

Case No. IPR2023-00996

Patent No. 10,991,165

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 PRELIMINARY RESPONSE

35 U.S.C. §313, and 37 C.F.R. §42.107(a)

TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	1
II. DESCRIPTION OF '165 PATENT	2
III. DESCRIPTION OF CITED ART.....	4
A. Pisanich.....	4
B. Description of Phantasy Star Online Manual (“Manual”)	5
IV. LEVEL OF ORDINARY SKILL	5
A. CLAIM CONSTRUCTION	6
V. APPLICABLE LEGAL STANDARDS	9
VI. ARGUMENT	11
A. Institution of this Petition Should Be Denied Because Petitioner Fails to Show the Challenged Claims are Unpatentable Over Any of Petitioner’s Prior Art Combinations	11
B. Ground 1	12
1. Ground 1 of the Petition Fails to Address Many Elements of the Challenged Independent Claims at All	12
2. Ground 1 of the Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests each and every element of the challenged claims	17
a. Limitation 1[a]: Pisanich does not disclose or teach “providing a graphics user interface (GUI) module for use in the client system”	18
b. Limitation 1[b]: Pisanich does not disclose or teach “providing a quantum imaging environment (QIE) module in one of the client or the server system”	19

c. Limitation 1[c]: Pisanich does not disclose or teach “providing a thematic/publishing logic module in one of the client or the server system” ...	23
d. Limitation 1[f]: Pisanich does not disclose or teach “sending a request for first real-time information via the QIE module to the world wide web”	25
e. Limitation 1[g]: Pisanich does not disclose or teach “obtaining the first real-time information via the world wide web”	28
f. Limitation 1[h]: Pisanich does not disclose or teach “downloading the first real-time information from the world wide web into the primary application”	29
g. Limitation 1[j]: Pisanich does not disclose or teach “providing at least one secondary application within the primary application at the client system”	30
h. Limitation 1[k]: Pisanich does not disclose or teach “sending a request for second real-time information via the QIE module”	33
i. Limitation 1[n]: Pisanich does not disclose or teach “enabling a user to access the at least one secondary application through the first user interface;”	34
j. All Remaining Claims That Rely on Pisanich Fail for the Same Reasons	35
C. Ground 2	36
1. The Petition Must Be Denied for Ground 2 Because Petitioner Fails to Show That the Manual Reference is Authenticated or is Actually Prior Art to the ‘165 Patent	36
2. For Ground 2, the Petition Fails to Address Many Elements of the Challenged Independent Claims	42
3. Ground 2 of the Petition Fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests elements of the Challenged Independent Claims	44

a. Limitation 1[a]: The Manual does not disclose or teach “providing a graphics user interface (GUI) module for use in the client system”	45
b. Limitation 1[b]: The Manual does not disclose or teach “providing a quantum imaging environment (QIE) module in one of the client or the server system”	46
c. Limitation 1[f]: The Manual does not disclose or teach “sending a request for first real-time information via the QIE module to the world wide web”	50
d. Limitation 1[h]: The Manual does not disclose or teach “downloading the first real-time information from the world wide web into the primary application;”	52
e. All Remaining Claims That Rely on the Manual Fail for the Same Reasons	53
VII. The Board Should Exercise Discretion Under 35 U.S.C. §314 to Deny Institution	54
A. The Board should exercise its discretion to deny institution of this Petition.....	54
1. Factor 1 weighs against institution, as no court has granted a stay and no evidence exists that a stay may be granted.	56
2. Factor 2 weighs against institution, as trial in the district court is scheduled to begin months before the final written decision deadline.	57
3. Factor 3 weighs against institution, as parties to the district court litigation have already invested significant time and resources.	60
4. Factors 4-6 weigh against institution, as there is significant overlap between this IPR and district court proceedings, the parties involved are the same, and the asserted grounds fail.....	61
VIII. CONCLUSION	63

TABLE OF AUTHORITIES

	Page(s)
Federal Cases	
<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020).....	<i>passim</i>
<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper 15 (PTAB May 13, 2020)	57
<i>Apple Inc. v. Maxell, Ltd.</i> , IPR2020-00203, Paper 12 (PTAB July 6, 2020).....	58
<i>Arendi S.A.R.L. v. Apple, Inc.</i> , 832 F.3d 1355 (Fed. Cir. 2016)	11, 27, 51
<i>Barbaro Technologies, LLC v. Niantic, Inc.</i> , No. 3:18-cv-02955 (N.D. Cal.).....	<i>passim</i>
<i>Bentley Motors Limited and Bentley Motors, Inc. v Jaguar Land Rover Limited</i> , IPR2019-01539, Paper 16 (PTAB October 2, 2020).....	57
<i>Cisco Systems, Inc. v. C-Cation Techs.</i> , IPR2014-00454, Paper 12 (PTAB, Aug. 29, 2014).....	11
<i>Cisco Systems, Inc. v. Monarch Networking Solutions, LLC</i> , IPR2020-01227, Paper 11 (PTAB Mar. 4, 2021)	59
<i>Cisco Systems, Inc. v. Oyster Optics</i> , LLC, IPR2021-00319, Paper 9 (PTAB Jun. 8, 2021)	58
<i>Cisco Systems, Inc. v. Ramot At Tel Aviv University LTD.</i> , IPR2020-00123, Paper 14 (PTAB May 15, 2020)	58
<i>eClinicalWorks, LLC v. Decapolis LLC</i> , IPR2022-00229, Paper 10 (April 13, 2022) (“We will not attempt to predict, based on the facts in allegedly similar prior situations, how the Texas District Court would rule should a stay be requested in the WDTX Cases.”)	57

<i>Elec. Frontier Foundation v. Personal Audio, LLC</i> , IPR2014-00070, Paper 21 (PTAB Apr. 18, 2014)	39
<i>Gen. Plastic Indus. Co., Ltd. v. Canon Kabushiki Kaisha</i> , IPR2016-01357, Paper 19 (PTAB Sept. 6, 2017).....	56
<i>Google Inc. and Twitter, Inc. v. EveryMD.COM LLC</i> , IPR2014-00347, Paper 9 (PTAB May 22, 2014)	10, 17
<i>Hulu, LLC v. Sound View Innovations, LLC</i> , IPR2018-01039, Paper 29 (PTAB Dec. 20, 2019)	40
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	10
<i>Lantz Medical, Inc. v. Bonutti Research, Inc.</i> , IPR2015-00995, Paper 11 (PTAB Oct. 21, 2015).....	41
<i>LG Electronics, Inc. v. Advanced Micro Devices, Inc.</i> , Case IPR2015-00329, Paper 13	22
<i>Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.</i> , CBM2012-00003, Paper 7 (PTAB Oct. 25, 2012)	10
<i>NHK Spring Co., Ltd., v. Intri-Plex Techs., Inc.</i> , IPR2018-00752, Paper 8 (PTAB Sep. 12, 2018).....	54, 55, 56, 58
<i>Quantum Imaging LLC v. Sony Group Corporation, et al.</i> , Case No. 6:22-cv-00573-ADA-DTG (W.D. Texas, June 3, 2022)	54
<i>Sand Revolution II, LLC v. Continental Intermodal Grp. – Trucking, LLC</i> , IPR2019-01393, Paper 24.....	62
<i>ServiceNow, Inc. v. Hewlett–Packard Co.</i> , Case IPR2015–00716, Paper 13	38
<i>Verizon Business Network Services LLC, v. Huawei Technologies Co. LTD.</i> , IPR2020-01278, Paper 12 (PTAB Jan. 26, 2021)	62

Case No. IPR2023-00996

Patent 10,991,165

Xerox Corp. v. Bytemark, Inc.,
IPR2022-00624, Paper 9.....10

Xerox,
IPR2022-00624 27, 49, 51

Federal Statutes

35 U.S.C. § 102 39, 41

35 U.S.C. § 103 1

35 U.S.C. § 312(a)(3).....1, 9, 12, 42

35 U.S.C. § 314.....54

35 U.S.C. § 315(e)(2).....62

35 U.S.C. § 316(e) 9

35 U.S.C. § 325(d) 55

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

I. INTRODUCTION

Pursuant to 37 C.F.R. §42.107, Patent Owner, Quantum Imaging, LLC (“Patent Owner”), submits this Preliminary Response (“POPR”) to Sony Interactive Entertainment LLC’s (“Petitioner”) June 6, 2023 Petition for *Inter Partes* Review (“IPR”) of U.S. Patent No. 10,991,165 (the “’165 Patent”) challenging claims 1-3, 5-8, 10-12, and 18 as allegedly obvious under 35 U.S.C. §103 over PCT Patent Publication No. WO 02/062436 (“Pisanich”) in view of the knowledge of a person of ordinary skill in the art (“POSITA”) (Ground 1), and allegedly over Phantasy Star Online Manual (“Manual”) in view of the knowledge of a POSITA (Ground 2).

The Petition’s obviousness contentions are legally deficient because the Petition fails to show that the references, either alone or in view of the knowledge of a POSITA, make obvious the combination of every element as arranged within any of the challenged claims. Since the Petition fails to demonstrate a reasonable likelihood that any challenged claim is unpatentable, the Petition should be denied. 35 U.S.C. §314(a); 37 C.F.R. §42.108(c).

