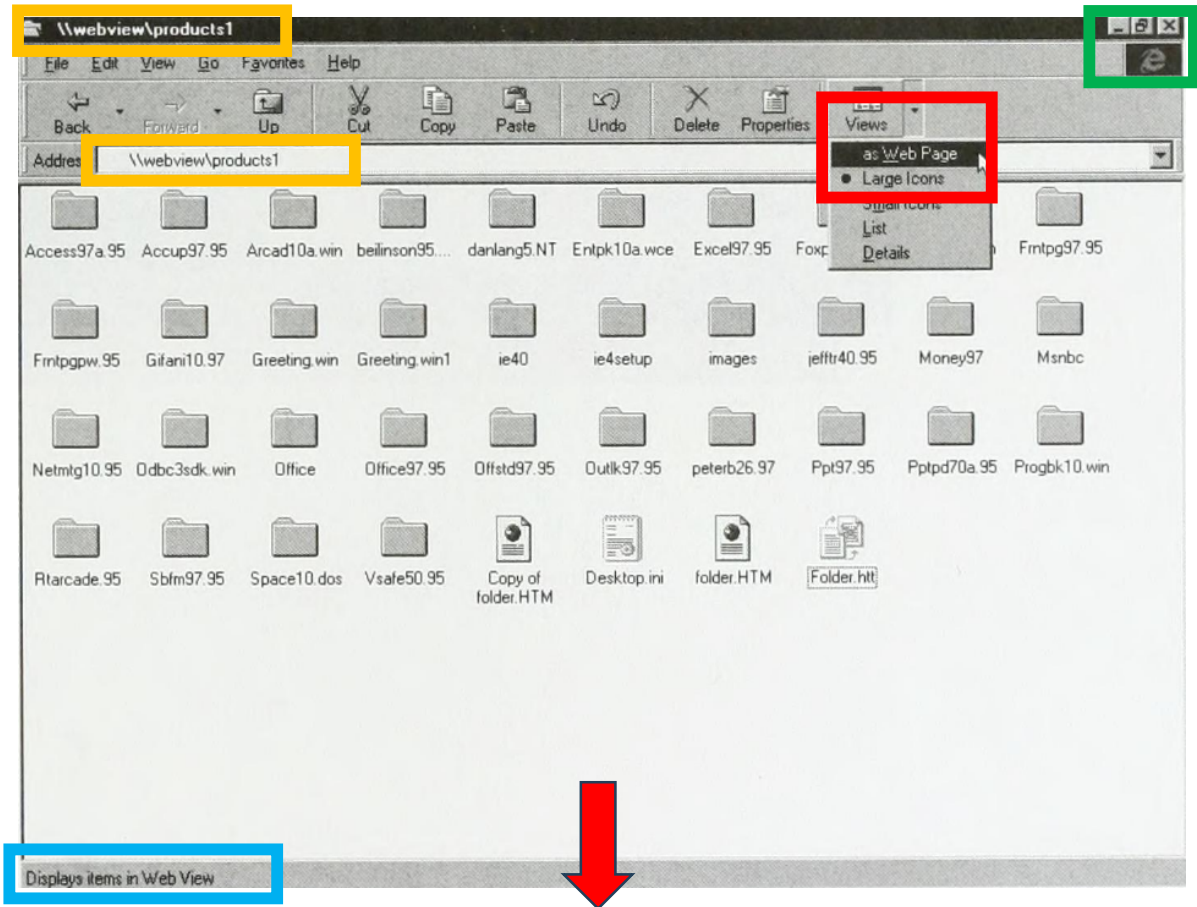
ignoring clear distinctions drawn in specification between web browsers and game applications. *See* §I.B.1.

