

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 RESPONSE TO PETITION
35 U.S.C. §316(a)(8), and 37 C.F.R. §42.120

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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

I. INTRODUCTION

Sony Interactive Entertainment LLC (“Petitioner”) filed a Petition for *Inter Partes* Review (IPR), challenging Claims 1 and 3-9 (the “Challenged Claims”) of U.S. Patent No. 8,454,028 (the “‘028 Patent”). Paper 2 (“Petition”; Pet.). The Board instituted IPR. Paper 11 (“Decision”).

Petitioner’s obviousness analysis is fundamentally flawed, as explained below. Further, the record provides clear evidence that the challenged claims are patentably distinct from the prior art, rendering Petitioner’s arguments ineffective. Patent Owner requests that the Board issue a Final Written Decision affirming the patentability of the Challenged Claims.

A. The ‘028 Patent

The ‘028 Patent relates to integrating business-related content into a computer game. Particularly, a player (1) locally executes a game application that is being held on a primary electronic device; (2) is exposed to business-related content held on webpages of a secondary electronic device that is integrated into the locally executed game application; and (3) is automatically re-directed to the webpages of the second electronic device from the primary electronic device as part of executing the game application. *Id.*, Claim 1.

B. Asserted Grounds

Petitioner alleges that the Challenged Claims are obvious over Angles in view of the knowledge of a PHOSITA (Ground 1), that the Challenged Claims are obvious over Robinson in view of the knowledge of a PHOSITA (Ground 2), and that Claim 6 is obvious over Angles, Robinson, and Ginter in view of the knowledge of a PHOSITA (Ground 3).

C. Claim Construction

Except for the term “application” in Claim 7, Patent Owner agrees that no other express claim constructions are required for this IPR. Pet. 13; Decision, 15; *see also* Ex-2011.

The term “application” in limitations 7[a]-[e] means “game application.” This construction is supported by the intrinsic evidence and expert testimony.

“When a patent . . . describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007). Referring to *Verizon*, the Federal Circuit recently upheld the district court’s use of “repeated descriptions of the present invention” to narrowly interpret the term “advertising objects” in the claim limitation “‘selectively storing advertising objects at a store established at the reception system’” to necessitate that “the advertising objects must be ‘pre-fetched.’” *Chewy, Inc. v. Int’l Bus. Machines Corp.*, 2024 WL 925884, at *2-*3

(Fed. Cir. Mar. 5, 2024). The Court held so despite absence of any “pre-fetching” requirement in the claim language, because “[i]n light of [specification’s] repeated descriptions of the present invention, a skilled artisan would understand the claimed invention requires pre-fetching of advertising objects.” *Id.* The Court also rejected the argument that claims not expressly stating “pre-fetching” should not be construed to require “pre-fetching” simply because some claims do “recite ‘pre-fetching.’” *Id.* at *3. Given specification’s “clearly limiting disclosures,” “[t]he asserted claims ... capture the concept of pre-fetching of advertising objects by reciting ‘selectively storing advertising objects,’ while [other] claims capture this concept by reciting ‘pre-fetching.’” *Id.*

Chewy controls here. In the “BRIEF SUMMARY OF THE INVENTION,” the ‘028 Patent describes four “aspect[s] of the illustrative embodiment of the present invention.” Ex-1001, 1:35-2:46. All four involve a game application. *Id.* Indeed, the word “application” never appears in the specification of the ‘028 Patent unless it is preceded by the word “game.” Ex-2005, ¶¶86-88. Thus, considering these repeated and exclusive references to “game application,” a PHOSITA reading the ‘028 Patent recognizes that the term “application” recited in Claim 7 must mean “game application.” *Id.*

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.

II. ARGUMENT

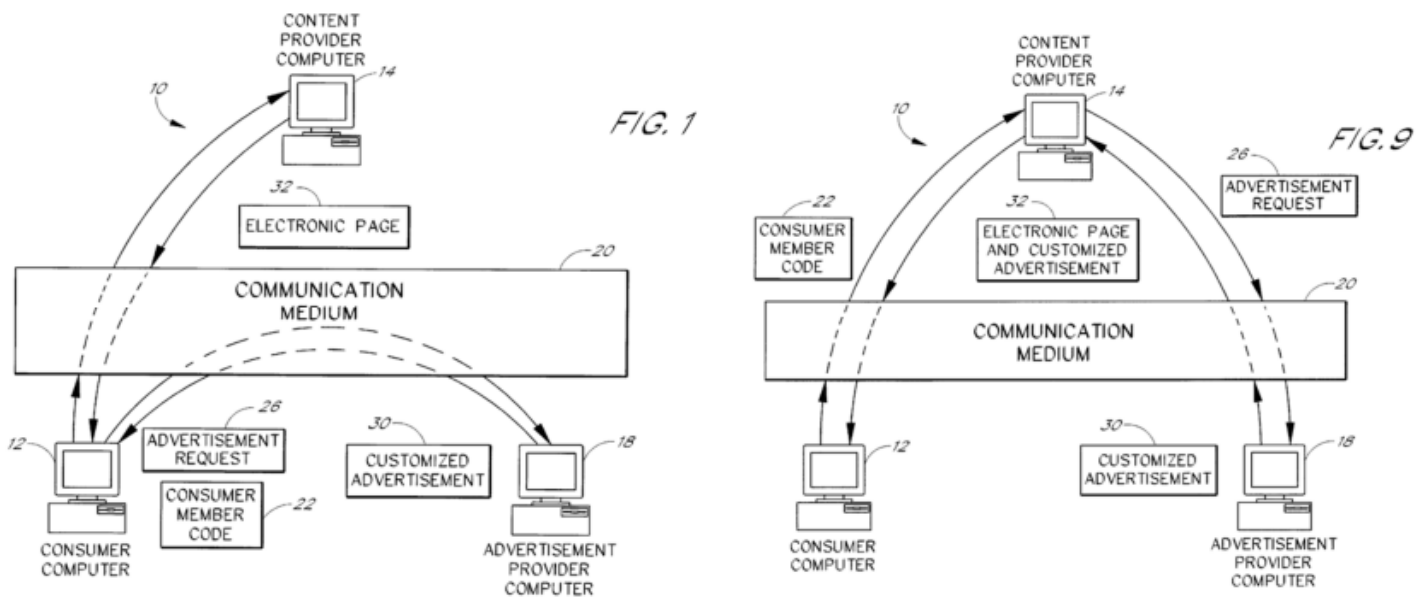
A. Ground 1: Angles in View of the Knowledge of a PHOSITA does not render obvious the Challenged Claims.

Petitioner's Ground 1 argument is flawed, because it pivots on combining Angles's two embodiments pertaining to structurally different technologies that clearly teach away from one another. Even overlooking this, Petitioner's limitation-by-limitation analysis deviates from proper obviousness inquiry as prescribed by the law, and fails to prove obviousness of the Challenged Claims by a preponderance of the evidence.

1. Petitioner's Angles-based obviousness analysis is flawed—it erroneously assembles disclosures from Angles's various embodiments that are inherently un-combinable.

“When an obviousness argument relies on ‘combining multiple embodiments from a single reference, ... there must be a motivation to make the combination and a reasonable expectation that such a combination would be successful,’ otherwise a skilled artisan would not arrive at the claimed combination.” *Reactive Surfaces Ltd., LLP v. Toyota Motor Corp.*, IPR2019-00867, Paper 6 at 8 (PTAB Sep. 18, 2019) (quoting *In re Stepan Co.*, 868 F.3d 1342, 1345-46 n.1 (Fed. Cir. 2017)).

Angles discloses methods for “delivering customized advertisements to users of interactive devices.” Angles, 2:49-51. Angles discloses two embodiments on which Petitioner and its expert exclusively rely: a “preferred system,” illustrated by Fig. 1, (*Id.*, 4:49-53), and an “alternative embodiment,” illustrated by Fig. 9, (*Id.*, 5:10-14). Both figures are reproduced side-by-side below.



As illustrated below, for each Challenged Claim, Petitioner’s obviousness argument relies on mixing and matching disclosures pertaining to different embodiments of Angles. Specifically, Petitioner plucks passages from Angles’s “preferred embodiment,” combines them with passages from Angles’s “alternative embodiment,” and pastes this amalgamation into the Petition. But Petitioner never explains why this is warranted.

Angles never teaches a PHOSITA to combine its embodiments. Ex-2005, ¶¶126-129. Significantly, Angles does not teach or suggest combining elements from Fig. 1 with those of Fig. 9, thereby failing to support a motivation to combine the two embodiments. *Id.* Further, neither Petitioner nor its expert explains “why a [PHOSITA] would have combined the separate embodiments of [Angles] on which Petitioner relies to prove the obviousness of the challenged claims.” *Reactive Surfaces*, IPR2019-00867, Paper 6 at 8. This, Petitioner cannot do, for Angles’s specification reveals fundamental differences between its two embodiments, where “adoption of one teaches away from adoption of the other.” Ex-2005, ¶¶147; 126-129.

In Angles’s “preferred embodiment,” “the consumer computer 12 establishes a communication link with the content provider computer 14.” Angles, 7:53-60; Ex-2005, ¶105. Then, “the content provider computer 14 transfers an electronic page to the consumer computer 12.” *Id.* Angles discloses the “preferred electronic page 32 contains an embedded advertisement request 26” which—upon “execut[ion]” by the consumer computer—“directs the consumer computer 12 to establish a communications link with the advertisement provider computer 18.” Angles, 7:59-65. Only then “[t]he advertisement provider computer 18 access[s] the consumer’s profile in a demographic database,” based on which “the advertisement provider

computer 18 selects an appropriate customized advertisement 30” and “sends” it to “the consumer computer 12.” *Id.*, 8:8-19.

In the preferred embodiment, there is no direct communication between the content provider and the advertisement provider computers, necessitating “a content provider member code,” executed upon the consumer computer executing “the embedded advertisement request 26.” *Id.*, 7:65-8:7. However, there *is* direct communication between the consumer and the advertisement provider. Ex-2005, ¶106. In fact, consumer computers are *required* to first “register[] with the advertisement provider computer 18,” to be assigned “unique consumer member codes 22.” Angles, 16:57-17:17; Ex-2005, ¶¶107-108. Here, “[t]he advertisement provider ... retains a demographic profile of the consumer.” Angles, 3:18-29. “[T]he advertisement provider computer 18 uses the consumer member code 22 to access the consumer’s profile in the registration database 68. The advertisement provider computer 18 processes the consumer preferences and selects an appropriate advertisement from the advertisement database 70.” *Id.*, 18:61-66; Ex-2005, ¶¶109-110. Additionally, because the consumer and the advertisement computers communicate directly, “the advertising module 62” can “update the customized advertisements 30 that are seen on the consumer[] 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.” Angles, 20:11-

17; Ex-2005, ¶112. Further, this embodiment does not allow “the customized advertisements 30 to be incorporated directly into the content provider’s offerings.” Angles, 21:53-55; Ex-2005, ¶111.

