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 IPR2023-00995
Patent 10,846,941

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, 02-26-2024.
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	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. Creating separate and distinct software versions of a game to be played on different types of devices (see Ex-1004, ¶¶82-84, p.101 n.14; Ex-2011, 131:24-133:6 and 133:14-134:2) is radically different than a software layer that receives, interprets and manipulates content 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, ¶94[1].

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

[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.

Reply states that Mr. Crane's declaration is used to provide evidence and explanation of arguments in the Petition. Reply, 31. However, the Petition used Mr. Crane's declaration for the arguments made in the declaration, not just as support. PO Response, 13-14.

II. PETITIONER FAILS TO DEMONSTRATE THAT THE CHALLENGED CLAIMS ARE OBVIOUS.

A. QIE Module is a Software Layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment.

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.

A software layer communicates with the layer adjacent. PO Response, 7; 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, 11:61-65. 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 simply 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 ’941 Patent shows a QIE module having two layers. Reply, 6. First, FIG. 2 is another, separate, embodiment from that shown in FIG. 1. *See, for example,* Ex-1001, 6:43-45. Second, the

Petitioner ignores basic tenants of claim construction in that Petitioner does not consider 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) (disregarding limitations resulted in treating claims as though they read differently than allowed).

Claim 1 requires "a …(QIE) module, the QIE module being a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices." The specification and figures reveal that there can be multiple QIE within the interactive software platform (Ex-1001, 6:43-45), but, proper construction of claim 1 requires the QIE module being a software layer that receives, interprets, and manipulates the second content 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 three enumerated functions (receives, interprets, and manipulates the second content) so as to be accessible on different types of devices. In contrast, conventional systems did not have a software layer that carried out all these functions on second 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, 22-26; Ex-2005, ¶¶88, 94; Ex-1004, ¶82; Ex-2011, 129:1-17; Ex-2012, 419:1-7.

Further, even if FIG. 2 were applicable to challenged claim 1, Petitioner also makes unfounded assumptions as to the meaning of FIG. 2 of the '941 Patent, such as the meaning of alignment of a box labeled "QIE" with other boxes in the figure, with no support for their assumptions from either the specification or evidence from an expert or POSITA. 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 of Pisanich 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." See also Ex-2005, ¶¶79-80.

Further, as discussed in the PO Response, the game data server 108 cannot be the QIE module and certainly not a software layer that receives, interprets, and manipulates. Ex-2005, ¶¶81,97; Ex-2006, pp.199,203. PO Response, 15-16. Pisanich's game data server 108 is constructed of separate objects using an object-oriented architecture, not a "software layer that receives, interprets, and manipulates…" *See* Ex-2005, ¶¶78-81, 86-89, and 93; PO Response, 16.

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, ¶79; PO Response, 16. Indeed, Petitioner's own expert admitted that Pisanich used an "object-oriented design." Ex-2011, 137:4-7; PO Response, 16. An object-oriented design is not a software layer. Ex-2005, ¶¶79; PO Response, 16-17.

B. QIE Module is a Software Layer that receives, interprets, and manipulates the Second Content so as to be Accessible on Different Types of Devices for use in the Same 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.

First, Petitioner did not make this argument in the Petition, and it is therefore impermissible[2] for Petitioner to raise it for the first time in its Reply, as it had the

[2] "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.

opportunity to raise it in its Petition, but failed to do so. In its Petition, Petitioner relied on Pisanich in its attempt to say that this element was known. *See,* Petition, 23. Pisanich, however, makes no teaching or suggestion of the QIE module being a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment. 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 presents a different argument.

Second, Petitioner's new argument is also 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.). Ex-2012, 419:1-7 and12-15., PO Response, 17-19. Crane's testimony confirmed that conventionally, different devices and games, even if they have a similar theme, required a different version of the game for each different type of device, not for use within the (same) virtual thematic environment. *Id.*

C. Software Layer That Interprets and Manipulates the Second Content So As To Be Accessible on Different Types of Devices for Use Within the Same Virtual Thematic Environment.

Petitioner's Reply asserts that the 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. In support of this new argument, Petitioner cites to Petition, 23-24. However, those pages 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." Ex-2005, ¶60-62, Ex-2007, p.1274; PO Response 24-25.

Petitioner also now relies for its argument on the Crane Declaration, Ex-1004, ¶¶73-84, which discusses flight simulators and platforms. Reply, 10. However, again, 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 – not from a software layer.