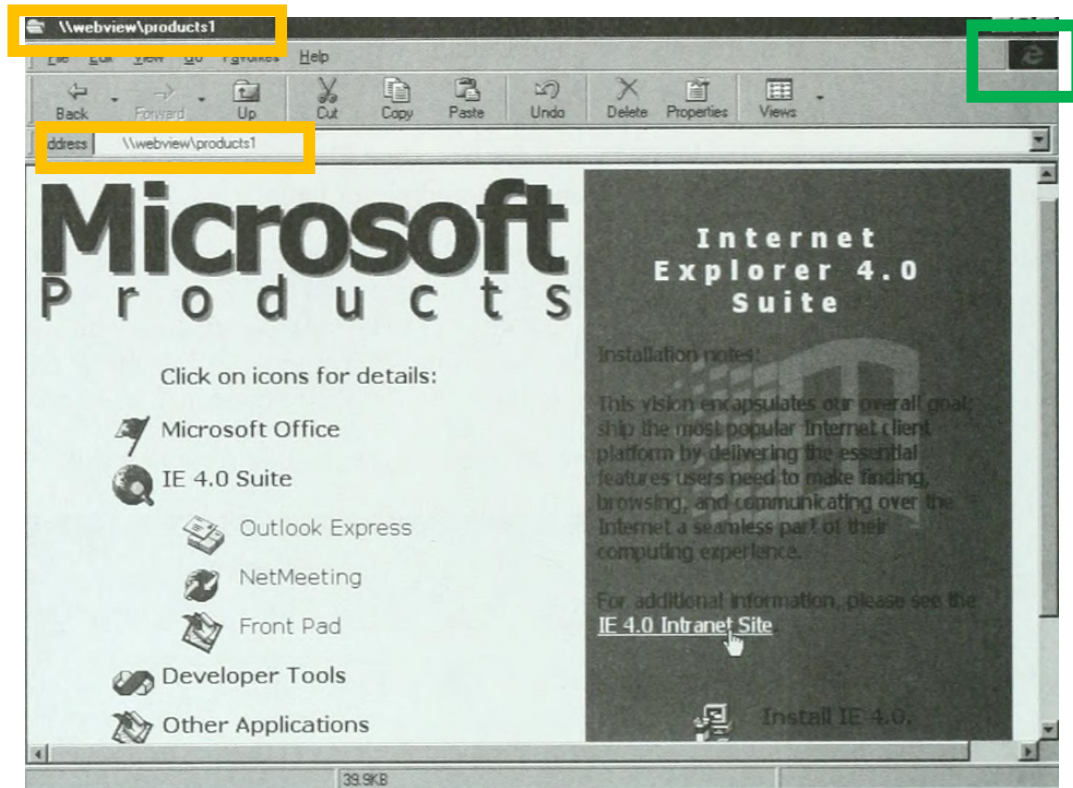
Second, Petitioner mischaracterizes prosecution history. Regarding TerraZones, PO never “mapped,” as Petitioner suggests (Reply, 6), game applications to web browsers. Ex-1003, 107-08. TerraZones shows the game application that is “locally executed” and “accessible at” the user’s device is Cronos Demo—not the browser. *Id.*, 125. Importantly, TerraZones shows Cronos Demo is not browser-based, evidenced by the absence of Internet Explorer title bar in prosecution history pages 125-31. These pages show initiating the game application (i.e., Cronos Demo), (*Id.*, 125-26), automatic integration of business-related content into the game application,² (*Id.*, 127-29), and “automatically redirect[ing] into ‘PJ’s Club’ while playing the game,” (*Id.*, 108; 130-31). Pages 123-24 show a user requesting to initiate a locally executed game application *accessible at the user’s*

² Petitioner mischaracterizes intrinsic record. Reply, 16, n.6. Prosecution history never described web browser as automatically integrating business-related content into the game application. Ex-1003, 107-08. Prosecution history shows Cronos Demo being initiated on pages 125-26, and integration occurs on pages 127-29, evidenced by “sponsored” and “product placement.” There is no browser depicted on pages 125-131 of prosecution history.

device (i.e., Cronos Demo, not the web browser). *Id.*, 123-24. Otherwise, prosecution history demonstrates that *Cronos Demo is initiated on page 125—but not in the browser*. *Id.*, 125-31; Ex-2016, 70:3-71:3.

Petitioner’s expert admits “page 125 does not expressly include the Microsoft Internet Explorer title bar seen in pages 123 and 124,” but speculates “POSITA would understand this to be an illustration of the same web browser seen on those pages.” Ex-1022, ¶25. Incorrect. A 2002 PHOSITA would understand, Internet Explorer was used to browse directories and files *residing on user’s computer*. Ex-2016, 64:22-65:10. This feature, aka Web View, allowed users to navigate directories *using Internet Explorer*. The region occupied by the file list became a general-purpose display area that is *effectively a webpage*. Each directory could have its own HTML Web View, customized to suit particular features. With HTML Web View, users could enhance the appearance of directories and create graphics, such as depicted on prosecution history’s page 123. The following figures are shown for illustrative purposes only.





PHOSITA would understand the Internet Explorer title bar, (Ex-1003, 123-24), simply indicates the Web View feature, which allows viewing the “txflashindexnew” directory’s “Game Zone.” Ex-1003, 123-24. This is supported by (1) Internet Explorer “working offline” as Petitioner admits,³ (Reply, 9; Ex-2016, 58:3-16); (2) no URL on pages 123-24, (Ex-2016, 53:3-58:1), indicating use of

³ Petitioner’s admission is fatal. Unlike TerraZones, Angles requires internet connection for consumer’s accessing content provider information. Angles, 9:65-10:7; Fig.1 (requiring communication medium). Petitioner never explains how Angles could be modified to include TerraZones’s “working offline” feature.

browser to view files on user's device⁴—not browsing Internet, (*Id.*, 58:3-16); and (3) pages 125-31 do not show game application (Cronos Demo) running in Internet Explorer, (Ex-1003, 125-31).