Conversely, by eliminating the direct communication between the consumer and advertisement provider computers, Angles’s “alternative embodiment” of Fig. 9 obviates the needs for registering a consumer with the advertisement provider, maintaining a consumer profile in the “registration module” of the advertisement provider computer, and selecting an appropriate advertisement based on the consumer profile. Ex-2005, ¶¶123-126.

Further, Angles’s alternative embodiment accomplishes what its “preferred embodiment” could not: “Since the embodiment shown in FIG. 9 allows the customized advertisements 30 to be incorporated directly into the content provider’s offerings, the content provider computer 14 can integrate the customized advertisements 30 into offerings such as on-line games, video programming, internet radio, virtual reality environments and the like.” Ex-2005, ¶131 (citing Angles, 21:53-60).

Moreover, because “the customized advertisement 30 [is] pre-selected for [the] consumer,” wherein both its “transfer[] ... from the advertisement provider computer 18 to the content provider computer 14” and its “incorporate[ion] ... into an electronic page 32” “happen[] prior to sending the electronic page 32 to the

consumer,” (Angles, 21:38-60), updating the customized advertisement becomes unfeasible. Ex-2005, ¶¶123-124.

Importantly, while in Angles’s Fig. 1 “the embedded advertisement request 26 [contained in the preferred electronic page] directs consumer computer 12 to establish a communications link with advertisement provider computer 18,” (Angles, 7:59-65), Angles’s Fig. 9 embodiment *never* re-directs the consumer computer to the advertisement provider computer. Ex-2005, ¶¶122; 125. Angles itself explains why:

Because transferring the customized advertisement 30 from the advertisement provider computer 18 to the content provider computer 14 happens prior to sending the electronic page 32 to the consumer, the electronic page 32 appears to the consumer like all other electronic pages 32 on the Internet 33, except that **it contains the customized advertisement 30** which has been pre-selected for that consumer.

Angles, 21:44-52. In other words, Fig. 9’s electronic page does not contain any embedded advertisement request to re-direct the consumer computer to the advertisement provider computer. Ex-2005, ¶¶122; 125-126.

As Dr. Medvidović explains, Angles’s Figs. 1 and 9 embodiments are non-combinable given their inherent incompatibility. *Id.*, ¶¶100-127. Nor can a PHOSITA be possibly motivated to combine them. *Id.*, ¶¶128-29; 147. Notably, Petitioner never argues that a PHOSITA would have reason to combine these

disparate embodiments. Yet—and despite complete lack of evidentiary support—Petitioner improperly combines Angles’s embodiments in its limitation-by-limitation analysis for the Challenged Claims.

a. *Claim 1*

Petitioner and its expert exclusively rely on Angles’s Fig. 9 to argue that Angles teaches limitation 1[c], i.e., “automatically integrating business-related content ... into said locally executed game application during execution of said game application.” Pet. 24-25. Specifically:

The embodiment shown in FIG. 9 allows the customized advertisements 30 to be incorporated directly into the content provider’s offerings. Thus, in addition to **integrating the customized advertisements 30 into an electronic page 32, the content provider computer 14 can integrate the customized advertisements 30 into offerings such as on-line games[.]**

Angles 21:53-60; Pet. 24-25.

Indeed, Petitioner cannot possibly use any other embodiments for limitation 1[c], for Fig. 9 is Angles’s only embodiment capable of integrating advertisements into games. Ex-2005, ¶¶131-134. As Dr. Medvidović explains, the very first sentence of this excerpt identifies the most important difference between Figs. 1 and 9: unlike the former, the latter enables direct incorporation of advertisement into the content provider’s offerings. *Id.*, ¶132. Dr. Medvidović explains that because of this

difference, Fig. 9 offers an advantage “[i]n addition to” what Fig. 1 offers—Fig. 9 does something that Fig. 1 could not: “[T]he content provider computer 14 can integrate the customized advertisements 30 into offerings such as on-line games” *Id.*, ¶¶132-134. The Board also recognizes this. Decision, 19-21.

However, to argue that Angles teaches limitation 1[d], i.e., “automatically re-directing said user to one of said web pages of said secondary electronic device from said primary electronic device ...,” Petitioner exclusively relies on disclosure in Angles related to Fig. 1. Pet. 27. Specifically, Petitioner argues because Angles discloses that “custom advertisements ... contain hyper-links to other information[,] ... [and that] the consumer may simply use a mouse to select an embedded hyper-link in the custom advertisement [to] be immediately transported to an advertiser’s website,” Angles teaches limitation 1[d]. *Id.* (citing Angles, 4:6-16).

Angles’s disclosure is entirely directed at its “preferred embodiment” of Fig. 1 with no relevance to its Fig. 9 embodiment:

[I]n **the preferred embodiment**, the advertisements are HTML compatible, such that **an advertisement can contain hyper-links to other information**. ... For example, if after viewing a customized advertisement 30, a consumer wishes to obtain additional information about an advertised product or service, **the consumer can simply select the hyper-link in the custom advertisement 30 and be immediately**

transported to a different content provider computer 14 which contains more advertising information.

Angles, 15:43-55; *see also id.* 20:5-10; Ex-2005, ¶¶122-126.

As Dr. Medvidović explains, Petitioner cannot possibly use Angles's Fig. 9 for limitation 1[d], because Fig. 9 shows no re-direction from the consumer computer to advertisement provider computer. Ex-2005, ¶¶122, 126. Thus, because Angles's Figs. 1 and 9 are un-combinable, no PHOSITA is motivated to combine Angles's Fig. 9-related disclosure of the content provider computer integrating the customized advertisements into on-line games with the Fig. 1-related disclosure of the consumer computer being immediately transported to the advertisement provider computer by selecting the hyper-link in the custom advertisement to arrive at Claim 1. *Id.*, ¶¶145-148.

Similarly, for limitation 1[e] Petitioner plucks statements related to Angles's Fig. 1. Notably, Petitioner cites Angles's disclosure that "the consumer may simply use a mouse to select an embedded hyper-link in the custom advertisement" to argue Angles discloses "executing a user action on said business-related content." Pet. 28 (citing Angles, 4:9-14). However, as Dr. Medvidović explains, Petitioner cannot use Angles's Fig. 9 for limitation 1[e], because in Fig. 9 the advertisement is directly incorporated into the online game, eliminating the need for hyperlinking. Ex-2005, ¶¶125-126. Thus, because Angles's Figs. 1 and 9 are un-combinable, no PHOSITA

is motivated to combine Angles's Fig. 9-related disclosure that Petitioner uses for 1[c] with the Fig. 1-related disclosure of the consumer selecting the hyper-link in the custom advertisement to arrive at Claim 1. *Id.*, ¶¶145-148.

The record is devoid of any contrary evidence, for Petitioner has not addressed it. Petitioner's obviousness analysis is flawed.

b. *Claim 3*

Because Claim 3 depends from Claim 1, Petitioner's obviousness analysis is flawed for the reasons discussed in §II.A.1.a.

c. *Claim 4*

Because Claim 4 depends from Claim 3, Petitioner's obviousness analysis is flawed at least for the reasons discussed in §II.A.1.b.

Further, to argue that Angles teaches "said branded business-related content is dynamically updated," Petitioner relies on disclosure in Angles that exclusively relates to Fig. 1. Specifically:

[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.

Pet. 29 (citing Angles, 20:11-17).

However, as discussed above, this disclosure has no applicability to, and thus is un-combinable with, Angles's Fig. 9, because there is no direct communication between the consumer and the advertisement provider computers in Fig. 9. Ex-2005, ¶¶122, 126. Accordingly, no PHOSITA is motivated to combine Angles's Fig. 9-related disclosure of the content provider computer integrating the customized advertisements into on-line games with the Fig. 1-related disclosure of the advertisement provider computer updating the customized advertisements by sending new customized advertisement to the consumer to arrive at Claim 4. *Id.*, ¶¶145-148.

The record is devoid of any contrary evidence, for Petitioner has not addressed it. Petitioner's obviousness analysis is flawed.

d. *Claim 5*

Because Claim 5 depends from Claim 1, Petitioner's obviousness analysis is flawed at least for the reasons discussed in §II.A.1.a.

Further, to argue that Angles teaches "generating a player profile based on said user choices made during said game application," Petitioner relies on disclosure in Angles that exclusively relates to Fig. 1. Specifically:

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.

Pet. 30 (citing Angles, 3:7-17).

However, as discussed above, this disclosure has no applicability to, and thus is un-combinable with, Angles's Fig. 9, because (1) there is no direct communication between the consumer computer and the advertisement provider computer in Fig. 9, and (2) the Fig. 9 embodiment obviates the need for registering with the advertisement provider computer and maintaining a consumer profile therein. Ex-2005, ¶124. Accordingly, no PHOSITA is motivated to combine Angles's Fig. 9-related disclosure of the content provider computer integrating the customized advertisements into on-line games with the Fig. 1-related disclosure of the advertisement provider computer storing demographic information about consumers to arrive at Claim 5. *Id.*, ¶¶145-148.

The record is devoid of any contrary evidence, for Petitioner has not addressed it. Petitioner's obviousness analysis is flawed.

e. *Claim 6*

Because Claim 6 depends from Claim 5, Petitioner's obviousness analysis is flawed for the reasons discussed in §II.A.1.d.

f. *Claims 7-9*

Like Claim 1, Petitioner's analysis of Claim 7 is based on an unwarranted assumption that Angles's Figs. 1 and 9 are combinable—they are not. Ex-2005, ¶¶129; 145-148. For “automatically integrating ...” limitation of 7[d], Petitioner

again resorts to Angles's Fig. 9-related disclosure. Pet. 36. However, for "automatically re-directing ..." limitation of 7[e] and "executing a user action ..." of limitation 7[f], Petitioner exclusively relies on Angles's Fig. 1 disclosure. Pet. 36-38. For the reasons discussed ABOVE, Angles's two embodiments are un-combinable; thus, Petitioner's analysis of Claim 7 necessarily fails.

Because Claims 8-9 depend from Claim 7, Petitioner's obviousness analysis of these claims is similarly flawed.

For the foregoing reasons, a PHOSITA would not be motivated to combine Angles's Figs. 1 and 9 teachings, and thus Petitioner's obviousness argument necessarily fails. **However, if the Board chooses to ignore Dr. Medvidović's testimony and finds motivation to combine—despite Petitioner's failure to present evidence proving it—Petitioner's limitation-by-limitation analysis still fails to prove obviousness of the Challenged Claims by a preponderance of the evidence, as discussed below.**

2. Petitioner's limitation-by-limitation analysis deviates from the proper obviousness inquiry prescribed by the law.

Petitioner's limitation-by-limitation analysis does not follow the analysis prescribed by the courts. Determining the correct meaning and scope of claims is a prerequisite for any obviousness inquiry. *Lemelson v. Gen. Mills, Inc.*, 968 F.2d 1202, 1206 (Fed. Cir. 1992) ("Only when a claim is properly understood can a

determination be made ... whether the prior art ... renders obvious the claimed invention.”). Once the scope of the claim is determined, the actual obviousness analysis begins. This requires “determine[ing] the scope and content of the prior art, and ascertain[ing] the differences between the prior art and the claims at issue, and resolv[ing] the level of ordinary skill in the pertinent art.” *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006).

