

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner

v.

WILDSEED MOBILE LLC,
Patent Owner

Case IPR2023-00244
U.S. Patent No. 10,251,021

PATENT OWNER'S RESPONSE

Mail Stop "PATENT BOARD"
Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	THE '021 PATENT	2
A.	Summary	2
B.	Prosecution History	6
1.	'021 Patent Prosecution History	6
2.	'960 Patent Prosecution History	12
C.	Person of Ordinary Skill in the Art (POSITA)	14
D.	Claim Construction	15
1.	“wherein the plurality of media content types comprises textual media, image media, audio media, and video media”	15
2.	“infer one or more entertainment preferences of a user ...”	18
III.	PETITIONER FAILS TO DEMONSTRATE THE OBVIOUSNESS OF ANY CHALLENGED CLAIM.....	20
A.	Summaries of the Asserted References.....	22
1.	Sasaki	22
2.	Ellis	28
B.	Independent Claims 1, 10, and 16 are not rendered obvious by Petitioner’s asserted combination.	29
1.	Petitioner’s combination of Sasaki and Ellis fails to teach that the server “ <i>infer[s]</i> one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein <i>the plurality of media content types comprises textual media, image media, audio media, and video media,</i> ” as recited in claim 1 and similarly recited in claims 10 and 16.....	30
a.	Sasaki does not disclose or suggest inferring a user’s entertainment preferences at all.....	31

b.	Ellis does not disclose or suggest inferring a user’s preferences based on the claimed plurality of media content types.	36
c.	Petitioner’s combination does not disclose or suggest inferring a user’s entertainment preferences based on textual, image, or video media, and Petitioner does not meet its burden of establishing why it would have been obvious to do so.	37
2.	Petitioner’s proposed combination impermissibly relies on two distinct embodiments from Sasaki without explanation.	40
3.	Petitioner’s combination of Sasaki and Ellis fails to teach that the portable media device “control[s] transmission, to the server, of location information associated with the portable media player device,” as recited in independent claim 10 [limitation 10.3]. .	44
4.	Petitioner’s combination of Sasaki and Ellis fails to teach “access one or more sources of information about venues or events proximal to a current location of the user,” as recited in independent claim 1.	47
5.	Petitioner’s combination of Sasaki and Ellis fails to teach “infer a current location of the user of the portable media player device based on obtained location information associated with the portable media player device,” as recited in independent claim 16 [limitation 16.2.2].	49
6.	Petitioner fails to establish a motivation to combine Sasaki and Ellis.	50
7.	Conclusion as to Independent Claims 1, 10, and 16.	53
C.	Dependent Claims	53
1.	Dependent Claim 2: Petitioner fails to show that the combination of Sasaki and Ellis teaches “wherein the audio media comprises music media and podcast media.”	53
2.	Dependent Claim 4: Petitioner fails to show that the combination of Sasaki and Ellis teaches “wherein execution of the instructions is to cause the computer server to infer the current location of the user of the media player device based on obtained location information associated with the portable media player device.”	55

3.	Dependent Claim 9: Petitioner fails to show that the combination of Sasaki and Ellis teaches “wherein execution of the instructions is to cause the computer server to: obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device.”	56
IV.	THE BOARD SHOULD NOT CREDIT DR. HOUEH’S OPINIONS BECAUSE KEY PORTIONS OF HIS DECLARATION MERELY REPEAT THE PETITION.	58
V.	CONCLUSION.....	61

PATENT OWNER'S UPDATED EXHIBIT LIST

Exhibit No.	Description
2001	File History of U.S. Patent No. 9,141,960
2002	Case No. 3:22-cv-04928, Plaintiff Wildseed Mobile, LLC'S Patent L.R. 3-1 Disclosure of Asserted Claims and Infringement Contentions
2003	U.S. Patent No. 10,251,021 Invalidity Contentions
2004	<i>Intentionally Left Blank</i>
2005	Declaration of Andrew G. Hamill In Support Of <i>Pro Hac Vice</i> Admission Under 37 C.F.R. § 42.10(c)
2006	Supplemental Declaration of Andrew G. Hamill In Support Of <i>Pro Hac Vice</i> Admission Under 37 C.F.R. § 42.10(c)
2007	Declaration of Robert Stillerman ("Stillerman Decl.")
2008	<i>Curriculum Vitae</i> of Robert Stillerman
2009	Transcript of the Deposition of Henry H. Houh, Ph.D.
2010	Richter, F., "The History of Portable Music," Statista, May 11, 2022, accessible at https://www.statista.com/chart/18555/portable-music-milestones/ , last accessed August 23, 2023
2011	Lynch, M., "The Difference Between Streaming and Downloading Media," The Tech Advocate, June 10, 2023, accessible at https://www.thetechadvocate.org/the-difference-between-streaming-and-downloading-media/ , last accessed August 24, 2023
2012	Definition of "streaming," Cambridge Dictionary, accessible at https://dictionary.cambridge.org/us/dictionary/english/streaming , last accessed August 23, 2023
2013	"Streaming," Verizon, February 21, 2023, accessible at https://www.verizon.com/articles/internet-essentials/streaming-definition/ , last accessed August 24, 2023

Exhibit No.	Description
2014	U.S. Patent Application Publication No. 2005/0262251 A1 to Klemets et al., published November 24, 2005
2015	Rouse, M., “Internet Radio,” Techopedia, December 9, 2016, accessible at https://www.techopedia.com/definition/3108/internet-radio , last accessed August 24, 2023
2016	U.S. Patent Application Publication No. 2013/0218970 A1 to Svendsen et al., published August 22, 2013
2017	Definition of “podcast,” Cambridge Dictionary, accessible at https://dictionary.cambridge.org/us/dictionary/english/podcast , last accessed August 23, 2023
2018	Definition of “podcast,” Merriam-Webster Dictionary, accessible at https://www.merriam-webster.com/dictionary/podcast , last accessed August 23, 2023
2019	Definition of “infer,” Merriam-Webster Dictionary, accessible at https://www.merriam-webster.com/dictionary/infer , last accessed August 23, 2023

I. INTRODUCTION

The Board should refuse to find claims 1-19 of U.S. Patent No. 10,251,021 (“the ’021 patent”) unpatentable.

First, Petitioner’s asserted combination of references does not disclose or render obvious at least two claim limitations of every independent claim of the ’021 patent. One of these limitations—“infer one or more entertainment preferences of a user . . . based at least in part on . . . a plurality of media content types . . . wherein the plurality of media content types comprises textual media, image media, audio media, and video media”—was discussed extensively by the Applicant and Examiner, who agreed that it required an inference based on all four media types. Neither of the references cited for this limitation teaches it. Petitioner’s cited art also fails to disclose, teach, or suggest another limitation: a portable media player device that transmits its location to a server. Further, Petitioner impermissibly combines embodiments from one of the cited references without explanation. These flaws are each fatal to the Petition.

Second, Petitioner fails to carry its burden of showing obviousness for at least three dependent claims—claims 2, 4, and 9. For example, Petitioner fails to establish that the cited art renders obvious the use of podcast media to infer a user’s entertainment preferences. Additionally, Petitioner conflates the claimed information about the media with the user’s entertainment preferences and

therefore fails to show that the cited art renders obvious retrieving information about the media from storage.

Additionally, Petitioner advances three- and four-reference combinations that rely on declaration testimony from Petitioner’s proffered expert, Dr. Houh. But Dr. Houh’s opinions should not be given any weight because his opinions on key issues repeat—often *verbatim*—the conclusory arguments presented in the Petition. Because Petitioner relies on Dr. Houh’s conclusory testimony throughout the Petition, every ground of unpatentability lacks sufficient evidentiary support from the perspective of a skilled artisan on key issues—such as the teachings of the references and motivations to support the proposed combinations—and thus the Petition fails to show that the claims would have been obvious.

II. THE ’021 PATENT

A. Summary

The ’021 patent, titled “Venue and Event Recommendations for A User of A Portable Media Player Device,” issued on April 2, 2019 and claims priority to U.S. Patent No. 9,141,960 (“the ’960 patent”), which was filed on June 23, 2008, and U.S. Provisional Application No. 60/945,677, filed on June 22, 2007. EX1001, [45], [54], [60], [63].

The ’021 patent notes that “[w]ith the advance of storage technology, the amount of media that can be stored in a portable media player device has grown

exponentially.” *Id.*, 1:50-53. Additionally, “with the advance of telecommunications and networking technology, the number of sites offering media and other media-rich environments to provide new and/or replacement media content for portable media player devices have also grown exponentially.” *Id.*, 1:53-57.

The ’021 patent “relates to venue or event recommendations for a user of a portable media player device.” *Id.*, 1:18-20. The ’021 patent describes a server that wirelessly transmits the venue or event recommendations to the portable media player device. *Id.*, 4:25-28.

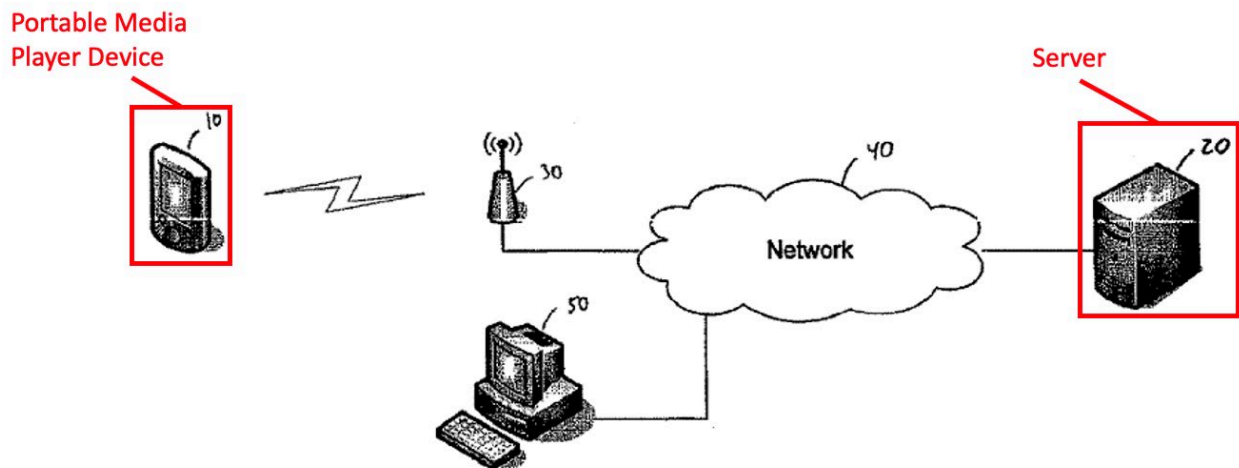


Figure 1

EX1001, FIG. 1 (annotated).