Third, Petitioner contorts “application” as “program designed to assist in the performance of a specific task” to propose self-serving construction for “game application” as “program designed to assist in the performance of a game.” Reply, 9. PHOSITA rejects this overly-broad construction. Ex-1023, 45:11-25; 50:6-51:18. Specifically, PHOSITA would not characterize games as specific tasks, “because a game is a collection of capabilities, typically, that allow players to do any range of things, only some of which could be boiled down to tasks. But to say that a game enables a task, I would have to disagree.” *Id.*, 45:11-25. Dr. Medvidovic testified, game application is “an application that is a game.” *Id.*, 51:8-18.

Petitioner never shows that web browsers are specifically “designed to assist in the performance of a game.” Reply, 9. Petitioner cannot, because the dictionary definition is clear: web browsers are not designed to do so. Ex-1017, 562. Further, per Petitioner, any program that “assist[s] in the performance of a game” is game application—an absurd result. For example, Mr. Crane states “operating system

⁴ Mr. Crane admits that the browser on page 123 depicts “a file name in the search bar.” Ex-2016, 50:8-14; 52:12-20.

could be a program designed to assist a program to assist in the performance of a game,” (Ex-2016, 38:4-24), absurdly making it a game application. Consider graphical user interface, construed as “software that provides a graphical display” Ex-2011, 2. Per Petitioner, it is a game application, because it assists in performance of a game by rendering graphics. Ex-2016, 36:12-18. Web browsers are not game applications, much like Netflix application is not a movie, despite assisting in streaming one. Ex-2005, ¶141. Also, per Petitioner, web browsers are word processing applications, for “word processing is an example of a task that a web browser can perform.” Ex-2016, 44:9-21. Absurd.

Assuming Petitioner’s new construction was correct, it is inapplicable here. As explained, Internet Explorer on prosecution history pages 123-24 is a navigation tool for viewing a user’s device directory content. Petitioner’s expert concedes page 123 depicts “a file name in the search bar with a navigation bar of Internet Explorer that represents a resource locator.” Ex-2016, 50:8-14; 52:12-20. Thus, this browser never “present[s] a website offering games,” as Petitioner argues. Reply, 7. Further, pages 125-31 show Cronos Demo is not being run in browser—thus, the browser does not assist in performance of the game. Ex-1003, 125-31. Again, the specification distinguishes between game applications and browsers. §I.B.1.

Petitioner’s broad construction confuses Petitioner itself into taking inconsistent positions. First, Petitioner states TerraZones’s web browser “is

consistent with the '028 patent's description that 'user ... accesses the network ... through an electronic device ... holding a web browser.'" Reply, 8-9. But Petitioner admits "the TerraZones web browser is executed without reliance on any such network connection, indicating it is 'working offline.'" *Id.*, 9. This inconsistency results from Petitioner's misunderstanding the Claims' meaning and scope. Response, 18-23.

b. Medvidovic textbook

"[Expert] [o]pinions expressed without disclosing the underlying facts or data may be given little or no weight." CTPG, 40 (Nov. 2019). *For the first time*, Petitioner rely on a 2009-textbook to advance conclusory assertions about PHOSITA's knowledge in 2002. Reply, 10-13. Citing Mr. Crane, Petitioner states web browser configurations depicted in the textbook were known in 2002. Reply, 13. But Mr. Crane offers no corroborating evidence. Ex-1025, ¶¶35-38. He concedes: (1) PHOSITA could not access the textbook in 2002, (Ex-2016, 78:8-82:13); (2) he never cites any references indicating the textbook's concepts were known in 2002, (*Id.*, 85:8-89:24); and (3) he does not know of any evidence independently corroborating his assertions (*Id.*, 87:5-10). *If known in 2002, why did Petitioner not use references from that timeframe?* Petitioner cannot.

Upon encountering his textbook *for the first time* in this proceeding, Dr. Medvidovic unequivocally testified:

[W]eb browsers in my textbook are a specific anti-pattern, all three examples of something that you would not do in practice for a video game such as “Lunar Lander.” So to the extent that you want to build an example of Figure 1 as something that you should not do in -- in practice, then maybe we could consider that. ... I don’t think that’s appropriate.

