

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BUNGIE, INC.,
Petitioner,

v.

WORLDS INC.,
Patent Owner.

Case IPR2015-01321
Patent 8,145,998 B2

Before KARL D. EASTHOM, KERRY BEGLEY, and
JASON J. CHUNG, *Administrative Patent Judges*.

CHUNG, *Administrative Patent Judge*.

DECISION
Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Petitioner, Bungie, Inc., filed a Petition to institute an *inter partes* review of claims 1–3, 7, 8, and 11–20 (“the challenged claims”) of

U.S. Patent No. 8,145,998 B2 (“the ’998 patent”). Paper 3 (“Pet.”). Patent Owner, Worlds Inc., filed a Preliminary Response pursuant to 35 U.S.C. § 313. Paper 12 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). Upon consideration of the Petition and the Preliminary Response, and for the reasons explained below, we determine that the information presented shows a reasonable likelihood that Petitioner would prevail with respect to claims 1–3, 7, 8, 12–18, and 20. *See* 35 U.S.C. § 314(a). Accordingly, we institute an *inter partes* review of these claims.

A. Related Matters

The ’998 patent is involved in a district court proceeding, *Worlds Inc. v. Activision Blizzard, Inc.*, Case No. 1:12-cv-10576 (D. Mass.). Paper 6. In addition, the ’998 patent is the subject of IPR2015-01325 and related to the patents at issue in IPR2015-01264, IPR2015-01268, IPR2015-01269, and IPR2015-01319. *Id.*

B. The Asserted Grounds

Petitioner identifies the following as asserted grounds of unpatentability:

Reference(s)	Basis	Challenged Claim(s)
Funkhouser (Ex. 1005) ¹ and Marathon (Ex. 1021) ²	§ 103(a) ³	1, 2, 7, 8, 11, 12, 16, 18, and 20
Funkhouser, Marathon, and Sitrick (Ex. 1013) ⁴	§ 103(a)	3
Funkhouser, Marathon, and Funkhouser '93 (Ex. 1017) ⁵	§ 103(a)	13–15
Funkhouser, Marathon, and Wexelblat (Ex. 1020) ⁶	§ 103(a)	17
Funkhouser and Pratt (Ex. 1027) ⁷	§ 103(a)	19

¹ Thomas A. Funkhouser, *RING: A Client-Server System for Multi-User Virtual Environments*, in 1995 SYMPOSIUM ON INTERACTIVE 3D GRAPHICS (1995).

² Marathon, Bungie Products Software Corporation, 1994.

³ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, took effect on March 16, 2013. Because the application from which the ’998 patent issued was filed before that date, our citations to Title 35 are to its pre-AIA version.

⁴ U.S. Patent No. 4,521,014, issued June 4, 1985.

⁵ Thomas A. Funkhouser & Carlo H. Séquin, *Adaptive Display Algorithm for Interactive Frame Rates During Visualization of Complex Virtual Environments*, in COMPUTER GRAPHICS PROCEEDINGS: ANNUAL CONFERENCE SERIES (1993).

⁶ U.S. Patent No. 5,021,976, issued June 4, 1991.

⁷ David R. Pratt, *A Software Architecture for the Construction and Management of Real-Time Virtual Worlds* (1993) (unpublished doctoral dissertation, Naval Postgraduate School).

C. The '998 Patent

The '998 patent is directed to a three-dimensional graphical, multi-user, interactive virtual world system that includes highly scalable architecture. Ex. 1001, Abs. The system disclosed in the '998 patent displays avatars representing other users neighboring the user viewing the virtual world. *Id.* Motion information from the remote users' avatars is transmitted to a central server process that provides positions updates to client processes for neighbors of the user at that client process. *Id.* The client process also determines which background objects to render. *Id.*

D. The Challenged Claims

Petitioner challenges claims 1–3, 7, 8, and 11–20. Pet. 4. Claims 1, 2, 18, and 19 are independent. Claim 1 is illustrative and reproduced below:

1. A method for displaying interactions of a local user avatar of a local user and a plurality of remote user avatars of remote users interacting in a virtual environment, the method comprising: receiving, at a client processor associated with the local user, positions associated with less than all of the remote user avatars in one or more interaction rooms of the virtual environment, wherein the client processor does not receive position information associated with at least some of the remote user avatars in the one or more rooms of the virtual environment, each avatar of the at least some of the remote user avatars failing to satisfy a condition imposed on displaying remote avatars to the local user; generating, on a graphic display associated with the client processor, a rendering showing position of at least one remote user avatar; and switching between a rendering on the graphic display that shows at least a portion of the virtual environment to the local user from a perspective of one of the remote user avatars and a rendering that allows the local user to view the local user avatar in the virtual environment.

II. ANALYSIS

A. *Claim Construction*

In an *inter partes* review, the Board construes claim terms in an unexpired patent using their broadest reasonable construction in light of the specification of the patent in which they appear.⁸ 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1275–79 (Fed. Cir. 2015). The claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). We must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification. *Id.* (citing *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002)). The “ordinary and customary meaning” is that which the term would have to a person of ordinary skill in the art in question. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Petitioner proffers proposed constructions of several claim terms. Pet. 13–15. At this stage of the proceeding, Patent Owner does not

⁸ The parties agree that the broadest reasonable interpretation standard applies to the ’998 patent. *See* Pet. 13; Prelim. Resp. 9–10. Based on our review of the patent, however, the patent may have expired recently or may be expiring shortly. *See* Ex. 1001, [60], [63]. For expired patents, we apply the claim construction standard outlined in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Our analysis in this Decision is not impacted by whether we apply the broadest reasonable interpretation or the *Phillips* standard. We, however, expect the parties to address, with particularity, in their future briefing the expiration date of claims 1–3, 7, 8, 12–18, and 20 of the ’998 patent, and if necessary to address this issue, to file a copy of Provisional Application No. 60/020,296, as an exhibit in this case.

challenge Petitioner’s construction. Prelim. Resp. 9–10. For the purposes of this Decision, and on this record, we determine that no claim term needs express construction. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only those claim terms that are in controversy need to be construed and only to the extent necessary to resolve the controversy).