The server infers the preferences of the user of a portable media player device based on an analysis of a wide variety of media types, such as “music, podcasts, books or audiobooks, video, photos or other images.” *Id.*, 5:36-42. The

server also infers the current location of the user of the portable media player device. *Id.*, 2:44-60. The server transmits venue or event recommendations based on the user's inferred preferences and current location. *Id.*, 4:25-28. Figure 2 illustrates the role of the server in determining the location and entertainment preferences of the user, and generating a recommendation for a venue or event.

200

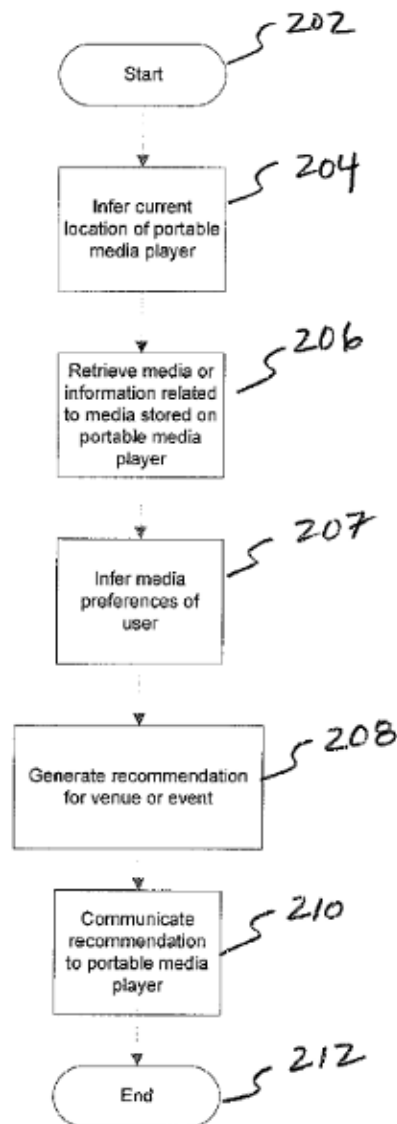


FIGURE 2

EX1001, FIG. 2.

B. Prosecution History

As noted above, the '021 patent claims priority to the '960 patent. Relevant portions of prosecution histories of both the '021 patent and the parent '960 patent are discussed below.

1. '021 Patent Prosecution History

After filing the application that became the '021 patent, the Applicant filed a preliminary amendment, cancelling the original claims and adding new claims, including claim 21, which issued as claim 1. EX1002, 255-260. Claim 21 included a limitation requiring the server to infer the entertainment preferences of the user of the media player device based at least in part on the retrieved plurality of media or retrieved information about said plurality of media:

infer, based at least in part on the retrieved plurality of media or the retrieved information about said plurality of media, one or more entertainment preferences of a user of the media player device;

Id., 256.

After a double patenting rejection over the parent '960 patent, the Applicant filed a terminal disclaimer. *Id.*, 231-237, 215-216. The Examiner then rejected claim 21 as anticipated by the Spiegelman reference. *Id.*, 177-194, 196.

The Applicant amended claim 21 to require the server to infer the user's entertainment preferences based at least in part on the *one or more* types of media stored on, or accessed by, the portable media player device:

infer, based at least in part on the retrieved ~~plurality of media~~, or the retrieved information about ~~said plurality of the media~~, and one or more plurality of media types of the media stored on or accessed by the portable media player device, one or more entertainment preferences of a user of the ~~media player~~portable media player device;

Id., 164.

The Applicant also amended dependent claim 22 to identify the plurality of media types used to infer the user's entertainment preferences (*i.e.*, textual, image, music, podcast, and video):

22. (Currently Amended) The one or more ~~NTCRMnon-transitory computer-readable media~~ of claim 21, wherein the plurality of media types comprises textual media, image media, music media, podcast media, and video media ~~generate a recommendation comprises generate a recommendation based at least in part on a genre of music played at the venue or event of interest and on a music genre preference of the user inferred by the computer server based at least in part on music media stored in, or accessed using, the media player device.~~

Id.

The Applicant argued that “nothing in *Spiegelman* discloses or suggests that the event recommendations are based on the type of media accessed or stored by the consumer.” *Id.*, 172.

Of particular note here, the Examiner agreed that the amendment overcame *Spiegelman*, but rejected the amended claims 21 and 22 over the combination of *Spiegelman* and *Martin*. *Id.*, 143-159. With respect to claim 22, the Examiner stated that *Spiegelman* discloses “wherein the plurality of media types comprises music media, podcast media, and video media” (citations omitted) but

acknowledged that it did not disclose “textual media and image media.” *Id.*, 150.

The Examiner then relied on Martin to meet the remaining media types required by claim 22 and alleged that it would have been obvious to a POSITA to combine Spiegelman and Martin:

“Regarding claim 22: ... Spiegelman further discloses: wherein the plurality of media types comprises music media, podcast media, and video media. Spiegelman does not disclose: textual media and image media. However, Martin further discloses: textual media and image media.”

Id., 150-151 (citations omitted). ***Thus, the Examiner’s understanding of claim 22 was that it required each of the recited media content types, not simply two or more.*** EX2007, ¶77. If the Examiner’s understanding of the claim was that it simply required two or more of the recited media types, then Spiegelman’s disclosure of three media types would have been sufficient to reject the claim. But it was not then, and is not now.

The Applicant responded by arguing that, while Martin discloses performing “taste analysis,” it does not disclose basing recommendations on the type of media accessed by the user. EX1002, 120-121.

The Applicant then amended claim 21 to require *a plurality* of media content types:

~~infer one or more entertainment preferences of a user of the portable media player device, based at least in part on the retrieved media, the retrieved information about the media, and one or more a plurality of media content types of the media stored on or accessed by the portable media player device, one or more entertainment preferences of a user of the portable media player device;~~

Id., 93.

The Applicant further clarified, when distinguishing Martin, that claim 21 requires determining a user's preferences for more than one type of media. In contrast, "*Martin* is only concerned with identifying a user's taste (i.e., preference for a particular genre) for one type of content (e.g., audio/music)." *Id.*, 101. The Applicant also distinguished Martin on the basis that claim 21 requires the server to rely on a plurality of media content types for determining the user's preferences: "There is no focused and specific examples within Martin that utilize a plurality of media content types stored or accessed by a user for recommending mediasets to the user or group of users." *Id.* The Applicant did not dispute the Examiner's interpretation of claim 22.

The Examiner agreed that the Applicant's arguments overcame the Spiegelman-Martin combination, but rejected claim 21 over the combination of Spiegelman and Baudino and claim 22 over the combination of Spiegelman, Baudino, and Martin. *Id.*, 65-80. With respect to claim 22, the Examiner stated that the combination of Spiegelman and Baudino discloses music, podcast, and video media but not textual and image media. The Examiner further stated that Martin

discloses textual media and image media and that it would have been obvious to a POSITA to combine Spiegelman with Baudino and Martin:

“Regarding claim 22: ... The combination [sic] Spiegelman and Baudino further discloses: wherein the plurality of media types comprises music media, podcast media, and video media. The combination [sic] Spiegelman and Baudino does not disclose: textual media and image media. However, Martin further discloses: textual media and image media.”

Id., 74-75 (citations omitted). Thus, the Examiner again interpreted claim 22 as requiring each of the recited media content types. EX2007, ¶81.

The Applicant responded by amending claim 21 to incorporate claim 22’s language, with the modification of changing music and podcast media to the broader “audio media”:

infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;

EX1002, 51.

The Applicant admitted that “[t]he amendments to claim 21 are based in part on the subject matter previously recited by claim 22.” *Id.*, 58. The Applicant pointed out that the Examiner previously conceded that Spiegelman and Baudino

fail to disclose textual and image media and that the Examiner had relied on Martin’s disclosure of “e-book” and “picture” to satisfy those media types. The Applicant further argued that it was improper to combine Martin with Spiegelman and Baudino:

“The amendments to claim 21 are based in part on the subject matter previously recited by claim 22. The Office Action at page 10 concedes that *Spiegelman* and *Baudino* fail to disclose ‘textual media and image media’ previously recited by claim 22. However, the Office Action at page 10 asserts that *Martin* ... discloses ‘e-book’ and ‘picture.’ By rejecting claim 22 in this manner, the Office Action is misapplying the law regarding motivation to combine, and the Office Action has failed to set forth a *prima facie* case of obviousness for at least the reasons discussed below. ... It is improper to combine the *Martin* reference with the *Spiegelman* and *Baudino* references because the *Martin* reference is not considered as a whole and does not suggest the desirability of making the combination.”

Id., 58-59. The Applicant did not contest the combination of Spiegelman with Baudino and did not contest that the combination of Spiegelman and Baudino disclosed audio and video media. By arguing that the claim was patentable over Spiegelman and Baudino without Martin, the Applicant adopted the Examiner’s interpretation that claim 21 requires *each* of the recited media types. EX2007, ¶83.

The Examiner agreed with the Applicant’s argument and issued a Notice of Allowance. EX1002, 30-39. In the Notice, the Examiner explained that combining

Spiegelman and Baudino with Martin was improper and that the claim was patentable because Spiegelman and Baudino did not disclose two of the four recited media types:

“The combination [sic] Spiegelman and Baudino did not disclose that the Media could comprise textual media and image media. For this the examiner relied upon Martin. In the remarks received 08/31/2018 the applicant argued improper hindsight in combining these references. The examiner was persuaded by applicant’s remarks[.]”

Id., 37. The Examiner allowed the claims over Spiegelman and Baudino, which in combination taught generating preferences based on “songs, movies, etc.” (*i.e.*, audio and video media). *Id.*, 37, 69-71. Thus, the Examiner once again reiterated that claim 21 was not satisfied without Martin’s disclosure of textual and image media. *Id.*, 37-38. Ultimately claim 21 issued as claim 1. *Id.*, 34-39, 45-46.

2. ’960 Patent Prosecution History

The prosecution history of the ’960 patent also provides guidance as to the meaning and scope of the challenged claims of the ’021 patent.

Claim 1 of the originally-filed application that led to the ’960 patent included a limitation requiring a server to infer a media preference of a user:

wherein the recommendation is based at least in part on the . . . inferred media preference of a user of the portable media player device, *wherein the inferred media preference is determined based at least in part on media stored on or accessed using the portable media player device.*

EX2001, 0018¹. The initial version of claim 1 did not require basing the inference of the user's preferences on more than one type of media. *Id.*; EX2007, ¶86.