Ex-1023, 136:14-137:9; 113:15-25; 132:17-133:1; 121:4-21; 125:21-126:19.

c. “Accessible at”

Petitioner never addresses PO’s argument that Petitioner’s position renders “accessible at” superfluous. Response, 19. Moreover, Petitioner never addresses PO’s argument that Angles’s online games are not accessible at user’s device—they are stored on content provider’s computer. Response, 24-25. Instead, Petitioner advances a new argument: Angles’s web browser is “a locally executed game application accessible at the user’s device.” Reply, 14. But web browsers are not game applications—the Claim requires the game application to be locally executed and accessible at the user’s device. §I.B.1.

Petitioner argues “accessible at” electronic device does not mean “being held by” that device, (Reply, 13), ignoring English grammar, specification, and prosecution history. As Response explained, the “at” preposition grammatically refers to the precise location of the game application. Response, 20. The game

application is “accessible at” device if residing entirely on (i.e., being held by) the device. *Id.*

Petitioner contends PO “limit[s] the claim based on ‘one aspect’ of an ‘illustrative embodiment.’” Reply, 14. Incorrect. Petitioner ignores numerous specification examples supporting PO’s position that game applications must be held by an electronic device—which is the case *for both the illustrative and alternative embodiments and all aspects*. Ex-1001, 1:64-67 (“a primary electronic device *holding a game application* is part of a network”); 2:5-7 (“an electronic device *holding a game application* ...”); 2:17-19; 2:20-22; 2:32-35; 2:53-56 (describing Fig.2 embodiment “where a local device *holds the game application*”); 3:36-46.

In ‘028 Fig.1, game application is held by (i.e., accessible at) primary device 2, and web browser is held by (i.e., accessible at) user’s device (device 14). Response 22-23; Ex-1001, 3:36-52. “[T]he user is accessing the game application *through a local web browser with the game application being stored on a remote site on the network*.” Ex-1001, 6:40-45; Fig.1; Response 22-23. Since Fig.1’s game application is not “stored on” user’s device, it is not “accessible *at*” user’s device. Contrastingly, in Fig.2 “user 60 accesses the game application 64 on a local electronic device 62,” (Ex-1001, 4:3-6), i.e., user’s device “holds the game application.” Response, 21-22. Thus, Fig.2’s game application is “accessible *at*” user’s device.

Petitioner incompletely depicts prosecution history regarding Applicant's amendment. Reply, 13-14. The '028 Patent was amended, adding the underlined "game application held at said primary electronic device." Ex-1003, 658. Applicant again amended, replacing "held" with "that is accessible," i.e., "game application ~~held~~that is accessible at" *Id.*, 503. **This amendment was not proposed to overcome rejections or distinguish over prior art.** *Id.*, 513. **Applicant made no disclaimer** that "being accessible at" does not encompass "being held at." **Examiner raised no objection to this amendment** for exceeding the application's original scope. Reviewing specification and prosecution history, PHOSITA would regard the two terms synonymously. Ex-2005, ¶¶33-35.

Finally, prosecution history's TerraZones forecloses Petitioner's argument. Internet Explorer is "working offline," as Petitioner admits. Reply, 9. When "working offline," Internet Explorer cannot access Angles's online games residing on content provider's computer. Ex-2016, 58:8-16. Contrastingly, Angles's consumer computer establishes communication link with content provider's computer through communication medium—defined as Internet, (Angles, 9:4-55)—before "consumer browser software then accesses an electronic document ... stored on the content provider computer." *Id.*, 8:40-42. Angles's embodiments cannot work if consumer computer's browser is offline. Therefore, TerraZones is **outside** Angles's teachings.

Further, PHOSITA understands TerraZones’s Internet Explorer was used for viewing and navigating the “txflashindexnew” directory. *See* §I.B.1.a. Thus, TerraZones illustrates a locally executed game application accessible at user’s device—not because of Internet Explorer’s title bar—but because Cronos Demo (the actual game application) is run (i.e., locally executed) and resides (i.e., accessible at) on user’s device.

2. Limitation 1[c]

Contrary to Petitioner’s assertion, (Reply, 15), the *timing* of content integration is relevant and mandated by claim language: “integrating ... during execution of said game application.” In Angles’s Fig.9—which Petition exclusively relied on—“integration of advertisement into such games takes place prior to a consumer executing the games.” Ex-2005, ¶134. Faced with its expert’s admissions that integration of business-related content into content provider’s offerings occurs before submission to consumer’s computer, (Response, 27), and that consumer’s computer cannot execute electronic page 32 before it is sent to consumer’s computer, (Response, 27-28), Petitioner leaves PO’s arguments unaddressed.