B. Obviousness of Claims 1, 2, 7, 8, 11, 12, 16, 18, and 20 in View of Funkhouser and Marathon

1. Funkhouser (Ex. 1005)

We have considered Petitioner’s argument that Funkhouser has a publication and distribution date no later than April 12, 1995. Pet. 6. In determining whether a reference is a “printed publication,” “the key inquiry is whether or not [the] reference has been made ‘publicly accessible.’” *In re Klopfenstein*, 380 F.3d 1345, 1348 (Fed. Cir. 2004). A reference is “publicly accessible” if the reference “has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter . . . exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation.” *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006) (citations omitted).

Funkhouser (Ex. 1005) is an article that appears in a collection of articles, titled 1995 SYMPOSIUM ON INTERACTIVE 3D GRAPHICS (Ex. 1006) (“1995 Symposium Book”). Ex. 1005; Ex. 1006, cover, 1–3, 85; Ex. 1002 ¶ 44. The 1995 Symposium Book was compiled for a symposium sponsored

by the Association for Computing Machinery (“ACM”), held on April 9–12, 1995 (“1995 Symposium”). Ex. 1006, cover, 1–3, 85; Ex. 1002 ¶ 45.

According to the Declaration of Michael Zyda, D.Sc. (Ex. 1002) filed by Petitioner, Dr. Zyda served as the chair of the 1995 Symposium. Ex. 1002 ¶¶ 44–45; *see* Ex. 1006, 1, 4–6. Dr. Zyda has personal knowledge that copies of Funkhouser were distributed to approximately 250 attendees at the 1995 Symposium, who were “many of the top researchers in the fields of virtual reality systems, computer graphics, and real-time interactive 3D.” Pet. 6; Ex. 1002 ¶¶ 44–45. In addition, Dr. Zyda testifies that copies of the book were available from the ACM. Ex. 1006, cover, 1–3, 85; Ex. 1002 ¶ 45. The 1995 Symposium Book and Funkhouser feature a 1995 copyright date and permit copying, generally without a fee, or with “a fee and/or specific permission” if for “direct commercial advantage.” Ex. 1006, copyright page, 85; Ex. 1005, 85.

Accordingly, we are persuaded, at this juncture of the proceeding, that Petitioner has established adequately that Funkhouser qualifies as prior art under 35 U.S.C. § 102(a) because Petitioner has proffered adequate evidence that an interested ordinarily skilled artisan, “exercising reasonable diligence,” could have obtained Funkhouser no later than April 12, 1995—the last day of the 1995 Symposium. *See Mass. Inst. of Tech. v. Ab Fortia*, 774 F.2d 1104, 1109 (Fed. Cir. 1985) (holding paper to be a prior art printed publication where the paper was “disseminated without restriction to at least six persons” and “between 50 and 500” ordinary artisans were “informed of its contents by [an] oral presentation” before the critical date).

Funkhouser describes providing a three-dimensional virtual environment between entities representing users. Ex. 1005, 85. In addition,

Funkhouser discusses when an entity changes state, sending update messages to workstations with entities that can “potentially perceive” the change. *Id.* Figure 12 is reproduced below.

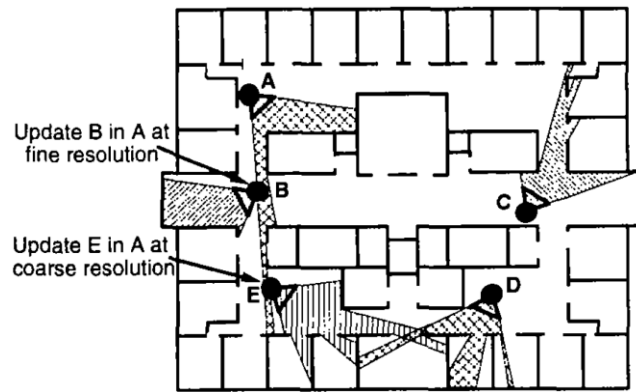


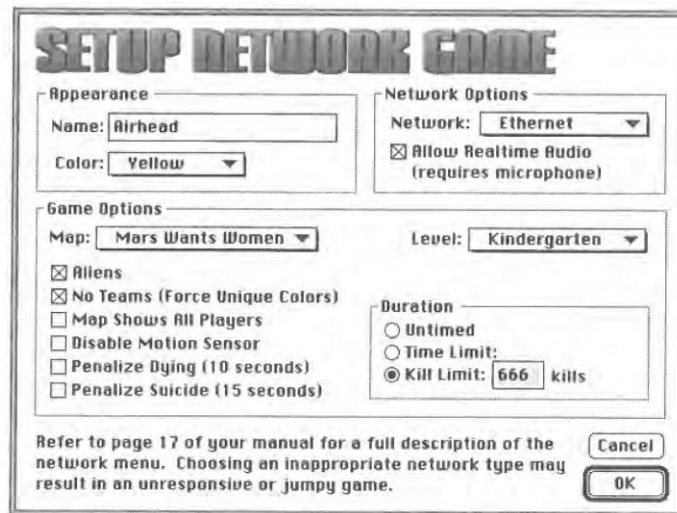
Figure 12 illustrates user A can see both users B and E and user B is closer to user A than user E. Because the cells in which user A is located is potentially visible to the cells in which users B and E are located, user A receives updates from users B and E. *See id.* at 87. Moreover, updates to user B “could be sent to A at a finer resolution” because user B “may be more important” than user E to user A. *Id.* at 91.

