

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner,

v.

VISUAL REAL ESTATE, INC.,
Patent Owner.

Case IPR2014-01338
Patent 7,389,181 B2

Before MICHAEL R. ZECHER, BEVERLY M. BUNTING, and
KEVIN W. CHERRY, *Administrative Patent Judges*.

BUNTING, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. BACKGROUND

A. Introduction

Google Inc. (“Petitioner”) filed a corrected Petition requesting an *inter partes* review of claims 1 and 3–11 (the “challenged claims”) of U.S. Patent No. 7,389,181 B2 (Ex. 1002, “the ’181 patent”) pursuant to 35 U.S.C. §§ 311–319. Paper 4 (“Pet.”). Patent Owner, Visual Real Estate, Inc., (“Patent Owner”) timely filed a Preliminary Response to the Petition. Paper 9 (“Prelim. Resp.”). Pursuant to 35 U.S.C. § 314, we instituted this trial on February 23, 2015 as to these claims based on the following asserted grounds of unpatentability (“grounds”):¹

1. Claims 1, 3–5, 7, and 9 as anticipated under 35 U.S.C. §§ 102(a) or 102(e) by Yoichi;
2. Claims 6, 10, and 11 as unpatentable under 35 U.S.C. § 103(a) over Yoichi and Di Bernardo; and
3. Claim 8 as unpatentable under 35 U.S.C. § 103(a) over Yoichi and Lachinski.

Paper 11 (“Decision on Institution” or “Dec. to Inst.”).

During the course of trial, Patent Owner timely filed a Patent Owner Response (Paper 22 (“PO Resp.”)), and Petitioner timely filed a Reply thereto (Paper 23 (“Pet. Reply”)). Patent Owner then filed two motions. Patent Owner filed a Motion for Observation regarding certain cross-examination testimony of Petitioner’s rebuttal witness, Dr. John. R. Grindon (Paper 29 (“Obs.”)), and a Motion to Exclude (Paper 30 (“Mot. to Exclude”)). In turn, Petitioner filed a Response to Patent Owner’s Motion

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, took effect on March 18, 2013. Because the application from which the ’181 patent issued was filed before that date, our citations to 35 U.S.C. §§ 102 and 103 are to the pre-AIA version.

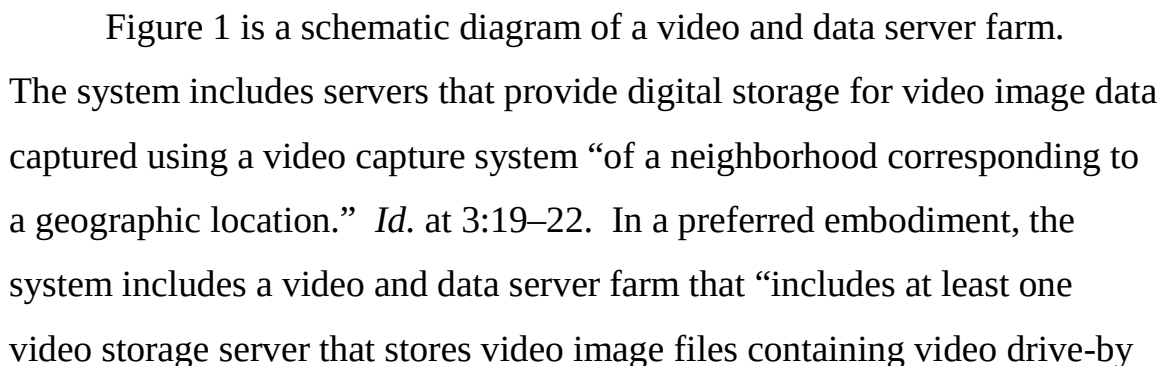
for Observation (Paper 35 (“Obs. Resp.”)) and an Opposition to Patent Owner’s Motion to Exclude (Paper 34 (“Exclude Opp.”)). An oral hearing was conducted on October 28, 2015, and a transcript of the hearing is entered in the record. Paper 38 (Tr.).

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–11 of the ’181 patent are unpatentable. We also *deny* Patent Owner’s Motion to Exclude.

B. Related Matters

The parties represent that the ’181 patent is the subject of the following judicial proceeding: *Visual Real Estate, Inc., v. Google, Inc.*, No. 3:14-cv-00274-TJC-JRK (M.D. Fla. March 10, 2014). Pet. 2; Paper 7, 2. In addition to this Petition, Petitioner filed another corrected petition, in Case IPR2014-01339, challenging the same claims of the ’181 patent on other grounds. Case IPR2014-01339, Paper 4 (PTAB Sept. 5, 2014). We entered a Final Written Decision in Case IPR2014-01339, concluding that Petitioner demonstrated by a preponderance of the evidence that claims 1 and 3–11 of the ’181 patent were unpatentable under §§ 102(b) and 103(a). Case IPR2014-01339, Paper 39 (PTAB Jan. 25, 2016). Petitioner also filed two other Petitions challenging the patentability of a certain subset of claims in the following patents owned by Patent Owner: (1) U.S. Patent No. 7,929,800 B2 (Case IPR2014-01340); and (2) U.S. Patent No. 8,078,396 B2 (Case IPR2014-01341). Paper 7, 2–3. We instituted an *inter partes* review in each of these cases. Case IPR2014-01340, Paper 11 (PTAB Feb. 27,