Further, the Petition fails to adequately state a claim for relief since the Petition provides insufficient detail, explanation, and support for its contentions as required by 35 U.S.C. §312(a)(3) and 37 C.F.R. §42.104(b)(4). Additionally, the Board should afford little or no weight to the testimony of Mr. David Crane as his supporting Declaration (“Crane Declaration”; Ex. 1004) (i) provides solely

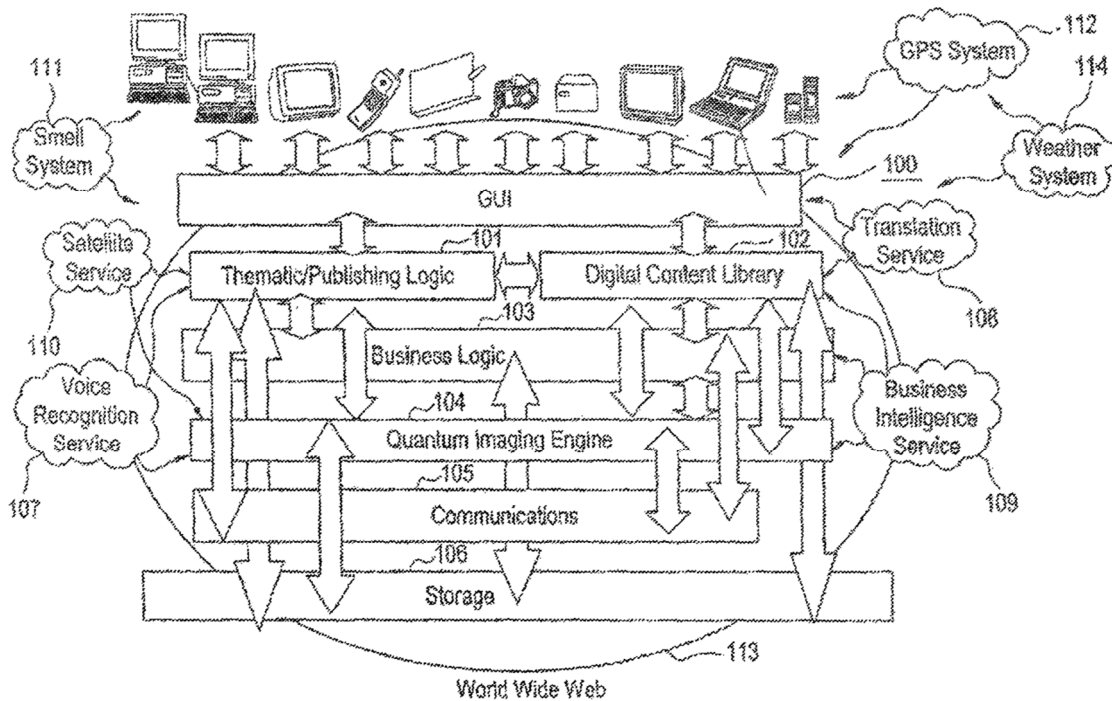
conclusory assertions without any underlying factual support, (ii) attempts to buttress the prior art by providing, without support, limitations missing therefrom, and, (iii) merely repeats verbatim the language of the Petition.

II. DESCRIPTION OF '165 PATENT

The '165 Patent generally relates to “an interactive software application platform which can be used in entertainment, business, publishing, and other applications to provide a virtual and real world experience to the user by integrating audio, video, two-dimensional (2D), and three dimensional (3D) technology, and other applications or services.” Ex. 1001, 1:52-57. The technology was created to enable a user to have a virtual real-world experience by developing ways to “integrate audio, video, 2D and 3D technology to maximize the real world experience for the user.” Ex. 1001, 1:46-48.

The application platform disclosed in the '165 Patent is implemented in software deployed at a client, across a client-server architecture, or throughout a distributed system. Ex. 1001, 11:50-55. As disclosed in the '165 Patent, the interactive software application platform has a logical software architecture having logical “software layers” and service area modules that work together to provide an end user with a real world environment, one embodiment of which is illustrated in Figure 1:

FIG. 1



Ex. 1001, Figure 1; 11:50–12:25. The software layers illustrated in Figure 1 include (1) graphical user interface (GUI); (2) Thematic/Publishing Logic and Digital Content Library; (3) Business Logic; (4) a thematic or zone application builder and interpreter (i.e., a Quantum Imaging Engine); (5) Communications; and (6) Data Storage. Ex. 1001, Figure 1; 11:62–67.

The logical software architecture disclosed in the '165 Patent provides a virtual thematic environment that allows, among other things, “the user to move through the 2D and/or 3D and/or integrated graphical representation of the actual real world environment and interact with it.” Ex. 1001, 7:40–43. Additionally, the software architecture provides that other applications may be integrated into the

virtual thematic environment, wherein those applications have their own separate user interfaces and are programmatically independent. Ex. 1001, 9:1–9:12; 10:8–14

III. DESCRIPTION OF CITED ART

A. Pisanich

Pisanich discloses integrating “real world information” into “a virtual environment provided for a game.” Ex. 1007, p. 2, ll. 17–18. Pisanich discloses a game relating to a competitive outdoor gaming activity, which integrates information upon request, such as data from remotely located conventional data providers that “gather and encode observations about the world (weather, airplane traffic, etc.).” *Id.*, ll. 17–18. For example, the flight simulation game of Pisanich may integrate information such as what Pisanich refers to as “‘real time’ data from traffic 100 and a weather 104 data provider systems.” *Id.*, ll. 13–15. The data from the data provider systems 100, 104 are gathered and accessed by a game data server 108, which transfers the data to a database storage area for later retrieval. *Id.*, ll. 20–21. More particularly, game data server 108 maintains its own databases of information concerning “observations about the world.” Ex. 1007, p. 7, ll. 17–19. For example, game data server 108 maintains its own air traffic 200 and weather 204 databases using data requested from traffic 100 and weather 104 data provider systems. *Id.*

The databases of game data server 108 are populated by periodic data requests from data provider systems 100, 104 the frequency of those requests and the time of

those requests “are chosen and optimized to match the update times and frequency of the data providers 100, 104.” Ex. 1007, p. 8, ll. 5–7. In short, Pisanich discloses integrating past or simulated “real world information” into a gaming application.

B. Description of Phantasy Star Online Manual (“Manual”)

The Manual purports to be an “instruction manual” for the video game *Phantasy Star Online*, published by the Sega Corporation for their Dreamcast gaming console. Ex. 1008, p. 2. The Manual describes the operational game-play of the *Phantasy Star Online* game, including the basic controls, character creation and modification, and other aspects of game-play. The Manual explains that players can play *Phantasy Star Online* either online or offline. Online, players are brought to a virtual lobby where they can organize teams with others to play the game cooperatively over the internet. *See id.*, 8–10. As an instruction manual for end-user video game players, the Manual offers little, if any, technical information regarding the specification of the game itself or its execution by the console. The Manual does not delineate which functions are provided by software or hardware—it is silent as to this information.

IV. LEVEL OF ORDINARY SKILL

For purposes of this Preliminary Response, Patent Owner applies Petitioner’s characterization of a POSITA.

A. CLAIM CONSTRUCTION

Petitioner acknowledges that the District Court of the Northern District of California, in *Barbaro Technologies, LLC v. Niantic, Inc.*, No. 3:18-cv-02955 (N.D. Cal.) (“*Niantic* court”) has previously construed several claim terms that now appear in the claims of Grounds 1 and 2, and issued a claim construction order. *See* Pet. 10–11; Ex. 1009. The *Niantic* court construed several claim terms of U.S. Patent Nos. 7,373,377 and 8,228,325, which belong to the same patent family and share the same specification and figures with the ’165 Patent.¹ Petitioner provides the previous construction of three claim terms that also appear in the challenged claims of the ’165 Patent: (1) “*graphics user interface (GUI) module*”; (2) “*quantum imaging environment (QIE) module*”; and (3) “*virtual thematic environment.*” Pet. 11. However, in its order, the *Niantic* court also construed the following terms that also appear in the Challenge Claims, but were omitted by Petitioner:

’165 Claim Term	Prior Construction
secondary application within the primary application	“secondary computer program within the primary computer program”
world wide web	“an aspect of the internet using web-based protocols such as HTTP and HTTPS”

¹ The ’165 Patent is a child of Patent 7,373,377, by divisionals and continuations, addressed in the *Niantic* court.

See Ex. 1009, 4–14.

Further, Petitioner explicitly refuses to adopt the *Niantic* constructions it does list. *See* Pet. 11 (“Without consenting to the court’s construction of claim terms listed above...). Petitioner’s qualified statement concerning the *Niantic* court’s claim construction of the terms it does address is insufficient to show that Petitioner agrees with, proposes, or adopts the construction required by 37 C.F.R. §42.104(b)(3). Petitioner fails to construe or address the other claim terms and fails to commit to any construction, instead purporting to reserve the right to advocate different constructions should this Petition be granted. *Id.* at n3. Thus, Petitioner does not satisfy its obligation to set forth “[h]ow the challenged claim is to be construed” in the Petition.

Notwithstanding the previously construed claim terms (Ex. 1010), which Petitioner has made of record in this proceeding but fails to consent to, Petitioner fails to explicitly set forth **any** constructions for the claim elements in the challenged claims. Instead, Petitioner simply proposes that “no express constructions of the claims are necessary to assess whether the prior art reads on the Challenged Claims.” Pet. 9. Further, Petitioner fails to make any statement proposing that the claim terms be construed according to their plain and ordinary meaning. It is entirely unreasonable to believe that there is not a **single** claim term requiring construction—

even its plain and ordinary meaning— to resolve this Petition, particularly when the *Niantic* court found claim construction was required, and the court in the Related Matter (Pet. 2), will do so in an order following the *Markman* hearing in September 2023 (Ex. 1010 at 2), prior to an institution decision in this IPR.

Therefore, the Petition fails to explain how the challenged claims are to be construed in view of known constructions as required by 37 C.F.R. §42.104(b)(3). Worse, the Petition does not show how, as so construed, the challenged claims are unpatentable under the Petition's stated statutory grounds. Despite the requirements of §§42.104(b)(3) and (b)(4), Petitioner fails to provide Patent Owner sufficient notice of how Petitioner construes the challenged claims and how Petitioner applies the asserted prior art in light of Petitioner's constructions. Petitioner's failure to provide constructions in this Petition for terms that are consistent with or are distinguishable over established constructions, or consistent with or distinguishable over the constructions offered by Petitioner in the pending district court action, risks creating inconsistent results in the determination of the rights afforded by the claims of the '165 Patent.

For purposes of this POPR, Patent Owner adopts the district court construction for the above terms. However, in the event the Board institutes review of this Petition, Patent Owner explicitly reserves the right to provide proposed constructions of claim limitations.

V. APPLICABLE LEGAL STANDARDS

The Board may only institute an *inter partes* review when a petitioner proves that there is a “reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition.” 35 U.S.C. §314(a). Petitioner bears “the burden of proving a proposition of unpatentability by a preponderance of the evidence.” 35 U.S.C. §316(e). Inherent in this burden are the requirements that Petitioner set forth “[h]ow the challenged claim is to be construed” and then demonstrate “[h]ow *the construed claim* is unpatentable.” 37 C.F.R. §§42.104(b)(3) and (b)(4) (emphasis added).