2. *Marathon (Ex. 1021)*

According to the Declaration of Michael Durkin filed by Petitioner, *Marathon* is a computer game software instruction manual that was included with each copy of the software that Petitioner sold and distributed beginning in December 1994. Pet. 8; Ex. 1022 ¶¶ 1–2. Mr. Durkin, an employee of Petitioner since August 2010, also declares that *Marathon* was obtained from one of the originally packaged boxes available for sale by Petitioner in December 1994. Ex. 1022 ¶¶ 1–3. In addition, Mr. Durkin declares the box was stored, unopened, and in its original shrink wrap until it was opened on May 22, 2015. *Id.* ¶ 3. Mr. Durkin personally witnessed the opening of the

box, Marathon's removal from the box, and photocopying Marathon as Exhibit 1021. *Id.* Accordingly, we are persuaded, at this juncture of the proceeding, that Petitioner has made a sufficient showing that Marathon qualifies as prior art under 35 U.S.C. § 102(a) because Petitioner has proffered adequate evidence that an interested ordinarily skilled artisan, "exercising reasonable diligence," could have obtained Marathon no later than December 1994—when Marathon began sales. *See Bruckelmyer*, 445 F.3d at 1378.

Marathon discusses playing a video game over a network with other players. Ex. 1021, 17. A setup network game menu is reproduced below.



The figure illustrates setting up teams, colors, etc. in an options menu. *Id.* In addition, Marathon shows an overhead map of all players and using the delete key to switch views to other players in the game. *Id.* at 18.

3. *The Parties' Contentions for Claims 1, 2, 7, 8, 12, 16, 18, and 20*

Petitioner asserts that the subject matter of claims 1, 2, 7, 8, 12, 16, 18, and 20 would have been obvious in view of Funkhouser and Marathon under 35 U.S.C. § 103(a). Pet. 15–36. Petitioner provides a limitation-by-

limitation analysis of where each limitation of claims 1, 2, 7, 8, 12, 16, 18, and 20 is allegedly taught in Funkhouser and Marathon. *Id.*

The present record supports the contention that Funkhouser teaches a local user receiving position information associated with less than all of the remote user avatars in one or more rooms of a virtual environment because some of the avatars that do not send position information fail to satisfy a condition, as required in claims 1, 2, and 18. Pet. 18–36 (citing Ex. 1005) (pinpoint citations omitted). The present record also supports the contention that Funkhouser teaches displaying some of the remote user avatars representing other users to the local user viewing the virtual environment, as required in claims 1, 2, and 18. Pet. 18–36 (citing Ex. 1005) (pinpoint citations omitted). The present record likewise supports the contention that Marathon teaches switching between a rendering on a display that shows the virtual environment to the local user from a perspective of one of the remote user avatars and a rendering that allows the local user to view the local user avatar in the virtual environment. Pet. 25–27, 31–32, 34–36 (citing Ex. 1021) (pinpoint citations omitted).

Petitioner relies on Marathon’s sending a voice message to other players in a game using a microphone to teach or suggest the limitations of claim 7. Pet. 36–37 (citing Ex. 1021, 9, 11, 19).

Petitioner relies on Funkhouser’s client workstation storing display data such as polygons, textures, etc. to teach or suggest the limitations of claim 8. Pet. 37 (citing Ex. 1005, 88).

Petitioner relies on Funkhouser’s client workstation screen displaying the point of view of one or more of its entities to teach or suggest the limitations of claim 12. Pet. 37–38 (citing Ex. 1005, 87).

Petitioner relies on Funkhouser's geometric database storing room information to teach or suggest the limitations of claim 16. Pet. 39–40 (citing Ex. 1005, 85, 89).

Petitioner relies on Funkhouser's client workstation screen displaying the point of view of one or more of its entities to teach or suggest the limitations of claim 20.⁹ Pet. 40 (citing Ex. 1005, 87).

Petitioner concludes that one of ordinary skill in the art would have combined Funkhouser's interacting users in a three-dimensional virtual environment using server-based message culling and Marathon's interacting users in a three-dimensional virtual environment switching their perspective to another player's perspective in order to shift processing burden away from client workstations, thereby increasing a user's enjoyment. Pet. 40–43 (citing Exs. 1005 and 1021) (pinpoint citations omitted).