Petitioner (Reply, 11) in support of its new argument also cites to the deposition of Mr. Crane Ex-2011, 128:15-25. 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, interprets, and manipulates second content so as to be accessible on different types of devices for use within the virtual thematic environment, and shows that conventionally 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. Ex-2011 at 131:21-133:6. PO Response, 28-29.

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. 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 Response, 20. Reply, 10. In direct opposition to Petitioner's assertion, the Response actually stated that "[o]nly 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)." Response, 20, emphasis in original. Pisanich's game data server 108 does not teach or suggest the claimed QIE Module, as game data server 108 does not interpret and manipulate the second content so as to be accessible on different types of devices. Ex-2005, ¶97.

Petitioner states that Pisanich Figure 2 and 6:18-9:23 discloses that the game data server 108 "interprets air traffic and weather content from providers 100 and 104, at least via request processes 224 and 228, for provision of that content to various games 112." *Id*. This statement is incorrect and unsupported by evidence.

First, Figure 2 and the text (*see*, for example, 6:18-20) of Pisanich show and describe "a game 112" (emphasis added) with a single player, not "various games 112."

Additionally, as previously shown, Pisanich's game data server 108 is not a software layer. Pisanich's game data server 108 is rather constructed of separate objects using an object-oriented architecture. *See* Ex-2011, 137:4-7; Ex-2005, ¶¶78-81, 86-89, and 93; PO Response 15-17

Also, Pisanich's Game Data Server 108 does not interpret and manipulate the second content so as to be accessible on different types of devices for use within the 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, ¶97. Pisanich's game data server 108 gathers data, but does not interpret and manipulate the second content so as to be accessible on different types of devices. Ex-2005, ¶97. PO Response, 19-20.

Further, Petitioner does not address its mistaken assertion regarding the second content. Again, the claimed second content is not the same as the claimed second real-time information, as the terms are separate and independent in the claims. Ex-2005, ¶98. PO Response, 20

Additionally, Pisanich expressly discloses that Player 120 and Other Players 124 play different games–i.e., different virtual thematic environments. *See, for*

example, Ex-1007, 7:9-11, and Figure 1; Ex-2005, ¶¶84-85. This includes, at the very least, different virtual thematic environments (rather than the claimed same virtual thematic environment) that are independent of one another (whether or not they have similar themes); rather than the second content being accessible on different types of devices for use within the (i.e., the same) virtual thematic environment. Ex-2005, ¶84. PO Response, 21-22.

D. QIE Module Being a Software Layer that Receives, Interprets, and Manipulates the Second Content.

Petitioner argues that the "request processes 224, 228…receive the second content from databases 200, 204; interpret the second content… (e.g., based on game needs such as aircraft performance); and manipulate the content for provision to game 112 (e.g., by gathering the data 'in the direction of movement of that aircraft appropriate for that aircraft and state')." Reply, 13. The Reply cites to the Petition, 23-25, in support of this argument; however, this argument does not appear anywhere in those pages.

Further, Petitioner's new argument is incorrect and unsupported by evidence. Once again, Petitioner conflates "second content" with "second real-time information."

Pisanich discloses that the game 112 makes requests for data through "separate air traffic 224 and weather request 228 processes" (Ex-1007, 8:8-11.) which "generate data queries for the respective traffic and weather databases 200, 204" (Ex-1007, 8:16-17).

However, the primary application provides the "second content" of claim 1. Ex-1001, claims 1, 23; Ex-2005, ¶95. Petitioner asserts that the primary application is the game 112. Petition p.20. As such, the claimed second content cannot be the real-time traffic data or weather information, as Petitioner asserts, because the challenged claims require that the second content must be provided by the primary application. The traffic and weather data disclosed by Pisanich is not provided by the primary application; it is provided by "traffic 100 and a weather 104 data provider systems" which are outside the primary application (the game 112). Ex-1007, 7:17-23; Ex-2005, ¶99.

E. Content Management Coordinated by the Thematic/Publishing Logic Module.

In the Petition, Petitioner only addressed its theory of how Pisanich disclosed "a content management application" in the world manager 312, but failed to address the element "at least one digital content library module…providing content management of information within the virtual thematic environment coordinated by

the thematic/publishing logic module." Petition, 26. Petitioner newly argues in the Reply that "the world manager 312 meets this limitation at least by coordinating the display of the 2D content (e.g., cockpit graphics) overlaying 3D content (e.g., a rendered 3D canopy display) via rendering engine 316." Reply, 17, emphasis added.