After a rejection by the Examiner, the Applicant amended claim 1:

inferring, by the server, based at least in part on the retrieved one or more of media or media-associated meta data, one or more entertainment preferences of a user of the portable media player device;

EX2001, 0077. The amended claim 1 did not yet require basing the inference of a user's entertainment preferences on more than one of media or media-associated metadata. EX2007, ¶87.

After another rejection, however, the Applicant further amended claim 1 to require basing the inferred entertainment preferences of the user on a *plurality* of media or retrieved information about said *plurality* of media.

inferring, by the server, based at least in part on the retrieved ~~one or more of plurality~~ of media or ~~the retrieved information about said plurality of media~~media-associated meta data, one or more entertainment preferences of a user of the portable media player device;

EX2001, 0119; EX2007, ¶88.

Further, in distinguishing the Ng reference cited by the Examiner, Applicant argued that entering user preference information does not satisfy the *inferring*

¹ Emphasis is added throughout unless otherwise noted.

portion of this claim limitation: “Thus, Ng teaches that a user ‘preference’ is either *entered by the user* of the device . . . or is *inferred based on the user’s location . . .*” *Id.*, 0131 (emphasis in original).

After further rejections (but no further amendment to this limitation), the Applicant appealed to the P.T.A.B. *Id.*, 0217-0245. In the Board’s decision, the panel addressed the inferring step, finding:

The recited step of “inferring, by the server, based at least in part on the retrieved plurality of media or the retrieved information about said plurality of media, one or more entertainment preferences of a user of the portable media player device” infers the user preferences based on the retrieved media or the retrieved information about the retrieved media. In other words, “entertainment preferences of a user” are not the recited basis for the “inferring”; instead, those preferences are themselves inferred. Considering the proper interpretation of the disputed claim limitation, the Examiner has not identified any teachings in Ng that would meet the claimed step of inferring.

Id., 0299. Claim 1 of the ’960 patent then issued with this language.

C. Person of Ordinary Skill in the Art (POSITA)

“[T]he level of skill in the art is a prism or lens through which . . . the Board views the prior art and the claimed invention.” *Okajima v. Bourdeau*, 261 F.3d 1350, 1354-55 (Fed. Cir. 2001). “This reference point prevents these factfinders from using their own insight or, worse yet, hindsight, to gauge obviousness.” *Id.*

Petitioner and Dr. Houh contend that a POSITA “would have a bachelor’s degree in electrical engineering, or equivalent training, and approximately two years of experience working in the field of portable devices. Lack of work experience can be remedied by additional education, and vice versa.” EX1003, ¶20; Pet. 14.

Patent Owner’s expert proposes a similar level of ordinary skill. EX2007, ¶¶35-38. In particular, a POSITA “would have had a degree in computer science, computer engineering or related field and one year of experience working with portable devices.” *Id.*, ¶37. “Additional education could compensate for less practical experience and vice versa.” *Id.* Petitioner’s asserted grounds fail under either party’s definition of a POSITA. *Id.*

D. Claim Construction

Patent Owner agrees with Petitioner that the terms of the challenged claims should be given their plain and ordinary meaning. Pet., 14-15. Further discussion regarding the plain meaning of certain claim limitations is pertinent to resolving the parties’ dispute.

1. “wherein the plurality of media content types comprises textual media, image media, audio media, and video media”

Claim 1 requires that the claimed server include instructions that cause the server to “infer ... entertainment preferences of a user ... based at least in part on ... a plurality of media content types ..., wherein the plurality of media content

types comprises textual media, image media, audio media, and video media.”

EX1001, Claim 1. More specifically, the clause, “wherein *the plurality of media content types comprises* textual media, image media, audio media, and video media,” requires that the inference of the user’s entertainment preferences be based on *all four* of the recited types of media. EX2007, ¶¶95-99; *supra* Section II.B.1. This conclusion is dictated by the plain language of the claim and is consistent with the Examiner’s and Applicant’s interpretation of this claim language during prosecution. *Id.*

The Board’s preliminary determination in the Institution Decision that “claim 1 only requires basing the inference (in part) *on two or more* media types, instead of basing the inference *on all four* types listed,” DI, 23, is inconsistent with the plain language of the claim. The claim does not recite that the plurality of media content types *is selected from* textual media, image media, audio media, and video media. Rather, claim 1 recites that “the plurality of media content types *comprises* textual media, image media, audio media, *and* video media.”

The signal “comprising” “simply means that the device may contain elements *in addition to* those explicitly mentioned in the claim.” *In re Skvorecz*, 580 F.3d 1262, 1267 (Fed. Cir. 2009); *see also CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007) (“In the patent claim context the term ‘comprising’ is well understood to mean ‘including but not limited to.’”). Federal

Circuit precedent finds that the signal “[c]omprising,” while permitting additional elements not required by a claim, *does not remove the limitations that are present.*” *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1409 (Fed. Cir. 2004); *see also In re Skvorecz*, 580 F.3d at 1268 (“The signal ‘comprising’ does not render a claim anticipated by a device that contains less (rather than [sic] more) than what is claimed.”). Thus, although the server may infer a user’s entertainment preferences based on additional media types than those recited in the claim, the claim requires that the inference be based on each of the four recited media types.

Patent Owner’s construction also is consistent with how Applicant presented the claim language and how the Examiner viewed the claim language during prosecution. Section II.B.1, *supra*. Indeed, the assertions by both the Examiner and Applicant regarding this clause during prosecution illustrate that both sides interpreted it as requiring all of the recited media types and that this interpretation was relied upon in determining the patentability of the claim. For example, and as discussed in more detail above, in rejecting application claim 22, the Examiner relied on the Martin reference for disclosing textual media and image media. EX1002, 37, 58-59, 74-75, 150-151; EX2007, ¶96. If the Examiner was interpreting the claim to require basing the inference on only at least two of the recited types of media, then there would have been no need to rely on the Martin

reference, as Spiegelman and Baudino already taught two types of media—music and video media. *Id.*

Thus, both the language of the claim itself and the intrinsic prosecution history evidence definitively support that a POSITA would understand the plain meaning of this limitation to require that the inference of the user’s entertainment preferences be based on all of the recited types of media. EX2007, ¶¶95-98. Notably, Dr. Houh did not provide an opinion as to whether all four media types are required. *See* EX2009, 65:10-16; EX2007, ¶99.

2. “infer one or more entertainment preferences of a user ...”

Claim 1 recites “infer[ring] ... entertainment preferences of a user ... based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types.” The plain language of the claim requires that the entertainment preferences be inferred. EX2007, ¶¶100-107. The plain and ordinary meaning of “infer” is “to derive as a conclusion from facts or premises.” *Id.*, ¶100; EX2019. If a user preference is explicitly provided, as in Sasaki for example, then this preference is not derived from anything—let alone “based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types,” as claimed—and accordingly is not inferred. EX2007, ¶100. The Institution Decision suggests that the claims can encompass “forming inferences based on known or stored preferences.” DI, 24 n.8. Claim 1,

however, requires that the user preferences themselves are inferred, not that they form the basis of the inference. EX2007, ¶103. This is an important distinction.

Furthermore, this construction is consistent with Applicant's statements regarding a similar "inferring" limitation made during prosecution of the parent '960 patent to distinguish the Ng reference. *Id.*, ¶101. As discussed above, Applicant distinguished the Ng reference by stating, "Ng teaches that a user 'preference' is either entered by the user of the device . . . or is inferred based on the user's location." EX2001, 0131 (emphasis omitted); *supra* Section II.B.2. The Applicant, thus, argued against a claim scope that covers the user simply providing user preference information or inferring the preferences based on something other than "the retrieved media, the retrieved information about the media, and a plurality of media content types," as claimed. EX2007, ¶101. Patent Owner's construction also is consistent with the Board's finding regarding the parent '960 patent claims, that "'entertainment preferences of a user' are not the recited basis for the 'inferring'; instead, *those preferences are themselves inferred.*" EX2001, 0299. The Board should treat this limitation consistently here.

Accordingly, in order to meet the plain language of the claims, the recited "entertainment preferences of a user" cannot simply be provided by the user or inferred from other known or stored preferences, but rather, must be "*infer[red]* ...

based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types.” EX2007, ¶105.

* * *

Petitioner acknowledges that independent claims 10 and 16 have substantially similar limitations as those of claim 1 discussed above. Pet., 52, 59. Patent Owner submits that the above claim construction discussion applies to those claims as well.

III. PETITIONER FAILS TO DEMONSTRATE THE OBVIOUSNESS OF ANY CHALLENGED CLAIM.

Petitioner contends the independent claims would have been obvious under 35 U.S.C. § 103 based on the combination of Sasaki, Ellis, and Jacobi. Pet. 30-41, 46-53, 56-60. The combination of Sasaki and Ellis,² however, fails to disclose, teach, or suggest one or more limitations in each of the '021 patent's independent claims. First, as discussed below, neither Sasaki nor Ellis teaches or suggests relying on the claimed plurality of media content types to infer a user's

² Petitioner relies on Jacobi only for its disclosure of “techniques for generating and displaying recommendations to the user,” for example limitations [1.1.5] and [1.1.6]. Pet. 28; *id.*, 27-30, 39-41. Patent Owner does not discuss these limitations, and so Jacobi is not discussed further herein.

entertainment preferences. EX2007, ¶¶148-159. Instead, Ellis discloses a device that pertains only to audio content and, in fact, teaches away from applying its teachings to other content types, such as video. *Id.*, ¶¶133-143, 149-152. Second, Sasaki and Ellis also fail to disclose, teach, or suggest a portable media player device that transmits its location to a server. *Id.*, ¶¶162-174. Sasaki discloses only portable terminal devices that send location information as part of a recommendation sent to other portable terminal devices, not to a server from which it receives a recommendation. *Id.*, ¶¶163-171. And Ellis teaches only a portable device that determines its own location for use locally and does not send it to a server. EX2007, ¶¶172-174. Third, Petitioner impermissibly combines embodiments from Sasaki without explanation. EX2007, ¶¶145-147. Each of these flaws is fatal to Petitioner's obviousness challenge.

Furthermore, Petitioner also fails to meet its burden of establishing obviousness of at least three dependent claims. Petitioner does not establish that Sasaki and Ellis render obvious the use of podcast media to infer a user's entertainment preferences (claim 2). Petitioner also does not show that the server obtains location information about the portable media player device (claim 4). Further, Petitioner does not establish the asserted combination renders obvious a server retrieving information about the media from storage (claim 9).