Patent Owner argues that there is no rationale to combine Funkhouser and Marathon because Funkhouser maintains surrogates for only a subset of remote avatars visible to at least one avatar local to the client, whereas Marathon provides perspective switching of multiple users. Prelim. Resp. 13–20. Moreover, Patent Owner contends the combination would require each client to waste storage space for all other remote entities and increase client workstation processing burdens, which would frustrate the

⁹ We note that claim 20 states “displaying the plurality of avatars.” “[T]he plurality of avatars” lacks explicit antecedence. We can construe “the plurality of avatars” as either: 1) displaying both “the local user avatar” and “the remote user avatars;” or 2) as merely displaying “the remote user avatars.” We are persuaded that Marathon teaches both constructions. Ex. 1021, 18. Specifically, Marathon teaches an overhead map of all players and using the delete key to switch views to other players in the game, thereby teaching the limitations in claim 20 under either construction. *Id.*

entire purpose of Funkhouser. *Id.* On this record, we disagree with Patent Owner.

Marathon's perspective switching would not necessarily affect Funkhouser's server-based message culling because Funkhouser's message culling could be applied immediately prior to the client determining which remote user perspective to display and what should be included in that display. Pet. 42. Thus, Petitioner provides articulated reasoning with rational underpinning to support the rationale to combine the teachings of Funkhouser and Marathon. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 989 (Fed. Cir. 2006)).

We have reviewed the proposed ground of obviousness over Funkhouser and Marathon against claims 1, 2, 7, 8, 12, 16, 18, and 20, and we are persuaded, at this juncture of the proceeding, that Petitioner has established a reasonable likelihood of prevailing in its challenge to claims 1, 2, 7, 8, 12, 16, 18, and 20 on this ground.

4. *Claim 11*

In concurrent Case IPR2015-01325, we institute review of claim 11. Based on the record before us, we exercise our discretion to expedite the proceedings and decline to institute review in this proceeding of claim 11 based on the asserted ground of obviousness over Funkhouser and Marathon. *See, e.g.*, Pet. 6; 37 C.F.R. § 42.108(a).

C. Obviousness of Claim 3 in View of Funkhouser, Marathon, and Sitrick

1. Sitrick (Ex. 1013)

Sitrick describes providing a multi-player gaming system on a network. Ex. 1013, Abs, 1:4–5, 3:56–57, 4:48–51. In addition, Sitrick discusses a user selecting a distinguishable visual image as their avatar. *Id.* at Abs, 1:4–5, 3:56–57, 4:48–51. The user selection includes the color, size, shape, or a digitized image of the user’s face. *Id.* at Abs.

2. The Parties’ Contentions for Claim 3

Petitioner asserts that the subject matter of claim 3 would have been obvious in view of Funkhouser, Marathon, and Sitrick under 35 U.S.C. § 103(a). Pet. 43–46. Petitioner provides a limitation-by-limitation analysis of where each limitation of claim 3 is allegedly taught in Funkhouser, Marathon, and Sitrick. *Id.*

The present record supports Petitioner’s contention that Marathon teaches a user selecting their own teach color or unique color when setting up a multi-player game, as required by the limitations of claim 3. Pet. 43; Ex. 1021, 17–19. The present record also supports the contention that Sitrick teaches a user selecting a distinguishable visual image as their avatar, as required by the limitations of claim 3. Pet. 44; Ex. 1013, Abs., 1:4–5, 3:56–57, 4:48–51.

Petitioner concludes that one of ordinary skill in the art would have combined Funkhouser and Marathon’s interacting users in a three-dimensional virtual environment using server-based message culling and Sitrick’s avatar customization in order to permit the user to modify the

appearance of their avatar in the virtual world while using the performance improvements of the server-based message culling. Pet. 44–46.

Patent Owner argues that the combination of Funkhouser, Marathon, and Sitrick suffer from the same shortcomings as Funkhouser and Marathon. Prelim. Resp. 20. On the present record, we disagree with Patent Owner for the same reasons discussed *supra* in Part II.B.3.

We have reviewed the proposed ground challenging claim 3 as obvious over Funkhouser, Marathon, and Sitrick, and we are persuaded, at this juncture of the proceeding, that Petitioner has established a reasonable likelihood of prevailing in its challenge to claim 3 on this ground.

D. Obviousness of Claims 13–15 in View of Funkhouser, Marathon, and Funkhouser '93

1. Funkhouser '93 (Ex. 1017)

Petitioner has made an adequate showing that Funkhouser '93 was a printed publication by August 6, 1993 and, thus, constitutes prior art to the '998 patent under § 102(b). Pet. 9–10. Funkhouser '93 is an article included in a collection of presentation materials (Ex. 1018, “1993 Conference Book”), compiled for a conference sponsored by the ACM and held on August 1–6, 1993. Ex. 1018, cover, 1–8, 247; Ex. 1002 ¶ 51. Dr. Zyda testifies that all participants in the conference, including Dr. Zyda, received a copy of the 1993 Conference Book. Ex. 1002 ¶ 51. The 1993 Conference Book and Funkhouser '93 feature a 1993 copyright date and permit copying, generally without a fee and with “a fee and/or specific permission” if for “direct commercial advantage.” Ex. 1018, 2, 247; Ex. 1017, 247. The 1993 Conference Book also provides information for ACM and non-ACM

members to order the 1993 Conference Book. Ex. 1018, 2. We are persuaded that this evidence sufficiently shows that an interested ordinarily skilled artisan, exercising reasonable diligence, could have obtained Funkhouser '93 by August 6, 1993—the last day of the conference. *See Mass. Inst. of Tech.*, 774 F.2d at 1109.

Funkhouser '93 discusses an adaptive display algorithm that allows users to set target frame rates. Ex. 1017, 247. In addition, Funkhouser '93 discusses workstations rendering image quality at less than full detail in exchange for faster target frame rates when rendering complex images. *Id.* Funkhouser '93 also describes the omission of books in bookshelves when applying the faster target frame rate. *Id.* at 253–54.