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].⁵ Compare Reply, 15-16 (citing for the first time Angles, 8:33-67; 10:43-59; Fig.3), with Petition, 24-25. Improper. *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1008 (Fed.Cir.2023) (“[T]he Board is not permitted to entertain ‘shifting arguments’ but must, instead, reject any ‘entirely new theory of prima facie obviousness absent from the petition,’ if the petitioner attempts to inject ... post-petition.”).

⁵ Petitioner claims Petition cited Angles's Abstract. Reply, 15. Petition cited a single sentence from Abstract that is unrelated to Angles's Fig.1 or preferred embodiment. Petition, 24. “[P]referred embodiment” and “Fig.1” do not appear where Petition cited. Indeed, portions of Abstract cited in Petition point to Angles's Fig.9: “The customized advertisements are selected based on consumer profiles and are then integrated with offerings maintained by different content providers.” *Id.* (citing Angles, Abstract). This is evidenced by “integrated” here, for Angles consistently uses “integrate” for Fig.9, (Angles, 21:53-67), but uses “combine” for preferred embodiment (*Id.*, 8:62-67; 19:60-65; Figs. 3, 7-8 (discussing the preferred embodiment)). Reply utilizes another sentence from Abstract—but this sentence was not cited in Petition. Reply, 15-16.

Even if overlooked, Angles’s preferred embodiment still does not teach 1[c]. First, 1[c] requires automatic integration. Petitioner conceded “automatically” as “without human initiation or intervention.” Petition, 24 (citing Ex-1004, ¶117). But in Angles’s preferred embodiment, “consumer combines the customized advertisement with the electronic page that was requested by the consumer.” Angles, 19:60-65. The Angles combination requires human initiation, thus cannot be automatic.

Further, Petitioner’s expert differentiated “combine” and “integrate” in explaining Angles. Compare Ex-2010, 437:9-438:1 (stating “advertisement and the content are combined in the content provider,” and distinguishing it from his answers in redirect), with 423:7-424:6 (stating that “integration” occurs “on the client device”). Thus, Petitioner cannot hide behind Angles’s preferred embodiment—which discusses in terms of “combination”—and equate that with “integration,” when its expert sees the terms differently. Dr. Medvidovic explains—and Petitioner never rebuts—Angles admits its Fig.9 embodiment is the only embodiment capable of integrating advertisements into games. Response 10-11 (citing Ex-2005, ¶¶130-34).

3. Limitation 1[d]

Petitioner concedes Angles’s re-direction occurs “upon selecting a hyperlink.” Reply, 16. As Response explained, Petitioner’s expert admits hyperlink clicks are

manual redirection—not automatic as required by 1[d]. Response, 32-33 (citing Ex-2009, 232:7-2; 231:10-13). Petitioner leaves PO’s argument unaddressed.

Petitioner contends that PO cites “an ‘aspect’ of an ‘illustrative’ embodiment” to conclude that redirection “occurs as part of the user executing and playing the game application.” Reply, 17. Petitioner ignores the language of 1[d], requiring “said re-direction being integrated into said game application and said re-direction occurring as part of the user executing said game application.” Thus, PO never limited the claim to an embodiment—the claim *requires* this limitation.

Crop-quoting from specification, Petitioner argues incorrectly that ‘028 Patent’s re-direction “is not forced, but occurs in response to ‘user actions.’” Reply, 17. In full context: “User actions within the game cause the game application to automatically re-direct the user to a customized corporate web site[.]” Ex-1001, 3:7-10. The game application *causes* the re-direction, thereby forcing player re-direction. Specification explains the game application uses “a static decision tree or ... an artificial intelligence engine to generate the next game event for the user[.]” including “[e]vents occurring at the external company websites to which the player is re-directed.” *Id.*, 5:43-49.

Petitioner mischaracterizes prosecution history, arguing “Czepluch does not forcibly redirect the user.” Reply, 17-18. False; the Board “agree[d] with the Examiner,” (Response, 30-31, n.8; Ex-1003, 33-34), who characterized Czepluch

“**automatically forcing** the game player to visit product web pages.” Response, 30-31 (citing Ex-1003, 147-48). Petitioner omits critical aspects, (Reply, 17 (citing Ex-1003, 33-34): “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.” Ex-1003, 33-34 (Petitioner’s omission emphasized). The omitted fragment clarifies that *clicking is part of the game in Czepluch*, i.e., without clicking, player cannot play the game. Thus, Czepluch’s clicking constitutes game-related user actions in game’s context, and by associating hyperlinks with puzzle items, “customer to play the game ‘must visit’ the ‘Web pages of the Web store’ which requires ‘automatically redirecting.’” Response, 30 (citing Ex-1003, 147-48).

