

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 IPR2023-00996
Patent 10,991,165

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

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EXHIBIT LIST

Ex.	Description
2001	Petitioner's Preliminary Invalidity Contentions
2002	Memorandum from Katherine K. Vidal on Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022)
2003	Lex Machina, Patent Cases (All Judges) Time to Trial, U.S. District Court for the Western District of Texas, September 9, 2023
2004	Lex Machina, Patent Cases (Judge Alan D. Albright) Time to Trial, U.S. District Court for the Western District of Texas, September 9, 2023
2005	Declaration of Dr. Nenad Medvidović
2006	"Software Architecture in Industrial Applications," Soni et al., International Conference on Computer Engineering 1995, Seattle, Washington, USA, published by the Association for Computing Machinery
2007	Merriam-Webster's Collegiate Dictionary 10th Edition, Merriam-Webster Incorporated, United States, 2001
2008	Microsoft Computer Dictionary, Copyright 2002, 5th edition, Microsoft Press, a Division of Microsoft Corporation, One Microsoft Way, Redmond Washington 98052-6399
2009	Not filed.
2010	Declaration of Marc A. Brockhaus.
2011	Transcript of Deposition of David Crane, Part 1, 02-24-2024.
2012	Transcript of Deposition of David Crane, Part 2, 02-29-2024.
2013	Transcript of Deposition of Alexander Harry, 02-27-2024.
2014	https://www.mobygames.com/game/3341/microsoft-flight-simulator-2000/screenshots/windows/351054/
2015	Claim Construction Order dated 10/20/2023, <i>Quantum Imaging LLC v. Sony Group Corporation et al.</i> , No. 1:23-cv-01212-ADA-DTG (W.D. Tex.), Document 159.
2016	May 28, 2024 Teleconference Transcript regarding the deposition of Nenad Medvidovic, Ph.D.

I. INTRODUCTION

Patent Owner, Quantum Imaging, LLC (“Patent Owner”), submits this Patent Owner Sur-Reply to Petitioner’s, Sony Interactive Entertainment LLC, Reply.

Petitioner’s Reply fails to show that Pisanich and the Manual, in combination with the knowledge of a POSITA, teach the challenged claims’ QIE Module. As the Board is aware, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Petitioner has failed to do so. Creating separate and distinct software versions of a game to be played on different types of devices is radically different than a software layer that receives and interprets content such that content is manipulated so as to be accessible on different types of devices (i.e., two or more different types of devices; such as a PC and a mobile computing device) for use within a virtual thematic environment. Ex-2005, ¶85¹.

¹ PO Response is supported by many citations to Dr. Medvidović’s declaration and Mr. Crane’s deposition discrediting Mr. Crane’s testimony. Notably, Petitioner’s Reply did not provide a single citation to Dr. Medvidović’s deposition discrediting Dr. Medvidović’s prior testimony.

Further, the Petition is deficient for impermissibly incorporating by reference swathes of Mr. Crane's declaration (see, for example, Patent Owner Response, Paper 24, hereinafter PO Response, 13-14) and the Reply cannot rectify this error. The Reply states that Mr. Crane's declaration is used to provide evidence and explanation of arguments in the Petition. Reply, 30. However, as discussed in the PO Response, the Petition used Mr. Crane's declaration for the arguments made in the declaration, not just as support. PO Response, 15-16.

Additionally, the Reply attempts to rely on the Institution Decision to argue that Petitioner's analysis is not conclusory. Reply, 30.² Patent Owner respectfully submits that the PO Response, discussing Dr. Medvidović's declaration and Mr. Crane's cross-examination, supports a finding that the Petition and the Crane Declaration contained conclusory arguments not sufficiently supported by evidence.

II. CLAIM CONSTRUCTION

Patent Owner submits that adoption of the proposed claim construction fosters consistency with the District Courts and that such claim constructions are in

²The Institution Decision also states that Patent Owner "will be free to offer its own testimony and cross-examine Mr. Crane during trial." Paper 11, 25.

accordance with the ordinary and customary meaning of such terms, as would have been understood by a POSITA, in light of the specification.

III. PETITIONER FAILS TO DEMONSTRATE THAT THE CHALLENGED CLAIMS ARE OBVIOUS OVER PISANICH WITH THE KNOWLEDGE OF A POSITA.