2. *The Parties' Contentions for Claims 13–15*

Petitioner relies on Funkhouser displaying user avatars and Funkhouser '93 omitting display of books in bookshelves when applying the user's selection of a faster target frame rate to teach or suggest the limitations of claims 13–15. Pet. 46–50.

Petitioner concludes that one of ordinary skill in the art would have combined Funkhouser and Marathon's interacting users in a three-dimensional virtual environment using server-based message culling and Funkhouser '93's omitting objects in the display in order to further reduce processing requirements of client workstations. *Id.* at 50–53.

Patent Owner argues that the combination of Funkhouser, Marathon, and Funkhouser '93 suffer from the same shortcomings as Funkhouser and Marathon. Prelim. Resp. 20. At this stage of the proceeding, we disagree with Patent Owner for the same reasons discussed *supra* in Part II.B.3.

We have reviewed the proposed ground challenging claims 13–15 as obvious over Funkhouser, Marathon, and Funkhouser '93, and we are persuaded, at this juncture of the proceeding, that Petitioner has established a reasonable likelihood of prevailing in its challenge to claims 13–15 on this ground.

E. Obviousness of Claim 17 in View of Funkhouser, Marathon, and Wexelblat

1. Wexelblat (Ex. 1020)

Wexelblat discusses an artificial reality with interacting users. Ex. 1020, 6:61–7:10. In addition, Wexelblat discusses a user teleporting from a current location to another location. *Id.*

2. The Parties' Contentions for Claim 17

Petitioner relies on Wexelblat's user teleporting from a current location to a library to meet the limitations of claim 17. Pet. 53–55.

Petitioner concludes that one of ordinary skill in the art would have combined Funkhouser and Marathon's interacting users in a three-dimensional virtual environment using server-based message culling and Wexelblat's teleportation in order to allow the users to navigate from room to room with greater ease. Pet. 54–55.

Patent Owner argues that the combination of Funkhouser, Marathon, and Wexelblat suffer from the same shortcomings as Funkhouser and Marathon. Prelim. Resp. 20. On this record, we disagree with Patent Owner for the same reasons discussed *supra* in Part II.B.3.

We have reviewed the proposed ground challenging claim 17 as obvious over Funkhouser, Marathon, and Wexelblat, and we are persuaded,

at this juncture of the proceeding, that Petitioner has established a reasonable likelihood of prevailing in its challenge to claim 17 on this ground.

F. Obviousness of Claim 19 in View of Funkhouser and Pratt

1. Pratt (Ex. 1027)

We have considered Petitioner's argument that Pratt has a printed publication date no later than October 26, 1993. Pet. 56–57. Petitioner relies on the title page of Pratt that is dated June 1993 and states “[a]pproved for public release; distribution is unlimited.” Ex. 1027, Title Page.

In addition, Petitioner relies on Dr. Zyda's Declaration. Pet. 56. According to the Declaration, Dr. Zyda was an advisor to David Pratt on the dissertation shown as Exhibit 1027. Ex. 1002 ¶ 180. Dr. Zyda kept two copies, distributed two copies to the Defense Technical Information Center (“DTIC”), two copies to the library at the Naval Postgraduate School, one copy to the Director of Research Administration, four copies to the author, David. R. Pratt, one copy to Major David Neyland, and one copy to Lieutenant Colonel Michael D. Proctor. Pet. 56; Ex. 1002 ¶ 180; Ex. 1027, 147.

In addition, Petitioner states the

DTIC “provide[s] the general public and industry with access to unclassified, unlimited information” to meet its responsibility to “[s]timulate innovation with public and industry access to DoD (Department of Defense) funded research and digital data.” Ex. 1028. A pre-1995 document describing the use of DTIC information, products and services states that “DTIC also provides some limited services to the general public and foreign requestors. Unclassified and unlimited DoD documents are announced and made generally available through a contractual

arrangement with NTIS [National Technical Information Service].”

Pet. 56–57; Exs. 1028 and 1029. We disagree with Petitioner.

“Public accessibility” is the touchstone for determining whether a reference constitutes a printed publication. *In re Hall*, 781 F. 2d 897, 898–99 (Fed. Cir. 1986). A reference is “publicly accessible” 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.

Bruckelmyer, 445 F.3d at 1378. In this case, Petitioner’s reliance on the June 1993 date and “[a]pproved for public release; distribution is unlimited” language in Pratt is not sufficient to show that the thesis was publicly accessible in June 1993 because Petitioner has not shown sufficiently that such document was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, could have located it in June 1993. *Id.*

Next, although Dr. Zyda states (Ex. 1002 ¶ 180 (citing Ex. 1027, 147, title page)) copies of Pratt were disseminated to other parties on the list shown on page 147 of Exhibit 1027, Petitioner has not alleged or shown that the listed parties were persons interested and ordinarily skilled in the subject matter or art. We are not persuaded that distribution to these individuals is sufficient to demonstrate that persons interested and ordinarily skilled in the subject matter exercising reasonable diligence, could have located Pratt before the earliest priority date of the ’998 patent. *Bruckelmyer*, 445 F.3d at 1378.