A petitioner who does not state the differences between a challenged claim and the prior art, and relies instead on the Patent Owner and the Board to determine those differences based on the rest of the submission in the petition risks having the corresponding ground of obviousness not included for trial for failing to adequately state a claim for relief.

Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co., CBM2012-00003, Paper 7 at 2-3 (PTAB Oct. 25, 2012) (precedential).

As discussed below, Petitioner fails to follow the prescribed approach to obviousness analysis. Petitioner misunderstands the correct scope and meaning of the Challenged Claims. Further, Petitioner fails to identify the differences between Angles’s teaching and the Challenged Claims, nor does Petitioner explain how the knowledge of PHOSITA helps resolve those differences.

Petitioner relies solely on conclusory statements from Mr. Crane. However, his credibility is compromised by contradictory testimony presented in both his

declaration and deposition. *See, e.g.*, Ex-2005, ¶¶135-138 (discussing Mr. Crane’s repeated change of position); *see also* ¶139 (citing Ex-2007 at 277-278 and Ex-2008 at 537 for definition of “integration,” explaining that Mr. Crane’s arbitrary distinction between “combining” and “integrating” is wrong); *see also id.*, ¶¶140-144 (discussing Mr. Crane’s inconsistent positions). “[P]etitioner cannot employ merely conclusory statements [and] must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380-81 (Fed. Cir. 2016).

Under the correct limitation-by-limitation analysis, Angles fails to render obvious the Challenged Claims.

a. *Angles does not render obvious Claim 1.*

- i. 1[a]: Angles does not teach “a locally executed game application that is accessible at said primary electronic device.”

As an initial matter, Petitioner’s theory of obviousness pivots on an interpretation of Claim 1, and specifically limitation 1[a], that collides head-on with basic underpinnings of patent law. Specifically, Petitioner’s interpretation of 1[a] is contrary to well-entrenched principles of claim differentiation.

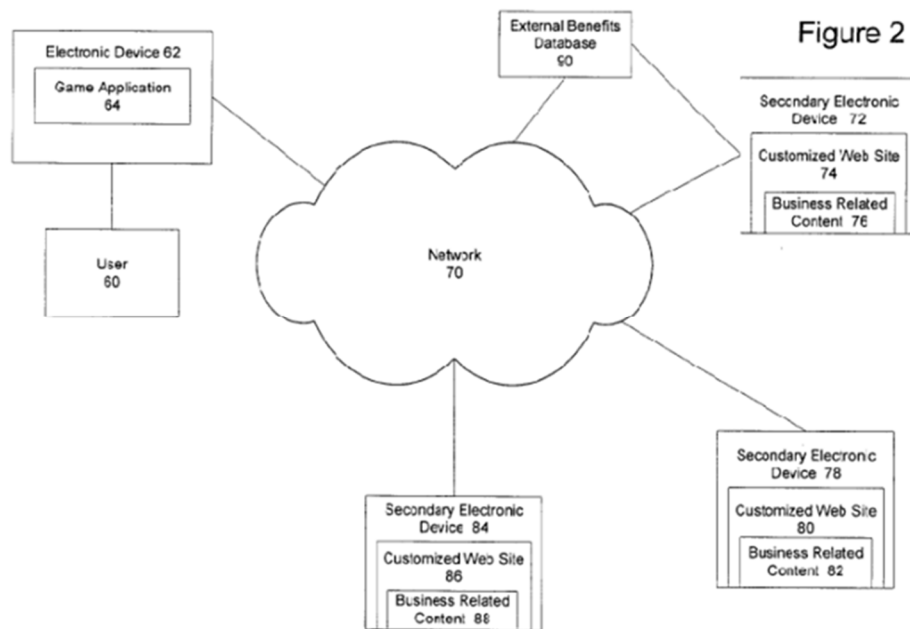
Petitioner, relying on its expert, equates “locally executed” and “accessible,” effectively rendering the claimed term “accessible” superfluous.¹ See Ex-1004, ¶109 ([T]he claimed locally executed game application would be, **by definition** accessible at said primary electronic device.”); Pet. 21-22. This is against well-settled principles that different words and phrases in a claim must have different meanings to avoid redundancy. *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1119-20 (Fed. Cir. 2004) (“[W]hen an application uses different terms in a claim, it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms.”); *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1354 (Fed. Cir. 2012) (“To give effect to all terms of claim [1], ‘secured to’ and ‘into engagement with’ must have distinct meanings.”). For this reason alone, the Board should not credit the interpretation proposed by Petitioner and its expert. *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1563 (Fed. Cir. 1991) (“[O]ur interpretation [should] give[] full effect to the recitation of two distinct elements in the claimed structure.”).

¹ Even at his deposition, Mr. Crane was unable to articulate a meaningful difference between the two terms. Ex-2005, ¶35 (discussing Mr. Crane’s struggle). But the two terms communicate different meanings to a PHOSITA. Ex-2005, ¶¶36-40.

Compounding upon error described above, Petitioner misunderstands the correct scope and meaning of Claim 1—particularly limitation 1[a]. The express claim language requires that the game application must be both “locally executed” and “accessible at” the primary electronic device. Ex-2005, ¶30. For the first requirement, the specification explains that a game is locally executed when “executed on a local device” versus executed “via a network connection to a remote server.” Ex-1001, 1:37-40. Both experts agree that “[a] locally executed game application is a game application that is running on your computer,” that is, “[t]he computer you are sitting at locally.” Ex-2009, 276:13-21; Ex-2005, ¶31-32.

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.

Only '028 Fig. 2, reproduced below, comports with the claim language. Ex-2005, ¶¶43-49. It depicts an “illustrative embodiment of the present invention where a local device holds the game application.” Ex-1001, 2:53-56. Specifically, Fig. 2 shows that a user 60 *accesses* a Game Application 64 that is *held* on Electronic Device 62. Similarly, the specification describing Fig. 2 states that the “user *accesses* the game application 64 on a local device 62.” *Id.*, 4:5-6. Note that here the user uses Electronic Device 62, the claimed primary electronic device.



No other embodiment in '028 relates to where the game application is “accessible at” the primary electronic device on which the game application is

“locally executed.”² Consider ‘028 Fig. 1 reproduced below which Petitioner also cited. Pet. 6-7.

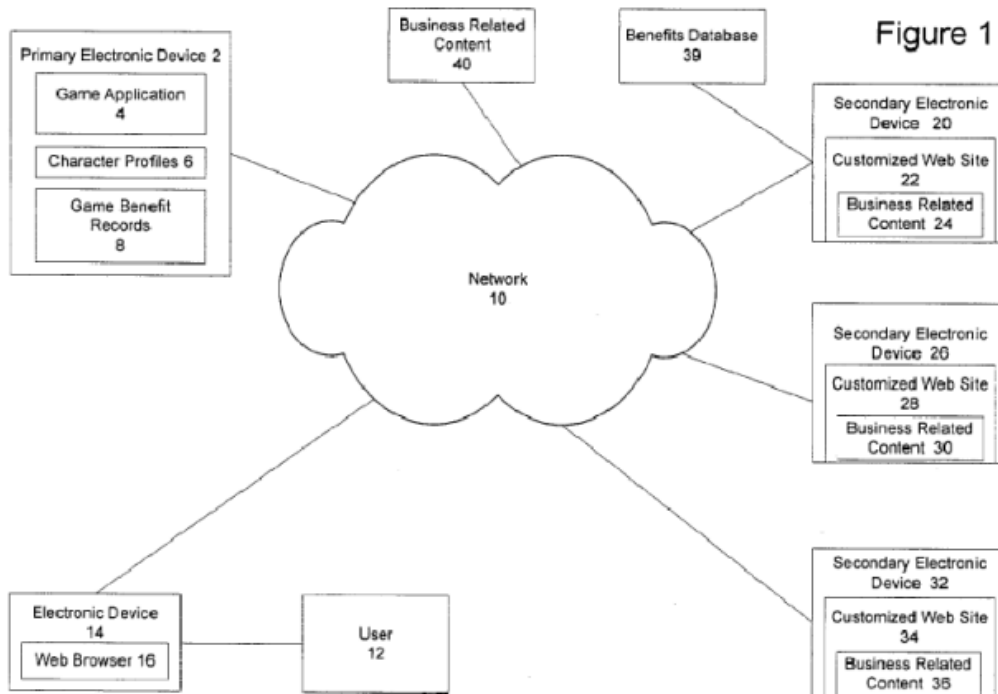


Fig. 1 depicts an embodiment where the Game Application 4 is *held* at the Primary Electronic Device 2. Ex-2005, ¶42. But User 12 cannot *access* the Game Application 4, because User 12 is using Electronic Device 14. *Id.* Differently put, the game application is *not* accessible at the local device—it *is* accessible at a server. *Id.* Indeed, the ‘028 specification describing Fig. 1 provides that the “user 12 *accesses* the **network** 10 through an electronic device 14 holding a web browser 16,” but makes **no mention** of the user *accessing* the Game Application 4. Ex-

²Both experts agree. Ex-1004, ¶52; Ex-2005, ¶49.

1001, 3:36-52. In other words, the game application is not “accessible at” the local device (i.e., the user’s device),³ but only accessible from a server via *the network*. Ex-2005, ¶42. Thus, per the ‘028 disclosure, “a locally executed game application that is accessible at said primary electronic device” requires that the game application being run on the same device that holds the game application.⁴

Since Petitioner fails to understand the correct meaning of 1[a], Petitioner fails to consider fundamental differences between Angles’s disclosure and Claim 1. Petitioner alleges limitation 1[a] is taught by Angles, because it discloses that “consumer computers ... access an offering existing in one of the content provider computers,” like “on-line games.” Pet. 22. Not so; Angles’s disclosure covers a significantly different scope than that of Claim 1. Ex-2005, ¶¶149-151 (noting Angles’s online games are different from the claimed games). Nor can a PHOSITA arrive at limitation 1[a] in the context of Claim 1 by studying Angles. *Id.*

³ Mr. Crane agrees that the term “primary electronic device,” in Challenged Claims refer to the user’s device—not a server device. Ex-1004, ¶156 (“The ‘consumer computer 12’ is the claimed primary electronic device.”); ¶177 (“Robinson discloses a client computer (a primary electronic device)”)

⁴ This is different from online games or situations involving remote play. Ex-2005, ¶40.