A. Pisanich and the Knowledge of a POSITA Do Not Teach the Claimed QIE Module that is a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment.

1. Does Not Teach that the QIE Module is a Software Layer.

First, Petitioner asserts that a software layer cannot be limited to having modules that interact only with modules assigned to adjacent layers because Figure 1 of the '941 specification shows arrows between nonadjacent layers. Reply, 3. Petitioner asserts that the arrows must mean that the nonadjacent layers are communicating with one another directly. Reply, 3. However, Petitioner provides no evidence of what the arrows mean from the specification or elsewhere and makes an assumption unsupported even by declaratory evidence.

As provided in the evidence submitted with the PO Response, a software layer communicates with the adjacent layer. PO Response, 17-18; Ex-2005, ¶63, discussing Ex-2006, pp. 199, 203. A software layer is used to guide the partitioning of a system's functionality into modules, where the modules assigned to one layer

interact only with those that are assigned to adjacent layers. *Id.* The specification supports these constructions, explaining that:

The six layers of the virtual platform include 1) a graphical user interface (GUI) 100, 2) a Thematic/Publishing Logic 101 and a Digital Content Library 102, 3) a Business Logic 103, 4) a thematic or zone application builder and interpreter (i.e., a Quantum Imaging Engine 104), 5) Communications 105, and 6) a Data Storage 106.

Ex-1001, 11:62-67. These six layers are shown in FIG. 1

The arrows in the figures do not contradict this understanding. The arrows that appear to cross layers in the figure may represent virtual interactions with adjacent layers. For example, they may represent that a first layer, such as the QIE, can interact with its adjacent layer, such as the Business Logic layer, and that Business Logic can then interact with its adjacent layer, such as the Digital Content Library. The arrows do not necessarily teach direct communication between non-adjacent layers, but may show indirect communication with other layers by using adjacent layers to pass communications to their adjacent layers. There is no indication, much less evidence, that the arrows crossing layers teaches direct communication between non-adjacent layers.

Additionally, the Reply asserts that Figure 2 of the '165 Patent shows a QIE module having two layers. Reply, 6-7. First, FIG. 2 is another, separate, embodiment from that shown in FIG. 1. *See, for example, Ex-1001,6:41-46.* Second, the Petitioner ignores basic tenants of claim construction in not considering the claim as a whole. *See, for example, W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)* (restricting consideration of the claims to a 10% per second rate of stretching of unsintered PTFE and disregarding other limitations resulted in treating claims as though they read differently than allowed).

Claim 1 requires a QIE module” which is “a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment.” The specification and figures reveal that there can be multiple QIE within the interactive software platform (Ex-1001, 15:54-16:4), but, proper construction of claim 1 requires the QIE module being a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment.

This requires the same software layer to perform at least two enumerated functions (receives and interprets the content) such that the content is manipulated

so as to be accessible on different types of devices. In contrast, conventional systems did not have a software layer that carried out these functions on content so as to be accessible on different types of devices. Rather, the conventional system had to have different, separate software for each different type of device. PO Response, 22-27; Ex-2005, ¶¶88, 94; Ex-1004, ¶82; Ex-2011, 129:1-17; Ex-2012, 419:1-7.

Further, even if FIG. 2 of the ‘165 Patent were applicable to challenged claim 1, Petitioner also makes unfounded assumptions as to the meaning of FIG. 2, such as the meaning of alignment of a box labeled “QIE” with other boxes in the figure, with no support for their opinions from either the specification or evidence from an expert or person having ordinary skill in the art. Reply, 5-6. This is simply unfounded conjecture.

Additionally, Petitioner argues that Pisanich demonstrates a game data server 108 that interacts only with its adjacent layers, arguing that the game data server is, therefore, a software layer that discloses the QIE module. Reply, 7-8. Petitioner points only to the game data server 108 in Figure 2 to support its theory that the game data server 108 is a software layer. This argument is unsupported by evidence and is directly contradicted in Pisanich. *See, for example*, Ex-1007, 10:1-2, “a game system 107 is shown implemented using an object orientated design.”

Further, as discussed in the PO Response, the game data server 108 cannot be the QIE module and certainly not a software layer performing the QIE Module functions, as Medvidović explained. Ex-2005, ¶¶63,74; Ex-2006, pp.199,203; PO Response, 17-18. Pisanich's game data server 108 is constructed of separate objects using an object-oriented architecture, not a "software layer." See Ex-2005, ¶¶74,75; PO Response 18.