Regarding Petitioner's contention that DTIC's website shows public accessibility, we note DTIC's website states "[m]ore than 50 percent of the research records in the collection are available . . . and provid[ing] the general public and industry with access to unclassified, unlimited information, *including many full text downloadable documents*" (emphasis added). Pet. 56–57; Ex. 1028, 1; Ex. 1029. Petitioner has not shown sufficiently that Pratt is among the set of 50 percent of the available research records or among the set of the full text downloadable documents. In addition, although Exhibit 1027 features an October 26, 1993 date from the DTIC and an October 21, 1993 date on the title page, these dates do not show that the DTIC made Pratt publicly accessible. Specifically, Petitioner has not shown what these dates represent, i.e., whether the October 26, 1993 date from the DTIC and the October 21, 1993 date represent a receipt date, partial text availability date, public accessibility date, etc.

As for Petitioner's argument that Pratt was publicly accessible because it was sent to the library at the Naval Postgraduate School (Pet. 56; Ex. 1002 ¶ 180), Petitioner has not shown sufficiently that Pratt was catalogued, indexed, or shelved. *See In re Hall*, 781 F. 2d 897, 898–99 (Fed. Cir. 1986) ("In the present case, Dr. Will's affidavits give a rather general library procedure as to indexing, cataloging, and shelving of theses"); *Voter Verified, Inc. v. Premier Election Solutions, Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012) ("[I]ndexing is a relevant factor in determining accessibility of potential prior art, particularly library-based references"); *In re Bayer*, 568 F.2d 1357 (CCPA 1978) (holding that a thesis housed, but neither shelved nor catalogued, within a university library was not publicly accessible).

Even if Petitioner was able to show that Pratt was catalogued, indexed, or shelved, which it has not, Petitioner has not shown Pratt was catalogued, indexed, or shelved *in a meaningful way* such that Pratt was publicly accessible. In *In re Cronyn*, 890 F.2d 1161 (Fed. Cir. 1989), for example, a thesis was catalogued and indexed in a college's main library using thousands of individual cards that contained only a student's name and the title of their thesis, which was searchable by the student's name. The actual theses themselves, however, were not included in the index. The Federal Circuit held that because the theses were only presented to a handful of faculty members and "had not been cataloged or indexed in a meaningful way," they were not sufficiently publicly accessible to constitute prior art.

Accordingly, Petitioner has not shown sufficiently that Pratt was publicly accessible before the earliest priority date of the '998 patent. Because Petitioner has not made a sufficient showing that Pratt is prior art to the '998 patent, Petitioner has not demonstrated a reasonable likelihood that it would succeed in showing that claim 19 of the '998 patent would have been obvious over Funkhouser and Pratt.

G. Patent Owner's 35 U.S.C. § 325(d) Arguments

We have considered Patent Owner's argument that the Petition should be denied under 35 U.S.C. § 325(d) because Funkhouser was previously presented to the Patent Office. Prelim. Resp. 12. Although 35 U.S.C. § 325(d) *permits* the Board to reject a petition merely for the reason that the same or substantially the same prior art or arguments were considered previously in another proceeding before the Office, it does not *require* the

Board to do so. In this case, we decline to exercise our discretion to reject the Petition under 35 U.S.C. § 325(d).

H. Real Parties-in-Interest

Patent Owner argues that Activision Publishing, Inc. (“Activision”) is an unnamed real party in interest in this proceeding. Prelim. Resp. 23–30. Thus, according to Patent Owner, the Petition fails to name all real parties in interest as required by 35 U.S.C. § 312(a)(2) and institution of review is barred under 35 U.S.C. § 315(b). *Id.*

1. Factual Background

Petitioner and Activision entered into a Software Publishing and Development Agreement (“the Agreement”), effective April 16, 2010. Ex. 2002, 1. Under the Agreement, Petitioner “agreed to develop” a series of software products with the title Destiny (“the Destiny Products” or “the Products”), “to be exclusively published and distributed by Activision.” *Id.*

In 2012, Patent Owner filed and served a complaint against Activision alleging infringement of the ’998 patent in the U.S. District Court for the District of Massachusetts (“Activision Case”). Ex. 2010; Ex. 2003. The complaint alleges infringement by various products—but not any Destiny Products. *See* Ex. 2010.

In a letter dated November 13, 2014 (“the Letter”), Patent Owner informed Activision that Patent Owner “intend[s] to add . . . Destiny” to the Activision Case. Ex. 2004, 1. Patent Owner, however, has not added any of the Destiny Products as an accused product in the case. Ex. 2001, 16:9–10; Prelim. Resp. 27.

2. Discussion

Courts traditionally have invoked the term real party in interest to describe a relationship sufficient to justify applying conventional principles of estoppel and preclusion to non-parties. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759–60 (Aug. 14, 2012) (“Practice Guide”). The factors courts consider in analyzing these issues inform our analysis. *Id.*

In *Taylor v. Sturgell*, the Supreme Court reaffirmed the “fundamental nature” of the general rule that a non-party is not estopped, precluded, or otherwise bound by litigation. 553 U.S. 880, 893, 898 (2008). The Court, however, explained that this rule is subject to six categories of exceptions that “apply in limited circumstances,” namely where: (1) the non-party “agrees to be bound”; (2) a “pre-existing substantive legal relationship[]” with the named party justifies binding the non-party; (3) the non-party, “in certain limited circumstances,” is “adequately represented” by a party with the same interests (e.g., class actions); (4) the non-party “assume[d] control” over the proceeding; (5) the non-party is bound by a prior decision and is attempting to rehear the matter through a proxy; and (6) a “special statutory scheme . . . expressly foreclos[es] successive” hearing by non-parties. *Id.* at 892–98 (citations and quotations omitted).