4. Claim 3

Reply never disputes that Petition advanced no argument for Claim 3, other than referring to the discussion of 1[d]. Response, 34-35. Reply never explains how re-directing users to external webpages meets “game application display[ing] branded business-related content.” *Id.* Petitioner does not dispute Claim 3 **imposes a limitation on game application**—the game application must display branded content. *Id.* Petitioner never addresses PO’s argument citing specification portions that distinguish displaying branded content and re-directing user to external webpages. Response, 34-35. Instead, Petitioner diverts to limitation 1[c], implying Claim 3 and 1[c] are identical. Reply, 18-19.

Reply's focus on distinguishing business-related content and branded content is misplaced. *Id.* Even if they were the same (they are not, discussed in Response, 36-38), integrating content into game is not the same as game displaying content. Response, 34; 37. Dr. Medvidovic explains that Claim 3 requires “the game application by and of itself must display ‘branded business-related content.’ **This is a feature of the game application alone—not merely a network capability allowing for integration** of business-related content into the game.” Ex-2005, ¶62. Petitioner's theory renders Claim 3 redundant—by integrating content into the game, the game essentially displays that content, thus Claim 3 is not different from Claim 1. Incorrect. Response, 34-35.

Angles never teaches game applications that **display** branded content; nor does Petitioner explain or offer evidence on how “**general knowledge** of online and in-game advertising methods” would help with **creating game applications that standalone display branded content**. Reply, 18-19.

5. Claim 4

Petitioner confuses integrating content into game with game displaying content. *See* §I.B.4. Compounding error, Petitioner concludes Angles's sending new advertisements (i.e., new content) for integration into game⁶ satisfies Claim 4. Reply,

⁶ PO disagrees that Angles's Fig.1 integrates anything into game. §I.B.2.

19-20. Petitioner ignores Claim 4's dependency from Claim 3, thereby adding a limitation to the branded content displayed by the game application—which is divorced from the integration step of 1[c]. Response, 39-40; Ex-2005, ¶¶63-65. The Claim requires Claim 3's branded content be dynamically updated—not new branded content being shown or integrated into the game. Response, 39-40.

Petitioner's assertion that Dr. Medvidovic contradicts PO's argument is baseless. Reply, 20. He replaced Honda Civic's front-view with rear-view to contrast that with replacing Honda with Tesla, explaining that only the former is consistent with the Claim, i.e., the same branded content must be updated as opposed to showing new branded content. *Compare* Ex-2005, ¶67, *with* ¶68. His focus was not on the manner of the updating. During deposition, he testified about ¶67, and Petitioner never rebuts, that “[t]here could be a series of intermediate steps in an actual execution. But I couldn't show that ... in a declaration. So these would be either two bookends of multiple intermediate steps of this content being dynamically updated....” Ex-1023, 177:7-178:1. While he “couldn't show ... in a declaration,” (*Id.*), he stated “the ‘028 Patent teaches dynamically updating as doing so in a manner similar to the methods enumerated in the specification.” Ex-2005, ¶69. PO explained its basis from specification, consistent with Dr. Medvidovic's opinion. Response, 39-40.

Petitioner argues PHOSITA's knowledge, but again fails to explain how this would help to create game applications that standalone display branded content, which can be updated dynamically. Finally, Petitioner *for the first time* cites Angles, 15:32-42, that neither Petition nor Mr. Crane's declaration relied upon for any limitations, including Claim 4. Petition, 28-29. This is improper. Disregarding this, this portion states "different versions of the advertisements" are created using "different demographic categories." For example, one version of the juice advertisement is for children, and the other for adults. Angles, 15:32-42. Angles never states the juice advertisement is dynamically updated to show children all different versions—only the version designed for children is shown to children; thus, no dynamical updating.

6. Claim 5

For "player profile," Petitioner uses extrinsic evidence, (Reply, 21), ignoring specification's clear definition: "The profiles are tied to a character representing the player, not the actual individual playing the game." Ex-1001, 5:62-64. Further, "[c]haracter profiles ... track the game choices a player makes while playing the game application," which is the language of limitation 5[b]. *Id.*, 3:39-41; Ex-2005, ¶¶76-77. Moreover, Response explained Angles's profiles are *not* created based on user choices during a game application; Petitioner fails to rebut. Response, 46-48.

Petitioner insinuates without support that “during the game application” means “concurrently with executing the game application.” Reply, 21. Absurdly broad: is drinking tea while executing the game application tied to the player profile? Petitioner cites specification’s login using Player ID and password, (Reply, 21), but ignores the next sentence, clearly tying players to character profiles: “The player is cross-indexed to a character profile which tracks the player’s decisions during ... the game.” Ex-1001, 5:57-59.