The Reply offers no citation to Pisanich in support of this argument. Petitioner instead cites to the Crane Declaration, Ex-1004, ¶160; however, like the original argument in the Petition, this paragraph of the Crane declaration simply addresses the information stored and makes no mention of how Pisanich teaches or suggests "providing content management of information within the virtual thematic environment coordinated by the thematic/publishing logic module."

Petitioner offers no explanation of why a POSITA would understand that Pisanich coordinates a display or how such supposed display discloses "at least one digital content library module…providing content management of information within the virtual thematic environment coordinated by the thematic/publishing logic module." Further, Pisanich, in view of the knowledge of the POSITA, does not teach any coordination between the objects. *See* Ex-2005, ¶80; Ex-2008, pp.372-373; PO Response, 41; Petition, 26; Ex-1004, ¶¶160-163.

F. Second User Interface Associated with the Secondary Application and enabling the user to access the secondary application through the second user interface.

The Reply, 16, cites to a portion of the '941 patent specification (Ex-1001, 15:5-22) cited by the Board in its Institution Decision (Paper 10, 23): "[t]he GUI 201 contains an engine for providing graphic hardware capabilities, . . . management of voice, music, and other graphic and voice formats, voice recognition, and translation services drivers." However, Petitioner leaves out, the Board also quoted (*Id.*) from the specification that, "Voice is also used in this sense to take information via a microphone or some type of input device into the system, which is processed through the GUI 250, passed to the QIE for processing and/or to the Voice library 255 for instruction to be passed back to the Graphics library 251 and back through the GUI 250 and drivers 261 to be outputted through a set of speakers or output device." Ex-1001, 20:13-19, emphasis added.

The specification as cited directly supports that the interfaces include an input (for example, a microphone or some type of input device into the system), not just an output.

Petitioner also points to the '941 specification (Ex-1001, 9:31-42) and asserts an interface described between the virtual thematic environment and a GPS system is an example of a "one-way" flow of "maps via the virtual thematic environment."

Reply, 16. However, Petitioner gives no reason why it believes this and no evidence that a POSITA would understand it to be true. In fact, based on the previous examples of interfaces as being two-way in the specification, a POSITA would understand that there is an input provided by the virtual thematic environment to the GPS System.

Petitioner then argues that the Pisanich audio engine accepts user input "via the aircraft manager 308." Reply, 17. In support of this assertion, Petitioner points to Pisanich 10:5-8, 15:14-17, and Fig. 3. *Id.* However, none of these citations support Petitioner's argument. First, Pisanich 10:5-8 makes no mention of the audio engine. Second, Pisanich 15:14-17 includes that "the aircraft manager 308 takes control input from the player control process 328 (movement of the aircraft, and control of the systems)," not the audio engine. Emphasis added. Finally, Fig. 3 shows no indication that the audio engine 320 is accepting any input. *See, for example,* annotated Fig. 3 (red annotations by Mr. Crane, highlighting by Patent Owner for the PO Response) PO Response, 35; and Ex-2011, 161:22-162:2.

Further, Petitioner appeared to admit in its Petition that the alleged "GUI module" of Pisanich does not disclose the challenged claim's requirement that the "second user interface" is associated with the secondary application. Petition, p.21.

Petitioner still provides no evidence that the audio system 336 is provided by the GUI module.

G. Client System and a Server System Communicating to Provide an Interactive Software Application Platform from Claims 23-26.

Petitioner asserts that a client system and server system would be compatible with Pisanich. Reply, 18. Despite Petitioners conjecture as to whether it is possible for Pisanich to use a client-server architecture, Pisanich does not in any way teach or suggest to a POSITA a client system and a server system. As explained by Dr. Medvidović, Pisanich discloses a three-tier architecture rather than a client-server architecture. Ex-2005, ¶110; PO Response, 40.

H. Petitioner failed to address elements of claim 23

Regarding limitation 23[e], Petitioner argues that the limitation is met for the reasons described with respect to 1[b] and 1[d]. Reply, 20.

However, limitations 1[b] and 1[d] do not claim "the secondary application within the primary application, "the primary application receiving and using first real-time information to provide the second content, the secondary application receiving and using second real-time information to provide the first content, the first real-time information being different from the second real-time information" as

recited in limitation 23[e]. Therefore, the discussions of limitations 1[b] and 1[d] do not fully address element 23[e].