Here, Patent Owner argues that Activision is a real party in interest because the second and fourth categories in *Taylor*—a “pre-existing substantive legal relationship[]” and control—are satisfied. Prelim. Resp. 24. Patent Owner argues that the Letter, indicating an intent to add a Destiny Product as an accused product in the Activision Case, “triggered [Petitioner]’s duties under the Agreement.” *Id.* at 27. Moreover, according to Patent Owner, “[b]y the express terms of the Agreement, Activision had

at minimum an opportunity to control this [*inter partes* review] through its contractual right to review and approve [Petitioner]’s legal reviews underlying this [*inter partes* review], its participation in the meetings of [Petitioner]’s Board of Directors, and its funding of th[is *inter partes* review] indirectly through payment of Development Advances.” *Id.* at 29.

We disagree. Even assuming that Petitioner’s obligations under the Agreement were triggered by Patent Owner’s mere representation to Activision of an intent to accuse a Destiny Product in the Activision Case, Patent Owner has not shown that Activision has an opportunity to control this *inter partes* review. Instead, we agree with Petitioner that Patent Owner’s arguments are based on unreasonable assumptions and interpretations of various sections of the Agreement. *See* Paper 10.

The concept of control generally means that “the non[-]party has the actual measure of control or opportunity to control that might reasonably be expected between two formal coparties” in a proceeding. Practice Guide, at 48,759 (citation omitted). In other words, the non-party “had the opportunity to present proofs and argument,” *Taylor*, 553 U.S. at 895 (citation omitted), or “to direct or control the content” of the filing, *In re Guan Inter Partes* Reexamination Proceeding, Control No. 95/001,045, Decision Vacating Filing Date, at 8 (Aug. 25, 2008).

Patent Owner fails to show that Activision satisfies these standards. First, Patent Owner argues that Activision has at least the opportunity to control this proceeding based on Petitioner’s obligation to conduct legal reviews, with Activision’s review and approval, under § 7A.15(j) of the Agreement. Prelim. Resp. 24, 26, 28. Section 7A.15(j) states that Petitioner—“subject to prior review and approval of Activision”—must

manage and is responsible for “[c]onducting *legal reviews of the Products* to ensure that all Intellectual Property and other rights are fully cleared for use.” Ex. 2002, 10 (emphasis added). According to Patent Owner, Petitioner’s obligation to conduct legal reviews is pursuant to its warranty of non-infringement in § 14.1.2. *Id.* at 19; Prelim. Resp. 26.

We, however, agree with Petitioner that Patent Owner’s argument is misplaced “because it is premised on a faulty assumption,” namely that this proceeding constitutes a “legal review[] of the Products” under § 7A.15(j). Paper 10, 6 (emphasis omitted). The only subject of this proceeding is the ’856 patent; this proceeding does not involve any product. *Id.* Accordingly, Patent Owner has failed to show that this proceeding falls within the scope of a “legal review[] of the Products” under § 7A.15(j), such that the Agreement would give Activision a right of review and approval related to this proceeding.

Second, Patent Owner asserts Petitioner has “at minimum the opportunity to control this . . . proceeding[]” as a result of Activision’s “contractual oversights of [Petitioner]’s management” pursuant to §§ 18.1 and 18.2 of the Agreement. Prelim. Resp. 29. Section 18.1 gives Activision “a right of approval, which . . . may be withheld in Activision’s sole discretion, over any ‘Change in Control’ of [Petitioner],” which is defined as “a merger or consolidation . . . with another company, sale or transfer of any . . . significant and/or material assets, or a transaction or series of related transactions resulting in the transfer of fifty percent (50%) or more of the equity ownership.” Ex. 2002, 24. Under § 18.2, Activision has “the right to designate one person to attend and participate as a non-voting observer in all meetings of the Board of Directors of [Petitioner].” *Id.*

Neither of these provisions shows that Activision has an opportunity to control this proceeding. Regarding § 18.1, Patent Owner fails to show any relationship between Activision's right of approval of a "Change in Control" of Petitioner, such as a merger or transfer of majority ownership, and the control of this proceeding. *See Aruze Gaming Macau, Ltd. v. MGT Gaming, Inc.*, Case IPR2014-01288, slip op. at 11 (PTAB Feb. 20, 2015) (Paper 13) ("[Real party in interest] is the relationship between a party and a *proceeding*[,] . . . not . . . the relationship between *parties*," and, thus, the inquiry "focus[es] . . . on the degree of control the nonparty could exert over the *inter partes* review, not the petitioner."). Similarly, even if Activision invoked its "right to designate *one . . . non-voting observer*" in Petitioner's Board of Director meetings, pursuant to § 18.2, one person's attendance at meetings, without any voting rights, fails to rise to an opportunity to control this proceeding. Ex. 2002, 24 (emphasis added). The limited involvement in Petitioner's management that these provisions afford Activision falls far from any opportunity to control this proceeding that "might reasonably be expected between two formal coparties," Practice Guide, at 48,759, such as "the opportunity to present proofs and argument," *Taylor*, 553 U.S. at 895 (citation omitted), or "to direct or control the content" of the filing, *In re Guan*, No. 95/001,045, at 8 (Aug. 25, 2008).