The '181 patent is directed to a system for providing a street-level view of a selected geographic location using video drive-by data (Ex. 1002, Abstract), as illustrated in Figure 1 reproduced below:



data that corresponds to a geographic location, a database server that processes a data query received from a user over the Internet that corresponds to a geographic location of interest, and an image server.” *Id.* at 2:63–3:3.

Operatively, the video drive-by data is captured using a video capture system that includes a camera array that generates video image data corresponding to the geographic location. *Id.* at 3:19–22. The location of the video image data is acquired concurrently using a positioning unit that produces positioning data corresponding to the location of the camera array. *Id.* at 3:22–24. A processing unit “processes the video image data and positioning data to produce the video drive-by-data.” *Id.* at 3:24–25. In response to a query from a user, the database server identifies video image files stored in the video storage server that correspond to the requested geographic location of interest, and transfers the identified video image files to the image processing server via a pre-processing network. *Id.* at 3:3–7. The image processing server “converts the video drive-by data to post-processed video data corresponding to a desired image format,” which is transferred back to the user via a post-processing network. *Id.* at 3:7–11.

D. Illustrative Claim

Of challenged claims 1 and 3–11 of the ’181 patent, claim 1 is independent, and claims 3–11 depend directly or indirectly from claim 1. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A system including a video and data server farm comprising:
 - at least one video storage server that stores video image files containing video drive-by data that corresponds to a geographic location;

a database server that processes a data query received from a user over a communications network that corresponds to a geographic location of interest; and
an image processing server;
wherein the database server identifies video image files stored in the video storage server that correspond to the geographic location of interest contained in the data query, and transfers the video image files over a preprocessing network to the image processing server; and
wherein the image processing server converts the video drive-by data to post processed video data corresponding to a desired image format, and transfers the post processed video data via post-processing network to the communications network in response to the query.

Ex. 1002, 18:2–20.

E. Prior Art

Petitioner relies on the following prior art references (Pet. 4) and the Declaration of Dr. Henry Fuchs (Ex. 1001):

Reference	Patent/Printed Publication No.	Date	Exhibit
Yoichi	U.S. Patent App. Pub. No. 2003/0210806 A1	Nov. 13, 2003	1004
Di Bernardo	U.S. Patent App. Pub. No. US 2002/0047895 A1	Apr. 25, 2002	1005
Lachinski	U.S. Patent No. 5,633,946	May 27, 1997	1006

F. Instituted Grounds

As explained in the Introduction section above, we instituted trial based on the grounds set forth in the table below. Dec. to Inst. 27.

Reference(s)	Basis	Claim(s) Challenged
Yoichi	§ 102(a) or (e)	1, 3–5, 7, and 9
Yoichi and Di Bernardo	§ 103(a)	6, 10, and 11
Yoichi and Lachinski	§ 103(a)	8

II. ANALYSIS

A. *Level of Skill in the Art*

In determining the level of skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). There is evidence in the record before us that reflects the knowledge level of a person with ordinary skill in the art. Petitioner’s expert witness, Dr. Fuchs, attests that a person with ordinary skill in the art in the relevant time frame would be an individual who possesses a combination of experience and education in computer science, computer graphics, and imaging technology. Ex. 1001 ¶ 14. According to Dr. Fuchs, this would consist of the following: (1) a minimum of a bachelor degree in computer science or a related engineering field; and (2) 2–5 years of work or research

experience in the field of computer science and its sub-field of imaging technology.² *Id.*

Additionally, we note that the prior art of record in this proceeding—namely, Yoichi, Di Bernardo, and Lachinski—is indicative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *GPAC*, 57 F.3d at 1579; *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

B. Claim Interpretation

In an *inter partes* review, we interpret a claim term in an unexpired patent according to the broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 84 U.S.LW. 3218 (U.S. Jan. 15, 2016) (No. 15-446) (“Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA,” and “the standard was properly adopted by PTO regulation.”).

Under the broadest reasonable interpretation standard, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art, in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may rebut that presumption by providing a definition of the term in the specification “with reasonable clarity, deliberateness, and

² Petitioner’s rebuttal witness, Dr. John R. Grindon, offers testimony as to the knowledge level of a person with ordinary skill in the art at the relevant time frame that is essentially the same as Dr. Fuchs’s assessment. Ex. 1010 ¶ 12.

precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). We apply these general principles in construing the claims of the ’181 patent.