A QIE Module is not inherently disclosed by Pisanich, nor would a POSITA assume that Pisanich uses a software layer for the game data server 108. Ex-2005, ¶74; PO Response 18. Indeed, Petitioner's own expert admitted that Pisanich used an "object-oriented design." Ex-2011, 137:4-7. An object-oriented design is not a software layer. Ex-2005, ¶74; PO Response 18.

Pisanich does not disclose or teach a POSITA to implement or construct the claimed QIE Module as a software layer architecture in light of Pisanich's object-oriented architecture. See, for example, *id.* and Ex-2008, pp.372, 373; PO Response 19.

2. **Does Not Teach the QIE Module being a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment.**

For the first time, Petitioner includes explicitly the argument that “six different types of gaming devices running the SubLOGIC Flight Simulator II game” discloses a single virtual thematic environment in the form of a flight simulator, citing the Crane Declaration. Reply, 9-10.

First, Petitioner did not make this argument in the Petition, and it is therefore impermissible for Petitioner to raise it for the first time in its Reply, as it had the opportunity to raise it in its Petition, but failed to do so.³ Rather, in its Petition, Petitioner relied on Pisanich in its attempt to say that this element was known (*see*, Petition, 20), citing to, but not including any other specific argument from Dr. Crane’s declaration. Pisanich, however, makes no teaching or suggestion of the QIE module being a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within **the** virtual thematic environment. The Pisanich reference itself discloses different games, with each game having its own virtual thematic environment, not a

³ “Generally, a reply or sur-reply may only respond to arguments raised in the preceding brief. 37 C.F.R. § 42.23, except as noted above. ‘Respond,’ in the context of 37 C.F.R. § 42.23(b), does not mean proceed in a new direction with a new approach as compared to the positions taken in a prior filing.” PTAB Consolidated Practice Guide, November 2019, p. 73.

software layer that receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the (same) virtual thematic environment. Ex-2005, ¶95; PO Response 20-22.

Petitioner was unable to rebut that Pisanich discloses different games, each having its own virtual thematic environment (i.e. software created specifically for each type of device). Therefore, Petitioner now improperly presents a different argument.

However, Petitioner impermissibly relies entirely on the knowledge of a POSITA in the form of Crane's declaration regarding flight simulators to provide the missing limitation from Pisanich. Reply, 9-10.

Even if Petitioner's new argument is considered, it is incorrect. Even if different devices have flight simulator programs, they are different software versions of flight simulators, and, therefore, are different virtual thematic environments on each different device.

During cross-examination, Crane affirmed that in order to play a flight simulator game on different types of devices, conventionally, different versions of the flight simulator game were required for each different type of device (i.e., a PC, a mobile device, etc.) i.e., the software for each type of device was programmed separately, meaning a different virtual thematic environment, not a QIE Module

being a software layer that receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment. Ex-2012, 419:1-7, 12-15; Ex-2005, ¶95; PO Response, 21-22.

3. . Does Not Teach a QIE Module Makes the Content Accessible on Different Types of Devices.

Petitioner's Reply asserts that game data server 108 makes the data available for use in games 112 and 116 "which include different games that operate on different types of devices (e.g., different types of PCs)." Reply, 10. This argument is both incorrect and untimely.

Petitioner again attempts impermissibly to assert a new argument, that the different games are on different types of PCs. Reply, 10. In support, Petitioner cites to its Petition, 20. However, those pages of the Petition do not mention different types of PCs.

Additionally, the phrase "different types of devices" should not be construed to overlook both words "different" and "type," PO Response 26-27.

Petitioner also cites to the Crane Declaration, Ex-1004, ¶¶73-84, which discusses flight simulators and platforms. Reply, 10. However, as discussed

previously, the argument of those paragraphs of Crane were not argued in the Petition.

Even if Petitioner can now rely on this new argument, Dr. Crane states in Ex-1004, ¶82: “To publish a game on different platforms, the game program had to be configured to manipulate game content to work on different devices. As was well known in the art, the conventional method of doing so involved creating a different version of the game for each device or at least different size and resolution images.” This again affirms that even if there were different devices, which is not disclosed in Pisanich, they would require different software.