Next, a petition must be rejected unless the petition specifies, with particularity, each challenged claim, grounds for challenging such claims, and evidence supporting those challenges. 35 U.S.C. §312(a)(3). Specifically, a petition must explain “[h]ow the construed claim is unpatentable” and “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. §42.104(b)(4). “The Board may exclude or give no weight to the evidence where a party has failed to state its relevance or to identify specific portions of the evidence that support the challenge.” 37 C.F.R. §42.104(b)(5).

A showing of obviousness requires: (a) the prior art teach or suggest each limitation of the claims; (b) there exists an apparent reason to combine and/or modify the prior art as proposed; and (c) a person of ordinary skill would have a reasonable

expectation of success that the proposed combination and/or modification of the prior art would operate for its intended purpose. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

A petition based on obviousness also must “meaningfully” address the first two Graham factors: (i) the scope and content of the prior art, and (ii) any differences between the claimed subject matter and the prior art. *See, e.g., Google Inc. and Twitter, Inc. v. EveryMD.COM LLC*, IPR2014-00347, Paper 9 at 23–25 (PTAB May 22, 2014). Specifically, the petitioner must sufficiently specify where each element of each challenged claim is found in the prior art (including explaining the significance of the quotations and citations). *Id.* It is not the Board’s burden to “sift through the information” provided with a petition to find the differences between a challenged claim and the prior art. *Id.*; *see also, Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.*, CBM2012-00003, Paper 7 at 2-3 (PTAB Oct. 25, 2012) (precedential).

Further, declarations with conclusory statements are entitled to little or no weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (precedential) (citing 37 C.F.R. §42.65(a)). The Xerox opinion explains (citing *KSR*, 550 U.S. at 421 (2007)), on page 16: “This is particularly problematic in cases where, like here, expert testimony is offered not simply to provide a motivation to combine prior-art teachings, but rather to supply a limitation missing from the prior art.” *See also*

Arendi S.A.R.L. v. Apple, Inc., 832 F.3d 1355, 1361–62 (Fed. Cir. 2016) (holding that reliance on common sense in an obviousness analysis is “typically invoked to provide a known motivation to combine, not to supply a missing claim limitation.”).

Finally, “[a]rguments must not be incorporated by reference from one document into another document.” 37 C.F.R. §42.6(a)(3). The “practice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference.” *Cisco Systems, Inc. v. C-Cation Techs.*, IPR2014-00454, Paper 12 at 9 (PTAB, Aug. 29, 2014)(designated informative).

VI. ARGUMENT

A. Institution of this Petition Should Be Denied Because Petitioner Fails to Show the Challenged Claims are Unpatentable Over Any of Petitioner’s Prior Art Combinations

Petitioner has failed to meet its burden because the Petition does not show the prior art teaches or suggests each limitation of independent claims 1 and 23. As detailed below, Petitioner fails to address certain limitations of the challenged claims at all. Where Petitioner actually addresses some of the limitations of the challenged claims, Petitioner offers nothing more than conclusory statements of unpatentability and superficial, factually deficient arguments, often supported only by *verbatim* restatement in the Crane Declaration.

Further, Petitioner's obviousness analysis is superficial, legally flawed, and unsupported by the claims as construed; the specification; and the prosecution history. The Petition is littered with conclusory statements of unpatentability that merely incorporate by reference large passages from the Crane Declaration and/or rests on the alleged common knowledge of a POSITA as a gap-filler to supply missing claim elements. Importantly, the Petition also fails to determine the differences between the prior art and the claimed invention, or provide any rationale regarding a motivation to combine certain teachings. For any one of the above-reasons, and certainly for them in aggregate, the Petition should be denied institution.

B. Ground 1

1. Ground 1 of the Petition Fails to Address Many Elements of the Challenged Independent Claims at All

The Petition fails to specify where each element of claim 1 and 18 is found in the prior art. Petitioner fails to provide sufficient details as to how the claims are obvious in relation to Pisanich, as required by 35 U.S.C. §312(a)(3) and 37 C.F.R. §42.104(b)(4).

Specifically, Petitioner fails to address the underlined language of the following limitations/elements of claim 1 as arranged in the claim²:

² Patent Owner adopts the same shorthand naming convention as Petitioner.

- Within its limitation 1[a] analysis (Pet. 16-19) regarding “providing a graphics user interface (GUI) module for use in the client system,” and despite its previous statement that no construction is necessary, Petitioner uses the Niantic Court’s construction that the “‘graphics user interface (GUI) module’ is “software that provides a graphical display and processes user inputs to allow a user to interact with the graphical display.” The Petition places a box around the Rendering Engine 316, the Audio Engine 320, the Force Feedback Engine 324, and the Player Control / Game State Manager Engine 328 of FIG. 1 in support of its theory that these elements form the GUI module. However, the Petition does not explain how this constitutes “software” as required in the Court’s claim construction. Further, the Petition fails to address the claim element “for use in the client system” at all.
- Within its limitation 1[b] analysis (Pet. 19-20) regarding “providing a quantum imaging environment (QIE) module in one of the client or the server system,” Petitioner uses the Niantic Court’s construction that the QIE module 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 Petition never explains how Pisanich teaches “a software layer which receives and interprets content ...” In its analysis, the Petitioner alleges the “game data server 108 receives, interprets and manipulates content”. However, the Petitioner fails to explain how the game data server 108 meets the claim element of the “QIE module” or the “QIE module being a software layer.”

- Within its limitation 1[c] analysis regarding (Pet. 21) “providing a thematic/publishing logic module in one of the client or the server system,” Petitioner fails to specifically address the claim element “thematic/publishing logic module” at all.
- On pages 21-22 of the Petition, Petitioner attempts to address limitation 1[d] regarding “providing a primary application in the client system,” stating, “Pisanich discloses a primary application, e.g., an electronic game, which is theme-based and provides a theme-based virtual world environment. *See* Ex-1007, Claims 1-5, 12-21. Pisanich further discloses that the described game is to be played on a computer system, i.e., client system. Ex-1004, ¶¶136-37.” However, Petitioner fails to address the claim element “in the client system.” Rather, Petitioner simply alleges that “the described

game is to be played on a computer system, i.e., client system.” The Petition fails to explain how this meets the claim element “in the client system.”

- Within its limitation 1[e] analysis (Pet. 22) regarding “providing a first user interface that is associated with the primary application,” Petitioner addresses “providing a first user interface” but fails to address the claim element “associated with the primary application.”
- Petitioner attempts to address limitation 1[f] regarding “sending a request for first real-time information via the QIE module to the world wide web” (Pet. 22–24), but fails to address the claim element “via the QIE module.” Further, the term “QIE module” was construed by the *Niantic* court, as a “software layer ...” as explained above. Petitioner fails to explain where the Pisanich reference teaches the QIE module being a software layer.
- Petitioner attempts to address limitation 1[g] (Pet. 24) regarding “obtaining the first real-time information via the world wide web,” but fails to address the term “world wide web”. Rather, the Petitioner alleges Pisanich further discloses obtaining weather information for a specific location from the Internet, without any explanation regarding the “world wide web”.

- Petitioner fails to address limitation 1[i] regarding “providing access to the first real-time information within the virtual thematic environment via the first user interface” in its entirety (Pet. 24). Instead, Petitioner simply refers back to its deficient analysis of claim limitations 1[e] and 1[f] (Pet. 22).
- Petitioner attempts to address limitation 1[j] regarding “providing at least one secondary application within the primary application at the client system” (Pet. 25–26). Within its analysis, Petitioner fails to address the claim element “at the client system.”
- Petitioner attempts to address limitation 1[k] regarding “sending a request for second real-time information via the QIE module” (Pet. 26). However, within its analysis, Petitioner fails to address the claim element “via the QIE module.”
- Petitioner fails to address limitation 1[l] regarding “obtaining the second real-time information via the world wide web” in its entirety (Pet. 27). Instead, Petitioner simply refers back to its deficient analysis of claim limitations 1[f] and 1[k] (Pet. 25–26).
- Petitioner fails to address limitation 1[m] regarding “downloading the second real-time information into the secondary application” in

its entirety (Pet. 27). Instead, Petitioner simply refers back to its deficient analysis of claim limitations 1[j] and 1[k] (Pet. 25–26).

- Petitioner attempts to address limitation 1[o] (Pet. 27), but fails to address the claim element of “enabling the user to control the at least one secondary application through a second user interface.”

For claim 18, Petitioner on pages 35-37 simply refers to its deficient analysis of claim 1, again missing the elements corresponding to the elements of claim 1 addressed above.

For the underlined language set forth above, Petitioner offers neither reasoned argument nor reference to any language in Pisanich that teaches or even suggests this language. The Crane Declaration makes no attempt to identify where these limitations are in Pisanich and is equally deficient. Because Petitioner has not specified where each element of each claim of Ground 1 is found in the prior art, institution should be denied. *See e.g., Google Inc., IPR2014-00347*, Paper 9 at 23–25; and 37 C.F.R. §42.104(b)(4).

2. Ground 1 of the Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests each and every element of the challenged claims

The Petition fails to show that Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests every element of independent claims 1 and 18. The Petitioner fails to (i) ascertain the differences between the claimed invention and

Pisanich, (ii) articulate any rationale as to why the claimed invention would have been obvious to a POSITA at the relevant time, and (iii) explain why a POSITA would be motivated to combine a POSITA's knowledge with Pisanich.

Claim 1

As noted above, there are many elements of claim 1 not addressed by the Petition. Further, Petitioner does not provide any evidence or rationale to support its obviousness allegations for the following elements and limitations of claim 1.

- a. Limitation 1[a]: Pisanich does not disclose or teach “providing a graphics user interface (GUI) module for use in the client system”.**

The Petition fails to show that Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[a], at least because the Petitioner's arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner correctly acknowledges that the *Niantic* court previously construed the claim term “graphics user interface (GUI) module” to mean “software that provides a graphical display and processes user input to allow a user to interact with the graphical display.” Pet. 16; Ex. 1009, at 5. However, Petitioner fails to show how the limitation of claim 1[a] is unpatentable as construed, or under any other reasonable interpretation of the claim language.