Relying on Angles's terse description of "on-line games," like "interactive car races," (Pet. 19 (citing Angles, 21:61-65)), Petitioner states "the 'offering' can be an online game accessible over the Internet." *Id.*, 22. But Angles's online game example is disclosed in the context of Angles's Fig. 9, showing that "the content provider computer 14 offers consumers on-line games."⁵ Angles, 21:53-65. Indeed, Angles *only* discloses on-line games, and does not disclose a game held at a user's computer that has connectivity to secondary computers. Ex-2005, ¶151. Per Petitioner's expert, an online game requires that the "program being performed [i.e., executed]⁶ inside the client communicating to the server." Ex-2009, 197:10-12. This communication, as Mr. Crane explains, occurs "over the internet." *Id.*, 230:9-11. Further, he admits that in Angles "[t]he content provider is a server device that is accessible through the communications." *Id.*, 256:21-22. Thus, Angles *only* discloses an embodiment where the game, which is executed inside the user's device,

⁵ Even if Angles disclosed online games in context of Fig. 1, the analysis remains the same for this limitation, because to a PHOSITA online games communicates a different meaning than games accessible at the user's device. Ex-2005, ¶¶36-40.

⁶ "In computer parlance, executing is performing a program." Ex-2009, 210:24-25.

is *accessible at the content provider computer*, and *not* a configuration where the game is *accessible at the user's device*.⁷ Ex-2005, ¶151.

For this limitation, Petitioner alleges that Angles alone teaches it. Pet. 21-23. Because Petitioner expressly admits that Angles's "offering[s] exist[] in one of the content provider computers," and are only accessible "by use of a communication medium" (e.g., "over internet"), (Pet. 22), Angles covers significantly different scope than that of limitation 1[a]. Ex-2005, ¶.

The significant disparities between Angles and this limitation demonstrate that a PHOSITA could not reasonably interpret Angles as teaching "a locally executed game application that is accessible at said primary electronic device." Ex-2005, ¶. And Petitioner does not explain how the knowledge of PHOSITA helps to resolve the differences between Angles's teaching and limitation 1[a]. Accordingly, Petitioner's argument fails.

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).

- ii. 1[c]: Angles does not teach “automatically integrating business-related content ... into said locally executed game application during execution of said game application.”

Petitioner fails to understand the correct meaning and scope of limitation 1[c].

This limitation expressly requires that business-related content being integrated into the locally executed game application “during execution of said game application.”

Once again, understanding scope and content of this limitation before beginning the obviousness determination is important. As explained above, Petitioner’s expert admitted that a locally executed game necessarily requires that a user “executing a game application on [user’s] computer, that computer is local to [the user], so it’s locally executed.” Ex-2009, 216:2-6. He further testified that “[e]xecuting a game is running the game program.” *Id.*, 220:15-18. Therefore, Petitioner’s expert understands that this limitation requires that integration of business-related content occurs while the user is running the game program on the user’s local device. Ex-2005, ¶¶50, 53.

Petitioner contends Angles teaches this limitation, because it discloses directly incorporating customized advertisements into a content provider’s offering. Pet. 24 (referencing Angles’s Fig. 9). Petitioner relies exclusively on Angles’s online game example, the car race, where customized advertisements are shown on

billboards that appear in the game. *Id.*, 24–25 (citing Angles, 21:53–22:2).

Petitioner’s argument is completely undermined by testimony from its expert.

In discussing Angles’s Fig. 9, Petitioner’s expert testified “[m]y understanding from reading this section is that there’s a customized advertisement that is incorporated into content information which is then forwarded to the user computer.” Ex-2009, 227:19-228:2. Indeed, he repeatedly testified that Angles’s integration of business-related content into content provider’s offerings occurs before submission to the consumer computer:

Q. Okay. Is it your testimony that when the content provider combines 32, which is the electronic page and customized advertisement in Figure 9, that the integration of those two happens automatically.

THE DEPONENT: It is incorporated before then being submitted down to the consumer computer. It’s part of a process, I suppose it would be automatic in that case.

Id., 228:3-11; *see also id.*, 228:22-229:3 (“The electronic page is created on the content creator. The customized advertise is passed to the content provider, and the combined data is sent down to the consumer computer.”); *id.*, 227:4-10 (“It does state that [the content provider computer] incorporates [the customized advertisement] into an electronic page 32.”). Further, he testified that in Angles the

consumer computer 12 cannot execute the electronic page 32 before the electronic page 32 is sent to the consumer computer 12. *Id.*, 229:6-9.

Accordingly, because Angles's content provider computer integrates the advertisements into online offerings and electronic pages before sending them to the consumer, and because the consumer computer cannot execute such online offerings and electronic pages *before* first receiving them, Angles does not teach integration of business-related content into online offerings such as game applications "during execution of said game application[s]" on the user's local device. Ex-2005, ¶¶152-154.

The significant disparities between Angles and this limitation demonstrate that a PHOSITA could not reasonably interpret Angles as teaching "automatically integrating business-related content ... into said locally executed game application during execution of said game application." Petitioner does not explain how a PHOSITA's knowledge resolves the differences between Angles's teaching and limitation 1[c]; thus, Petitioner's argument fails.

- iii. 1[d]: Angles does not teach “automatically re-directing said user to one of said web pages of said secondary 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.”

Again, Petitioner misunderstands this limitation’s meaning and scope. Limitation 1[d] expressly requires “automatic[] re-directi[on]” of the user “being integrated into said game application.” Thus, to teach this limitation, Petitioner must show Angles disclosing four elements: (1) a user “re-direct[ed] to web pages of said secondary electronic device from said primary electronic device;” (2) said “redirecti[on]” occurs “automatically;” (3) said automatic “redirection” is “integrated into said game application;” and (4) said automatic “redirection occur[s] as part of the user executing said game application.” *Id.*, ¶54. Angles lacks at least the second and third elements. *Id.*, ¶155.

Starting with the third element, the specification clarifies the meaning and scope of “said [automatic] re-direction being integrated into said game application.”

The game requires the user to perform certain tasks specified in the game. In the course of conducting the tasks, **the user is transparently re-directed to a corporate sponsor’s customized web site to finish the completion of a task.** While at the sponsors corporate web site, the game player is exposed to additional business-related content which relates to the game the user is playing. All of the business-related content displays **occur within the context of the player playing the**

game. ... Following completion of the task at the customized corporate web site, **the player is transparently re-directed back to the original game site.**

Ex-1001, 1:42-56. As shown, for “said automatic re-direction” to be “integrated into said game application,” the game forces the user to visit the web pages of the secondary electronic device to complete tasks as part of playing the game. Ex-2005, ¶¶56-58; Ex-1001, 2:12-14 (“The re-direction is integrated into the game ... and occurs **as part of the user executing and playing the game application.**”). Indeed, the examiner prosecuting the ‘028 Patent Application understood this explicitly. In explaining his § 103 rejection over different prior art, the examiner explains his understanding:

As for the feature of “automatically redirecting said user (customer) to one of the Web page” ... for the customer to play the game “**must visit**” the “Web pages of the Web store” which requires “automatically re-directing.” ... [W]ithout “automatically integrating” feature, **the customer would not (does not have to) visit the Web pages with information about the goods and/or services as indicated above,** which is what CZEPLUCH tries to avoid since it makes no profit by letting the customer play games alone but **by automatically forcing the game player to visit product web pages.**

Ex-1003, 147-148; Ex-2005, ¶¶56-58.⁸

For the re-direction occurring “automatically,” the specification is clear: “[a] **game event** re-directs the user 12 to one of the customized web sites 22, 28 and 34.” Ex-1001, 3:53-54. Indeed, the user’s game related actions—not just any user’s action—“**cause the game application to automatically re-direct the user** to a customized corporate web site containing selected information from a business sponsor.” *Id.*, 3:7-10; Ex-2005, ¶¶51-52 (citing Ex-2008 at 58 for the definition of “automatic”), ¶55. This re-direction is *automatic* because it is part of the game actuated by the user’s playing the game:

[T]he occurrence of **a pre-determined event in the game causes a transparent re-direction to one of the customized web pages** The web pages expose the user 60 to additional business-related content **in the context of the ongoing game. Game actions undertaken by the user** 60 may result in the generation of benefits for the user 60 which are to be used outside the game environment.

Id., 4:14-24; Ex-2005, ¶52.

⁸ The Board agreed with the examiner. Ex-1003, 6 (“Here, we agree with the Examiner....”)

Petitioner contends that Angles teaches this limitation because Angles's advertisements may include embedded hyperlinks that the consumer can click on to visit an external website. Pet. 27. Petitioner relies on Angles:

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.

Id. (citing Angles, 4:61-16). Petitioner's reliance is misplaced.

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.

Second, in Angles the re-direction is not “integrated into said game application.” Ex-2005, ¶157. Put differently, Angles’s re-direction is not part of the game, which requires the user to visit the “web pages of said secondary electronic device” to perform game-related tasks. Angles merely discloses that “*if a consumer wishes* to obtain additional information,” the consumer can choose to manually be re-directed by clicking on the embedded hyperlinks. Angles, 4:61-16. Contrary to the express language of this limitation, Angles’s re-direction is a user choice.

Petitioner does not explain how the knowledge of PHOSITA resolves the differences between Angles’s teaching and limitation 1[d]. Petitioner’s argument

⁹ In his declaration, Mr. Crane also states that “automatically re-directing” is taught by Angles’s disclosure of a player being “immediately transported” to external websites. Ex-1004, ¶121. However, he contradicted his declaration testimony during the deposition, when he said “[b]ut inherently, the term ‘automatically,’ in my opinion, doesn’t have anything to do with a particular time.” Ex-2009, 231:18-24.

fails.

- b. *Angles does not render obvious Claim 3, because it does not teach a “game application [that] displays branded business-related content.”*

Starting with determining its scope and meaning, Claim 3 requires that the game application of Claim 1 “display[] branded business-related content” to the user. This limitation is distinct from 1[c], requiring “integrating business-related content ... into said locally executed game application during execution of said game application.” Ex-2005, ¶¶60-62. Thus, this limitation is not taught by merely showing that “business-related content” integrated “into said locally executed game application during execution of said game application” is displayed to the user playing the game. *Id.* There must be a showing that the game application—standing alone—displays branded business-related content to the user. To hold otherwise offends principles of claim differentiation, rendering Claim 3 redundant. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314-15 (Fed. Cir. 2005) (“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”)

Petitioner advances no argument for this claim, merely pointing to its argument for limitation 1[d]. Pet. 28 (citing §VII.A.2.(e) of Petition). In essence, Petitioner suggests that because Angles teaches “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,”—which Angles does not (*see* §II.A.2.a.iii)—“Angles discloses said game application displays branded business-related content.” Pet. 28. This is wrong, for two reasons.

One, Petitioner’s argument violates principles of claim differentiation, effectively equating the new limitation of Claim 3 with limitation 1[d]. Two, Petitioner improperly conflates “display” with “re-direct,” implying that “re-directing” the user to websites outside the game to view advertisements equals “the game display[ing] branded business-related content.” This is incorrect in view of the ‘028 specification: “The sequence begins when the game is initiated (step 100). The player is exposed to company branding through player action during game play (step 102). Eventually, a game event re-directs the source of the content being displayed to the user to an external company web site (step 104).” Ex-1001, 4:59-64. Thus, the game application *necessarily* displays branded content to the user before the user is re-directed to external websites.