Petitioner (Reply, 10) also cites to the deposition of Mr. Crane for the proposition that “even in different versions of the flight simulator, ‘the theme would be the same’.” However, there, Dr. Crane discusses flight simulator games on different platforms and states the “programs running on those machines differ dramatically.” This simply supports that the prior art did not teach or suggest a software layer that receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the same virtual thematic environment, and shows that different software had to be manually written for each type of console in the prior art.

Regarding Pisanich, Crane admits (Ex-1004, ¶82; and Ex-2011, 129:9-17, 130:12-19, 131:21-133:6) that the individual game 112 and the “entirely different game 116” (Ex-1007, 7:9), if played on different types of devices would require that the game software be manually rewritten to be run on each different type of device. PO Response, 22-23.

There is no teaching or suggestion in Pisanich that the games are run on different types of devices. On page 10 of its Reply, Petitioner appears to try to support its argument by citing to Pisanich Ex-1007, 5:2-6:2, but this makes no mention of PCs at all, much less of different types of PCs.

Petitioner attempts to draw a parallel between the game data server 108 of Pisanich to the QIE module, pointing again to Figure 2 of the ‘165 Patent. Reply, 11-12. Petitioner also falsely claims that Patent Owner concedes that “the game data server 108 ‘makes that data available for use in games 112 and 116’ which include different games that operate on different types of devices,” citing PO Response, 23. Reply, 10. To the opposite, the PO Response actually stated that “any interpretation and manipulation of the data that would be arguably performed by the rendering engine 316 (steps that are not disclosed in Pisanich) would have to be performed within each game (e.g., games 112, 116) that is being played on each device...As such, the rendering engine 316 would be rendering the game content for a single

device—not for different types of devices as required by Patent Owner’s claimed QIE Module.” Response, 23, emphasis in original. Ex-2005, ¶90.

Further, Pisanich does not teach or even suggest that its game data server 108 is a software layer. See Ex-2005, ¶74,75; PO Response, 18.

Pisanich’s Game Data Server 108 does not receive and interpret content such that the content is manipulated so as to be accessible on different types of devices for use within the same virtual thematic environment. Ex-2005, ¶97. Rather, the game data server 108 simply gathers “real time” data and makes that data available for use in games 112 and 116. Ex-1007, 5:13-15; Ex-2005, ¶96; PO Response 26. Only for the sake of argument, any interpretation and manipulation of the data in Pisanich (which is explicitly not disclosed in Pisanich) would have to be performed within each game 112, 116 that is being played on each device (i.e., a single type of device). Ex-2011 at 132:19-133:7; Ex-2005, ¶90; PO Response 23.

B. Does Not Teach the Claims Required Element of “Sending a Request for First Real-Time Information Via the QIE Module to The World Wide Web.”

Petitioner argues that a POSITA would understand that all “web-based systems” disclose this limitation. Reply, 13. Once again, Petitioner attempts to impermissibly rely on knowledge of a POSITA to fill a completely missing limitation from Pisanich, but here, Petitioner fails to support this assertion with even

a single piece of evidence. Petitioner appears to ask the Board to assume this knowledge exists, but Petitioner does not provide any evidence that it did so at the priority date of this application. A POSITA would not understand that Pisanich discloses “sending a request for first real-time information via the QIE module to the world wide web,” (Ex-2005, ¶100) and general knowledge of a POSITA is impermissible for providing an entirely missing limitation. PO Response, 32-33.

C. Does Not Teach or Suggest “Sending a Request for Second Real-Time Information Via the QIE Module.”

Petitioner is incorrect for the same reasons addressed above regarding “sending a request for first real-time information via the QIE module to the world wide web.” Ex-2005, ¶106; PO Response 34.

D. Does Not Teach a Method for Integrating Real-Time Information into a Virtual Thematic Environment Using a Computer System Including a Client and a Server.

Petitioner argues that a client system and server system would be compatible with Pisanich. Reply, 14. However, “compatibility” is not the test for obviousness. Pisanich never uses the term “client” or “client computer.” Rather than providing a reason why the skilled person would modify Pisanich to include a “client” or a “client computer”, Petitioner explains that the POSITA would have knowledge of client-server systems. *Id.* Simply having knowledge of a “client,” however, provides

no reason to imply that it is taught by Pisanich, or to implement, change, or otherwise modify Pisanich in this manner.