According to Petitioner, the above limitation is somehow disclosed in Pisanich by a combination of the following: (1) traffic manager 300; (2) rendering engine 316; (3) force feedback engine 324; (4) player control/game state manager engine 328; (5) joystick 340; and (6) keyboard 344. *See* Pet. 16. Petitioner claims the above combination discloses “provid[ing] a graphical display and processes user inputs to allow a user to interact with the graphical display.” *Id.*, 17. Even if that were true, Petitioner fails to show that such a combination discloses the “GUI module,” as construed—namely, “**software** that provides a graphical display and processes user input to allow a user to interact with the graphical display.” Emphasis added. Petitioner offers no reasoned argument or supporting evidence to show that its asserted combination of components is “software.” Further, even if Pisanich discloses a “GUI module,” Petitioner fails to show that such “GUI module” is provided for use in the “client system,” as required by claim 1[a].

b. Limitation 1[b]: Pisanich does not disclose or teach “providing a quantum imaging environment (QIE) module in one of the client or the server system”.

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[b], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner correctly acknowledges the *Niantic* court construed the claim term “quantum imaging environment (QIE) module” to mean “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.” Pet. 19; Ex. 1009, at 7. However, Petitioner fails to show how claim 1[b] is unpatentable as construed, or under any other reasonable interpretation of the claim language.

Petitioner claims Pisanich discloses this limitation, and claims that “a POSITA would have understood the QIE’s function is to interpret content so it is manipulated and accessed by any device.” Pet. 19. In support, Petitioner cites to the Crane Declaration, the pertinent part of which simply recites the same statement verbatim without any supporting evidence or technical reasoning. *See* Ex. 1004, ¶127. However, with regards to the “QIE module,” Mr. Crane opined: “[t]he QIE is an integral part of the alleged invention of the ’165 patent. Despite the importance of this module or system to the claimed operation of the invention, neither the specification nor the claims inform a POSITA the meaning of the term.” *Id.*, ¶56. The Petitioner does not explain how it could assert Pisanich discloses this limitation based on a POSITA’s understanding when their expert explicitly opines that a POSITA would not have been able to appreciate the meaning of the term “QIE module.” As such, this assertion by Petitioner is unsupported by any meaningful

expert testimony or other factual evidence, rendering it a purely conclusory statement. Nevertheless, Petitioner claims Pisanich discloses this limitation, but does not explain which element of Pisanich Petitioner claims to disclose the “QIE module.”

First, Petitioner claims “game data server 108 receives, interprets, and manipulates content, i.e., real world information, in real time so as to be accessible on different types of devices for use within the game.” Pet. 19. However, Petitioner fails to show that “game data server 108” is a “software layer,” as required by claim 1[b] under the *Niantic* construction.

Even if Petitioner could show that “game data server 108” is a “software layer”—which it cannot—Petitioner still fails to show that content is “accessible on different types of devices for use within the virtual thematic environment,” as required by claim 1[b] under the *Niantic* construction. Petitioner offers only that “[a] POSITA would have understood that players 120, 124, etc. may access such content on different types of devices for use with the game,” citing only to ¶131 of the Crane Declaration (attempting to impermissibly incorporate argument from Crane that does not appear in the Petition). Pet. 20. The pertinent part of the Crane Declaration provides:

Each type of game (“Game 112” and “Other Games 116”)
relied on the “Game Data Server 108” to provide a range

of information specific to that game's needs. Thus, Pisanich taught that Game Data Server 108 could be connected to multiple devices playing different games, and said server interpreted and manipulated content to be accessed by said multiple devices. A POSITA would understand that, for example, the players 120, 124 etc. may access such content on different types of devices for use with the game. [Emphasis Added]

Ex. 1004, ¶131. That different games, i.e., game 112 and other games 116, rely on game data server 108 to provide information specific to each game's needs shows, if anything, that content may be accessible on different *games*, but does not show that content is accessible “on different types of *devices* for use within the virtual thematic environment,” as required by claim 1[b] under the *Niantic* construction. Further, even if Pisanich discloses that content may be accessible on *different games*, Pisanich does not disclose permitting access to said content within the **same** “virtual thematic environment,” as also required by claim 1[b] under any reasonable construction.

Additionally, the Crane Declaration attempts to reference additional sources, without providing any authentication of the sources or evidence that such sources were publicly accessible prior art.

Additionally, Petitioner claims “Pisanich further discloses that at least the rendering engine 316 acted as a QIE module in the client system. *i.e.*, one of the client or the server system.” Pet. 20. However, Petitioner points only Pisanich’s teaching that “[t]he rendering engine 316 displays to the user the internal (cockpit) and external (terrain, weather, other aircraft) state of the game via the display 332 using conventional technology.” *Id.*; Ex. 1007, 16:10–11. That Pisanich teaches displaying the “state of the game” to a user does not disclose “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,” as required by claim 1[b] under the *Niantic* construction.

c. Limitation 1[c]: Pisanich does not disclose or teach “providing a thematic/publishing logic module in one of the client or the server system”

The Petition fails to show that Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[c], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner claims Pisanich discloses this limitation: “Pisanich discloses a game system that controls aircraft operation based on a ‘Rules-Based Logic Module’ containing the claimed virtual thematic environment rules to coordinate actions to

be taken.” Pet. 21. Petitioner offers no argument or evidentiary support for the claim that the “Rules-Based Logic Module” discloses a “thematic/publishing logic module.” That the “Rules-Based Logic Module” contains “the claimed virtual thematic environment rules to coordinate actions to be taken” is entirely irrelevant considering that the ’165 Patent does *not* claim “virtual thematic environment rules to coordinate actions to be taken.” Petitioner also claims that “Pisanich further discloses that an ‘application module generates simulated real world constructs responsive to the real world information’ into the virtual world environment.” *Id.* However, Petitioner offers no argument or evidentiary support to show how or why the “application module” of Pisanich discloses a “thematic/publishing logic module.”

Further, even if Petitioner were able to show that either the “Rules-Based Logic Module” or the “application module” disclosed a “thematic/publishing logic module,” Petitioner still fails to show that said module is “in one of the client or the server system.” Instead, Petitioner simply states “a POSITA would have understood that a computer game that received information from an external server included a client (the computer system) and a server.” *Id.*, 21. This assertion by Petitioner is unsupported by expert testimony or other factual evidence, rendering it a purely conclusory statement. A computer game simply “includ[ing] a client (the computer system) and a server” does not show a “thematic/publishing logic module *in* one of

the client or the server system,” as required by claim 1[c] under any reasonable construction.

d. Limitation 1[f]: Pisanich does not disclose or teach “sending a request for first real-time information via the QIE module to the world wide web”

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[f], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

As discussed above, the *Niantic* court previously construed the claim term “world wide web” to mean “an aspect of the internet using web-based protocols such as HTTP and HTTPS.” Ex. 1009, at 13. Although Petitioner attempts to couch its construction of this limitation in such terms (as will be discussed below), Petitioner fails to expressly acknowledge the previous construction of the claim term “world wide web.” *See* Pet. 22–24. In any event, Petitioner fails to put forward a construction or show how claim 1[b] is unpatentable as construed, or under any other reasonable interpretation of the claim language.

Petitioner claims that Pisanich discloses this limitation: “Pisanich discloses that game data server 108 receives, interprets, and manipulates real world

information in real time so as to be accessible on different types of devices that may send requests for its use within the game.” Pet. 22.

First, as discussed above, Petitioner fails to show that Pisanich discloses a “QIE module,” at least because Petitioner does not show that “game data server 108” is a “software layer,” as required by independent claim 1 under the *Niantic* construction.

Next, Petitioner fails to show that Pisanich discloses the remaining elements of limitation 1[f], including “sending a request” and doing so “to the world wide web.” Petitioner claims that “[a] POSITA would have understood that techniques involving the transmission/sending a request and receipt of real time data over a network could be applied to the transmission and receipt of data over the Internet and to and from the World Wide Web using web-based protocols such as HTTP and HTTPS.” Pet. 22–23. Petitioner’s aforementioned assertion, however, is not supported by a citation to *any* evidence whatsoever. Likewise, Petitioner offers, **without any support**, that “a POSITA would have understood that to access information over the Internet required sending a request as claimed.” *Id.*, 23. Further, Petitioner claims that “[a] POSITA would have understood that when communicating between a game and a server (or other remote players), there is a communication channel that sends requests and receives responses.” *Id.* In support of that assertion, Petitioner cites to ¶141 of the Crane Declaration, which simply

recites the same statement verbatim without any additional support or reference. *See* Ex. 1004, ¶141. As discussed before, this is an improper attempt to use a POSITA's common knowledge to supply a wholly missing claim limitation without evidentiary support. *See Arendi*, 832 F.3d at 1362–63; *see also Xerox*, IPR2022-00624 at 16.

Finally, Petitioner claims “Pisanich further discloses that at least the rendering engine 316 acted as a QIE module in the client system, *i.e.*, one of the client or the server system.” Pet. 24. As discussed above, Petitioner fails to show that “rendering engine 316” of Pisanich discloses a “QIE module.” However, even if “rendering engine 316” discloses a “QIE module,” Petitioner still fails to show that request for first real-time information is being sent via “rendering engine 316” to the world wide web, as required by claim 1[f]. More particularly, Petitioner claims that the “weather information” of Pisanich discloses “first real-time information,” and cites to a portion of Pisanich, which provides, in pertinent part: “The weather manager 304 processes requests for weather state (temperature winds, precipitation, visibility) over a general area from the render engine 316 on a continual basis.” Pet. 23 (quoting Ex. 1007, 11:11–18). As such, Pisanich makes clear that if “rendering engine 316” is sending requests for first real-time information (*i.e.*, “weather information”) at all, it is not to the “world wide web,” but rather to the “weather manager 304.” Accordingly, Petitioner does not and cannot show that Pisanich discloses the limitations of claim 1[f] under any reasonable construction.

e. Limitation 1[g]: Pisanich does not disclose or teach “obtaining the first real-time information via the world wide web”

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[g], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements.

Petitioner claims Pisanich teaches this limitation and refers back to its arguments concerning 1[f]. *See* Pet. 24. Accordingly, Patent Owner incorporates its remarks concerning Petitioner’s analysis of claim 1[f], at least with regards to the elements that correspond to claim 1[g]. However, claim 1[f] requires “sending” a request for first real-time information, whereas claim 1[g] requires “obtaining” the first real-time information.