Petitioner also cites its expert’s conclusory statements to support its Claim 3 obviousness argument. Pet. 28 (citing Ex-1004, ¶¶126-129). But there is no discussion supporting Petitioner’s conclusion, requiring Patent Owner and the Board to search for support in Mr. Crane’s declaration (which is also conclusory). Petitioner incorporates arguments by reference and therefore violates 37 C.F.R. §

42.6(a)(3). *Cisco Systems, Inc. v. C-Cation Techs.*, IPR2014-00454, Paper 12 at 9 (PTAB. Aug. 29, 2014) (informative) (providing that “practice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference.”).

Even overlooking this, statements offered by Petitioner’s expert falsely rely on Angles’s “customized advertisement” teaching both “business-related content” and “branded business-related content.” See Ex-1004, ¶¶83, 106, 117, 127 (referring to earlier discussion “as noted above” about Angles’s customized advertisements), 131 (relying on Angles’s discussion of “update[ing] customized advertisements” to conclude Angles teaches “branded business-related content is dynamically updated”). Even during deposition, Mr. Crane testified that an advertisement is both business-related content and branded business-related content. Ex-2010, 303:24-304:3; *see also id.*, 307:3-23.

Firstly, blurring the line between “branded business-related content” and “business-related content” is problematic. Petitioner’s expert fails to address how two separately recited claim elements are met by the same prior art feature, i.e., customized advertisement. *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249 (Fed. Cir. 2010) (“Where a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.”).

Further, and more important, Angles’s “customized advertisement” is discussed in context of content provider’s integration of the same into content provider’s offerings, such as online games. Angles, 21:53-65; Ex-2005, ¶161. Indeed, Angles never discloses, and Petitioner cannot identify a single example, that the game application—stand-alone without the integration process—displays customized advertisements, as required by this limitation. Ex-2005, ¶160. Thus, at best, Angles’s customized advertisement might show Angles teaches limitation 1[c] (which it does not; *see* §II.A.2.a.iii). As discussed above, Petitioner’s argument, treating this limitation and limitation 1[d] as identical, violates claim differentiation principles. Similarly, Petitioner’s expert erroneously equates this limitation with limitation 1[c], citing Angles’s customized advertisement as support. This assertion is incorrect and suffers from the same inherent flaws.

Moreover, the ‘028 specification defines “branded business-related content” as content “which *uniquely identifies the goods and services of a particular company.*” Ex-1001, 1:40-42; Ex-2005, ¶160. While Angles uses the term “customized advertisement” repeatedly throughout its disclosure, it never uses the word “brand” anywhere, nor does Angles refer to the *unique identification of goods or services of a particular company.* Ex-2005, ¶161. Indeed, Angles **teaches away** from customized advertising based on *branded content*, but rather discloses customized advertising based on **customer interests**:

The advertisement provider's computer stores demo-graphic 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.**

Angles, 3:7-15; Ex-2005, ¶161. Angles likewise makes repeated reference to “content provider,” which never describes *the particular company that provides the advertised goods and services*. Indeed, Angles emphasizes this distinction by defining “content provider” as “an individual or company that places information (content) on the Internet so that it can be accessed by others.” Angles, 1:59-62. Thus, the content provider could be a party that does not necessarily disclose the brand name of the advertised goods or services.

Petitioner does not explain how the PHOSITA's knowledge resolves the differences between Angles's teaching and this limitation, so Petitioner's argument fails.

- c. *Angles does not render obvious Claim 4, because it does not teach “said branded business-related content is dynamically updated.”*

Referring to §II.A.2.b., Angles does not disclose a “game application display[ing] branded business-related content.” For this reason alone, Angles does not render obvious Claim 4. Further, Angles does not disclose that the “branded business-related content *is dynamically updated*,” as this limitation requires. Ex-2005, ¶¶162-165.

Starting with scope and meaning, this claim requires that the “branded business-related content” of Claim 3 be “dynamically updated.” As discussed in §II.A.2.b., Claim 3’s clear language, coupled with guiding principles of claim differentiation, emphasizes that the disclosed “branded business-related content” should stand alone within the game application, setting it apart from the integrated nature of the “business-related content” in Claim 1. Ex-2005, ¶¶61-62. The former is inherently part of the game itself—and is displayed even if the user’s device is not interfaced with “the computerized network of Claim 1”—whereas the latter is integrated into the game via the network. *Id.*, ¶62. Hence, the game application must “dynamically update” the “branded business-related content.”

Furthermore, as shown, the ‘028 specification expressly defines “branded business-related content” as content that “uniquely identifies the goods and services of a particular company.” Ex-1001, 1:40-42. Consequently, the process of

“dynamically updating” this “branded business-related content” necessitates the updating of the same content (which is related to “the goods and services” of the same “particular company”) that the game application displays. Ex-2005, ¶¶65-68. Crucially, the concept of “dynamically updating” branded business-related content goes beyond merely periodically presenting different content from various companies. *Id.* Nor does it involve dynamically integrating disparate business-related content into the game. *Id.* Instead, the essence lies in the continual evolution and modification of the same branded content displayed by the game application. *Id.*

Misunderstanding the scope of Claim 4, Petitioner leans on Angles for support: “[T]he advertising module 62 continues to update the customized advertisements 30 that are seen on the consumer’s computer 12” and “if a consumer views a particular electronic page 32 for more than a minute, the advertising module 52 [*sic*] can send a new customized advertisement 30.” Pet. 29 (citing Angles, 20:11-17).

This is deficient. First, Angles’s customized advertisements do not constitute “branded business-related content.” Ex-2005, ¶¶160-161. Angles’s customized advertisements are sent by the advertising module located on the advertisement provider computer, (Angles, 13:47-50), via a network interface, to be integrated into the game application. *Id.* 21:53-57; 15:20-31. By contrast, the “branded business-

related content” in Claim 4 is not integrated into the game—it is inherently part of the game. Ex-2005, ¶¶160-161.

Second, Angles’s advertising module sends new content as “a new customized advertisement,” (Angles, 20:11-17), but this is different from what Claim 4 requires, which is “dynamically update[ing]” the same branded content displayed by the game application—not sending new content for integration. Ex-2005, ¶¶164-165.

Even Petitioner’s expert admitted that modifying the same branded content displayed to the user constitutes dynamically updating that branded content. Ex-2010, 322:17-22 (“[I]f you see an advertisement for a black Tesla on a billboard and a minute later, as you’re looking at the billboard, the Tesla advertisement changes color to pink, [I would] say that the advertisement was dynamically updated[.]”). However, conflating the advertisement replacement process with dynamically updating a single branded content, Petitioner’s expert then stated “[b]ut if you are updating an ad, you are replacing an ad.” *Id.*, 321:1-5; *see also id.*, 321:15-18 (“If the advertisement for the iPhone ... changes to an advertisement for the Samsung, then the advertisement was dynamically updated.”). As discussed above, Claim 4 does not teach an advertisement replacement process.

Indeed, Angles’s replacement method of dispatching new customized advertisements contrasts sharply to “dynamically updating” already displayed

advertisements promoting a single branded product or service. Ex-2005, ¶165 (discussing the difference between the two). Angles discloses the former, while Claim 4 requires the latter. *Id.*, ¶165; *see also* ¶¶65-68. Further, Angles is silent regarding updating any *branded* business-related content. Angles requires that an *entirely new* customized advertisement be pulled from a database and sent to the user's computer. Angles, 15:20-31. Moreover, Angles's advertisement replacement process occurs only "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." Pet. 29 (citing Angles, 20:11-17). This cumbersome process of searching a database, selecting an advertisement, sending for integration, waiting a minute, and sending new advertisements cannot provide a "dynamic update" as required by Claim 4.

Petitioner does not explain how a PHOSITA's knowledge resolves the differences between Angles's teaching and this limitation.

d. *Angles does not render obvious Claim 5.*

i. 5[preamble]: Angles does not teach 5[preamble].

This is demonstrated in §II.A.2.a.

- ii. 5[a]: Angles does not teach “executing game-related user actions in said game application as a result of user choices.”

Petitioner again fails to engage with the meaning and scope. The claim expressly requires that (1) the user actions should be “game-related;” (2) these game-related actions are executed while the user is “in said game application;” and (3) these game-related actions are directly tied to “choices” made by the user during gameplay, which lead to executing these game-related user actions. Ex-2005, ¶¶70-74. Thus, user actions executed prior to executing the game application, even if game-related (e.g., starting the user device for the purpose of game play or even starting the game application), fall outside the scope of limitation 5[a]. *Id.*, ¶¶72-73. Further, user actions (game-related or not) on business-related content are not actions executed “in said game application.” *Id.*, ¶74. Those actions fall squarely under limitation 1[e], and principles of claim differentiation necessitate differentiation between those actions and actions disclosed in this limitation. Indeed, the ‘028 specification supports differentiating between the two: “Game actions undertaken by the user 12 while at the customized web sites or at the primary electronic device 2 may cause the generation of player benefits.” Ex-1001, 3:56-59. Finally, game-related actions not directly tied to the user’s volition during gameplay also fall outside the scope of 5[e]. *Id.*, ¶¶72-73.

Misunderstanding the meaning and scope, Petitioner asserts that Angles somehow teaches this. Petitioner first alleges “Angles discloses that the consumer computer 12 can execute an offering, e.g., an online game, provided by the content provider computer 14, upon receiving a request from the consumer.” Pet. 29-30. Wrong. As discussed above, limitation 5[a] requires that the game-related action be executed “in said game application.” Ex-2005, ¶¶167-168. Thus, because an action merely starts the game application, it does not constitute an action “in said game application.” *Id.*, ¶169.

Next, Petitioner cites its expert’s declaration: “[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.” Pet. 29. This conclusory statement has no support in the Petition, requiring Patent Owner and the Board to search for support in Mr. Crane’s declaration (which is also conclusory). Petitioner incorporates arguments by reference and therefore violates 37 C.F.R. § 42.6(a)(3). *Cisco Systems*, IPR2014-00454, Paper 12 at 9 (“[P]ractice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference.”).

Even overlooking this, Petitioner’s conclusory statement is undermined by its expert. Mr. Crane contends that Angles teaches this limitation, because Angles discloses “a consumer can choose (a user choice) to enter demographic information

that will be used to refine what advertisements may be served in his online game.” Ex-1004, ¶¶136-137. But this choice does not result in any game-related action executed in the game. Indeed, the precise passage that Mr. Crane relied on makes clear that “[a] consumer who wishes to receive customized advertisements first registers with the advertisement provider by entering pertinent demographic information into the advertisement provider’s demographic database.” *Id.* (citing Angles, 4:6-16). But registering with the advertisement provider is neither game-related, nor executed in the game application as required by this limitation.