IV. PETITIONER FAILS TO DEMONSTRATE THAT THE CLAIMED INVENTION IS OBVIOUS IN VIEW OF THE MANUAL.

In response to Patent Owner’s argument that the Manual “describes how to play a game,” Petitioner argues that a POSITA “would have been specifically familiar with the Dreamcast and its hardware and software characteristics.” Reply, 22. However, this does not cure the Petition’s deficiencies for several reasons. First, Petitioner provides no evidence of this assertion. Second, this argument highlights that Petitioner is relying on knowledge of a POSITA to impermissibly fill in entire missing limitations that are not disclosed in the Manual.

The Manual describes how to play a game but does not describe or otherwise disclose how the game is implemented in either the software or hardware architecture. Ex-2005, ¶¶117-119, 122; PO Response, 37. A POSITA would not understand from a gameplay guide or manual the underlying software or hardware architecture that allows the game to be executed or run—including, in the present case, whether or not the underlying software and hardware architecture includes a QIE module that is a software layer. Ex-2005, ¶¶118, 119, 122; PO Response, 37.

A. The Manual Alone or In Combination with the Common Knowledge of a POSITA, Does Not Teach the Claimed QIE Module.

1. Software layer

As explained above, the specification and external evidence support Patent Owner's interpretation of "software layer." A person of ordinary skill in the art would understand that the Manual does not teach or suggest the "QIE module," or that the QIE Module is "a software layer" as required by challenged claims 1 and 18. Ex-2005, ¶120,122; PO Response, 38.

Petitioner argues that page 9 of the Manual "describes an online network structure akin to the modular architecture of Fig. 2 of the '941 patent." Reply, 23-24. This is incorrect. Petitioner quotes explanations to a user of how to navigate in the game. Reply, 25-26. Page 9 does not teach or suggest anything about the architecture used to implement the game. Even if the diagram showed some sort of system architecture, which it does not, the diagram does not disclose a software layer. PO Response. 39-40.

2. So as to be accessible on different types of devices

Petitioner argues that the Sega Dreamcast consoles are different types of devices. Reply, 25. Petitioner's supposition is without basis as the Manual itself explicitly teaches only one type of device, i.e., the software to which the gameplay

manual is directed “the [Sega] Dreamcast console.” Ex-1008, p 2; PO Response, 40. However, even if there were different types of devices (which Patent Owner does not concede), the Manual does not teach that the software layer receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment. Rather, the evidence shows that even if the consoles were different types of devices, they would have separate software on each device creating an environment on that device, not other devices.

Crane states that the “Word Select” system shown in the Manual receives, interprets, and manipulates content “at the destination.” Ex-1004, ¶238. A POSITA would understand that the “destination” is a piece of hardware, i.e., the game console, however, and not the claimed QIE Module software layer. As explained by Medvidović, at the game console, the software can interpret for that game console, but the software on the game console cannot interpret for any other game console type. Ex-2005, ¶130; PO Response, 42. The software on the game console would only work with content on that device, not different devices.

Petitioner’s supposition that “game systems sold into different countries were different systems” (Pet. 45) is without basis. Ex-2005, ¶127; PO Response, 40. Contrary to Petitioner’s contention, the Manual itself explicitly teaches that it is

directed to solely one type of device, i.e., the software to which the gameplay manual is directed “is designed only for use with the Dreamcast console.” Ex-1008, p. 2; Ex-2005, ¶127; PO Response, 40.

3. A software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices

Petitioner argues that the Word Select feature of the game discloses a software layer that receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment. Reply, 26-27. As explained above, this, however, is not correct. Rather, Crane states that the Word Select system receives, interprets, and manipulates content “at the destination.” Ex-1004, ¶238.

Further, as explained by Medvidović, a POSITA would understand that choosing a limited number of text options in the chat box that are available in other languages at the destination is NOT equivalent to a QIE Module manipulating the content so as to be accessible on different types of devices. Ex-2005, ¶133; PO Response, 43.