Petitioner additionally claims, “Pisanich further discloses obtaining weather information for a specific location from the Internet, which a POSITA would have understood including obtaining the information.” In support, Petitioner cites to ¶¶143–44 of the Crane Declaration, which simply recites the same statement verbatim without any additional support or reference. *See* Pet. 24; *see also* Ex. 1004, ¶¶143–44. This conclusory statement is insufficient for proving that a POSITA would have had such knowledge or would have been motivated to combine such knowledge with Pisanich.

f. Limitation 1[h]: Pisanich does not disclose or teach “downloading the first real-time information from the world wide web into the primary application”

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[h], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements.

Petitioner claims that Pisanich teaches this limitation and refers back to its arguments concerning 1[f]. Pet. 24. Accordingly, Patent Owner incorporates its remarks concerning Petitioner’s analysis of claim 1[f], at least with regards to the elements that correspond to claim 1[h]. However, claim 1[f] requires “sending” a request for first real-time information, whereas claim 1[h] requires “downloading” the first real-time information.

Petitioner additionally claims, “Pisanich further discloses that ‘Game Data Server 108’ gathered and cached real-time air traffic and weather data, *i.e.*, the first real-time information, to be downloaded to Game 112.” *Id.* In support, Petitioner cites to a portion of Pisanich, which provides: “Referring to Figure 1, a game data server 108 continually gathers “real time” data from traffic 100 and a weather 104 data provider systems. On request, the game data server 108 permits data available to a game 112, 116 and players 120, 124.” Ex. 1007, 5:13–15. Petitioner does not explain how “game data server 108” *permitting* data to a game discloses

“downloading the first real-time information from the world wide web into the primary application,” as required by claim 1[h] under any reasonable construction. More particularly, Petitioner offers no argument or evidence to support the assertion that “permit[ting]” access to information discloses “downloading” information.

Petitioner also cites to ¶¶145–46 of the Crane Declaration to support its assertion that Pisanich discloses the limitations of claim 1[h]. *See* Pet. 24. The pertinent portion of the Crane Declaration, however, simply recites Petitioner’s same statement verbatim without any additional support or reference and, accordingly, should receive no weight. *See* Ex. 1004, ¶¶145–46.

g. Limitation 1[j]: Pisanich does not disclose or teach “providing at least one secondary application within the primary application at the client system”

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[j], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate the Crane Declaration.

As discussed above, the *Niantic* court previously construed the claim term “secondary application within the primary application” to mean “secondary computer program within the primary computer program.” Ex. 1009, at 12. Petitioner fails to use the previous court’s construction for this term. *See* 37

C.F.R. §42.100(b) (“[a]ny prior claim construction determination concerning a term of the claim in a civil action...that is timely made of record in an IPR...will be considered”). Therefore, Petitioner fails to meet the requirements of 37 CFR §42.104(b)(3) and §42.104(b)(4). Specifically, Petitioner fails to define the “secondary application” and does not explain how the construed claim is unpatentable.

Petitioner claims Pisanich teaches this limitation, asserting that:

As shown by Figure 3 reproduced above, there are **multiple “managers” or “engines”, i.e., secondary applications**, such as the audio engine 336, that are within the primary application, i.e., game 112, which receive real-time information from, e.g., the Air Traffic Database Update Process 216 and/or Weather Database Update Process 220.

Pet. 25 (emphasis added).

First, it is entirely unclear which element of Pisanich Petitioner is specifically asserting discloses a “secondary application.” More particularly, it is unclear whether it is the various “managers” *or* “engines” that Petitioner claims to disclose a “secondary application,” as Petitioner makes its assertion in the alternative. Petitioner does, however, offer “audio engine 336” as an example of the purportedly disclosed “secondary application.” *Id.* But, the uncertainty is confounded by the fact

that, although Petitioner claims that “multiple” of the “managers” or “engines” of Pisanich, including “audio engine 336,” disclose a “secondary application,” the referenced annotated figure indicates that Petitioner believes that the “engines” of Pisanich, including “audio engine 336” actually teach a “graphics user interface (GUI) module.” *See* Pet. 18.

Next, even if the various “managers” or “engines” of Pisanich disclose a “secondary application,” Petitioner does not show that said “secondary application” is “*within* the primary application.” Petitioner claims only that “[t]he concept of having a secondary application **integrated** with a primary application would have been well known to a POSITA as merely one of a variety of ways to program software **to accomplish substantially the same functionality.**” *Id.*, 25 (emphasis added). Petitioner cites to ¶149 of the Crane Declaration to support its contention, but the pertinent portion of the Crane Declaration simply recites Petitioner’s same statement verbatim without any additional support or reference and, accordingly, should receive no weight. *See* Ex. 1004, ¶149.

Regardless, neither Petitioner nor Mr. Crane offers any argument or evidence to suggest that “a secondary application *integrated* with a primary application” discloses a “secondary application *within* the primary application,” as required by claim 1[j] under any reasonable construction. Also, Petitioner does not explain how or why a POSITA understanding a way to integrate a secondary application with a

primary application by way of programming software “*to accomplish substantially the same functionality*,” discloses the claim limitation of 1[j]. Again, Petitioner offers no argument or evidence to suggest that the claimed “secondary application” of the ’165 Patent is “to accomplish substantially the same functionality” as the claimed “primary application,” or that claim 1[j] should be construed in such a manner.

h. Limitation 1[k]: Pisanich does not disclose or teach “sending a request for second real-time information via the QIE module”

The Petition fails to show Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[k], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements.

Petitioner claims Pisanich teaches this limitation, claiming, in part, that “a POSITA would have understood that accessing information from a remote data provider required sending a request.” Pet. 26–27. In support, Petitioner cites to ¶¶151–53 of the Crane Declaration, which simply recites the same statement verbatim without any additional support or reference. *See* Pet. 27; *see also* Ex. 1004, ¶¶151–53.

i. Limitation 1[n]: Pisanich does not disclose or teach “enabling a user to access the at least one secondary application through the first user interface;”

The Petition fails to show that Pisanich, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation 1[n], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate the Crane Declaration.

Petitioner claims Pisanich teaches this limitation by referencing back to its arguments concerning claim 1[a], and additionally claiming that: “As shown in Figure 3 above, Pisanich further discloses the location of a player’s aircraft was controlled through the first user interface, which required access of the ‘managers’ and ‘engines’, such as ‘Traffic Manager 300,’ i.e., one of the secondary applications.” Pet. 27. Additionally, Petitioner offers that “Pisanich disclosed that the user of the exemplary Flight Simulator game controlled his or her aircraft through the game’s GUI (the claimed first user interface) whereby ‘choices and control inputs by the player’ determined ‘where and how the player 120 is flying a plane.’” *Id.*

Even if Pisanich discloses what Petitioner purports it does, Petitioner still fails to show that Pisanich discloses “enabling **a user to access** the at least one secondary application,” as required by 1[n]. More particularly, Petitioner provides no argument

or supporting evidence to show that *a user* is enabled to access the secondary application, and not, for example, another “secondary application.” Even if Pisanich discloses that a user of the exemplary flight simulator is controlling an aircraft through control inputs, Petitioner fails to offer any argument or supporting evidence to show that controlling an aircraft via control inputs discloses “enabling a user to access the at least one secondary application.”

Further, Petitioner simply claims Pisanich discloses that “the location of a player’s aircraft was controlled through the first user interface,” without any support. Petitioner previously claimed that the second user interface was provided by “rendering engine 316,” but makes no reference to “rendering engine 316” in its analysis of claim 1[n]. As such, Petitioner fails to show, at least, that a user accesses a secondary application “through the first user interface,” as required by claim 1[n].

j. All Remaining Claims That Rely on Pisanich Fail for the Same Reasons

Ground 1 relies on Pisanich as the primary reference. Claims 2–3, 5–8, and 10–12 depend from independent claim 1. Because Pisanich does not render obvious independent claim 1, it cannot render obvious dependent claims 2–3, 5–8, and 10–12, and institution based on Ground 1 should be denied.

Claim 18

Petitioner fails to specifically address many of the limitations of Claim 18, providing only, “Pisanich teaches this limitation,” and a reference back to Petitioner’s arguments concerning claim 1. *See* Pet. 35–37. Accordingly, Patent Owner incorporates its remarks concerning Petitioner’s deficient analysis of claim 1 for the elements in claim 1 that correspond to claim 18. *See supra* VI(B)(2)(a)–(j).

C. Ground 2

1. The Petition Must Be Denied for Ground 2 Because Petitioner Fails to Show That the Manual Reference is Authenticated or is Actually Prior Art to the ‘165 Patent.

Exhibit 1008, the Manual, is not properly authenticated because Petitioner has not presented any evidence that the document is what Petitioner purports it to be—a document allegedly shipped along with the *Phantasy Star Online* video game for Sega Dreamcast before the priority date of the ‘165 Patent. Further, Petitioner has failed to establish that the Manual is a prior art printed publication.

Mr. Harry’s testimony forms nearly the entire basis for Petitioner’s assertions that the Manual is prior art, and that Exhibit 1008 is a true and correct copy of the Manual allegedly “published” in 2000. *See* Ex. 1011, ¶¶11–12. Mr. Harry describes himself as “an analyst with Global Technology Transfer Group (‘GTT’)” and as a registered US patent agent “with fifteen years of experience in the patent practice, including drafting and prosecuting patents and ensuring positive relationships, with

a wide range of clients.” *See id.* ¶2; Ex. 1011, Attachment A. Mr. Harry is neither a records custodian for Sega, nor the person responsible for archiving or retrieving Sega’s video game manuals or versions thereof. Notably, Mr. Harry also did not testify that he contacted or consulted with people who were records custodians of Sega in preparing his declaration. Finally, Mr. Harry did not testify that he had any knowledge of Sega’s video game packaging and distribution practices at the time *Phantasy Star Online* was purportedly sold or distributed, or that he contacted or consulted people that did.

Mr. Harry did testify that he personally ordered a copy of the *Phantasy Star Online* videogame, which purportedly included a copy of the Manual, for the Sega Dreamcast gaming console from an individual seller on the e-commerce website e-Bay. *Id.* ¶6. There is nothing to suggest that the individual seller from which Petitioner obtained the video game and Manual is a particularly trustworthy or reliable reseller of goods. There is also nothing in the record to indicate the individual re-seller’s business practices, including, for example, whether he obtains one or more associated items and seals them together on his own to create the products he sells on eBay.