In our Decision on Institution, we expressly construed the claim term “video drive-by data” as “street-level video data.” Dec. to Inst. 7. Patent Owner, in its Patent Owner Response, does not challenge expressly our construction of this term. Now, based on the full record developed during trial, we adopt our initial construction and analysis of “video drive-by data” for purposes of this Decision. *Id.* *See* Paper 12, 3 (“The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.”).

We also determined in our Decision on Institution that there was no need to expressly construe the claim term “geographic location of interest” because Patent Owner’s narrow construction proposed in its Preliminary Response (i.e., “a subject property in relation to parcel boundaries or a subject property at a specific street address”) was not supported by the specification, which uses the term “broadly and generically, and consistent with its plain and ordinary meaning.” Dec. to Inst. 8. In its Patent Owner Response, Patent Owner did not challenge expressly our construction of “geographic location of interest.” Nevertheless, Patent Owner’s arguments surrounding this claim term still rely upon the definition proposed in its Preliminary Response. *See e.g.*, PO Resp. 36 (“Yoichi is not concerned with returning “images” from the actual “geographic location” that matches the “geographic location of interest.”). Based on the full record developed

during trial, and for purposes of this Decision, our position and analysis regarding the claim term “geographic location of interest” remains unchanged.

Additionally, based on the full record developed during trial and for purposes of this Decision, we provide construction of the following additional claim terms.

1. “server farm”

In its Patent Owner Response, Patent Owner argues that the ’181 patent describes a “video and data server farm” as including at least one video storage server, a database server, and an image server. PO Resp. 24 (citing Ex. 1002, 2:64–3:2). According to Patent Owner, this explanation is consistent with the ordinary and customary meaning of the term “server farm” as “a group of networked servers that are housed in one location.” *Id.* In response, Petitioner counters that the disputed phrase “a video and data server farm” is recited in the preamble of claim 1, and argues that Petitioner fails to establish that the preamble should be read as a limitation on the scope of the claim. Pet. Reply 2–3. We agree with Petitioner.

The preamble of claim 1 recites “[a] system including a video and data server farm comprising” Ex. 1002, 18:2–3. “In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (citations omitted). “Conversely, a preamble is not limiting ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’” *Id.* In other words, the preamble is regarded as limiting if it recites essential

structure that is important to the invention or necessary to give meaning to the claim. *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1305–06 (Fed. Cir. 2005). When the limitations in the body of the claim “rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.” *Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003).

At oral argument, Patent Owner addressed expressly the question of whether the recitation of “server farm” in the preamble, regardless of its intended meaning, should be considered a claim limitation. Tr. 45:6– 52:5. For example,

MR. MACEDO: As I understand, whether or not the preamble’s a limitation, it turns on whether or not it’s merely a use or whether the elements of the claim refer back to it. And therefore, it adds meaning and life to the claim. I think that in this context, it does.

Id. at 50:17–22.

Here, it is unclear from the language of claim 1 as to what limitation in the body of the claim, if any, would “refer back to” “server farm,” nor what “meaning and life” the recitation of “server farm” would add to claim

1. Patent Owner also argued at oral hearing that:

the video and data server farm includes at least one video data -- one video storage server that stores video image files containing video drive-by data that corresponds to geographic location; a database server that processes as data query received from the user over the Internet and corresponds to a geographic location; and an image server. Those are the three elements. When it says in the claim a video and data storage server comprising and then it gives those three elements as the composition, that’s perfectly consistent with saying that’s an important part of the claim.

Id. at 48:20–49:9. Despite Patent Owner’s argument to the contrary, we observe that the body of independent claim 1 appears to recite a structurally complete invention that includes the elements cited by Patent Owner of “at least one video storage server,” “a database server,” and “an image processing server.” Ex. 1002, 18:4–10.

We further observe that the term “server farm” is not recited in the body of claim 1, nor in dependent claims 3–11. Thus, it does not appear to provide any antecedent basis support for any elements of the claims. Indeed, all the term “server farm” appears to do is to give a descriptive name to the set of limitations that completely set forth the invention. In such an instance, the preamble does not limit the claims. *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434 (Fed. Cir. 2000) (“The phrase ‘control apparatus’ in the preamble merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention. Its use does not limit the claims . . .”). For these reasons, we do not accord patentable weight to the recitation of “server farm” in the preamble of claim 1.

Nonetheless, even if we were to accord the recitation of “server farm” in the preamble of claim 1 some patentable weight, we are not persuaded by Patent Owner’s arguments and evidence that the broadest reasonable interpretation of this term is limited to “a group of networked servers housed in a single location.” The cited passage of the ’181 patent specification does not explicitly disclose that the servers associated with video and data server farm 100, as illustrated in Figure 1 and which includes, among other things, video server 110, image processing servers 115, and database servers 120, are housed in a single location. Tr. 54:4–55:11 (arguing that the direct

connections between the various servers that make up video and data server farm 100 implies that these servers are all housed in one location). Indeed, we observe that the specification of the '181 patent describes a *preferred embodiment* of the video and data server farm as “utilize[ing] a set of servers to provide digital storage of video drive-by data, and processes the video drive-by data for deliver[y] to an end user.” Ex. 1002, 6:23–25. In our view, the direct connections between the various servers that make up video and data server farm 100 illustrated in Figure 1 do not indicate that these servers are all housed in one location, but instead illustrate the flow of information between these servers. *See, e.g., id.* at 6:21–62 (disclosing how the video drive-by data is processed and delivered to the end user).