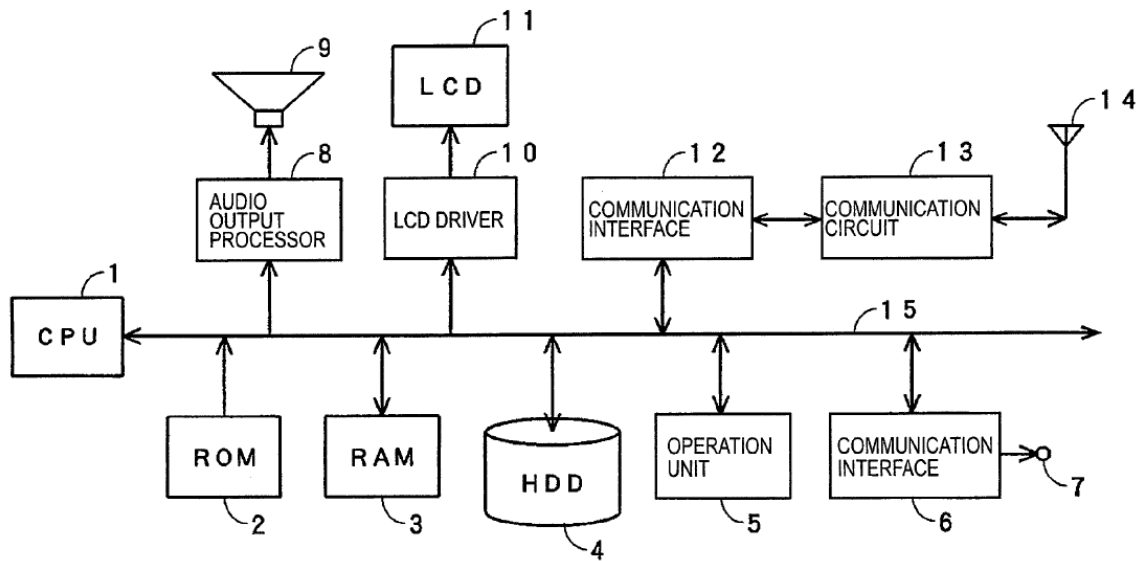
A. Summaries of the Asserted References

1. Sasaki

Sasaki relates to the transmission of electronic media content recommendations to users of portable media terminals. Sasaki discloses two distinct embodiments. EX2007, ¶¶108-121. Sasaki discloses a first embodiment involving the transmission of media content recommendation information from one portable terminal device to another portable terminal device. Sasaki discloses a second embodiment involving the transmission of media content recommendation information from a server to a portable terminal device. EX1004, ¶¶29-111 (terminal-to-terminal embodiment), ¶¶112-130 (server-to-terminal embodiment).

The portable terminal device, illustrated by Figure 1, includes “a central processing unit (CPU) 1, a read-only memory (ROM) 2, a random access memory (RAM) 3, a hard disk drive (HDD) 4, an operation unit 5, a communication interface 6, a communication terminal 7, an audio output processor 8, a speaker 9, an LCD (liquid crystal display) driver 10, an LCD 11, a communication interface 12, a communication circuit 13, and a transmitting/receiving antenna 14.” *Id.*, ¶29.

FIG. 1



EX1004, FIG. 1.

The portable terminal device can receive “audio data such as music, and image data such as still images and video ... and can record and store the audio data and the image data in the HDD 4.” *Id.*, ¶¶45-47. The server of the server-to-terminal embodiment includes similar components but does not need audio and video playback systems and therefore does not include an audio output processor, speaker, LCD driver, and LCD. *Id.*, ¶113.

The particular media content recommendation information may be based on preferences of the user receiving the recommendation. *Id.*, ¶¶83, 99-100, 119. Although preferences are taken into account, in each embodiment, the user preference information is explicitly provided, *e.g.*, registered in the hard disk drive

(HDD) of the terminal device or stored beforehand at the server. *Id.*, ¶¶73, 126, 128, 130.

Sasaki's Figure 3A illustrates the content recommendation data stored "in the transmitting area of the HDD 4," including "information of recommenders' recommendation comments, and locations at which sample data items of recommended content are stored." *Id.*, ¶66.

FIG. 3A

RECOMMENDATION COMMENT INFORMATION, ETC.	SAMPLE
MANHATTAN! AT DUSK!	NYview.jpg
THIS PIECE OF MUSIC IS THE BEST OF Mike XXXXX, THE SECOND NUMBER OF ALBUM "XXX".	Rocking.mp3

EX1004, FIG. 3A.

As discussed with respect to Sasaki's Figure 3C, user preference information is explicitly entered into the terminal device: "As shown in FIG. 3C, *by entering*, in the preference information area of the HDD 4, *preference information including content types and preference keywords* of the user of the terminal device, and using the preference information to selectively use pieces of content recommendation information, only a piece of content recommendation information that matches user's preferences can be obtained." *Id.*, ¶73; *see also id.*, ¶85 ("[P]reference information . . . is registered in the preference information area of the HDD 4 in [the] terminal device . . ."). In Sasaki's server-to-terminal embodiment, users

update the preference information stored by the server by using a “personal computer at a home to access a service site through a network such as the Internet” or by using “a terminal device such as a cellular phone.” *Id.*, ¶128; *see also id.*, ¶126 (“[P]reference information . . . [is] stored beforehand . . .”). There is no disclosure in Sasaki of a server inferring or determining a user’s preferences.

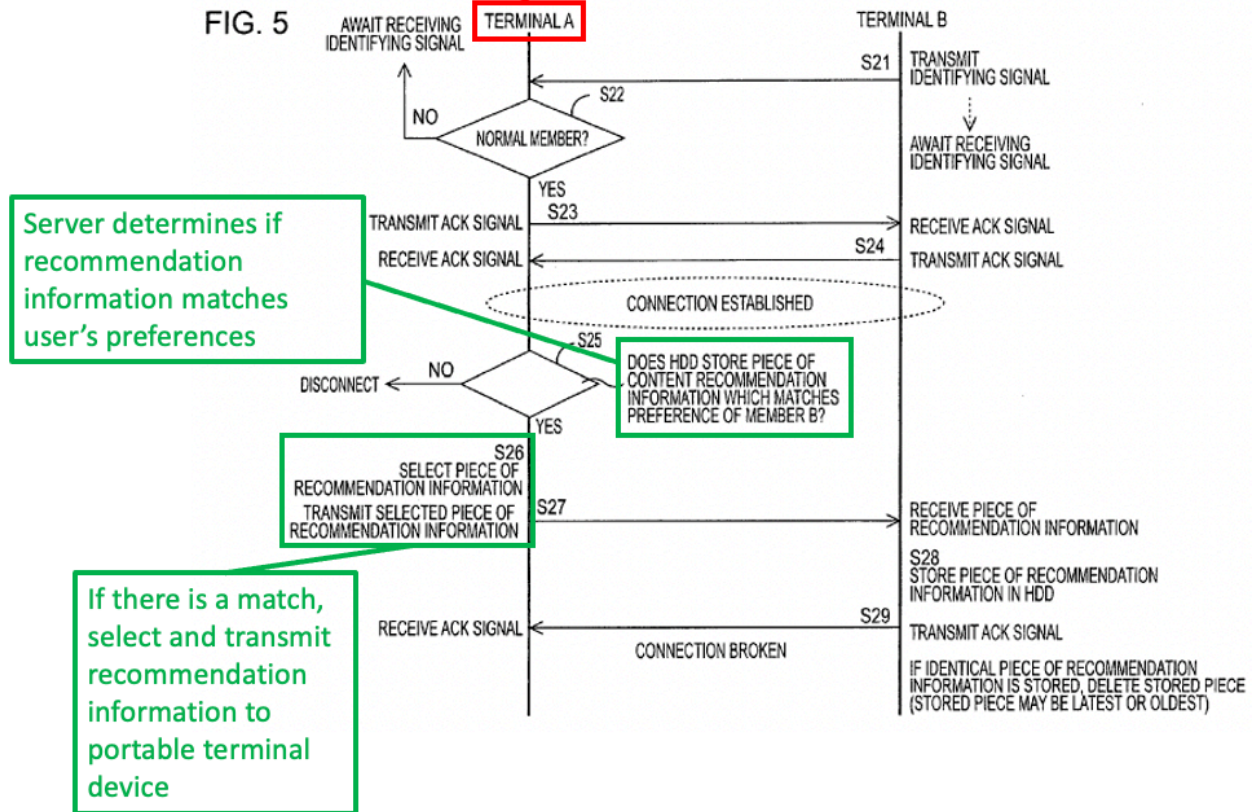
FIG. 3C

CONTENT TYPE	PREFERENCE KEY WORDS
MUSIC	MIKE XXXXX; ROCK; BEATLES; LOVE
PHOTOGRAPH	MOUNT FUJI; NIGHT VIEW; LANDSCAPE; PROSPECT; MOUNTAINS, SEA, SKY; DUSK; SUNSET

EX1004, FIG. 3C.

Sasaki’s Figure 5 depicts the sequence of communications for Sasaki’s second (server-to-terminal) embodiment. In this embodiment, “communication is performed between the server [located at a service spot] and terminal device B.” *Id.*, ¶113. Sasaki describes a “service spot” as “a predetermined area in which various types of information are provided to users or members”—“such as CD/DVD shops and bookstores, sightseeing areas, attraction places, art museums, museums, movie theaters, coffee shops, hotel lobbies, and other public facilities”—“and in which a server for providing content recommendation information to terminal devices is installed.” *Id.*, ¶114.

Fig. 5's Terminal A refers to the server. Sasaki ¶¶0113, 0116.



EX1004, FIG. 5 (annotated).

“At the service spot, the installed server provides content recommendation information to a user's terminal device and the terminal device receives and stores the content recommendation information in the HDD 4 of the terminal device.” *Id.*, ¶115. In this regard, “the CPU 1 of the server determines whether or not the HDD 4 of the server stores a piece of content recommendation information which matches a preference of the member of terminal device B.” *Id.*, ¶119. If there is a match, “the server selects the piece of content recommendation information that

matches the preference of the member of the terminal device B, and, in step S27, transmits the selected piece of content recommendation information.” *Id.*, ¶120.