Mr. Crane also argues that because Angles’s user can make a “request[] for more information about” an advertisement, Angles teaches game-related actions executed in the game application. *Id.* ¶139 (citing Angles 3:7-17). Yet, Mr. Crane cannot explain how requesting more information is a “game-related” action. Mr. Crane continues with “[viewing] one advertisement vs. another, responding to an encountered advertisement ... and requesting more information are all based on game-related user actions in said game application.” *Id.* ¶140. They are not. Also, it is unclear how viewing an advertisement constitutes “executing a game-related user action in said game application.” Further, Angles’s advertisements are selected for the user *by the advertisement provider*—not because of “user choices” during gameplay. Angles, 8:10-15; Ex-2005, ¶¶103, 110.

Angles does not teach this limitation. Given Petitioner's inconsistencies in pinpointing where Angles teaches "executing game-related user actions in said game application as a result of user choices," it is unreasonable to conclude that a PHOSITA reading Angles would understand it as teaching 5[a].

- iii. 5[b]: Angles does not teach "generating a player profile based on said user choices made during said game application."

For meaning and scope, this limitation expressly requires that a profile be generated based on "said user choices"—that is, choices made by the user during game play that lead to executing game-related user actions. Ex-2005, ¶¶75-77. "Character profiles 6 are records which track the game choices a player makes while playing the game application 4." Ex-1001, 3:39-41. Further, "[t]he profiles are tied to a character representing the player, **not the actual individual playing the game.**" *Id.*, 5:62-64; Ex-2005, ¶76. Thus, since these profiles are not tied to "the actual individual playing the game," they must be generated exclusively based on game-related choices of the individual playing the game, consistent with the limitation's express language. Therefore, while the profile disclosed in Claim 5 "is specific to the said user," it is a "player profile," merely "tied to a character representing the player." Ex-2005, ¶76.

Having misunderstood this, Petitioner argues that Angles teaches generation of *two* user profiles: a demographic profile based on consumer's demographic

information, and an interaction profile based on the tracking of viewed advertisements by a specific user. Pet. 30-31. In these arguments, Petitioner acknowledges that Angles's profiles uniquely identify the consumer, as opposed to the game-related user choice-based profile disclosed in Claim 5. Ex-2005, ¶76. Indeed, unlike the '028 Patent, Angles's profiles are *tied to the actual individual* playing the game:

In addition, the consumer computer 12 contains a consumer member code 22 which uniquely identifies the consumer. The advertisement provider computer 18 obtains the consumer member code 22 and uses the consumer's member code 22 to access the consumer's profile in a demographic database (not shown). Based on the consumer's profile, the advertisement provider computer 18 selects an appropriate customized advertisement 30.

Angles, 8:8-15; Ex-2005, ¶172. Thus, Angles does not teach this limitation.

Further, Petitioner's first relied-upon "demographic" profile is created when a user "registers with the advertisement provider by entering pertinent demographic information into the advertisement provider's demographic database." Angles, 3:18-24. This profile fails to fulfill the requirements of limitation 5[b], because it is not generated *based on said user choices made during said game application*. Ex-2005, ¶172. Entering demographic information into an advertising database *cannot possibly* be described as a user choice made *during a game application*. The profile

is generated via user's data entry actions that are *clearly outside of the game application*, and not *during the game application*, as the Claim requires: "Once the consumer enters the demographic data, the registration module 60 stores the demographic data as a profile in the registration database 68." Angles, 14:23-26.

Petitioner's second "interaction profile" necessarily fails because it is based on "user choices" interacting with displayed advertisements (e.g., clicking on the hyper-link for additional information). Again, this profile is not created based on game-related user choices. There is **no** generation of a profile based on "user choices" by Angles. Ex-2005, ¶¶170-172.

The significant disparities between Angles and this limitation demonstrate a PHOSITA's inability to arrive at "**generating a player profile based on said user choices made during said game application.**" Petitioner does not explain how a PHOSITA's knowledge resolves the differences between Angles's teaching and limitation 5[b]. Thus, Petitioner's argument fails.

iv. 5[c]: Angles does not teach "the player profile."

Angles does not teach this limitation, because it does not disclose "the player profile."

Angles does not render obvious Claim 5.

- e. *Angles does not render obvious Claim 6, because it does not teach “said player profile is disseminated to providers of business-related content used in said game application.”*

As shown in §II.A.2.d, Angles does not disclose “the player profile.” Even if it did, Petitioner’s argument fails because Mr. Crane misapprehends Angle’s use and implementation of its “consumer profile.” ***It is not disseminated anywhere***; rather, it is accessed by various modules—all of which are located in the advertisement provider computer:

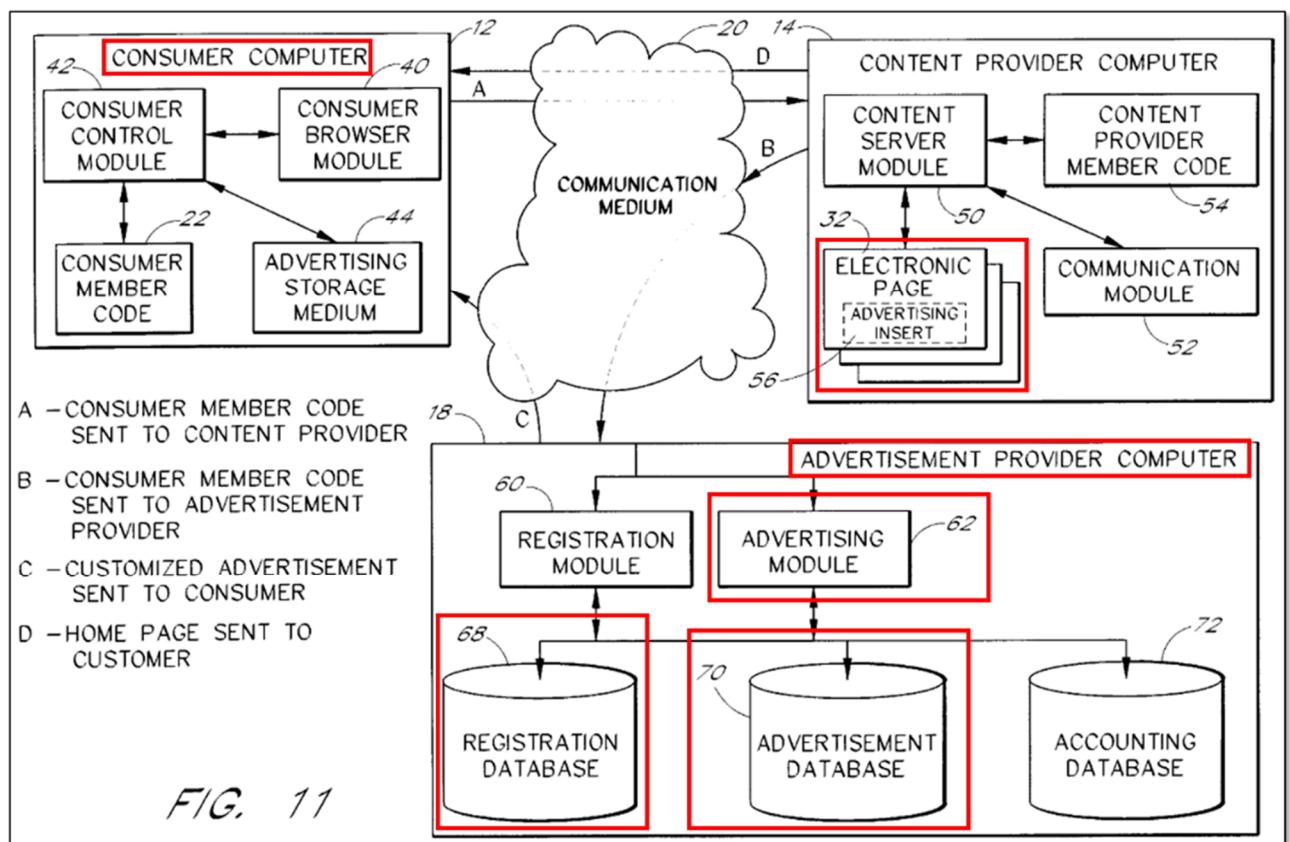
The advertising module 62 uses the consumer member code 22 to obtain a ***consumer profile*** from the registration database 68. As discussed in more detail below, the advertising module 62 then uses the ***consumer profile*** to select an appropriate advertisement from the advertisement database 70. In another embodiment, the advertising module 62 uses both the ***consumer profile*** and the content provider information to select an appropriate advertisement from the advertisement database 70. ***The advertising module 62 then sends a customized advertisement 30 directly to the consumer computer 12***

....

Angles, 15:20-31; *see also id.* 13:47-54 (listing modules of the advertisement provider computer); Ex-2005, ¶¶175-176. ***By contrast, the ‘028 Patent’s player profile is held by the same electronic device that holds the game application, i.e., the user’s local device.*** Ex-1001 3:37-38; Ex-2005, ¶¶80-84.

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.

Mr. Crane's statement "user's demographic information must be sent



(disseminated) from the Registration Database 68" (Ex-1004, ¶151) is factually

incorrect, (Ex-2005, ¶176), and Petitioner relies on it; thus, Petitioner fails to show that Angles renders Claim 6 obvious.

f. *Angles does not render obvious Claims 7-9.*

Petitioner advances the same argument for limitations 7[a], [d]-[e] as it does for limitations 1[a], [c]-[d], respectively. Ex-2005, ¶. Thus, in light of Patent Owner’s proposed construction for the term “application,” Petitioner’s limitation-by-limitation analysis of Claim 7 fails for the same reasons discussed in §II.A.2.a, *Id.*, ¶¶177-178.

Further, because Claims 8-9 depend from Claim 7, Angles does not render them obvious at least for the same reasons. *Id.*, ¶179.

B. Ground 2: Robinson in View of the Knowledge of a PHOSITA does not render the Challenged Claims obvious.

Petitioner’s Ground 2 argument is inherently flawed, and its limitation-by-limitation analysis substantially deviates from the proper obviousness inquiry.

1. Petitioner’s Robinson-based obviousness analysis is flawed as Robinson neither enable the portions of its disclosure being relied upon, nor does it enable a PHOSITA to produce the invention claimed by the ‘028 Patent.

“To render a claim obvious, the prior art, taken as a whole, must enable a skilled artisan to make and use the claimed invention.” *Raytheon Techs. Corp. v. Gen. Elec. Co.*, 993 F.3d 1374, 1380 (Fed. Cir. 2021). “The enabling disclosure concept [] is a commonsense factor in making a determination of obviousness, for if

neither any item of prior art, nor the background knowledge of one with ordinary skill in the art, would enable one to arrive at an invention, that invention would not be obvious.” *Id.* at 1381. Absent “other supporting evidence,” “a standalone § 103 reference must enable the portions of its disclosure being relied upon.” *Id.* When the standalone reference is a prior art patent, “the relevant inquiry is not whether the [prior art] patent was invalid for lack of enablement, but whether [that patent] enabled persons skilled in this art to produce [the claimed invention].” *In re Kumar*, 418 F.3d 1361, 1369 (Fed. Cir. 2005). Because Petitioner’s Ground 2 relies solely on Robinson, it must “enable the portions of its disclosure being relied upon,” *Raytheon*, 993 F.3d at 1381, and “enable persons skilled in this art to produce” the invention claimed by ‘028 Patent, *Kumar*, 418 F.3d at 1369. Robinson does neither.