Likewise, the extrinsic evidence Patent Owner proffers to support its proposed definition of “server farm” has uncertain evidentiary value, specifically as to how an ordinary skilled artisan would have understood this term in the 2004 time frame of the '181 patent. PO Resp. 24–26 (citing Exs. 2008–11). Other than stating that this evidence was “last pulled on June 3, 2015,” Patent Owner has not demonstrated adequately the significance of this extrinsic evidence in the relevant time frame. *Id.* As such, we agree with Petitioner that extrinsic evidence regarding the use of this term in 2015 does not inform us whether ordinary skilled artisans in 2004, the earliest priority date of the '181 patent, would have had the same understanding of this term. Pet. Reply 3–4. To illustrate this point, Petitioner presents evidence showing, in the 2004 time period, the term “server farm” was utilized in a broader context “to describe systems in which computers were connected via a network while situated either at different locations or at the same location.” *Id.* at 4 (citing Ex. 1011 ¶¶ 34–35; Ex. 1012; Ex. 1013).

In summary, even if we were to accord the recitation of “server farm” in the preamble of independent claim 1 patentable weight, we conclude that the broadest reasonable interpretation of this term is simply “a group of networked servers.” This construction is consistent with the specification of the ’181 patent (*see, e.g.*, Ex. 1002, 2:64–3:3, 6:21–62, Fig. 1), as well as the ordinary and customary meaning of the term “server farm” as would be understood by one of ordinary skill in the art at or around 2004 (*see, e.g.*, Ex. 1011 ¶¶ 34, 35; Ex. 1012; Ex. 1013).

2. Means-plus-function limitations

In the Petition, Petitioner proposed a construction for the following means-plus-function terms recited in claims 7–10:

- a) “means for providing a variety of geo-coded data layers in conjunction with the video drive-by data” (claim 7);
- b) “means for creating geo-coded text, image and vector data which is superimposed onto the post processed video data that is transferred to the communications network” (claim 8);
- c) “means for linking latitude and longitude data with video drive-by data” (claim 9); and
- d) “means for calculating a camera position of designated individual frames of video by using position data points captured before and after a designated frame position” (claim 10).

Pet. 10–15. Petitioner asserts that each of these means-plus-function claim terms invokes 35 U.S.C. § 112, sixth paragraph. *Id.* Construction of a “means-plus-function” limitation under 35 U.S.C. § 112, sixth paragraph, involves two steps: first identifying the function explicitly recited in the claim, and then identifying the corresponding structure set forth in the

written description that performs the particular function set forth in the claim. *Asyst Techs, Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369 (Fed. Cir. 2001). For each of these means-plus-function claim terms, Petitioner identified the particular function performed by the means, as well as the structure within the specification performing the identified function. Pet. 10–15. Accordingly, we ascertained in the Decision on Institution that Petitioner had identified sufficiently corresponding structures for each of these means-plus-function claim limitations for us to perform our analysis. Dec. to Inst. 9.

The parties agree essentially on the specific function performed by each of these means-plus-function claim limitations. See Pet. 10–15; PO Resp. 44–51. Where the parties diverge, however, is in the type of analysis required to demonstrate that the identified structure performs the identified “means for” function. *Id.* For convenience, the parties’ positions are summarized in the table below:

Claim	“Means for” Function	Petitioner’s Structure	Patent Owner’s Structure
7	Providing a variety of geo-coded data layers in conjunction with the video drive-by data.	Any computer system capable of performing the identified function.	Software based on open source programming tool Mencoder.

Claim	“Mean for” Function	Petitioner’s Structure	Patent Owner’s Structure
8	Creating geo-coded text, image and vector data which is superimposed onto the post processed video data that is transferred to the communications network.	Any computer system capable of performing the identified function.	Rendering program (open source programming suite tool Open GL and GraphicsMagick); recompositing program (open source programming tool FFMPEG); and streaming (open source Apache web server).
9	Linking latitude and longitude data with video drive-by data.	Any system capable of performing the identified function.	Open source programming tool GDAL.
10	Calculating a camera position of designated individual frames of video by using position data points captured before and after a designated frame position.	Any system capable of performing the identified function.	GIS viewing software, such as open source University of Minnesota MapServer.

Patent Owner takes the position that because the claimed function of the computer implemented invention is performed by computer software, “the corresponding structure is a software algorithm, not merely the computer itself.” PO Resp. 43 (citing *EON Corp. IP Holdings, LLC v. AT&T Mobility LLC*, 785 F.3d 616 (Fed. Cir. 2015)). Patent Owner

confirmed its position at the oral hearing. Tr. 64:12–73:23. Essentially, Patent Owner urges us to find the Petition deficient because Petitioner’s declarant, Dr. Fuchs, did not perform an analysis as to whether the asserted prior art references used or disclosed the same or similar programs as the open source software disclosed in the ’181 patent. PO Resp. 43–44 (citing Ex. 2006, 258:3–20); Tr. 65:23–67:14.