Accordingly, Mr. Harry cannot testify as a witness as to whether the product he purchased, and the entirety of its contents, was “intact and original from the factory,” even based “upon visual inspection,” when Mr. Harry does not testify that

he has any knowledge regarding SEGA's packaging or distribution practices at the time *Phantasy Star Online* was purportedly distributed, or when he has not testified that he has ever seen an "intact and original from the factory" version of the game. *See* Ex. 1011, ¶8. Similarly, Mr. Harry cannot testify that, in his opinion, "the manual would have been provided by SEGA with all copies of PSO that were sold." *Id.* ¶12. To the extent that Mr. Harry is deemed competent to offer any testimony, such testimony would be limited to his opinion that Exhibit 1008 is identical to the document he received with his eBay order, but his testimony is incompetent to offer the Manual as prior art in this proceeding. Further, Mr. Harry cannot offer testimony to confirm or deny whether multiple versions of the Manual were associated with the *Phantasy Star Online* game, or whether the Manual was updated at different times to reflect corrections of errors or upgrades to the video game.

Further, the copyright notice relied on by Petitioner to evidence date of publication is hearsay not falling within any exception and has no guarantees of trustworthiness. A copyright notice, alone, is insufficient to establish public accessibility as of a particular date. *See ServiceNow, Inc. v. Hewlett-Packard Co.*, Case IPR2015-00716, Paper 13 at 17 ("[w]e are not persuaded that the presence of a copyright notice, without more, is sufficient evidence of public accessibility as of a particular date.") (citing *LG Electronics, Inc. v. Advanced Micro Devices, Inc.*, Case IPR2015-00329, Paper 13 at 10-13). Petitioner attempts to overcome the

hearsay deficiency of its evidence by supplementing its contention with other, expressly admitted “circumstantial,” evidence, including its reference to promotional advertising and copyright statements about the game Sonic Adventure 2, referenced on the last page of page of the Manual (Ex. 1008 at 19), and other video game industry publications concerning Phantasy Star Online game. *See* Pet. 39 n. 4. However, this “circumstantial evidence” is unrelated to the Manual itself—i.e., the Manual and its date of existence is wholly unrelated to the Sonic Adventure 2 video game or the video game industry publications concerning the existence of the *Phantasy Star Online* game itself, but not the Manual in question here. For example, while Petitioner states that the Manual was available as early as March 31, 2001, it could just as well be a counterfeit that was first produced in 2019. There is no evidence to suggest that it is anything that the Petitioner claims it to be—it is an unauthenticated document that cannot properly form the basis for a Petition to find the claims obvious.

Moreover, Petitioner has not submitted any evidence to establish that the Manual qualifies as a printed publication pursuant to §102. *See* MPEP §2128 (“A reference is proven to be a ‘printed publication’ ‘upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.’”); *Elec. Frontier Foundation v. Personal Audio*,

LLC, IPR2014-00070, Paper 21 at 20–24 (PTAB Apr. 18, 2014) (petitioner bears burden of proving a reference is a printed publication). Petitioner claims that the Manual was distributed publicly at least as early as March 31, 2001, relying on a purported copyright notice that appears near the end of the Manual. Pet. 37–38.

In *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 (PTAB Dec. 20, 2019), the Board considered whether a reference was publicly accessible before the critical date of the challenged patent. The Board held that the petitioner had submitted sufficient evidence to establish a reasonable likelihood that the reference was publicly accessible, and thus qualified as prior art, where the reference, on its face, bore a copyright date, a printing date, an ISBN date and was a well-known book series from an established publisher. *Id.* at 19. The Board provided instances in which it found that such a determination could not be made. For example, when the asserted reference was a conference paper that bore only a copyright date and a date on the cover. *Id.*, internal citation removed.

The copyright notice in question here states: “Copying and/or transmission of this game is a violation of applicable laws. ©SEGA CORPORATION, 2000.” Ex. 1008, p. 33. To the extent the date of the copyright notice shows anything, it may imply that the associated product—the video game—was distributed at that time, not that the Manual was publicly available at that time. Even then, Petitioner fails to submit any evidence as to when the video game was actually sold. Petitioner asserts

two separate potential dates of public availability for the Manual: (1) “at least as early as March 31, 2001; and (2) “at least as early as December 2000/March 31, 2001.” *See* Pet. 38; *id.*, 5. But Petitioner submits no evidence to support either alleged date. In fact, Petitioner does not submit any evidence that copies of *Phantasy Star Online* were ever sold, or that the game sold was the same as the game depicted in the Manual. *See Lantz Medical, Inc. v. Bonutti Research, Inc.*, IPR2015-00995, Paper 11 at 8 (PTAB Oct. 21, 2015) (Board found that a petitioner’s reliance on the sale of product insufficient to demonstrate that the operating manual was a “printed publication” within the meaning of 35 U.S.C. §102).

Additionally, the Petition fails to identify “with particularity” the evidence it contends shows a reasonable likelihood that the Manual is a printed publication. *See* MPEP §2128. Petitioner’s evidence lacks particularity, as Petitioner does not provide any information as to how the Manual would have been disseminated or otherwise made available to the extent that a POSITA as defined by Petitioner (Pet. 10) can locate it.

Here, the Petitioner has merely produced an unclear copyright notice that appears to be referencing the game and not the Manual. *See* Ex. 1008, at 33. As discussed above, Petitioner’s other “circumstantial” evidence is also unconvincing.

2. For Ground 2, the Petition Fails to Address Many Elements of the Challenged Independent Claims

The Petition also should be denied because the Petition fails to state an adequate claim for relief for the alleged obviousness of the challenged claims based on the Manual alone, or in view of the knowledge of a POSITA. Pointedly, Petitioner has failed to provide sufficient details as to how the claims are obvious in relation to the Manual, as required by 35 U.S.C. §312(a)(3) and 37 C.F.R. §42.104(b)(3) and (4). Specifically, 37 C.F.R. §42.104(b)(4) requires that “[t]he petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon.”

With respect to Ground 2, the Petition is woefully incomplete as Petitioner fails to address many elements of the claims in its Ground 2 analysis, including the following underlined language of the following elements/limitations of claim 1:

- Petitioner attempts to address limitation 1[b] regarding “providing a QIE module in one of the client or the server system” (Pet. 44-46); however, Petitioner fails to address the claim element “in one of the client or the server system.”
- Petitioner attempts to address limitation 1[c] regarding “providing a thematic/publishing logic module in one of the client or the server system” (Pet. 46); however, Petitioner fails to go beyond a mere

conclusory statement to address the claim element
“thematic/publishing logic module.”

- Petitioner attempts to address limitation 1[g] regarding “obtaining the first real-time information via the world wide web” (Pet. 47-48); however, Petitioner fails to address the claim element “via the world wide web” at all.
- Petitioner attempts to address limitation 1[h] regarding “downloading the first real-time information from the world wide web into the primary application” (Pet. 48); however, Petitioner fails to address the elements of “downloading” and “into the primary application.”
- Petitioner attempts to address limitation 1[i] regarding “providing access to the first real-time information within the virtual thematic environment via the first user interface” (Pet. 48); however, Petitioner fails to address the element “via the first user interface.”
- Petitioner attempts to addresses limitation 1[j] regarding “providing at least one secondary application within the primary application at the client system” (Pet. 49-50); however, Petitioner fails to address the claim element “at the client system.”

- Petitioner fails to address limitation 1[o] regarding “enabling the user to control the at least one secondary application through a second user interface” in its entirety. Instead, Petitioner simply refers back to its deficient analysis of limitation 1[n] (*see* Pet. 51).

For claim 18, Petitioner on pages 57-59 simply refers to its deficient analysis of claim 1, corresponding to the elements/limitations of claim 1 addressed above.

3. Ground 2 of the Petition Fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests elements of the Challenged Independent Claims

The Petition fails to demonstrate that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests each and every element of independent claims 1 and 18. The Petition fails to (i) ascertain the difference between the claimed invention and the Manual (ii) to provide any articulated rationale as to why the invention as claimed would have been obvious to a POSITA at the relevant time, and (iii) explain why a POSITA would be motivated to combine a POSITA’s knowledge with the Manual.

Additionally, the Crane Declaration attempts to reference additional sources, without providing any authentication of such sources or evidence that such sources were publicly accessible prior art.

Claim 1

- a. Limitation 1[a]: The Manual does not disclose or teach “providing a graphics user interface (GUI) module for use in the client system”**

The Petition fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[a], at least because the Petitioner’s arguments regarding the following limitations are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner correctly acknowledges that the *Niantic* court previously construed the claim term “graphics user interface (GUI) module” to mean “software that provides a graphical display and processes user input to allow a user to interact with the graphical display.” Pet. 42; Ex. 1009, at 5. However, Petitioner fails to show how claim 1[a] is unpatentable as construed, or under any other reasonable interpretation of the claim language.

Petitioner claims that the Manual discloses this limitation, stating that: “*Phantasy Star Online* provides a graphical display that processes user inputs for use onto the Dreamcast, *i.e.*, a screen that allows players to interact with graphical display elements within the virtual thematic environment, including moving through the virtual world and chatting with other players.” Pet. 42. However, Petitioner fails to specify which, if any, element of the *Phantasy Star Online* game teaches the

limitation of a “GUI module” Rather, Petitioner asserts generally that *Phantasy Star Online* discloses this limitation without any additional support or technical reasoning. This, however, is not surprising considering that the Manual contains absolutely no *technical* information about the game, it is simply an instruction manual on how to *play* the game.

b. Limitation 1[b]: The Manual does not disclose or teach “providing a quantum imaging environment (QIE) module in one of the client or the server system”

The Petition fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[b], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner correctly acknowledges that a district court in an action concerning closely related patents previously construed the claim term “quantum imaging environment (QIE) module” to mean “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.” Pet. 44; Ex. 1009, at 7. However, Petitioner fails to show how claim 1[b] is unpatentable as construed, or under any other reasonable interpretation of the claim language.