Sasaki’s discussion of the first (terminal-to-terminal) embodiment describes the transmission of recommendation and location information. But in this embodiment, portable terminal A “determines whether or not any one piece of the content recommendation information [stored in the transmitting area of HDD 4 in terminal device A] matches the one or more preference keywords of preference information from terminal device B,” *id.*, ¶99, and, if there is a match, “transmits the selected piece of content recommendation information to terminal device B,” *id.*, ¶100. Regarding the first embodiment, Sasaki further describes the portable terminal device communicating its location as part of the content recommendation information:

[T]he content recommendation information to be transmitted does not contain only the information shown in FIG. 3A. Necessary information, such as an owner of a transmitting terminal device, a date and time of transmission, *and a place of transmission*, is added to the content recommendation information

Id., ¶68. In other words, the terminal device that is *providing* the recommendation information—namely, terminal device A, which corresponds to the *server* in the second (server-to-terminal) embodiment—transmits location information. In contrast, in Sasaki’s second embodiment (server-to-terminal) the portable terminal

device only *receives* recommendation information, so it does not transmit its location.

2. Ellis

Ellis relates to radio systems, including “enhanced radio reception and processing features, utilizing multiple radio receivers, digital storage of radio content, independent control of radio reception and playback, listener profiles, and two-way communication features.” EX1005, ¶2; EX2007, ¶¶122-131.

According to Ellis, “[r]adio is a very popular entertainment source today.” EX1005, ¶3. “It is used in many locations—in the home, in the automobile, at the office, and on the go.” *Id.* Ellis recognizes, however, that “radio functions have been fairly constant for years.” *Id.* Ellis states that “[a] system is needed that allows a radio listener to better control the audio content she hears.” *Id.*, ¶7.

Ellis discloses an “enhanced radio system (ERS),” which is a portable device that “may be used at home, at the office, in the shower, on the go, in the car, on the boat, or in any other environment.” *Id.*, ¶¶21, 24. The ERS “may tune in one or more radio sources, such as broadcast radio, satellite radio, Internet radio, shortwave radio, and radio scanner.” *Id.*, ¶25. The ERS simultaneously stores “content from multiple radio receivers” and allows the user to “quickly select output from the stored content.” *Id.*, ¶21. The ERS “may ... keep track of user radio preferences, and may have the ability to recognize specific content items,

such as songs, that the user may like.” *Id.*, ¶185. Although Ellis describes the ability of the ERS to connect to a “central facility,” *id.* ¶265, the only examples of the system determining user listening preferences describe the ERS portable device itself performing the determination. *Id.*, ¶¶212, 221.

B. Independent Claims 1, 10, and 16 are not rendered obvious by Petitioner’s asserted combination.

Petitioner fails to show that the asserted combinations render obvious two limitations of each independent claim. Petitioner also fails to establish that a POSITA would have been motivated to combine the asserted references. ***First***, each independent claim requires that the user preferences are inferred based at least in part on *four* recited media types: textual media, image media, audio media, and video media. EX1001, Claims 1, 10, 16. The asserted combination of Sasaki and Ellis teaches only inferring user preferences based on audio content. ***Second***, each of the claims require the server to infer or determine location of the user or the portable media player device. Claim 1 requires the server to access information about venues or events proximal to the current location of the user. Claim 10 requires the portable media player device to transmit location information to the server. Claim 16 requires the server to obtain location information associated with the portable media player device. Neither Sasaki nor Ellis teach a portable media player device transmitting location information to a server or a server otherwise determining the location of a portable media player device. ***Third***, Petitioner fails

to meet its burden of establishing why a POSITA would have been motivated to combine Sasaki and Ellis. Further, the Petition relies on two embodiments in Sasaki without even addressing motivation to combine. Thus, Petitioner fails to carry its burden of showing that the asserted combinations render obvious any independent claim.

- 1. Petitioner’s combination of Sasaki and Ellis fails to teach that the server “*infer[s]* one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein *the plurality of media content types comprises textual media, image media, audio media, and video media,*” as recited in claim 1 and similarly recited in claims 10 and 16.**

Claim 1 requires that the server “*infer* one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and *a plurality of media content types* of the media stored on or accessed by the portable media player device, wherein *the plurality of media content types comprises textual media, image media, audio media, and video media.*” EX1001, Claim 1. As Petitioner acknowledges, claims 10 and 16 have substantially similar limitations. Pet., 52, 59. As discussed above, the plain language of the claim, as confirmed by the extensive file history discussion of this limitation, compels a construction requiring the server infer the one or more entertainment preferences based on *each* of the four

recited media content types: textual, image, audio, and video media. *Supra*

Sections II.B.1., II.D.1; EX2007, ¶¶95-99.

Petitioner relies on the combination of Sasaki and Ellis to argue that this limitation would have been obvious. Pet., 34-36. However, neither Sasaki nor Ellis discloses, teaches, or suggests relying on all of the claimed types of media to infer a user's preferences. EX2007, ¶¶148-159. And Petitioner does not meet its burden of establishing why it would have been obvious to do so. *Id.*

a. Sasaki does not disclose or suggest inferring a user's entertainment preferences at all.

First, Sasaki does not disclose or suggest *inferring* a user's entertainment preferences at all. EX2007, ¶¶153-155. Instead, as discussed above, Sasaki discloses a system where user preferences are explicitly provided. EX1004, ¶¶73, 128, 130. Sasaki explains that “*by entering, in the preference information area of the HDD 4, preference information including content types and preference keywords of the user of the terminal device, and using the preference information to selectively use pieces of content recommendation information, only a piece of content recommendation information that matches user's preferences can be obtained.*” *Id.*, ¶73; *see id.*, ¶85. In Sasaki's second (server-to-terminal) embodiment, users update the preference information stored by the server by using a “personal computer at a home to access a service site through a network such as the Internet” or by using “a terminal device such as a cellular phone.” *Id.*, ¶¶128,

130; *see id.* ¶126. However, as discussed above, explicitly providing user preference information, as disclosed in Sasaki, is not encompassed by the claim language, which requires *inferring* the user’s entertainment preferences. *Supra* Section II.D.2. Therefore, Sasaki does not disclose or suggest the inferring limitation. EX2007, ¶¶153-155.

In the Institution Decision, the Board preliminarily found that “Sasaki’s system relies on inferences.” DI, 25. Pointing to Sasaki’s Figure 3C and the use of “generic preference key words” entered by a user, the Board stated:

Different users for example, may have different (subjective) opinions of what ‘entertainment preference’ arises from generic key words such as ROCK and LOVE, so that a match by the server of such a generic word provided by different users is an inference of an entertainment preference.

DI, 25-26.

At the outset, Patent Owner notes that Petitioner does not allege that Sasaki discloses inferring a user’s entertainment preferences, instead relying on Ellis to teach this element. Pet., 34-36; *see also* EX2009, 35:14-36:8, 37:19-22, 38:2-3, 39:5-11 (Dr. Houh confirming that he relies on Ellis, not Sasaki, for the disclosure of determining a user’s preferences). Further, the Board’s preliminary finding here is inconsistent with the plain language of the claims. EX2007, ¶¶100-107. Claim 1, for example, recites “infer[ring] one or more entertainment preferences of a user”

(e.g., that the user likes a certain type of music). Claim 1 does not recite inferring whether a specific media item falls within the user's preferences (e.g., whether a particular song matches a generic key word entered by a user). Although the Board indicated that the server in Sasaki determines whether a specific media item falls within the user's preferences, the server in Sasaki does not infer those preferences, as required by the claims. Rather, the user provides them. EX1004, ¶¶73, 128, 130.

This important distinction also is consistent with statements made during prosecution of the parent '960 patent, where Applicant distinguished the Ng reference because “Ng teaches that a user ‘preference’ is ... *entered by the user of the device[.]*” EX2001, 0131 (emphasis in original).

The Institution Decision preliminarily found that the claims could encompass a “match by the server of a generic [key] word provided by different users” as an “inference of an entertainment preference.” DI, 26. But, as discussed, the claim recites “infer[ring] one or more entertainment preferences *of a user.*” EX1001, Claim 1. Categorizing media into generic categories based on different users' subjective description of the media in order to match it to a user's preselected genre preferences is not the same as inferring what the particular user's entertainment preferences are based on the media stored on their device. As described in the '021 patent, for example:

In various embodiments, the server can analyze the media and the information about the media stored on or accessed using the portable media player device to identify user preferences for particular genres of media. Thus, in various embodiments, the server may analyze e.g. the meta data associated with a wide variety of media stored on or accessed using the portable media player device such as music, podcasts, books or audiobooks, video, photos or other images for various trends that can be translated into user preferences for a particular genre of music, film, video or art. The meta data may include data about the media title, media type, artist, subject matter, and so forth. For example, the server may determine that the user has a preference for a jazz music genre if the portable media player device stores or has been used to access a substantial amount of music by famous jazz artists such as Ella Fitzgerald or Louis Armstrong.

Id., 5:32-48.

In distinguishing Ng, Applicant clarified that “entertainment preferences of a user” must be “infer[red]” by the server, and that they cannot be entered by the user (as in Sasaki). EX2001, 0131. For this distinction to be as narrow as the Board implies (DI, 26), a user “preference” would need to be an exhaustive list of every specific writing, picture, song, movie, show, or other piece of media that falls within the user’s taste. EX2007, ¶104. Anything short of an exhaustive list would require the server to perform some “inference” to determine whether a specific media item falls within the user’s preferences. *Id.* This interpretation is contrary to

how a POSITA would understand the Applicant's statement distinguishing Ng and thus should be rejected. *Id.*, ¶¶104-105.

Regarding Sasaki's disclosure at ¶74, which the Board highlights in the Institution Decision, DI, 23, 27, this discussion is related to the *recommendation of* various types of media, *e.g.*, "CD music, still pictures ..., DVD video, and text data," once preference information is *already known* (*i.e.*, by having been provided by the user). EX1004, ¶¶73-74. Sasaki teaches that once a user's preference information *is entered into* the HDD 4, only pieces of content recommendation information that match that user's preferences can be obtained. *Id.* The *recommended content* itself may be music, image, video, or text media. *Id.*, ¶74. But Sasaki does not disclose or suggest inferring a user's preferences based on the media stored on or accessed by their device.

Thus, neither the Petition nor the evidence of record support a finding that Sasaki discloses or suggests inferring a user's entertainment preferences at all, let alone based on the recited plurality of media content types. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) ("[W]hile the PTO has broad authority to establish procedures for revisiting earlier-granted patents in IPRs, that authority is not so broad that it allows the PTO to raise, address, and decide unpatentability theories never presented by the petitioner and not supported by record evidence.").

b. Ellis does not disclose or suggest inferring a user's preferences based on the claimed plurality of media content types.

Second, Ellis discloses a system that only determines a user's preferences for radio (*i.e.*, audio) content. EX2007, ¶¶149-151. The examples cited in the Petition each refer to determining preferences based on what a user has *listened* to:

The system may also monitor the content *listened to* by the user, and automatically determine the groups liked and disliked

EX1005, ¶212.