To the extent *EON Corp. IP Holdings* stands for the proposition that the corresponding structure must include an *algorithm* for performing the claimed function performed by a computing device, Petitioner agrees. Pet. Reply 24. Nonetheless, Petitioner also directs our attention to the Federal Circuit’s holding that “[s]imply reciting ‘software’ without providing some detail about the means to accomplish the function is not enough.” *Id.* (citing *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1340–41 (Fed. Cir. 2008)). Petitioner understands *Finisar* as holding that the corresponding structure for the means-plus-function claim element is not the referenced software example, “‘but rather the special purpose computer programmed to perform the **disclosed algorithm**’ as disclosed in the specification.” *Id.* (citing *Finisar*, 523 F.3d at 1340 (quoting *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999))). Thus, Petitioner maintains that Dr. Fuchs’s analysis of the ’181 patent identified the corresponding structure, and then Dr. Fuchs “applied this construction to his analysis of Yoichi.” *Id.* at 25 (citing Ex. 1001 ¶¶ 21–24, 44–47, 54–56, 59–63).

We agree with Petitioner that the corresponding structure that performs the claimed function may include any computer system

programmed to perform the identified function.³ *Cf. WMS Gaming*, 184 F.3d at 1349 (“In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” (citation omitted)). In *Eon Corp. IP Holdings LLC*, the Federal Circuit confirmed that, on this point, *WMS Gaming* remains correctly decided and elaborated that:

the disclosure of a general purpose computer or a microprocessor as corresponding structure for a software function does nothing to limit the scope of the claim and “avoid pure functional claiming.” [*Aristocrat Techs. Australia Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).] As such, when a patentee invokes means-plus-function claiming to recite a software function, it accedes to the reciprocal obligation of disclosing a sufficient algorithm as corresponding structure.

Eon Corp. IP Holdings, 785 F.3d at 623.

Patent Owner’s efforts to limit the structure to the algorithms found in exemplary open source computer software are unavailing. Patent Owner does not direct us to, nor have we found, where the specification of the ’181 patent adequately *describes the particular algorithm* used by the open source computer software in detail. The mere disclosure of the name of the software is ineffective because “material incorporated by reference cannot provide the corresponding structure necessary to satisfy the definiteness requirement for a means-plus-function clause.” *Default Proof Credit Card*

³ Although we recognize this conclusion implicates 35 U.S.C. § 112, we do not address whether these claims are unpatentable under that section because an *inter partes* review may only consider grounds of unpatentability under §§ 102 and 103. See 35 U.S.C. § 311(b).

Sys., Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1301 (Fed. Cir. 2005) (citing *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1381 (Fed. Cir. 1999)). Instead,

The inquiry under § 112, ¶ 2, does not turn on whether a patentee has “incorporated by reference” material into the specification relating to structure, but instead asks first “whether structure is described in specification, and, if so, whether one skilled in the art would identify the structure from that description.

Id. (quoting *Atmel*, 198 F.3d at 1381). We find that the only structure disclosed and linked to the recited function in this way are the structures identified by Petitioner. For the reasons discussed above, we do not agree with Patent Owner that the recitation of exemplary software alone represents the requisite structure. Thus, based on the specification, claim language and evidence on the complete record before us, we adopt Petitioner’s proposed structures for the means-plus-function claim limitations recited in claim 7–10.

C. Anticipation by Yoichi

A claim is anticipated if each limitation of the claim is disclosed in a single prior art reference arranged as in the claim. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). As recently reiterated by the Federal Circuit, “a reference can anticipate a claim even if it ‘d[oes] not expressly spell out’ all the limitations arranged or combined as in the claim, if a person of skill in the art, reading the reference, would ‘at once envisage’ the claimed arrangement or combination.” *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015) (citing *In re Petering*, 301 F.2d 676, 681 (CCPA 1962)). We analyze this ground based on anticipation in accordance with the above-stated principles.

Petitioner challenged claims 1, 3–5, 7, and 9 as anticipated under 35 U.S.C. § 102 by Yoichi. Pet. 15–23, 32–43. In its Petition, Petitioner explains how Yoichi discloses each of the claim limitations (*id.*) and relies on the declaration of Dr. Fuchs to support the analysis advocated in the Petition (Ex. 1001). Patent Owner disagrees, and focuses its arguments on challenging the teachings of Yoichi with respect to the claim elements of a “video and data server farm,” an “image processing server” that “converts the video drive-by data to post processed data corresponding to a desired imaged format,” a “geographic location of interest,” and “360 degree view.” PO Resp. 5–8, 22–36.