A POSITA would understand that the Manual does not teach or suggest a QIE Module that “receives and interprets content such that the content is manipulated.” Ex-2005, ¶134. For the sake of argument, even if the Manual shows that content is

being received by a QIE module, it does not teach or suggest that it is being interpreted and manipulated. *Id.* While the finite universe of constructed messages provided by the Word Select function may be a program to facilitate communication, (Ex-1008, p.12) the Word Select functionality would not be understood by a POSITA as interpreting or manipulating the messages. Ex-2005, ¶134; PO Response, 43.

Additionally, even if Crane's supposition of "interpretation" of content is correct (Ex-1004, ¶238), such interpretation is not being conducted by the QIE Module (i.e., a software layer), as clearly testified to by Crane during cross-examination. Ex-2011, 188:3-189:13; PO Response, 44-45.

The Manual would teach a POSITA that any "interpretation" being performed by the Word Select is performed at the "destination," which is the recipient's console. As such, any interpretation by the "Word Select" feature takes place separately on each console, for only that console. Ex-2005, ¶135; PO Response, 45-46.

B. The Manual Alone or In Combination with Common Knowledge, Does Not Teach a Client or Client System.

Rather than providing a reason why the skilled person would modify the Manual to include a "client" or a "client computer," Petitioner explains that the

POSITA would have professional experience in “client server and web-based systems”. Reply, 29. Simply having knowledge of a “client,” however, provides no reason to imply that this is taught by the Manual, or would provide an apparent reason to modify the Manual. The Manual describes how to play a game and does not specifically teach or even suggest a “client” or a “client system”. *Id.*; PO Response, 47.

Mr. Crane states that the Manual discloses that the PSO game operated in a client-server configuration because it required users to log into the “PSO server” with a serial number and access key. Ex. 1008, ¶¶98, 231, 304, referring to Manual page 8. The Manual, however, is silent as to the choice of computer architecture. Ex-2005, ¶138; PO Response, 48.

C. Petitioner Fails to Show That the Manual is Authenticated or is Actually a Printed Publication Under 35 U.S.C. §102 and Available as Prior Art to the ‘165 Patent.

Petitioner provides the declaration of Monika Hudgins (Ex-1024) in an attempt to authenticate the Manual and prove it is a printed publication and available as prior art. Reply, 19.

However, Ms. Hudgins testimony is clear that she does not have any personal first-hand knowledge that the Manual which she translated was publicly available or, if available, at what date.

That is, Ms. Hudgins’ testified that she completed the user manual around December 2000 and provided the manual to the Sega U.S. marketing team. Ex-2024, ¶3. From that point on, Ms. Hudgins speculates as to what may have happened with respect to the manual, she has no first-hand knowledge of what happened after it left her possession. Ms. Hudgins declared that she provided the Manual to the Sega U.S. marketing team, but she then speculates that the Sega U.S. marketing team provided the user manual to a U.S.-based printing company for processing and printing. *Id.* She also testified that to “the best of her knowledge,” the user manual was then included within the packaging. *Id.* Ms. Hudgins did not testify, however, that she had inspected the packaging and knew the Manual was included. Given that Ms. Hudgins has no first-hand knowledge as to the fate of the translated manual once it left her hands, her speculation about its eventual inclusion in the packaging of the game is impermissible hearsay, not subject to any exclusions, and should be afforded no weight.

Further, the submission of the Hudgins declaration is untimely and improper. Patent Owner objected to Petitioner’s use of the Manual as evidence in the Objections to Evidence timely served and filed on 12/26/2023 in compliance with 37 CFR §42.64(b)(1). *See*, Paper 13. Specifically, Patent Owner objected under Fed. R. Evid. 901 for lack of authenticity; under Fed. R. Evid. 801, 802, and 805 to the

extent to which the out-of-court statements therein are offered for the truth of the matters asserted and constitute impermissible hearsay to the extent Petitioner relies on such a statement to attempt to prove the existence of the document on that date; and on the basis that Petitioner failed to show that the Manual is a printed publication within the meaning of 35 U.S.C. §§102 and 311. Paper 13, pages 6-8.

Petitioner did not respond within the timeframe required in 37 CFR §42.64(b)(2). Rather, Petitioner waited until filing its Reply. “It is also improper for a reply to present new evidence (including new expert testimony) that could have been presented in a prior filing.”⁴ Petitioner knew of Ms. Hudgins at the time of filing the Petition, evidenced by Petitioner themselves pointing to her name on a page of the Manual. Reply, 20. Petitioner had the opportunity to provide Ms. Hudgins’s testimony at the time of filing. Or, at the very least, Petitioner could have provided Ms. Hudgins’s testimony in response to Patent Owner’s Objections to the Manual. They did not.