The system may also determine user preferences automatically by monitoring what content the user *listens to*.

Id., ¶185.

In step 2220, the system may determine user information automatically by monitoring the content the user *listens to*. For example, the system may add points to a specific song, artist, genre, or other type of item or grouping, based on the user *listening to* an entire item.

Id., ¶221; Pet., 34-35. Thus, Ellis teaches determining user preferences based only on a single media type, namely audio media.

- c. Petitioner's combination does not disclose or suggest inferring a user's entertainment preferences based on textual, image, or video media, and Petitioner does not meet its burden of establishing why it would have been obvious to do so.**

The combination of Sasaki and Ellis fails to disclose or suggest inferring a user's preferences based on textual, image, or video media. As discussed above, the claim recites inferring a user's preferences based on *all four* of the recited types of media. *Supra*, Section II.D.1. Because neither Sasaki nor Ellis discloses inferring a user's entertainment preferences based on a plurality of media types—let alone based on textual, image, audio, *and* video media—and because Petitioner does not meet its burden of establishing why it would have been obvious to combine the references teachings to do so, Petitioner's combination must fail. EX2007, ¶¶132-143, 148-161.

In the Institution Decision, the Board stated that Patent Owner's argument that Ellis teaches only determining preferences based on audio media does not undermine Petitioner's showing because Petitioner relies on Sasaki for its disclosure of the four media types and relies on the combined teachings of Sasaki and Ellis to infer preferences. DI, 26-27. However, the claims are not met by a mere disclosure of four media types; the claims require inferring preferences based on all four media types. *Supra*, Section II.D.1. Neither Sasaki nor Ellis teaches this key claim element. EX2007, ¶¶148-161.

Even if Sasaki and Ellis were combined, there is no disclosure in either reference of a server that infers user preferences based on textual, image, or video media. EX2007, ¶¶148-161. This is not an attack on Sasaki and Ellis individually, but rather on the combination of the two references. Petitioner provides no explanation of how a POSITA would implement Ellis's method of determining preferences based only on what a user has listened to in Sasaki's system to arrive at the claimed invention, which requires inferring preferences based on the plurality of media types. *Id.*, ¶161. In fact, Petitioner alleges only that "Sasaki and Ellis render obvious a server that receives user preference information about different media content types, such as music, still pictures, video, and text that was *gathered by monitoring a user's listening habits* on a portable media player device." Pet., 34. Thus, Petitioner contends only that the preferences are determined by monitoring listening habits. The claims, however, require that preferences are inferred based on the plurality of media types. So Petitioner's arguments fail.

Petitioner further contends that "Sasaki discloses that its recommendation system collects information about different media content types, such as 'music,' 'still pictures, 'video,' and 'text.'" *Id.*, 35-36 (citing EX1004, ¶74). But, as explained above, Sasaki's ¶74 teaches only that the *recommended content* itself may be music, image, video, or text media. EX1004, ¶74. In other words, Sasaki teaches a plurality of media types on a terminal device that is *making* a

recommendation. Sasaki does not disclose or suggest collecting information about media stored on or accessed by the device of a user that is *receiving* the recommendation in order to make an inference about that user's preferences.

Petitioner also does not explain how or why a POSITA would have further modified its proposed combination of Sasaki and Ellis to additionally include determining a user's preference information based on all four claimed media types. Pet., 34-36; EX2007, ¶161. In fact, Dr. Houh's declaration on this critical element merely repeats almost the identical language from the Petition, with the exception that Dr. Houh's declaration merely adds block quotes from the references.

Compare Pet., 34-36, with EX1003, ¶¶87-95. Dr. Houh's testimony is thus entitled to little weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, 15-16 (P.T.A.B. August 24, 2022) (precedential) (holding that the Board may not credit declaration testimony that "merely repeats, *verbatim*, the conclusory assertion for which it is offered to support." (emphasis in original)); 37 C.F.R. § 42.65(a).

Petitioner therefore fails to carry its burden of establishing obviousness.

In sum, neither Sasaki nor Ellis—individually or in combination—disclose or suggest inferring user preferences based on image, video, or textual media content, *each* of which is required by the claims *in addition to* audio media content. EX2007, ¶¶148-159. And Petitioner provides no explanation as to why it would be have been obvious to do so based on the teachings of Sasaki and Ellis.

Id., ¶¶160-161. Therefore, Petitioner has not shown by a preponderance of the evidence that the combination of Sasaki and Ellis renders the claims obvious. *Id.*, ¶¶161, 219-221.

2. Petitioner’s proposed combination impermissibly relies on two distinct embodiments from Sasaki without explanation.

Petitioner’s asserted ground challenging each of the independent claims combines features of two distinct embodiments from Sasaki without explaining why or how a person of ordinary skill in the art would have been motivated to make the combination. EX2007, ¶¶144-146. This flaw is fatal to Petitioner’s challenge.

Indeed, it is *Petitioner’s burden* to establish that a POSITA would have been motivated to combine different references or different embodiments within a reference. *See Abiomed, Inc. v. Maquet Cardiovascular, LLC*, IPR2017-01204, -01205, Paper 9 (IPR2017-01204), Paper 8 (IPR2017-01205), 9-11 (P.T.A.B. Oct. 23, 2017) (finding that “Petitioner has failed to establish sufficiently that the features of [] different embodiments [of the asserted reference] are interchangeable or provide sufficient rationale to combine the teachings of those different embodiments”); *In re Stepan Co.*, 868 F.3d 1342, 1346 n.1 (Fed. Cir. 2017) (“Whether a rejection is based on combining disclosures from multiple references, *combining multiple embodiments from a single reference*, or selecting from large lists of elements in a single reference, *there must be a motivation to make the*

combination and a reasonable expectation that such a combination would be successful, otherwise a skilled artisan would not arrive at the claimed combination.”). Thus, because Petitioner did not explain why or how a POSITA would have combined these two separate embodiments of Sasaki, Petitioner cannot meet its burden of proving unpatentability of the challenged claims. *In re Magnum Oil*, 829 F.3d at 1375 (“In an *inter partes* review, the burden of persuasion is on the petitioner to prove ‘unpatentability by a preponderance of the evidence,’ 35 U.S.C. § 316(e), and that burden never shifts to the patentee.” (quoting *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015))).

Petitioner relies primarily on Sasaki’s second server-to-terminal embodiment in mapping Sasaki to the claims. *See, e.g.*, Pet., 30-33, 56-58. However, for certain claim elements, Petitioner relies on Sasaki’s first terminal-to-terminal embodiment, with no acknowledgement of switching between embodiments or addressing the differences between them. EX2007, ¶¶162-174, 180-182, 207-218, 222-223.

Although Sasaki states that the content recommendation system is applicable to a server, EX1004 ¶17, and that, in the server-to-terminal embodiment, one of the terminal devices is replaced by a server, *id.*, ¶115, it is not the case that the two embodiments are identical with the exception of swapping out a terminal device for a server. Sasaki describes the two embodiments in detail and differences between them, including the differences in the information transmitted by the

terminal devices in each embodiment. EX2007, ¶¶110-121. These differences are material to Petitioner's combination and Petitioner simply ignores them. *Id.*, ¶¶144-147.

For example, Petitioner contends that "Sasaki teaches that its portable media player device can directly transmit location information (either GPS or radio wave positional information)," Pet., 36, and that "Sasaki teaches receiving location information representing the location of the user," Pet., 38. But the teachings in Sasaki of transmitting location information relied on by Petitioner, EX1004, ¶¶69, 80-81, relate only to the terminal-to-terminal embodiment, where the terminal *sending* a recommendation sends location information with the recommendation. EX2007, ¶¶144-147. In the server-to-terminal embodiment, this terminal is replaced by the server. *Id.* Petitioner ignores this. *Id.*

The distinction between Sasaki's two embodiments is material. In the terminal-to-terminal embodiment, which includes four variations, terminal devices connect directly with each other with no intermediate servers or access points. EX1004, ¶¶51-57, 84-86, 94-97, 103-104; *see also* ¶58 ("[T]he above connection may have forms used in communication standards such as IEEE 802.11x and Bluetooth, which are known as ad hoc network specifications, whereby ... a plurality of terminal devices connect to one another without using any access point[.]"). In each variation of the terminal-to-terminal embodiment, terminal

devices transmit content recommendation information to each other, either in a unidirectional or bi-directional manner. *Id.*, ¶¶59, 84, 100, 103. Sasaki teaches that recommendation information sent by one terminal device to another can include the place of transmission. *Id.*, ¶¶69, 71, 80, 81, FIG. 3B.

In contrast, in the server-to-terminal embodiment, terminal devices communicate directly with a server, not with each other. *Id.*, ¶117. Once a server-to-terminal connection is established, the server determines whether it has content recommendation information that matches the preferences of the user of the terminal device. *Id.*, ¶119. If so, the server then transmits the content recommendation information to the terminal device. *Id.*, ¶120. The only information communicated from the terminal device to the server is identification information used to establish the connection (*Id.*, ¶117) and user preference information. *Id.*, ¶130. Unlike in the terminal-to-terminal embodiment, the terminal device in the server-to-terminal embodiment does not communicate content recommendations or “place of transmission” to the server. *Id.*, ¶¶112-130.

Petitioner does not explain why the portable media device would transmit location information to the server in Sasaki’s server-to-terminal embodiment when the portable device is the device receiving, rather than sending, a recommendation. This is particularly true because the server is described as being located at a “service spot,” *i.e.*, “a *predetermined area* in which various types of information

are provided to users or members” such as “CD/DVD shops and bookstores [and] sightseeing areas.” *Id.*, ¶¶113-114. There would be no need for the portable device to transmit its location to the server in this embodiment because the location of the service spot is already known and communication happens only when the terminal device is close enough to receive an identifying signal from the server. *See id.*, FIG. 5, ¶54.

Thus, Petitioner’s asserted mapping of Sasaki to the claims impermissibly combines two distinct embodiments of Sasaki, without explaining why a POSITA would have done so. Accordingly, Petitioner fails to meet its burden to show the unpatentability of the challenged claims.

3. Petitioner’s combination of Sasaki and Ellis fails to teach that the portable media device “control[s] transmission, to the server, of location information associated with the portable media player device,” as recited in independent claim 10 [limitation 10.3].

Claim 10 recites that the portable media player device “*control[s] transmission, to the server, of location information associated with the portable media player device* to facilitate the server in inferring a current location of a user of the portable media player device.”

Petitioner alleges that Sasaki “teaches that the portable media player device associated with the user directly transmits location information to the server (either GPS or radio wave positional information).” Pet., 51 (citing EX1004, ¶¶69, 81).