For the reasons given below, after consideration of the Petition, the arguments in the Patent Owner Response, Petitioner’s Reply, and the evidence of record, we conclude that Petitioner has demonstrated, by a preponderance of the evidence, that each of claims 1, 3–5, 7, and 9 of the ’181 patent are anticipated by Yoichi. We begin our discussion with a brief summary of the cited references, and then we address the parties’ contentions in turn.

1. Overview of Yoichi (Ex. 1004)

Yoichi describes a system and method for capturing video images along a driving route in order to provide drivers with information about conditions along the driving route (Ex. 1004 ¶¶ 1–2), as illustrated in Figure 1 reproduced below.

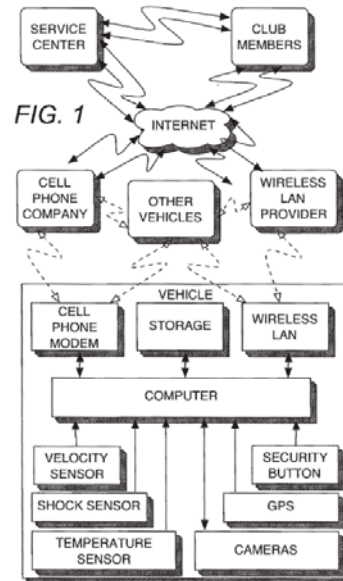


Figure 1 is a diagram of the system for image capture and sharing.

The vehicle is equipped with cameras and a computer in order to communicate “directly or indirectly with other vehicles for a peer-to-peer transfer” of video files. *Id.* ¶ 31. The captured data is stored in a service center, and the service center provides new services based on such data. *Id.* ¶ 32. Associated information, such as date, time, or location, is attached to the image, and stored in the vehicle for transmission to the service center for storage or retransmission to another driver. *Id.* ¶ 33. Navigational information is part of the data, and the service center “organizes, stores and analyzes the data.” *Id.* ¶ 34. In response to a request from a user, the service center will “transmit recent or real-time images from close to the location.” *Id.* ¶ 37. The image and associated information then is displayed to the requester. *Id.* ¶ 38.

2. Claim 1

a. “video and data server farm”

Independent claim 1 recites in the preamble a “video and data server farm.” Ex. 1002, 18:2. Petitioner asserts that Yoichi’s disclosure of a “service center” and vehicles equipped with a plurality of digital cameras, a computer and broadband wireless data communication satisfies this claim term. Pet. 16. Patent Owner challenges this assertion. PO Resp. 22–30. Relying on its understanding of server farm as “a group of networked computers housed in a single location,” Patent Owner argues that the server farm functions “**to distribute the workload of strenuous computing requirements.**” *Id.* at 26. Patent Owner reasons, without support, that the use of a server farm is unnecessary if computational requirements “are minimal or not complex.” *Id.* Based on its understanding of “server farm,” Patent Owner argues that Yoichi’s “computers aboard vehicles driving in different locations that have...limited interconnectivity” do not satisfy this claim term. *Id.* at 27.

As discussed in our claim construction section *supra*, the term “server farm” recited in the preamble of claim 1 is not considered limiting. Nonetheless, we explained that even if we were to accord the term “server farm” recited in the preamble of claim 1 patentable weight, the broadest reasonable interpretation of this term is simply “a group of networked servers.” Relying on testimony of its declarant Dr. Fuchs, Petitioner explains persuasively how Yoichi’s service center, and video storage and computer in each vehicle, are a group of networked servers. Pet. Reply 4–6 (citing Ex. 1001 ¶¶ 29, 30–35).

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes the “video and data server farm” recited in the preamble of independent claim 1.

b. “image processing server”

Claim 1 also recites, among other things, an “image processing server” that “converts the video drive-by data to post-processed video data corresponding to a desired image format, and transfers the post processed video data via post-processing network to the communications network in response to the query.” Ex. 1002, 18:16–20. In its Petition, Petitioner contends that the “image processing server” claim element is met by the disclosure in Yoichi of a computer located at each vehicle. Pet. 16–17 (citing Ex. 1001 ¶¶ 25, 30–32; Ex. 1004 ¶¶ 71, 127). According to Petitioner, the Service Center in Yoichi receives a query from the user corresponding to a geographic location of interest and transmits the data from the vehicle to the requestor. *Id.* at 17–18 (citing Ex. 1001 ¶¶ 27, 31, 33; Ex. 1004 ¶¶ 37, 39, 40, 81, 99). Petitioner also directs our attention to an alternative embodiment described in Yoichi, whereby the driver requests that their vehicle system, or the service center, search for the desired data from other vehicles, and when found in another vehicle, the data is transmitted through the service center from the other vehicle to the requestor. *Id.* at 18 (citing Ex. 1004 ¶ 39). Also relying on the testimony of Dr. Fuchs, Petitioner contends that Yoichi describes the processing of video drive-by data “into a desired format, e.g., a ‘secured image’ format that includes a watermark.” *Id.* at 20 (citing Ex. 1001 ¶ 34).