Petitioner ignores PO’s 5[a] argument. Response, 43-46. Response explained that Petitioner’s reliance on user’s action to execute the game is not a game-related action *in the game*. Response, 43-44. Response also explained that Mr. Crane’s examples, e.g., registering with advertisement providers, is not game-related action. Response, 44-45. Still, Petitioner maintains that “[u]ser actions taken in a game application are game-related.” Reply, 22. But Petitioner’s game application is a web browser; thus, per Petitioner, by bookmarking a page or minimizing the browser, a user executes a game-related action in the game application. Untenable.

7. Claim 6

Petitioner never disputes the player profile residing on the primary electronic device. Response, 49. Take Fig.1—primary device 2 holds the profiles. Ex-1001 3:37-38. Various business-related content is held on secondary devices. *Id.*, Fig.1. The Claim requires the profile be “disseminated to providers of business-related

content.” Specification states profiles are “exchanged with business sponsors.” *Id.*, 6:3-6. PHOSITA understands that for dissemination to providers of business-related content, profiles must leave primary device 2 and arrive at secondary devices 20, 26, and 32. Ex-2005, ¶¶80-82.

Petitioner contends “disseminate” encompasses “dispersing within a device, without necessarily leaving it.” Reply, 22. Petitioner never explains how profiles held by primary electronic devices are disseminated to providers of business-related content having secondary devices by merely “dispersing within” the same device holding them.

8. Claims 7-9

Petitioner’s reliance on *Ancora Techs.* is misplaced. Reply, 23. There, “[n]othing in the specification clearly narrows the term ‘program,’” 744 F.3d at 735; not so for the ‘028 Patent. Response, 2-3. Nevertheless, *Petitioner concedes Claim 1’s fate settles “any controversy” regarding Claim 7.* Reply, 23.

II. GROUND 2

A. Robinson never enables PHOSITA to produce the ‘028 Claims.

Response listed precedents governing single-reference obviousness analyses. Response, 51-52. Petitioner’s citation to *Symbol Techs. v. Opticon* is inapposite. Reply, 25. There, in a multi-reference obviousness challenge, the Court held whether

one of the references is enabling regarding the subject matter of its own invention “may” be unimportant, i.e., whether the prior art is invalid for enablement is irrelevant. 935 F.2d at 1578. PO never argued Robinson is invalid. It argued Robinson never “enabled [PHOSITAs] to produce the claimed invention.” Response, 55-57 (citing *In Kumar*, 418 F.3d 1361 (Fed.Cir.2005)). Petitioner does not rebut. Nor can it; as Response explained, Robinson’s sole mention of online games never enables PHOSITAs with the many details “concerning the game application” in the ‘028 Patent. *Id.*

Petitioner never disputes Robinson “must enable the portions of its disclosure being relied upon.” Response, 51-52 (citing *Raytheon Techs. Corp. v. Gen. Elec. Co.*, 993 F.3d 1374, 1380 (Fed.Cir.2021)). Nor does Petitioner dispute PHOSITA’s understanding of the *10-line portion* of Robinson it relied on. Response, 53-54 (citing Ex-2005, ¶¶205-08). Petitioner argues that given the “advanced” state of the art, PHOSITA’s knowledge included integration of avatars into games. Reply, 24. But this knowledge is irrelevant. Robinson *must* enable PHOSITAs in creating avatar-based games compatible with Robinson’s “network-enabled 3D computing environment of the present invention,” (Robinson, 9:29-37), which Robinson describes as “an intuitive 3D desktop environment,” (*Id.*, 1:55-67; 5:11-23). It does not.

B. Limitation-by-limitation analysis

1. Limitation 1[a]

Petitioner abandons its position that Robinson’s “3D computing environment” is a game application. Response, 58-60. Petitioner never disputes Kernel 465 is an “add-on,” append[ed] ... to the software requested or purchased by user.” Response, 61 (citing Robinson, 10:20-23). Petitioner admits Petition characterized Kernel 65 as “support[ing] a game application,” (Reply, 25), not a game application. Response, 61. Relying on its late construction, Petitioner states Kernel is game application because it supports a game application. Reply, 25. Petitioner’s self-referential approach is unwarranted. Robinson’s Kernel is an add-on, extending the capabilities of an application—it is not an application. Ex-2016, 95:2-97:15.