Petitioner claims that the Manual discloses this limitation, and that “a POSITA would have understood the QIE’s function is to interpret content so it is manipulated and accessed by any device.” Pet. 44. In support, Petitioner cites to ¶237 of the Crane Declaration, the pertinent part of which simply recites the same statement verbatim without any supporting evidence or technical reasoning. *See* Ex. 1004, ¶237. However, with regards to the “QIE module,” Mr. Crane has opined that: “[t]he QIE is an integral part of the alleged invention of the ’165 patent. Despite the importance of this module or system to the claimed operation of the invention, neither the specification nor the claims inform a POSITA the meaning of the term.” *Id.*, ¶56. Yet, Mr. Crane offers that “the game itself provides the function of said QIE module, and a POSITA would have understood that any references to a QIE module in the ’165 patent’s claims were disclosed by the game itself.” *Id.*, ¶237. Mr. Crane asserts generally that the *Phantasy Star Online* game itself discloses the “QIE module,” but fails to specify whether or not the purported “QIE module” includes a “software layer,” as required by claim 1[b] under the *Niantic* construction.

The Petitioner, on the other hand, does not explain how it could assert that the Manual discloses this limitation based on a POSITA’s understanding when their expert explicitly opines that a POSITA would not have been able to appreciate the meaning of the term “QIE module.” Nevertheless, Petitioner claims that the Manual

discloses this limitation, but it is entirely unclear which element of the Manual Petitioner claims to disclose the “QIE module.”

First, Petitioner claims that the Manual discloses this limitation because the “PSO Manual further described a ‘Word Select’ feature that players could use to chat with speakers of different languages, which acted as a QIE.” Pet. 44. Petitioner does not cite to any portion of the Manual to support its assertion. Instead, Petitioner impermissibly incorporates ¶238 of the Crane Declaration, which provides only that the “Word Select” feature “allowed a player to construct sentences to be sent via chat to any destination around the world. The ‘Word Select’ system at the destination received, interpreted, and manipulated the content for any device, translated into the language of the recipient.” Ex. 1004, ¶238. Mr. Crane’s testimony regarding the alleged “QIE module” is entirely unsupported by either reasoned analysis or evidentiary support—including, for example, whether the “Word Select” system “received, interpreted, and manipulated the content for **any device...**” *Id.* (emphasis added). Further, because the Manual contains no technical information about the game, it is entirely unclear whether messages sent by the “Word Select” feature were being translated at the Dreamcast level or at the PSO server level or elsewhere. *See* Ex. 1008, p. 12.

Next, Petitioner claims that the “PSO Manual discloses that the *Phantasy Star Online* video game receives, interprets, and manipulates the second content, *i.e.*, real

world information, in real time so as to be accessible on a player's Dreamcast game console for use while playing the *Phantasy Star Online* video game." Pet. 44. However, Petitioner further claims that "[i]t is also well known to a POSITA at the time that game systems sold into different countries were different systems, including the use of different voltage sources, different language operating systems, and compatible with different television standards." *Id.* In support, Petitioner cites to the Crane Declaration, the pertinent part of which simply recites Petitioner's same statement verbatim without any additional support or reference. Thus, Mr. Crane is attempting to gap-fill a missing limitation without proper evidentiary support. Such conclusory expert opinion is particularly problematic because it is offered not simply to provide a motivation to combine prior art teachings, but rather to supply a limitation missing from the prior art, i.e., "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. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624 (PTAB Aug. 24, 2022) (denying institution where expert declaration presented conclusory assertions without underlying factual support and repeated verbatim the petitioner's argument.).

Even if Mr. Crane's conclusory and unsupported statement were true, neither Mr. Crane nor Petitioner explains why they believe that different hardware and/or software systems that permitted the Dreamcast to be utilized in different countries

having differing voltage sources, languages, and television standards would result in “a **software layer** that receives, interprets, and manipulates second content so as to be accessible on **different types of devices**,” as required by claim 1[b] under the *Niantic* construction.

c. Limitation 1[f]: The Manual does not disclose or teach “sending a request for first real-time information via the QIE module to the world wide web”

The Petition fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation of claim 1[f], at least because the Petitioner’s arguments regarding the following limitations are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner claims that the Manual discloses this limitation, and states that the “PSO Manual discloses real-time movements of *Phantasy Star Online* remote players, non-player characters, and enemies, i.e. first real-time information, to be provided upon request.” Pet. 47. However, Petitioner fails to show how the limitation of claim 1[f] is met with any sort of specificity.

Petitioner fails to show that the Manual discloses several elements of limitation 1[f], including “sending a request” and doing so “via the QIE module to the world wide web.” Petitioner claims that “[a] POSITA would have understood that techniques involving the transmission and receipt of real time data over the

Internet and to and from the World Wide Web using web-based protocols such as HTTP and HTTPS.” Pet. 47. Additionally, Petitioner claims that “a POSITA would have understood that for data to be received in the client in a client/server game system, the data would have been requested by the client from the server via, e.g., sending a request to the server.” *Id.* In support of both assertions, Petitioner cites to ¶247 of the Crane Declaration, which simply recites the same statements verbatim without any additional support or reference. *See* Ex. 1004, ¶247. As discussed before, this is an improper attempt to use a POSITA’s common knowledge to supply a wholly missing claim limitation without evidentiary support. *See Arendi*, 832 F.3d at 1362–63; *see also Xerox*, IPR2022-00624 at 16.

Further, in an attempt to show that the Manual discloses the limitations of 1[f], Petitioner makes assertions inconsistent with its previous contentions. For example, Petitioner had previously claimed that the “Word Select” feature disclosed the “QIE module,” but, now, Petitioner claims that “*Phantasy Star Online* video game performed the function of the QIE module.” *Compare* Pet. 44–46 with Pet. 47. In any event, Petitioner fails to particularly show that the sending of a request for first real-time information is accomplished via the “QIE module,” which is required to be a “software layer,” under the *Niantic* construction.

d. Limitation 1[h]: The Manual does not disclose or teach “downloading the first real-time information from the world wide web into the primary application;”

The Petition fails to show that the Manual, alone or in view of the knowledge of a POSITA, teaches or suggests the above limitation 1[h], at least because the Petitioner’s arguments regarding the limitation are completely unsupported, offering only conclusory statements and attempting to impermissibly incorporate large portions of the Crane Declaration.

Petitioner claims that the Manual discloses this limitation, and states that the “PSO Manual further discloses that the player positions, i.e. first real-time information, was received and accessed through the internet (*i.e.*, the world wide web) via an Internet Services Provider (ISP).” Pet. 48. Petitioner cites to language in the Manual that states: “You will need to pay for access time from your Internet Service Provider (ISP) and any additional phone charges need to connect to your ISP’s access point.” Ex. 1008, p. 8. However, a statement advising a user that they may need to purchase access time from an ISP does not and cannot support Petitioner’s assertion that “first real-time information” was received and accessed through the internet via an ISP. Pet. 48. The Manual is entirely devoid of any information concerning what, if any, information is being received and accessed through the internet.

Petitioner further claims that the “PSO Manual further disclosed that real-time information is sent from the player to the server, including player positions.” *Id.* In support, Petitioner cites to ¶¶251–52 of the Crane Declaration, which simply recites the same statements verbatim with only a general citation to large swaths of the prior art without any further explanation. *See* Ex. 1004, ¶¶251–52. Such conclusory statements are entitled to little or no weight.

e. All Remaining Claims That Rely on the Manual Fail for the Same Reasons

Ground 2 relies on the Manual as the primary reference. Claims 2–3, 5–8, and 10–12 depend from independent claim 1. Because the Manual does not render obvious independent claim 1, it cannot render obvious dependent claims 2–3, 5–8, and 10–12, and institution based on Ground 2 should be denied.

Claim 18

Petitioner fails to specifically address many of the limitations of Claim 18, providing only that “PSO Manual discloses this limitation,” and a reference back to Petitioner’s arguments concerning claim 1. *See* Pet. 57–59. Accordingly, Patent Owner incorporates its remarks concerning Petitioner’s analysis of claim 1 for the elements in claim that correspond to claim 18. *See supra* VI(C)(3)(a)–(e).

VII. THE BOARD SHOULD EXERCISE DISCRETION UNDER 35 U.S.C. §314 TO DENY INSTITUTION

Institution of *inter partes* review is always discretionary. 35 U.S.C. §314(a).

The Board should exercise its discretion under §314(a) to deny institution here.

A. The Board should exercise its discretion to deny institution of this Petition.

The Board should deny institution under §314(a) in view of its precedential decisions in *NHK Spring*³ and *Apple v. Fintiv*⁴ because the ‘165 Patent is involved in a parallel district court proceeding (*Quantum Imaging LLC v. Sony Group Corporation, et al.*, Case No. 6:22-cv-00573-ADA-DTG (W.D. Texas, June 3, 2022)) that involves the same issues, arguments, and evidence that Petitioner has presented in this Petition. The parties and district court have already expended substantial time and resources, and a jury trial is scheduled for April 2024. Ex. 1010. A final written decision (“FWD”) in this proceeding is expected no earlier than December 2024, at least seven months after the jury trial begins. Duplicating the district court’s efforts would not be an efficient use of the Board’s resources and

³ *NHK Spring Co., Ltd., v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sep. 12, 2018) (precedential).

⁴ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential).

would not serve to fulfill the primary purpose of AIA proceedings: to provide a practical and efficient alternative to district court litigation.

In *NHK Spring* the Board denied institution primarily because the related district court case was nearing its final stages and would resolve all the issues before the Board. *NHK Spring Co.*, IPR2018-00752, Paper 8 at 20 (PTAB Sep. 12, 2018) (precedential); *see also id.*, 11-18 (applying discretion under 35 U.S.C. §325(d)). Other cases—relying on *NHK Spring*—have also denied institution. For example, in *E-One, Inc. v. Oshkosh Corp.*, the Board applied *NHK Spring*’s analysis under 35 U.S.C. §314(a) to deny institution. IPR2019-00161, Paper 16 (PTAB May 15, 2019). In *E-One*, the Board reasoned:

“[i]n the § 314(a) portion of its analysis, [*NHK Spring*] noted that a district court proceeding involving the same patent was scheduled to go to trial before a final decision would have been due in the Board proceeding, and the Board proceeding would involve the same claim construction standard, the same prior art references, and the same arguments as in the district court.”

Id., 6. In both *NHK Spring* and *E-One*, factors warranting a denial of institution included: the district court investing considerable time and resources to handle the same issues presented in the IPR, and trials that were scheduled to be completed prior to a Board’s FWD. The facts here warrant denial just as decided in *NHK Spring*

and *E-One*. Further, the Petition will not serve as an “effective and efficient alternative” to litigation, frustrating a primary objective of the AIA. *Gen. Plastic Indus. Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 16–17 (PTAB Sept. 6, 2017) (precedential).