Patent Owner challenges these contentions in its Patent Owner Response, arguing that Yoichi does not teach an “image processing server”

that “converts the video drive-by data to post-processed video data corresponding to a desired image format.” PO Resp. 16, 19. Patent Owner takes the position that updating an image file with additional information and saving the image file in the *same format* is not “‘convert[ing]’ the file format, such as from a TIFF image format to MPEG2 image format.” *Id.* at 16 (citing Ex. 1004, ¶ 85). Patent Owner asserts that, although we made reference to a definition for “desired” in the Decision on Institution (Dec. to Inst. 13, n.2), we did not construe “‘image format’ or ‘converting’ in the context of an ‘image processing server’” in the Decision on Institution. PO Resp. 31.

To demonstrate how the specification of the ’181 patent provides this context, Patent Owner first directs our attention to passages which purportedly address the “desired image format” and “converting” claim terms. *Id.* at 31–34. For example, the description surrounding the manner in which “‘image processing servers’ ‘convert the original drive-by data to one of **many potential new image formats (depending on the particular application)** which constitute Post Processed Video Data (PPVD).” *Id.* at 31 (citing Ex. 1002, 6:53–56). This passage, according to Patent Owner, describes the “desired image format” as “depending on the particular application that the user will presumably view the image.” *Id.* at 32. Petitioner argues persuasively that Yoichi’s conversion of the image file from an unsecured image format to a secured (watermarked) image format satisfies the “desired image format” claim element. Pet. Reply 14–15. Moreover, even if we were to adopt Patent Owner’s narrow definition of “desired image format” as a “new image format,” the secured image format

of Yoichi is a “new image format” as compared to the unsecured image format.

Patent Owner also cites passages in the specification regarding the use of “open source MENCODER software ‘to convert [] the compressed MPEG2 data in lossless TIFF image files’” (PO Resp. 31 (citing Ex. 1002, 9:25–26)); as well as “open source FFMPEG software to convert TIFF images to create a compressed video file in an MPEG2 file” (*id.* (citing Ex. 1002, 9:44–47)). Although both MENCODER and FFMPEG are named by way of example, Patent Owner does not present evidence demonstrating that one of skill in the art would have recognized from these passages that “converts” means that image files are converted from one format to another. Indeed, the specification of the ’181 patent states that the invention has been described with respect to certain preferred embodiments and that other modifications and variations are possible. Ex. 1002, 17:48–51.

Next, Patent Owner proffers extrinsic evidence from a technical dictionary to support its definition of “converting.” Specifically, the definition of “conversion program,” namely “a program that is capable of changing a file from one format to another.” PO Resp. 32 (citing Ex. 2073).⁴ The relevance of the dictionary meaning of “conversion program” is unclear, and Patent Owner does not proffer argument or evidence demonstrating that one of skill in the art would have understood “converting” to mean the same as “conversion program” in the context of the specification of the ’181 patent.

⁴ We note that Ex. 2073 is not of record in this proceeding, and as such, we are unclear as to what evidence Patent Owner is referring to.

Further, Patent Owner argues that the file format in Yoichi is unchanged by the watermark. PO Resp. 33. Patent Owner notes that the *Dictionary of Computer and Internet Terms* defines a watermark as “a faint pattern or second image added to a digital image for identification or other purposes.” *Id.* (citing Ex. 2073).⁵ Based on this definition, Patent Owner concludes that “**a watermark is an addition to an existing file in the same file format** and does not describe or suggest a conversion to a second, and different requested file format.” *Id.*

Having considered Patent Owner’s arguments in this regard, we agree with Petitioner that neither the claims nor the specification require converting an image to a “wholly different ‘file format’ than a desired ‘image format.’” Pet. Reply 14. Petitioner explains persuasively how Yoichi’s system converts the format of the image file into a desired format because watermarking converts the image files “from an unsecured image format into a ‘secured image’ format.” Pet. Reply 13 (citing Ex. 1001 ¶¶ 27, 34; Ex. 1004 ¶¶ 85–86, 97). Moreover, we agree with Petitioner that Patent Owner’s narrow interpretation of “desired image format” is predicated on our reading the term “file” into the language of claim 1, e.g., “desired image file format.” Pet. Reply 13–14. As Petitioner notes, we stated in the Decision on Institution, “there is no ‘explicit definition in the Specification [of the ’181 patent] for the claim term desired image format’ and the ‘specification describes the converted image format as one of many potential new image formats.’” Pet. Reply 14 (citing Dec. to Inst. 12). We, therefore, decline Patent Owner’s invitation to narrow the scope of the term “desired

⁵ This reference to Exhibit 2073 is likewise unclear because it is not of record in this proceeding.

image format” to a particular type of resource for storing information, such as a “file.”

Thus, contrary to Patent Owner’s assertion, we did not, in the Decision on Institution, overlook Patent Owner’s specific arguments with regards to the description of “converting” and “desired image format” in the context of the specification of the ’181 patent. Rather, we considered these passages in the context of the claims, but declined to import limitations from the specification into the claims. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”).