III. PETITIONER FAILS TO DEMONSTRATE THAT THE 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, 23. Petitioner provides no evidence of this assertion. Further, this argument highlights that Petitioner is relying on assumed 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 it does not describe or otherwise disclose how the game is implemented in either the software or hardware architecture. Ex-2005, ¶118; PO Response, 44. A POSITA would not understand from a gameplay guide or user manual the underlying software or hardware architecture that allows the game to be executed or run. Ex-2005, ¶¶114-115, 118; PO Response, 44.

A. The Manual does not Teach the Claimed QIE Module.

1. Software layer

As explained above, the specification and external evidence supports Patent Owner's interpretation of "software layer."

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, 24-25. 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 behind the game. PO Response, 46. Even if the diagram showed some sort of system architecture, which it does not, the diagram does not disclose a software layer.

2. A software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment

Petitioner argues that the Sega Dreamcast consoles are different types of devices. Reply 26. 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, 2; PO Response, 47. 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, interprets,

and manipulates the second content 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. 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, ¶126. Therefore, the software on the game console cannot be a QIE Module "software layer" that receives, interprets, and manipulates second content so as to be accessible on different types of devices. *Id.* The software on the game console would only work with content on that device.

3. A software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment

Petitioner argues that the Word Select feature of the game discloses a QIE Module software layer receives, interprets, and manipulates second content so as to be accessible on different types of devices. Reply, 27-28.

Petitioner's declarant admitted that the "Word Select" is a secondary application. *See* Ex-2012, 397:22-25. A POSITA would understand from the specification that if the PSO's Word Select is considered the secondary application, and if the text in the chat box is considered second real-time information, then interpreting the text in the chat box into other languages is not equivalent to the claimed QIE Module. Ex-2005, ¶¶51,130; PO Response 50. This is because the QIE Module interprets and manipulates the second content that is provided by the primary application. The claimed "second content" is not provided by the secondary application–i.e., Word Select. A POSITA would understand that the "second content" is not the same as second real-time information. *Id*. An example from the specification of the '941 Patent is that the second content is a graphic of a virtual room in which a radio is located; an example of second real-time information is a song being played on the radio for the user. Ex-1001, 9:53-58; Ex-2005, ¶¶39,51,130. The Manual's Word Select may interpret real-time information, but Word Select is the secondary application, not the primary application and cannot, therefore, meet the limitations found in the challenged claims. Ex-2005, ¶¶130-131.

The Petitioner now argues, in contradiction to their declarant Dr. Crane as explained above, that the Manual discloses a secondary application in the form of the "Balloon Chat," "Symbol Chat," and "Simple Mail." Reply, 29.

Any "interpretation" by the "Word Select" feature is performed at the "destination," which is the recipient's game console. As such, any interpretation by the "Word Select" feature takes place separately on each console, for only that console. Ex-2005, ¶132. Ex-2011, 188:3-189:13; PO Response, 48-49. Petitioner does not show how the "Word Select" or other feature is a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment. Rather, Crane stated that the POSITA would understand that different hardware would require different software versions specifically written for each differing version of the Dreamcast console. Ex-2011, 129:1-17.

B. Client System and a Server System Communicating to Provide an Interactive Software Application Platform.

Petitioner argues that the PSO Manual describes a game that can operate in a client-server configuration. Reply, 30. The Manual describes how to play a game and does not suggest "a client system" and a "server system" communicating to provide an interactive software application platform. Ex-2005, ¶139; PO Response, 54-55. The Manual is silent as to the choice of computer architecture. *Id.*

Regarding limitation 23[f], a POSITA would understand that the Manual does not teach or suggest the QIE Module "being a software layer" as described above in

relation to challenged independent claim 1. Also, regarding limitation 23[f], a POSITA would understand that the Manual does not teach or suggest a QIE Module software layer configured to receive and interpret the "first content and second content" as described above in relation to claim 1.

C. Petitioner Fails to Show That the Manual is Authenticated or is Actually a Printed Publication.

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, 20.

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, 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."[3] 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 Sur-Reply to rebut this new evidence submitted in the Reply.[4] 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, 21-22), 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

[3] PTAB Consolidated Trial Practice Guide, November 2019, p. 74.

[4] *Id.*, p. 73.

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.

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

As in its Petition, 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, 61.

V. CONCLUSION

Therefore, Patent Owner respectfully requests that the Board find that all of the challenged claims of the '941 Patent are valid and patentable.

Date: July 8, 2024

Respectfully Submitted,
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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 5,549 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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