Third, Patent Owner points to § 10.1 and § 14.1.4 of the Agreement as evidence that Activision is funding this proceeding. Prelim. Resp. 24, 26–27. Under § 10.1, Activision must "pay development advances ('Development Advances') to [Petitioner] for the development of each of the Products," which "shall fully fund [Petitioner]'s operations directly related to the development of the Products (including overhead costs associated

therewith, but excluding any built-in profit margin).” Ex. 2002, 14–15. Section 14.1.4 specifies that the Development Advances “shall be utilized by [Petitioner] *solely* to fund the costs of creation and development of the Products and otherwise cover day-to-day overhead and operational expenses that are reasonably necessary and related to the creation and development of the Products (e.g., office lease, computers[,], employee salaries, etc.), but excluding any built-in profit margin.” *Id.* at 20 (emphasis added).

Patent Owner argues that the operations and operational expenses in § 10.1 and § 14.1.4 “include the funding of the legal reviews required under [§] 7A.15(j), which were intended by [Petitioner] and Activision to come from the Development Advances paid by Activision for development of the Destiny [P]roducts.” Prelim. Resp. 24; *see id.* at 26–27. In other words, Patent Owner argues that the “legal reviews of the Products” in § 7A.15(j) is a permissible use of the Development Advances. As we explain above, Patent Owner has not demonstrated that this proceeding constitutes a “legal review[] of the Products” under § 7A.15. Therefore, even if Patent Owner were to show that the Agreement allows Petitioner to use Development Advances for such “legal reviews of the Products,” this would not establish that the Agreement allows Petitioner to use Development Advances to fund this proceeding. Moreover, Patent Owner also has not shown that “legal reviews of the Products” under § 7A.15(j) or this proceeding fall within the categories of permissible uses of Development Advances: (1) “creation and development *of the Products*” and (2) “day-to-day *overhead and operational expenses that are reasonably necessary and related to the creation and development of the Products.*” Ex. 2002, 20 (emphases added). Notably, the examples of “overhead and operational expenses” included § 14.1.4—

“office lease, computers[,] employee salaries”—are disparate from the “legal reviews” required by § 7A.15(j) and from the filing of this Petition.

Accordingly, Patent Owner has not demonstrated that the Agreement gives Activision any opportunity to control this proceeding. In addition, we note that Petitioner has expressly denied any control or funding of this proceeding by Activision. Paper 10, 1–2, 8. Petitioner represents to the Board that “[Petitioner] is solely responsible for the cost and control of the [*inter partes* review] against [Patent Owner]’s patents,” and “[n]othing in the . . . Agreement allows any party other than [Petitioner] to control th[is] . . . proceeding[.]” *Id.* at 1–2. Similarly, Petitioner states that “Activision’s payment of [D]evelopment [A]dvances to [Petitioner] funded the development of the [Destiny Products], not these [*inter partes* reviews].” *Id.* at 8. On this record, we accept Petitioner’s express representations that Activision is not controlling or funding this proceeding.

Moreover, Patent Owner has not shown that the second category outlined by the Supreme Court in *Taylor*—a pre-existing substantive legal relationship—justifies finding Activision to be a real party in interest. Prelim. Resp. 23–24, 29–30. Not all pre-existing relationships are sufficient to satisfy this category. The *Taylor* Court provided a non-exclusive list of “[q]ualifying relationships,” namely “preceding and succeeding owners of property, bailee and bailor, and assignee and assignor.” 553 U.S. at 894. Patent Owner has not shown that the relationship between Petitioner and Activision meets any of these examples. In addition, beyond stating that Petitioner and Activision had a preexisting relationship, Patent Owner has not made any arguments regarding this relationship distinct from its arguments addressed above regarding control. For the reasons explained

above, we likewise are not persuaded that the relationship between Petitioner and Activision, resulting from the Agreement, is sufficient to justify finding Activision to be a real party in interest in this proceeding.

In conclusion, Patent Owner has not demonstrated that Activision is an unnamed real party in interest in this proceeding. Accordingly, Patent Owner has not established that the Petition violates 35 U.S.C. § 312(a)(2) or that institution of review is barred under 35 U.S.C. § 315(b).

III. CONCLUSION

For the foregoing reasons, based on the information presented in the Petition and the Preliminary Response, we are persuaded that there is a reasonable likelihood that Petitioner would prevail in showing the unpatentability of claims 1–3, 7, 8, 12–18, and 20 of the '998 patent. We are not persuaded, however, that there is a reasonable likelihood that Petitioner would prevail in showing the unpatentability of claim 19 of the '998 patent. In addition, we exercise our discretion and decline to institute review based on the asserted grounds advanced by Petitioner regarding claim 11 of the '998 patent.

At this stage of the proceeding, we have not made a final determination on the patentability of the challenged claims.

IV. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314, an *inter partes* review of U.S. Patent No. 8,145,998 B2 is hereby instituted on the grounds that claims 1, 2, 7, 8, 12, 16, 18, and 20 are asserted to be unpatentable under 35 U.S.C. § 103(a) in view of Funkhouser and Marathon; claim 3 is asserted

to be unpatentable under 35 U.S.C. § 103(a) in view of Funkhouser, Marathon, and Sitrick; claims 13–15 are asserted to be unpatentable under 35 U.S.C. § 103(a) in view of Funkhouser, Marathon, and Funkhouser '93; and claim 17 is asserted to be unpatentable under 35 U.S.C. § 103(a) in view of Funkhouser, Marathon, and Wexelblat;

FURTHER ORDERED that no other ground of unpatentability alleged in the Petition for any claim is authorized for this *inter partes* review; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial commences on the entry date of this decision.

IPR2015-01321
Patent 8,145,998 B2

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