In *Fintiv*, the Board emphasized six factors to consider under *NHK Spring* which are discussed below. *See Fintiv*, IPR2020-00019, Paper 11 at 5-16. The Board stated that “[t]hese factors relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.*, 6. Here, each of these factors favors denial of institution of this Petition. The Board should apply its discretion under 35 U.S.C. §314(a) to deny institution of the requested proceeding for the following reasons.

1. Factor 1 weighs against institution, as no court has granted a stay and no evidence exists that a stay may be granted.

The parallel district court proceeding has not been stayed. That proceeding includes four patents, three of which are not at issue in this Petition. Although Petitioner has filed multiple Petitions against the other patents-in-suit at the district court, Petitioner has not sought a stay in the district court pending resolution of the PTAB trial. There is a pending motion to stay pending resolution of the motion for intra-district transfer. But the district court has not indicated whether it would grant a stay if *inter partes review* is instituted.

Regarding the motion to stay pending resolution of motion for intra-district transfer, consistent with its position regarding stays in general, the Board should decline to speculate whether the district court will grant a stay in this proceeding. *See, eClinicalWorks, LLC v. Decapolis LLC*, IPR2022-00229, Paper 10 at 8 (April 13, 2022) (“We will not attempt to predict, based on the facts in allegedly similar prior situations, how the Texas District Court would rule should a stay be requested in the WDTX Cases.”); *see also, Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (remarking judges decide stays based on the facts at issue in each case, and the Board refuses to infer how district courts will act in different cases with different facts).

It is more likely that a stay would not be granted in the district court if trial is instituted here. This factor weighs in favor of discretionary denial of institution.

2. Factor 2 weighs against institution, as trial in the district court is scheduled to begin months before the final written decision deadline.

Trial is set to begin in the parallel district court proceeding in April 2024. Ex. 1010. This trial date is currently at least seven (7) months before an expected December 2024 FWD would issue in this IPR. Proceedings with similar substantial gaps between trial and FWD have found Factor 2 weighs in favor of denying institution. *See, Bentley Motors Limited and Bentley Motors, Inc. v Jaguar Land Rover Limited*, IPR2019-01539, Paper 16 at 7-8 (PTAB October 2, 2020) (finding

that a trial date eight months before the statutory deadline for a FWD was a factor weighing in favor of discretionary denial); *Apple Inc. v. Maxell, Ltd.*, IPR2020-00203, Paper 12 at 9–10 (PTAB July 6, 2020) (eight months); *Cisco Systems, Inc. v. Oyster Optics, LLC*, IPR2021-00319, Paper 9 at 10-12 (PTAB Jun. 8, 2021) (seven months); *Cisco Systems, Inc. v. Ramot At Tel Aviv University LTD.*, IPR2020-00123, Paper 14 at 7-8 (PTAB May 15, 2020) (six months). Here, just as in *NHK Spring*, “[i]nstitution of an inter partes review under these circumstances would not be consistent with ‘an objective of the AIA ... to provide an effective and efficient alternative to district court litigation.’” *NHK Spring*, IPR2018-00752, Paper 8 at 20. As the Board recognized in *Fintiv*, “[i]f the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution under *NHK*.” *Fintiv*, IPR2020-00019, Paper 11 at 9.

Importantly, there is no evidence that the parties’ trial will be extended, let alone delay of trial would extend past the statutory deadline for the FWD. *See Cisco Systems, Inc.*, IPR2021-00319, Paper 9 at 10-12 (weighing *Fintiv* factor 2 in favor of exercising discretion to deny Petition). Further, Petitioner points out that at the filing of the Petition, the Related Matter was at its early stages; as discussed below, the Board recognizes the progress made in the district court at the time of the institution decision, not the time of the filing of the Petition.

There is no reason to believe the April 2024 trial will be postponed, much less postponed significantly enough to close the seven-month gap such that the FWD would issue before the trial. *See Fintiv*, Paper 11 at 13 (“We generally take courts’ trial schedules at face value absent some strong evidence to the contrary.”); *see also, Cisco Systems, Inc. v. Monarch Networking Solutions, LLC*, IPR2020-01227, Paper 11 at 9-11 (PTAB Mar. 4, 2021) (declining to speculate whether the district court will grant the pending motion to transfer and weighing *Fintiv* Factor 2 in favor of denial of institution).⁵ Without a stay pending IPR, litigation continues, and there

⁵ This timing continues to hold under the guidance in the Director’s June 21, 2022, memo titled “Interim Procedures for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” (“*Fintiv* Memo;” Ex. 2002). The *Fintiv* Memo directs the Board to “consider the median time from filing to disposition” in the district court (Ex. 2002 at 3), which for patent cases in the Western District of Texas is 25.4 months (Ex. 2003), and for patent cases before Judge Albright is 24.7 months (Ex. 2004). Counting from the June 3, 2022, filing of the parallel district court case results in an average time to trial before the end of July 2024, well in line with the scheduled April 2024 trial and still roughly five months before any expected FWD here.

will be a continued expenditure of court resources. This factor weighs in favor of discretionary denial of institution.

3. Factor 3 weighs against institution, as parties to the district court litigation have already invested significant time and resources.

The parties and the district court have invested significant time and resources. In *Fintiv*, the Board stated “if, at the time of the institution decision, the district court has issued substantive orders related to the patent at issue in the petition, this fact favors denial. Likewise, district court claim construction orders may indicate that the court and parties have invested sufficient time in the parallel proceeding to favor denial” of institution. *Id.*, 9-10. Further, “[t]his investment factor is related to the trial date factor, in that more work completed by the parties and court in the parallel proceeding tends to support the arguments that the parallel proceeding is more advanced, a stay may be less likely, and instituting would lead to duplicative costs.” *Id.*, 10.

The investment by the parties and the court will be significant by the time either an institution decision or a FWD is issued. For example, by the time an institution decision is rendered in December 2023, the parties will have (1) completed Claim Construction briefing, (2) have had the Court rule on Sony’s motion to transfer, (3) conducted a *Markman* hearing, (4) received claim constructions (the court’s procedure is to provide preliminary construction shortly

in advance of the Markman hearing and then provide final constructions at the hearing), (5) exchanged Final Infringement and Invalidity Contentions, and (7) closed fact discovery, which closes November 29, 2023. Ex. 1010. Further, fact discovery opened for all purposes on October 14, 2022. This factor weighs in favor of discretionary denial of institution.

4. Factors 4-6 weigh against institution, as there is significant overlap between this IPR and district court proceedings, the parties involved are the same, and the asserted grounds fail.

The dispute in this proceeding and the district court case involves the same parties and overlapping issues. (Factors 4 and 5). It is undisputed that Petitioner is a defendant in the parallel district court litigation. Moreover, Petitioner has presented substantially the same art and grounds of unpatentability in this Petition that it is asserting in the district court case – that the claims of the '165 Patent are allegedly obvious over at least the prior art Pisanich and the Manual. Ex. 2001 at 26-27. Thus, the claims and prior art addressed by PTAB will not materially differ from what is being addressed in the parallel district court litigation.

Petitioner has failed to make a stipulation in the Petition in full accordance with *Sotera*, and has not filed such a stipulation in the district court. Petitioner identifies concerns about overlapping issues with the conditional statement “if the Board institutes IPR in this proceeding, Petitioner will cease asserting in the Related Matter the prior art for the claims on which the IPR is instituted.” Pet. 62–63. But

this statement falls short of the estoppel that follows from 35 U.S.C. §315(e)(2) whereby a petitioner is prohibited from asserting a “claim is invalid on any ground that the petitioner raised or reasonably could have raised during [the] inter partes review.” While Petitioner has stipulated invalidity positions raised at the district court that are also brought before the Board, Petitioner’s stipulation is narrow – it covers only prior art references for the claims on which the IPR is instituted, but leaves out prior art they “reasonably could have raised.” *See Verizon Business Network Services LLC, v. Huawei Technologies Co. LTD.*, IPR2020-01278, Paper 12 at 11-13 (PTAB Jan. 26, 2021) (“Petitioner’s stipulation reduces concerns regarding overlapping issues, but it does not eliminate them.”). Therefore, under Petitioner’s stipulation, it would not be precluded from asserting other printed publications, or other prior art, in the pending district court litigation. Petitioner only minimally reduces the concerns of inefficiency and the possibility of conflicting decisions; thus, its stipulation should not be given significant weight. *See Sand Revolution II, LLC v. Continental Intermodal Grp. – Trucking, LLC*, IPR2019-01393, Paper 24 at 12 n.5 (noting that a broad stipulation better addresses concerns of duplicative efforts and potentially conflicting decisions in a much more substantial way).

Because the district court will address the same issues, arguments and evidence months before the Board’s FWD would be due, instituting review here

would not be an efficient use of the Board's resources. Nor would it be an effective and efficient alternative to district court litigation.

The Board noted in *Fintiv* with respect to Factor 6 that:

[I]f the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution.... [I]f the merits of the grounds raised in the petition are a closer call, then *that fact has favored denying institution* when other factors favoring denial are present.

Fintiv, IPR2020-00019, Paper 11 at 14-15 (emphasis added). As shown above, the Petition fails on the merits for numerous reasons. These weaknesses, and these remaining factors weigh in favor of discretionary denial of institution.

For the reasons illustrated above, the Board should exercise its discretion to deny institution under §314(a) in favor of the upcoming trial in the pending district court litigation.

VIII. CONCLUSION

For the foregoing reasons, institution of this IPR should be denied.

Case No. IPR2023-00996
Patent 10,991,165

Date: September 13, 2023

Respectfully submitted,

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Case No. IPR2023-00996

Patent 10,991,165

CERTIFICATE OF WORD COUNT

Pursuant to 37 CFR §42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Preliminary Response contains 13,943 words using the word count feature of Microsoft Word.

Dated: September 13, 2023

/s/ Kevin S. Tuttle
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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 Preliminary Response, and its cited exhibits, were served via electronic mail, in view of the July 31, 2023 Power of Attorney (Paper 6) and accompanying Motion to Withdrawal (Paper 7), and Order (Paper 8), on September 13, 2023 at the following email correspondence addresses of record:

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