- a. *The portions of Robinson’s disclosure relied upon by Petitioner are not self-enabled.*

A reference is not enabled if undue experimentation is required to practice the invention. *In re Wands*, 858 F.2d 731, 736-37 (Fed. Cir. 1988). Courts consider factors including “the amount of direction or guidance presented,” “the nature of the invention,” and the “relative skill of those in the art.” *Id.* at 737. Robinson does not enable the portions of its disclosure relied upon by Petitioner. *Raytheon*, 993 F.3d at 1380.

Petitioner’s Ground 2 argument pivots on Robinson’s following 10-line disclosure:

The network-enabled 3D computing environment of the present invention has several **extensions**, including: the introduction of real-time **avatars**. Avatars are virtual representations of users, allowing them to interact with other users across a network. The ability to create an interactive online community is very powerful. Such a utility would allow for intra- and inter-company meetings, the extension of the online communities which exist today, virtual concerts, **online games**, etc. Other uses of avatars with the present invention are described herein in a subsequent section.

Robinson, 9:29-39. The plain language of this passage listing possible “uses of avatars” merely provides utilizing “real-time avatars” as “virtual representations of users” is a “powerful” “utility” that “allows” for “create[ion]” of “interactive online communit[ies]” **such as online games**. *Id.*; Ex-2005, ¶¶205-206. Indeed, Robinson’s next paragraph discusses how even “limited avatar use” by game companies such as “id Software (the makers of Quake), Blizzard North (the makers of Diablo), and others” has led to “startling results.” Robinson, 9:40-42; Ex-2005, ¶207. Robinson then identifies Diablo’s “320,000 simultaneous connections” as a “startling result” of using avatars. Robinson, 9:42-44. Robinson concludes that its invention—what

Robinson describes as “create[ing] an intuitive 3D desktop environment,”¹⁰ (*Id.*, 1:58)—“can be used with this conventional technology [i.e., “limited avatar use” in gaming industry] to create a population of network enabled 3D computing systems, with people interacting in virtual cafes, offices, showrooms, etc.” Robinson, 9:44-47; Ex-2005, ¶207. Summarily, Robinson discloses that combining Robinson’s “3D visual interface for computing environments,” (Robinson, 5:18-19), with the “limited avatar use,” and specifically “real-time avatars,” of conventional online games or virtual concerts creates “interactive online communit[ies]” that were “only available in science fiction,” (Robinson, 9:45-50). Ex-2005, ¶207.

However, Robinson provides no “direction or guidance” for enabling the portions of its disclosure being relied upon by Petitioner. *Wands*, 858 F.2d at 737. Particularly, how can real-time avatars be utilized for delivery of online games to players? How does the use of avatars facilitate integration of business-related content into the game? And, more important, how do players play such online games that utilize real-time avatars? Robinson is silent. Ex-2005, ¶208.

Furthermore, Robinson makes clear, the nature of its invention is directed at “enable[ing] users to interact fully, intuitively and far more easily ‘in’ a spatial 3D

¹⁰ Both experts agree that Robinson is directed at 3D desktop. Ex-2010, 348:25-349:13; Ex-2005, ¶¶182-186.

environment.” Robinson, 1:55-57; Ex-2005, ¶¶181-188. At best, Robinson discloses—without enabling—use of real-time avatars in various settings including online games. Ex-2005, ¶208. But this is irrelevant, for there is no mention of avatars in the ‘028 Patent. Therefore, Robinson enables no more than what it says it enables—it is not self-enabled as to any game-related aspects of its disclosure.

Petitioner’s relied-upon portions of Robinson’s disclosure are not self-enabled.

- b. *Robinson does not enable a PHOSITA to make the claimed invention.*

Assuming that above-discussed portion of Robinson were self-enabled (it is not), Robinson must also “enable[] persons skilled in this art to produce [the claimed invention].” *Kumar*, 418 F.3d at 1369. It does not.

‘028 is directed at “a method of seamlessly integrating business-related content into the subject matter of an electronic game.” Ex-1001, 1:35-37. ‘028 provides detailed explanations concerning the game application it discloses. The game application must be “accessible at [a] primary electronic device.” Limitation 1[a]. The player of this game application must be “interfaced with [a] network.” *Id.* The player should “locally execute[]” it. *Id.* This game application must be programmed such that business-related content is integrated into it “during the execution” of the game. Limitation 1[c]. Automatically re-directing players to

external web pages must be “integrated into said game application,” (Limitation 1[d]), as if it “occurs as part of the user ... playing the game.” Ex-1001, 2:12-14. This game application must “display branded business-related content.” Claim 3. This game application “dynamically update[s]” said branded business-related content. Claim 4. And this list continues.

It is unclear from the record, the Petition, or Petitioner’s expert declaration how Robinson enables a PHOSITA to understand all these details about the game application disclosed by the ‘028 Patent. Robinson’s pertinence to a game application is tenuous at best; it never discusses a *game application* as required by ‘028’s claims. Robinson’s *lone mention* of even the concept of gaming is casually added to a laundry list of possible uses of avatars. Robinson, 9:29-39. Under Petitioner’s faulty logic, if this passing reference was all it takes for Robinson to enable a PHOSITA to appreciate all the ‘028 Patent’s game application details, , Robinson also enables a PHOSITA to perform “virtual concerts.” *Id.* This cannot be true. In fact, Petitioner’s argument is entirely based on a word search in Robinson for the term “game.” Despite Petitioner’s out-of-context interpretation of this isolated disclosure for reimagining the rest of Robinson, the record is clear that Robinson does not enable a PHOSITA to produce the claimed invention. Ex-2005, ¶208.

Robinson’s “passing reference” to online games is certainly an insufficient and non-enabling disclosure of the game application disclosed by the ‘028 Patent. *North America Inc. v. Lincoln Global, Inc.*, IPR2016–00840, Paper 11 at 21 (PTAB Oct. 6, 2016); *see also Meta Platforms, Inc. v. Eight kHz, LLC*, IPR2023-1004, Paper 9 at 22 (PTAB Jan. 9, 2024) (“Absent additional explanation, we are not persuaded that Li’s brief reference to a ‘conference call’ is sufficient.”).

2. Petitioner’s limitation-by-limitation analysis deviates from the proper obviousness inquiry prescribed by the law.

Petitioner’s analysis in Ground 2 suffers from the same fatal flaws explained in §II.A.2. Petitioner misunderstands the scope and meaning of each of the Challenged Claims. Further, Petitioner fails to identify the differences between Robinson’s teaching and the Challenged Claims, nor does Petitioner explain how a PHOSITA’s knowledge resolves those differences. Petitioner improperly relies on conclusory statements from its expert, whose credibility is compromised by contradictory his testimony. *See, e.g.*, Ex-2005, ¶¶135-139.

Under the correct limitation-by-limitation analysis, Robinson fails to render obvious the Challenged Claims.

a. *Robinson does not render obvious Claim 1.*

- i. 1[a]: Robinson does not teach “a locally executed game application that is accessible at said primary electronic device.”

As discussed in §II.A.2.a, this limitation expressly requires three elements: (1) a game application, which is both (2) locally executed and (3) accessible at a primary electronic device. Merely showing that Robinson discloses a locally executed application accessible at the user’s device is not enough. Most commercial software circa the ‘028’s priority date (e.g., Windows Notepad) were both locally executed and accessible at the user’s device—but were not necessarily game applications. Thus, absent sufficient evidence that a PHOSITA reading Robinson would reasonably understand that Robinson’s disclosure can include game applications, Petitioner cannot prevail.

As discussed in §II.B.1.b, Robinson’s passing reference to online games and avatars, in context, is not sufficient for Petitioner’s conclusion that Robinson teaches this limitation. Recognizing this deficiency, Petitioner attempts to ignore it and rely on conclusory expert statements to reimagine Robinson.

First, Petitioner contends that Robinson’s “3D computing environment can be a locally executed game application.” Pet. 46; *see also id.*, 54 (citing Ex-1004, ¶208) (“A POSITA would have recognized that the 3D environment taught by Robinson could be a game application.”).

Petitioner's faulty position is readily ascertainable upon reading Robinson's specification, where Robinson's "3D computing environment" is merely a 3D desktop:

[A] conventional computer user ... sees a flat desktop computing environment with icons on the glass surface of the monitor[.] ... **The present invention improves this desktop computing environment by creating a 3D visual interface for computing environments.** With the interface of the present invention, ... **the monitor immediately displays the computer desktop as a 360°, 3-Dimensional room "inside" of the monitor—a 3D computing environment. Looking at a 3D-enabled computer,** the user will be looking into a computing "room"—a room with depth and dimensions, not a flat glass surface. **Standard computer icons,** that would normally reside only on the 2D flat glass surface of the monitor, **can be spatially placed anywhere in the 3D environment.**

Robinson, 5:11-27; Ex-2005, ¶¶203, 181-188.

Robinson's prosecution history also indicates that Robinson is merely directed at "**a 3D desktop to display** content of a Web page **in a 3D environment,** where **the 3D desktop includes a persistent client window.**"¹¹ Ex-2012, 40; Ex-2005, ¶186.

¹¹ Relying on prosecution history of prior art in both obviousness and anticipation contexts is recognized by the Federal Circuit. *See Arthrocare Corp. v. Smith &*

Even Petitioner’s expert, when questioned about ¶188 of his declaration stating that “Robinson discloses the ‘Persistent Client Window 912’ integrated into the whole of the ‘3D computing environment,’” admitted—consistent with Robinson’s specification and prosecution history—that Robinson’s 3D computing environment is merely a 3D desktop and the “persistent client window” is “a window within the three-dimensional desktop that Robinson talks about.” Ex-2010, 347:20-349-4. He also agreed that Robinson’s “3D computing environment” is effectively a “virtual desktop,” noting “this is your computer display. But instead of just looking at icons and various backgrounds, it’s a 3D view.”¹² *Id.*, 349:5-13; Ex-2005, ¶203.

Second, Petitioner relies on Robinson’s disclosure of a “3D environment persistent kernel 465” that is “downloaded” and “automatically installed on the user’s desktop environment at client machine 460,” (Pet. 47 (citing Robinson, 10:22-29)), to argue this “persistent client kernel 465 can support a game application in a 3D computing desktop environment.” *Id.* But this passage is silent on how kernel 465 is “locally executed” or “initiat[ed].” The express language of limitation 1[a] requires that the locally executed game be initiated at the “request [of] ... a user

Nephew, Inc., 406 F.3d 1365, 1371 (Fed. Cir. 2005) (finding prosecution history of prior art patent can “make clear” what is disclosed in the prior art patent).

¹² Robinson does not use the term “virtual desktop.”

interfaced with said network,” whereas Robinson’s kernel has “a persistent presence on the user’s desktop” regardless of user initiation:

If the user 410 chooses not to activate the 3D computing environment, the 3D environment Persistent Client 465 nevertheless remains active in an unobtrusive two-dimensional persistent window on the user’s desktop for the delivery of advertisement or messages to the user’s desktop. As such, the present invention provides **a persistent presence on the user’s desktop** for the placement of advertising, messages, or the gathering of information about the user....