Petitioner further alleges that Sasaki “teaches that the server uses the information representing the location to infer a location of the user of the mobile device.

Specifically, Sasaki teaches that the location information can be ‘converted into map information ... or a building name or the like.’” *Id.* (citing EX1004, ¶80).

Petitioner fails to meet its burden to establish that Sasaki and Ellis disclose or render obvious a portable media player device that transmits its location to a server. EX2007, ¶¶207-218.

As discussed in the previous section, Petitioner impermissibly combines two distinct embodiments of Sasaki without explanation. *Id.* The problems with this combination are particularly apparent here. Petitioner relies on Sasaki’s teaching that the portable media device can transmit location information. Pet., 51. To be sure, the first terminal-to-terminal embodiment of Sasaki discloses a portable terminal device transmitting location information to another portable terminal device. EX1004, ¶¶68-69, 80-81. However, Petitioner incorrectly asserts that Sasaki at paragraphs 69 and 81 teaches a portable device transmitting location information *to a server*. Pet., 51. It does not. EX2007, ¶¶207-218.

In paragraphs 51-82, Sasaki describes “an example of an operation in a case in which two terminal devices communicate with each other ...” as part of its discussion of the terminal-to-terminal embodiment. There is no discussion of the server of the second embodiment in this example. *Id.* While paragraph 81 describes

that a terminal device can use radio waves from a plurality of base stations to determine its location, there is no discussion of the terminal device sending this location information to the server that is providing recommendations, as claimed. EX2007, ¶214. Petitioner’s assertion that paragraph 80 teaches a server using information representing the location to infer a location of the user of the mobile device is incorrect for the same reason. *Id.*, ¶215. Paragraph 80 of Sasaki is part of the same example of the operation of the terminal-to-terminal embodiment as paragraphs 69 and 81; it merely teaches that the terminal devices can include GPS functionality to determine their location. EX2007, ¶214. Again, there is no teaching of a terminal device sending its location information to a server. *Id.*

The teachings relied on in the Petition are unrelated to Sasaki’s second embodiment where *the server* sends the content recommendation information. *Id.*, ¶¶210-211. In the second embodiment, the portable device only *receives* recommendations from the server. EX1004, ¶¶112-130; EX2007, ¶¶210-211. In the Institution Decision, the Board stated that “Sasaki’s server at least implicitly determines the location of the user’s portable media device by communicating with it (i.e., determining that a specific user is local to, or in the vicinity of, the server).” DI, 29. But this is insufficient to meet the language of the claim 10, which requires that “the portable media device ... control[s] transmission, to the server, of location information.” Sasaki does not teach a portable media player device that

sends location information to a server. EX2007, ¶¶207-218; *see also* EX2009, 162:2-6 (Dr. Houh, unable to identify any disclosure in Sasaki in which the terminal device transmits its location to the server).

Furthermore, Petitioner relies on Ellis for *using* the geographic information to make local recommendations. Pet., 37. Petitioner does not rely on Ellis for providing user location information *to a server*, and Ellis does not remedy the deficiencies of Sasaki discussed above. EX2007, ¶216. Ellis’s enhanced radio system (ERS) is simply a portable device that knows its own location. EX1005, ¶¶44, 225, 226; EX2007, ¶216. The portable ERS uses its location information to determine available radio stations or identify events by using information stored locally on the ERS itself. EX1005, ¶¶233-235. Ellis does not disclose the ERS sending information about its location to a server. EX2007, ¶216.

Accordingly, Sasaki and Ellis—alone or in combination—do not disclose or render obvious a portable media player device that transmits its location to a server that provides recommendations, as required by independent claim 10.

4. Petitioner’s combination of Sasaki and Ellis fails to teach “access one or more sources of information about venues or events proximal to a current location of the user,” as recited in independent claim 1.

Claim 1 recites that the instructions written on the one or more non-transitory computer-readable media, when executed, cause the computer server to “access one or more sources of information about venues or events proximal to a

current location of the user.” Petitioner relies in part on Sasaki’s alleged disclosure of a server receiving location information from a portable device. Pet., 36-37.

Petitioner states that “Sasaki teaches that its portable media player device can directly transmit location information (either GPS or radio wave positional information).” *Id.*, 36 (citing EX1004, ¶¶ 69, 81). In concluding that the cited art renders this limitation obvious, Petitioner relies on “Sasaki’s server in communication with a portable media player device that directly transmits information representing location information.” *Id.*, 37. However, as explained above in Section III.B.3, Sasaki does not teach a portable device transmitting location information to a server. EX2007, ¶¶162-171, 174; EX2009, 162:2-6. Further, Sasaki does not teach a server determining the location of a portable media player device through any other technique either. *Id.* Petitioner relies on Ellis’s disclosure of the portable ERS device using location information to access information about events and facilities local to the user. Pet., 37. However, Ellis does not teach a *server* performing this task. EX2007, ¶¶172-173. Therefore, contrary to Petitioner’s allegations, none of the applied references, either alone or in combination, disclose a server that determines the location of the portable media player device. Pet., 36-37; EX2007, ¶¶162-174. The Petition, therefore, does not adequately explain how the applied art teaches a server that accesses information about venues or events *proximal to a current location of the user*. EX2007, ¶174.

Again, Dr. Houh’s testimony merely repeats the language from the Petition without additional explanation and is entitled to little or no weight. *Compare* Pet., 36-38, with EX1003, ¶¶96-101; *Xerox*, IPR2022-00624, Paper 9, 15-17; 37 C.F.R. § 42.65(a). Thus, Petitioner has not met its burden of showing that the applied art renders this limitation obvious.

5. Petitioner’s combination of Sasaki and Ellis fails to teach “infer a current location of the user of the portable media player device based on obtained location information associated with the portable media player device,” as recited in independent claim 16 [limitation 16.2.2].

Claim 16 recites that the claimed server “infer[s] a current location of the user of the portable media player device based on obtained location information associated with the portable media player device.” Claim 16 explicitly requires the server to obtain location information associated with the portable media player device. Petitioner incorporates its analysis of claim 4, which alleges that “Sasaki teaches that the portable media player device associated with the user directly transmits location information (either GPS or radio wave positional information) to the server.” Pet. 59, 42 (citing EX1004, ¶¶ 69, 81). Additionally, Petitioner alleges that this claim limitation is rendered obvious by “Sasaki’s server that receives location information of the portable media player device associated with the user and then converts that information into map information (or the like)[.]” *Id.*, 43. However, as explained above in Section III.B.2, Sasaki does not teach a portable

device transmitting location information to a server. EX2007, ¶¶222-223; EX2009, 162:2-6. Further, Sasaki does not teach a server obtaining the location of a portable media player device through any other technique either. EX2007, ¶¶222-223.

Petitioner also relies on Ellis's alleged teachings of the enhanced radio system portable device determining the user's location. Pet., 42-43. However, Ellis does not teach *a server* obtaining location information of the portable device. EX2007, ¶¶172-173. Therefore, contrary to Petitioner's allegations, none of applied references, either alone or in combination, disclose a server that obtains location information associated with the portable media player device. Pet., 42-43; EX2007, ¶174. Dr. Houh's testimony does not add any additional support. *Compare* Pet., 42-43, *with* EX1003, ¶¶117-120. Thus, Petitioner has not met its burden of showing that the applied art renders this limitation obvious.

6. Petitioner fails to establish a motivation to combine Sasaki and Ellis.

In addition to the missing elements discussed above, Petitioner fails to establish sufficient motivation to combine Sasaki and Ellis. EX2007, ¶¶132-143. Indeed, a POSITA would not have combined Sasaki and Ellis because the references address distinct problems. Ellis applies to radio content only, whereas Sasaki relates to content recommendations regarding various types of non-radio data. *Id.*, ¶¶133-134.

Additionally, the manner in which the devices of Sasaki and Ellis receive content is very different. Ellis teaches a device that receives audio content through several forms of wireless communication. *Id.*, ¶133. In contrast, other than “sample” content, Sasaki teaches that media content is purchased, such as using a personal computer, and then loaded onto the portable device. *Id.*, ¶¶134-136. The variety of ways in which Ellis receives audio data also presents a technological barrier to combining the references. The device of Ellis would require a number of antennas and related components that would not be feasible to include in a device with the extended storage and display requirements of Sasaki’s terminal. *Id.*, ¶¶137-140.

Highlighting the differences between radio and non-radio content, Ellis discusses certain advancements in television viewing functionality. For example, “[p]ersonal video recorders, such as those manufactured by TiVo, allow a user to easily record a television program, and also provide VCR-like controls for television programs.” EX1005, ¶5; EX2007, ¶¶138-140. Ellis refers to several patents related to playback of recorded television content. EX1005, ¶5. However, according to Ellis, these patented advancements in television viewing are irrelevant to radio because “these types of improvements have been optimized for the needs of the television viewer.” *Id.*

Ellis explains that “[r]adio listeners typically have different needs than television viewers.” *Id.*, ¶6. EX2007, ¶¶138-140. For example, “television viewing typically happens in a fixed environment in a home, while radio listening often happens in varied, often mobile, environments.” EX1005, ¶6. Additionally, “[a] television viewer may sit and watch a program through its completion” whereas “[a] radio listener more often listens casually while pursuing other activities, and may often switch between stations.” *Id.*

Ellis also identifies technological reasons why improving video and radio consumption requires different approaches. For example, “[b]ecause digitized audio content requires much less memory than digitized video content, it is less expensive to store a significant amount of radio content.” *Id.*, ¶10. Additionally, “[a] radio tuner is also less costly than a television tuner, so a system that monitors multiple radio stations at once is quite feasible.” *Id.* In view of Ellis’s express discussion, a POSITA would not have combined Ellis and Sasaki. EX2007, ¶¶132-143.

The Petition and Dr. Houh’s declaration ignore these passages of Ellis in their discussion on motivation to combine. EX1003, ¶¶58-62; Pet., 25-27. Indeed, they must in order to provide their manufactured motivation to combine the references. Moreover, Dr. Houh’s declaration testimony substantially recites the content of the Petition without providing additional analysis or evidence on the

issue of combining Sasaki and Ellis. EX1003, ¶¶58-62; Pet., 25-27. Thus, Dr.

Houh's declaration is therefore entitled to little or no weight on this issue. *Xerox*, IPR2022-00624, Paper 9, 15-17; 37 C.F.R. § 42.65(a).

For these reasons, Ellis's disclosure of determining a user's preferences for radio content is inapplicable to the problem of determining preference information for other types of media disclosed in Sasaki, and a POSITA would not have been motivated to combine the references.