New evidence entered at this stage of the proceedings places an unfair burden on Patent Owner in that Patent Owner is unable to file additional evidence with its

⁴ PTAB Consolidated Trial Practice Guide, November 2019, p. 74.

Sur-Reply to rebut this new evidence submitted in the Reply.⁵ Therefore, Petitioner's new evidence should be given no weight.

Further, Despite Petitioner's attempt to cast doubt on a scenario in which the Manual was replaced in the sleeve of the game disc holder (Reply, 20), it is Petitioner's burden to prove that the Manual presented is the same Manual that was publicly available. Neither of the Petitioner's declarants on the issue of availability put themselves forward as archival experts for this type of media and do not have the expertise or personal knowledge to opine as to whether this particular manual was the one distributed. Additionally, Mr. Harry did not confirm or deny whether multiple versions of the Manual were associated with the game or whether the Manual was updated at different times.

V. PETITIONER FAILS TO SHOW THAT THE ALLEGED COMMON KNOWLEDGE OF THE POSITA WAS KNOWN AT THE TIME OF THE PRIORITY DATE.

Petitioner has not provided any evidence showing that the various Exhibits and discussion provided in ¶¶72-84 of Crane's Declaration (Ex-1004) as common knowledge of a POSITA were publicly available before the March 22, 2004 priority date. PO Response, 53-54.

⁵ *Id.*, p. 73.

VI. THE PETITION FAILS TO ADDRESS ELEMENTS OF THE CHALLENGED INDEPENDENT CLAIMS

Petitioner attempts to justify its failure to address elements of claim 1 and corresponding elements in claim 18. Reply, 15-18. However, the underlined portions of the claims are different than the claim limitations to which the Petition referred. Petitioner now impermissibly wishes to add arguments that it should have included in its Petition.

- Within its limitation 1[j] analysis, Petitioner failed to address the claim element “at the client system.” Pet. pp.25–26. Now Petitioner argues that “the user’s computer system is the client system that executes the game.” Reply, 17. However, this argument was not included in the Petition and Petitioner provides no evidence that the secondary application is provided at the user’s computer system.
- Petitioner attempted to address limitation 1[o] (Reply, 18), but failed to address the claim element of “enabling the user to control the at least one secondary application through a second user interface.” Petitioner argues that its cross-reference to its discussion of limitation 1[b] of “providing a quantum imaging environment (QIE) module in one of the client or the server system” is sufficient. *Id.* Petitioner also argues that Pisanich discloses the limitation by

enabling a user to control a secondary application in the form of the Traffic Manager through a second user interface in the form of the audio engine. *Id.* Petitioner provides no evidence to support this argument. Further, it is simply incorrect. Pisanich does not disclose how or even if the audio engine 336 (i.e., what Petitioner identifies as the claimed “second user interface”) can accept inputs from a user. Ex-2005, ¶77. The audio engine 336 merely outputs audio. *Id.* Therefore, Pisanich’s audio engine 336 cannot be a second user interface as it does not accept inputs from a user. *Id.* A POSITA would understand that there is no second user interface disclosed in Pisanich that enables the user to interact with and provide inputs into the audio engine 336—i.e., the audio engine 336 only outputs audio to the user and does not accept user input. *Id.* Further, Pisanich’s player control/game state engine 328 does not use a second user interface. *See*, for example, Pisanich 34:11-15, and FIG. 3. Rather, the player uses the alleged first user interface (player control/game state engine 328) to respond to the audio engine 336, not a second user interface associated with the secondary application. *Id.* As such, the user in Pisanich could not access the secondary application through the second user interface. *Id.*

VII. CONCLUSION

Therefore, Patent Owner respectfully requests that the Board find that all of the challenged claims of the '165 Patent are valid and patentable.

Date: July 8, 2024

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Sur-Reply to Petitioner's Reply contains 5,412 words using the word count feature of Microsoft Word.

Date: July 8, 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 Patent Owner's Sur-Reply to Petitioner's Reply, and its cited exhibits, were served via electronic mail to the following email correspondence addresses of record:

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