Further, Robinson’s Kernel does not *support* any game application, and Petitioner offers no such evidence. Citing Fig.9, Petitioner argues “persistent client window 912 of ... kernel[] assist[s] alongside other programs (e.g., online games, in green),” Reply, 26-27, but never explains how exactly persistent window assists programs in the green box. Further, Fig.9 shows “a user desktop illustrating the presence of the Persistent Client Window.” Robinson, 2:24-24. Consistent with PHOSITA’s understanding of “desktop,” Robinson’s desktop shows icons for folders and programs on user’s device, except Robinson’s desktop is 3D and includes a persistent window for advertisement. Ex-2005, ¶¶191-92 (describing Fig.9). Robinson never states, nor does Petitioner provide citation, the kernel assists

with running programs. Robinson’s programs are run independently of the kernel—not in it. Robinson, 13:11-18.

2. Limitation 1[b]

Petitioner confuses demonstration of software with demonstration software. Reply, 28. Mr. Crane agrees: these terms differ for PHOSITA,⁷ and only the latter is a term of art. Ex-2016, 90:12-92:5. Robinson discloses the former, not the latter:

Upon automatic installation of the 3D Persistent Client kernel, the user is given a demonstration of the 3D environment software and given the choice to activate a full three-dimensional computing environment If the user chooses not to activate ... the 3D environment Persistent Client nevertheless remains active

Id., 10:36-45. In context, the kernel is installed as a 2D persistent window (as in Fig.9), and—within the window—user is shown a demonstration of 3D environment software; if user declines to activate the 3D software, the window remains in initially-installed 2D form. Ex-2005, ¶200. This is consistent with PHOSITA’s understanding: “[T]his demonstration refers to multimedia or illustrative materials created with the purpose of showcasing and highlighting the key features ... of the 3D desktop.” *Id.*, ¶201; Ex-2016, 92:7-93:1. Petitioner’s argument fails.

3. Limitation 1[c]-1[d]; Claims 3-9

⁷ Similarly, “photo album” and “photo of an album” have different meanings.

For 1[c], Petitioner implicitly admits that Kernel's Persistent Client Window is not the game application. Reply, 30. Response explained that Robinson's ads are displayed on the Window. Response, 63-64. When user opens an application (e.g., game), the ads “*remain in the Persistent Client Window* until the user closes the application.”” *Id.* Robinson's ads are never *integrated* into the application. *Id.* For 1[d], Petitioner refers to its Ground 1 analysis that fails. Petitioner never rebuts PO's arguments for Claims 3-9. Response, 66-67.

Date: July 8, 2024

Respectfully Submitted,

/s/ Erick S. Robinson

Erick S. Robinson (Reg. No. 51,354)
Patrick M. Dunn (Reg. No. 70,474)
Spencer Fane LLP
3040 Post Oak Boulevard, Suite 1300
Houston, TX 77056
erobinson@spencerfane.com
pdunn@spencerfane.com
Tel: (713) 212-2638
Fax: (713) 963-0859

Homayoon Rafatijo (Reg. No. 80,870)
Kevin S. Tuttle (Reg. No. 52,307)
SPENCER FANE LLP
1000 Walnut Street, Suite 1400
Kansas City, MO 64106
hrafatijo@spencerfane.com
ktuttle@spencerfane.com
Tel: (816) 474-8100
Fax: (816) 474-3216

Marc Brockhaus (Reg. No. 40,923)
Douglas Sorocco (Reg. No. 43,145)
DUNLAP CODING
609 W. Sheridan Avenue
Oklahoma City, OK 73102
mbrockhaus@dunlapcoddling.com
dsorocco@dunlapcoddling.com
Tel: (405)607-8610

Attorneys for Quantum Imaging LLC

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Sur-Reply to Petitioner's Reply contains 5,600 words using the word count feature of Microsoft Word.

Date: July 8, 2024

/s/Erick S. Robinson
Erick S. Robinson (Reg. No. 51,354)

Attorney for Quantum Imaging, LLC

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that the above-captioned Patent Owner's Sur-Reply to Petitioner's Reply, and its cited exhibits, were served via electronic mail, on the following email correspondence addresses of record:

Alex S. Yap
Mehran Arjomand
Bryan Blumenkopf
MORRISON & FOERSTER LLP
707 Wilshire Boulevard, Suite 6000
Los Angeles CA 90017-3543
AYap@mofo.com
MArjomand@mofo.com
BBlumen@mofo.com

Date: July 8, 2024

Respectfully Submitted,
SPENCER FANE LLP

By: /s/Erick S. Robinson
Erick S. Robinson (Reg. No. 51,354)
3040 Post Oak Boulevard, Suite 1300
Houston, TX 77056
erobinson@spencerfane.com
pdunn@spencerfane.com
Tel: (713) 212-2638
Fax: (713) 963-0859

Attorneys for Quantum Imaging LLC