7. Conclusion as to Independent Claims 1, 10, and 16

For the reasons discussed, Petitioner has not demonstrated that independent claims 1, 10, and 16 would have been obvious in view of the asserted combination of Sasaki, Ellis, and Jacobi.

C. Dependent Claims

Petitioner also has not shown that the challenged dependent claims would have been obvious in view of the asserted combinations. In addition to the reasons discussed above for the independent claims, dependent claims 2, 4, and 9 would not have been obvious for the following additional reasons.

1. Dependent Claim 2: Petitioner fails to show that the combination of Sasaki and Ellis teaches "wherein the audio media comprises music media and podcast media."

Claim 2 requires the audio media of claim 1 to comprise "music media and podcast media." Petitioner alleges Sasaki's teaching of a server that collects usage information about music combined with Ellis' teaching of inferring entertainment

preferences of a user based on music and radio show broadcasts over the Internet renders this claim obvious. Pet., 42. However, Petitioner does not show that the combination of Sasaki and Ellis teaches inferring user preferences based on “podcast media.” EX2007, ¶¶175-179; *see also id.*, ¶¶48-55. Therefore, Petitioner’s challenge to claim 2 fails.

According to Petitioner, a podcast is “a digital recording of a radio broadcast or similar programme, made available on the Internet in a number of separate files for downloading to a personal audio player.” Pet., 42 (quoting EX1010 (“Lim”), ¶2); EX2007, ¶177. Lim explains that after completing the download process, digital content, such as podcast media, is typically stored in the file system of a portable media player. EX1010, ¶4. Petitioner alleges that a “POSITA would recognize that a radio show broadcast via the internet, as disclosed in Ellis, corresponds to a podcast media.” Pet., 41-42.

Patent Owner first notes that none of passages of Ellis cited by Petitioner for claim 2 discuss broadcasting radio shows over the Internet. EX2007, ¶178. Additionally, a radio show that is broadcast over the Internet does not even meet the definition of podcast provided by the Petition. *Id.* According to Petitioner, a podcast is audio in the form of one or more files that can be downloaded and stored on a portable media device. *Id.*, ¶177. In contrast, a radio show broadcast over the Internet is not media that can be downloaded and stored. *Id.*, ¶178. It is scheduled

just like traditional radio programming at a certain time and is not delivered in a file that can be stored in the directory of a portable device. *Id.* Additionally, neither the Petition nor Dr. Houh’s declaration provide any discussion for why a radio broadcast over the Internet would render obvious a podcast. *Id.*, ¶¶178-179. Here again, Dr. Houh’s testimony simply repeats the language from the Petition without additional explanation and is entitled to little or no weight. *Compare* Pet., 41-42, with EX1003, ¶¶114-116; *Xerox*, IPR2022-00624, Paper 9, 15-17; 37 C.F.R. § 42.65(a). Therefore, Petitioner fails to carry its burden to establish that claim 2 would have been obvious.

2. Dependent Claim 4: Petitioner fails to show that the combination of Sasaki and Ellis teaches “wherein execution of the instructions is to cause the computer server to infer the current location of the user of the media player device based on obtained location information associated with the portable media player device.”

Claim 4 recites “wherein execution of the instructions is to cause the computer server to infer the current location of the user of the media player device based on obtained location information associated with the portable media player device.” Petitioner admits that this limitation is substantially similar to limitation 16.2.2 and applies the same analysis to both limitations. Pet., 42-43, 59. Accordingly, Petitioner fails to show that claim 4 is rendered obvious for the same reasons it fails to show limitation 16.2.2 is rendered obvious. *Supra*, Section III.B.5; EX2007, ¶¶180-182.

- 3. Dependent Claim 9: Petitioner fails to show that the combination of Sasaki and Ellis teaches “wherein execution of the instructions is to cause the computer server to: obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device.”**

Claim 9 requires the computer server of claim 1 to “obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device.” Petitioner alleges that Sasaki renders obvious this limitation through its teaching of a server that obtains user preference from a hard drive for subsequent processing. Pet., 45-46. Petitioner fails to carry its burden to establish obviousness because the claimed “information about the media” is not the user preference information but rather is information about the media that the server then uses to infer the user’s entertainment preferences. EX2007, ¶¶196-206; *see also* EX2009, 56:12-57:11, 58:13-59:6 (Dr. Houh agreeing that “information about the media” is different than user preference information).

Claim 1 introduces the “information about the media limitation” in the following clauses:

...cause the computer server to:

control receipt of media or information about the media, the media being stored on a portable media player device or accessed using the portable media player device;

infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media ...

Claim 1 is clear that the “information about the media” refers to information about the media that the server uses to infer the user’s entertainment preferences.

EX1001, Claim 1.

Petitioner incorrectly maps the “information about the media” limitation to the user’s entertainment preferences in Sasaki. EX2007, ¶¶196-206. The Petition states:

- Sasaki further discloses that the server obtains information about the media from a storage within the computer server by teaching that the “server performs processing based on preference information ... which is stored in the HDD 4 of the server.” Pet., 45 (citing EX1004, ¶119).
- Thus Sasaki’s server that obtains user preference information (*e.g.*, information about media) from a hard drive in the server for subsequent processing renders obvious this limitation. Pet., 46 (citing EX1003, ¶¶130-135).

Petitioner’s statements refer to the preference information of Sasaki. In the context of claims 1 and 9, however, the preference information is distinct from the

“information about the media” that the server uses to infer user preferences.

EX2007, ¶¶204-205. Further, that Sasaki’s server stores user preference information does not render obvious that it would store “information about the media” because in Sasaki the user preference information is provided by the user.

Id., ¶204. Thus, Petitioner’s analysis of claim 9 is inapt and fails to carry its burden of establishing obviousness.

IV. THE BOARD SHOULD NOT CREDIT DR. HOUH’S OPINIONS BECAUSE KEY PORTIONS OF HIS DECLARATION MERELY REPEAT THE PETITION.

The Board should not credit the declaration testimony of Petitioner’s proffered expert, Dr. Houh, because key portions of his declaration repeat, often *verbatim*, the arguments in the Petition.

“[C]onclusory expert testimony is inadequate to support an obviousness determination” *TQ Delta, LLC v. Cisco Systems, Inc.*, 942 F.3d 1352, 1359 (Fed. Cir. 2019); *see also In re Magnum Oil*, 829 F.3d at 1380 (“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements.”). The Board does not credit declaration testimony that “merely repeats, *verbatim*, the conclusory assertion for which it is offered to support.” *Xerox*, IPR2022-00624, Paper 9, 15-16 (precedential) (emphasis in original); *see also id.*, 15 (“[T]he cited declaration testimony is conclusory and unsupported,

adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”); 37 C.F.R. § 42.65(a).

As discussed above, portions of Dr. Houh’s declaration relating to motivation to combine contain no additional analysis beyond that presented in the Petition. For example, all three of the Petition’s grounds of unpatentability rely on combining Sasaki, Ellis, and Jacobi. Pet., 21. Such combinations require Petitioner to demonstrate “that a person of ordinary skill in the art would have been motivated to combine the prior art in the way claimed by the . . . claims at issue and had a reasonable expectation of success in doing so.” *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 991 (Fed. Cir. 2017). Dr. Houh’s opinions as to why a POSITA would have allegedly combined and reasonably expected success in combining Sasaki with Ellis and Sasaki-Ellis with Jacobi repeat, without additional support, the conclusory arguments in the Petition. *Compare* Pet., 25-30, *with* EX1003, ¶¶58-68. Such opinions are entitled to little or no weight, leaving key aspects of Petitioner’s challenge supported only by mere attorney argument.

As further noted above, Dr. Houh also simply repeats the language of the Petition in his analysis of specific claim limitations. For example, with respect to claim limitation [1.1.2], Dr. Houh’s declaration repeats almost the identical language from the Petition, with the exception that Dr. Houh’s declaration merely adds block quotes from the references. *Compare* Pet., 34-36, *with* EX1003, ¶¶87-

95. Dr. Houh similarly repeats the language from the Petition with respect to limitations [1.1.3] (*Compare* Pet., 36-38, *with* EX1003, ¶¶96-101), [2.0] (*Compare* Pet., 41-42, *with* EX1003, ¶¶114-116), and [4.0] (*Compare* Pet., 42-43, *with* EX1003, ¶¶117-120). Accordingly, his testimony on these limitations should be given little or no weight.

V. CONCLUSION

For the reasons discussed above, Petitioner fails to demonstrate that the Sasaki-Ellis (and Jacobi) combination teaches or suggests key claim elements and that a POSITA would have been motivated to combine and reasonably expected success in combining Sasaki and Ellis. Petitioner, thus, has failed to meet its burden of showing that the challenged claims would have been obvious. As such, Patent Owner respectfully requests that the Board confirm the patentability of the challenged claims of the '021 patent.

Respectfully submitted,

KRAMER ALBERTI LIM & TONKOVICH LLP

/ Sal Lim /

Sal Lim
Registration No. 45,706
Counsel for Patent Owner

Date: August 24, 2023

577 Airport Boulevard, Suite 250
Burlingame, California 94010
(650) 825-4300

CERTIFICATE OF WORD COUNT (37 C.F.R. § 42.24(d))

1. This Patent Owner's Response complies with the type-volume limitation of 14,000 words, comprising 12,357 words, excluding the parts exempted by 37 C.F.R. § 42.24(a)(1).
2. This Patent Owner's Response complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman font.

Respectfully submitted,

KRAMER ALBERTI LIM & TONKOVICH LLP

/ Sal Lim /

Sal Lim
Registration No. 45,706
Counsel for Patent Owner

Date: August 24, 2023

577 Airport Boulevard, Suite 250
Burlingame, California 94010
(650) 825-4300

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S RESPONSE** and **EXHIBITS 2007-2019** were served electronically via e-mail on August 24, 2023, in their entireties on the following counsel of record for

Petitioner:

Andrew S. Ehmke (Lead Counsel)
Raghav Bajaj (Back-up Counsel)
Calmann J. Clements (Back-up Counsel)
HAYNES AND BOONE LLP
andy.ehmke.ipr@haynesboone.com
raghav.bajaj.ipr@haynesboone.com
calmann.clements.ipr@haynesboone.com

Respectfully submitted,

KRAMER ALBERTI LIM & TONKOVICH LLP

/ Sal Lim /

Sal Lim
Registration No. 45,706
Counsel for Patent Owner

Date: August 24, 2023

577 Airport Boulevard, Suite 250
Burlingame, California 94010
(650) 825-4300