Robinson, 10:41-49; Ex-2005, ¶¶204, 195-199.

Importantly, Petitioner does not explain how Robinson’s “3D environment persistent kernel” is a locally executed game application. Robinson describes kernel 465 by asserting “the 3D engine and e-commerce front end 430 may append a persistent 3D environment client kernel 465 to the software requested or purchased by user 410.” Robinson, 10:20-23. Thus, **kernel 465 is not even an application per se**, but simply an “add-on” that front end 430 might append to an application. Ex-2005, ¶¶196-198. Petitioner concedes that kernel 465 is *not* an *application*, admitting “persistent client kernel 465 can support a game application,” (Pet. 47), but stops short of showing that kernel 465 is a *game application*.

Robinson does not teach, suggest, or disclose this limitation. Given Petitioner’s failure to pinpoint where Robinson teaches “a game application,” it is

unreasonable that a PHOSITA reading Robinson would understand it teaching this limitation.

- ii. 1[b]: Robinson does not teach “initiating said game application.”

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.

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.*

Petitioner further relies on “activate” as equivalent to “initiate.” This argument is unavailing. Since a 3D computing environment is merely a 3D desktop, the word “activate,” in context, indicates to a PHOSITA that the user has a choice—upon watching the demo—whether to turn the user’s conventional display into a 3D desktop. Robinson, 5:11-27; *see also id.*, 10:41-49 (discussing the user’s choice not to activate and keep their 2D desktop); Ex-2005, ¶201. As any PHOSITA knows, a download of demonstration software is not a working copy of the software. Ex-2005, ¶213. Thus, “activate” here defines a process of payment, customer registration, and possible further downloads. *Id.*, ¶201.

The significant disparities between Robinson and this limitation demonstrate that a PHOSITA could not reasonably interpret Robinson as teaching it. And Petitioner does not explain how a PHOSITA’s knowledge resolves the differences between Robinson’s teaching and limitation 1[b]. Petitioner’s argument fails.

- iii. 1[c]: Robinson does not teach “automatically integrating business-related content ... into said locally executed game application during execution of said game application.”

As discussed in §II.B.2.a.i, Robinson does not teach, suggest, or disclose “a locally executed game application.” Thus, Robinson necessarily does not teach 1[c].

Also, Petitioner alleges that Robinson discloses this limitation with its “Persistent Client Window,” because it will “automatically display an advertisement

or message [...] as long as the Persistent Client Window can be displayed or while the enter desktop is being displayed.” Pet. 49. Thus, Petitioner incorrectly equates “integrating” with “displaying.” Ex-2005, ¶216. Indeed, Robinson never discloses integration of advertisements into an application:

When the user opens an application program that overlaps and covers the display of the Persistent Client Window, the advertisement or message that is currently being displayed will remain in the Persistent Client Window until the user closes the application software and returns back to the desktop (or reduces the display of the application software so that the Persistent Client Window can be viewed).

Robinson, 13:11-18. Therefore, any displayed content in the Persistent Client Window is certainly *not* integrated into an executed application; it is either *partially blocked* or *completely obscured* by that application. Because advertisements are shown “as long as the Persistent Client Window can be fully viewed,” the displayed advertisements are not integrated into any application. Robinson, 13:24-25.

Robinson does not teach this limitation. Ex-2005, ¶214-216.

- iv. 1[d]: Robinson does not teach “automatically re-directing said user to one of said web pages of said secondary 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.”

As discussed in §II.A.2.a.iii, this limitation requires, *inter alia*, that “redirecting ... to web pages of said secondary electronic device” occur “automatically” and be “integrated into said game application.” The game must force the user to visit web pages of the secondary electronic device to complete tasks as part of game play. Ex-2005, ¶¶54-58.

Having misunderstood the proper scope and meaning, Petitioner provides examples of user re-direction to external websites, including “when the user clicks a link embedded in the advertisement presented in the Persistent Client Window,” or when the user may “drag and drop an advertisement to a region of the persistent client desktop environment 910 for re-directing to an external website.” Pet. 50-51. Mr. Crane likewise offers examples such as clicking on “links to product/service ordering websites,” all of which involve the “Persistent Client window 912.” Ex-1004, ¶190. Incorrect.

First, **none** of these are associated with **a user executing a game application.** Ex-2005, ¶219. As discussed in §II.B.2.a.i, the Persistent Client Window is not a game application. Ex-2005, ¶¶204, 195-199. Thus, any re-directing of the user is not

“occurring as part of the user executing said game application.” *Second*, even overlooking this, none of these examples involve re-direction as part of the user playing the game, as required by this limitation. *Third*, Petitioner’s expert admitted that a re-direction that is prompted as a result of clicking on a hyperlink is not automatic—but manual. *Id.*, ¶219; Ex-2009, 232:7-21.

Robinson does not teach this limitation.

b. *Robinson does not render obvious Claims 3-6.*

Claims 3-6 require a game application. Because Robinson does not teach a game application as discussed in §II.B.2.a.i, Robinson does not render obvious these claims. Ex-2005, ¶¶220-235.

For Claim 3, Robinson does not teach a game application, let alone a game application that displays branded business-related content. *Id.*, ¶220.

For Claim 4, Petitioner uses Robinson’s disclosure that “a different advertisement” is displayed within the “Persistent Client Window per a predefined cycling period.” Pet. 53-54. As discussed in §II.A.2.c, sending a replacement advertisement is different from updating the same branded content already displayed. Ex-2005, ¶¶221-224.

For limitation 5[a], tellingly Petitioner presents no argument, (Pet. 54), because Robinson does not disclose a game application, let alone game-related user actions. Ex-2005, ¶¶226-228.

For limitation 5[b], Petitioner uses Robinson’s disclosure of “profiling user preferences,” including “buying patterns [and] searches.” Pet. 54-55. Similar to Angles, Robinson’s profiles identify a user and cannot be a player profile. Ex-2005, ¶¶229-231.

For Claim 6, Robinson does not teach a player profile, let alone disseminating it to others. Ex-2005, ¶235. Further, Petitioner uses Robinson’s disclosure of “target advertising” to argue it necessarily requires dissemination of profiles to providers of business-related content. But Robinson is clear that its user profiles never leave “3D server 450,” but “can be made accessible to the e-commerce client 420 via interface 451 with 3D server 450.” Robinson, 10:55-60. As Dr. Medvidović explains Robinson’s mechanism is fundamentally different from Claim 6, for it requires a server holding the user profiles. Ex-2005, ¶¶235, 82-84 (discussing the difference between a technology like ‘028 and that of Robinson). Robinson does not teach “disseminated to.”

c. *Robinson does not render obvious Claims 7-9.*

Petitioner advances the same argument for limitations 7[a], [d]-[e] as it does for limitations 1[a], [c]-[d], respectively. Thus, in light of Patent Owner’s proposed construction for the term “application,” Petitioner’s limitation-by-limitation analysis of Claim 7 fails for the same reasons discussed in §II.B.2.a. *Id.*, ¶¶236-238.

Because Claims 8-9 depend from Claim 7, Robinson does not render them obvious at least for the same reasons. *Id.*, ¶239.

C. Ground 3: Angles, Robinson, and Ginter in View of the Knowledge of a PHOSITA does not render Claim 6 obvious.

Petitioner claims that Angles and Robinson disclose a player profile. Pet. 64. As shown in §II.A.-B., they do not. Nor do they teach dissemination of any profile. Ex-2005, ¶¶173-176, 232-235. Similarly, Ginter does not teach a “player profile”—by Petitioner’s admission Ginter only teaches a “user profile.” Pet. 64 (citing Ginter, 36:10-43). As Dr. Medvidović explains “player profile” and “user profile” are different. Ex-2005, ¶¶76-77. Further, Ginter’s “user profile” is never used in context of the ‘028 Patent. Ex-2005, ¶248. Thus, Ground 3 necessarily fails.

Further, Petitioner states Ginter teaches the “player profile is disseminated” by patching together two obscure portions of Ginter. Pet. 64. However, Petitioner neglects to show Ginter’s disclosure for “player profile is disseminated to providers of business-related content used in said game application,” as Claim 6 requires. Ginter does not disclose a “game application,” nor does it disclose a “player profile” for a game, and thus does not contemplate “providers of business-related content used in a *game application*.”

Moreover, Petitioner’s cited passage from Ginter fails to disclose the *dissemination of a profile*:

Reporting of *usage information and user requests* can be used for supporting electronic currency, billing, payment and credit related activities, and/or for *user profile analysis* and/or broader market survey analysis [...] and can be provided to content providers or other parties, through secure, authenticated encrypted communication to the VDE installation secure subsystems.

Ginter, 36:28-38. This passage makes it clear that merely the *analysis of a user profile* is being sent to content providers—not the *profile* itself. Thus, Ginter does not disclose the dissemination of a profile. Ex-2005, ¶¶249-251.

Petitioner alleges “[a] POSITA would have been motivated to modify Angles’ and/or Robinson’s system to employ Ginter’s techniques, including the secure dissemination of user profiles.” Pet. 64. But Petitioner fails to identify what features of Angles and/or Robinson would need to be modified to include dissemination of user profiles. Consider Angles: Petitioner does not explain how Angles’s Fig. 1—whose design is incompatible with any notion of profile dissemination as discussed in §II.A.2.e—can be modified to include profile dissemination.

Indeed, there is no motivation to combine Angles and Robinson. Ex-2005, ¶¶252-255. Angles describes “delivering customized advertisements within interactive communications systems,” (Angles, 1:10-12), and Robinson describes “an improved system and method to configure and provide network-enabled three-dimensional computing environments, (Robinson, 1:16-18). These references do not

teach the same subject matter, and do not share a single class code with each other or Ginter. Further, Ginter relates to “computer and/or electronic security” and “systems and techniques for secure transaction management,” (Ginter, 1:9-10), having nothing to do with the subject matter of the ‘028 Patent, Angles, or Robinson. Ex-2005, ¶¶240-247. The fact that Petitioner resorted to such an arcane reference to yield the phrase “user profile” is telling—there is *no motivation* to combine these references.

Claim 6 is not rendered obvious by the combination of Ginter, Angles, and Robinson.

III. CONCLUSION

For the reasons above, Petitioner’s proposed grounds of unpatentability fail. Patent Owner requests the Board determine the challenged claims have not been shown to be unpatentable.

Case No. IPR2023-00954
Patent No. 8,458,028

Date: March 18, 2024

Respectfully submitted,

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Case No. IPR2023-00954

Patent No. 8,458,028

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Response contains 13,801 words using the word count feature of Microsoft Word, and in consideration of the words in the figures.

Dated: March 18, 2024

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that the above-captioned Quantum Imaging LLC's Patent Owner Response, and its cited exhibits, were served via electronic mail on March 18, 2024 at the following email correspondence addresses of record:

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