Patent Owner concludes that Petitioner failed to meet its burden of showing that Yoichi anticipates claim 1 because “[t]he mere possibility that a prior art reference ‘could’ perform a claim limitation, but was not ‘required’ to perform a claim limitation is insufficient to show anticipation as a matter of law.” PO Resp. 34 (citing *Gracenote, Inc. v. Iceberg Indust., Inc.*, IPR2013-00551, slip op., at 31 (PTAB Feb. 28, 2014) (Paper 6)). Notwithstanding Patent Owner’s assertion to the contrary, we agree with Petitioner that Dr. Fuchs’s declaration does not rely upon inherent aspects of Yoichi’s system to account for the “desired image format” as claimed, but rather “points out how each structure of the claims is explicitly described by Yoichi and what a POSITA would have recognized from Yoichi’s teaching.” Pet. Reply 15 (citing Ex. 1001 ¶¶ 25–63). Indeed, there is no dispute that Yoichi expressly discloses adding a watermark to the image, which is what Petitioner relies upon

as teaching this claim limitation. We have found that this express teaching is within the meaning of this claim limitation. Thus, we do not agree Petitioner is relying on inherency for this claim element.

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes the “image processing server” and associated conversion to a “desired image format” recited in independent claim 1.

c. “geographic location of interest”

Claim 1 also recites, among other things, “wherein the database server identifies video image files stored in the video storage server that correspond to the geographic location of interest contained in the data query.” Ex. 1002, 18:11–15. In its Petition, Petitioner contends that this limitation is met by the disclosure in Yoichi regarding the attachment of associated information with the captured image, e.g., “[a] **location where the image was taken.**” Pet. 17 (citing Ex. 1004 ¶ 33). Additionally, Petitioner relies on the disclosure in Yoichi regarding the Service Center receiving a user submitted query, identifying a video image file stored in a video storage server that corresponds to the requested location of interest, and the server transferring an image corresponding to the geographic location. Pet. 17–19 (citing Ex. 1001 ¶¶ 27, 31, 33; Ex. 1004 ¶¶ 37, 39, 40, 81, 99, 107).

Patent Owner acknowledges that in the Decision on Institution we disagreed with its proposed interpretation of the claim term “geographic location of interest” as limited to “a specific street address.” PO Resp. 35. Nevertheless, Patent Owner maintains that “it is clear that the claimed system requires that the actual images of the ‘geographic location’ returned in response to a query for a ‘geographic location of interest’ must be the

same location.” *Id.* at 36. According to Patent Owner, because Yoichi is directed to a different problem from the problem addressed in the ’181 patent, “Yoichi is not concerned with returning ‘images’ from the actual ‘geographic location’ that matches the ‘geographic location of interest.’” *Id.* As discussed in the Decision on Institution, we disagreed with Patent Owner’s proposed construction of the claim term “geographic location of interest,” and instead determined that the evidence presently of record supports applying this term’s ordinary and customary meaning. Dec. to Inst. 7–8. Now, based on the full record developed during trial, Patent Owner’s similar argument that the geographic location of interest specified in the user query is limited to a street address, is likewise unpersuasive, because this argument is not commensurate in scope with claim 1. We agree with Petitioner that the broadest reasonable interpretation of the language of claim 1 in light of the specification of the ’181 patent does not require that the image “match with precision” the “geographic location of interest,” rather that the image “corresponds” to the “geographic location of interest.” Pet. Reply 16–17. That is, the user data query in Yoichi “corresponds to a geographic location of interest,” and the video image files stored in the video server “correspond to the geographic location of interest contained in the data inquiry,” as recited in claim 1. *Id.* at 17–19.

To the extent Patent Owner’s argument is predicated on the notion that Yoichi is non-analogous to the ’181 patent because, purportedly, it is directed to a different problem from the problem addressed in the ’181 patent, we disagree. PO Resp. 36. It is well settled that whether or not a reference constitutes analogous art is not relevant in an anticipation evaluation. *See In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997) (“A

reference may be . . . directed to an entirely different problem from the one addressed by the inventor, yet the reference will still anticipate if it explicitly or inherently discloses every limitation recited in the claims.”).

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes the “geographic location of interest” recited in independent claim 1.

d. Summary

In summary, we have reviewed each of the limitations of claim 1 in light of Yoichi, and find that Petitioner’s arguments and evidence presented in the Petition and Reply demonstrate, by a preponderance of the evidence, that each limitation of claim 1 is disclosed by Yoichi.

3. Claims 3–5, 7 and 9

With regard to claim 3, Patent Owner challenges Petitioner’s assertion that Yoichi discloses a “map server that provides a static image of an overhead view of the geographic location of interest.” PO Resp. 36. Specifically, Patent Owner argues that Yoichi does not describe the addition of a map server that provides “a separate, static image of an overhead view of the geographic location of interest as specified in a user query.” *Id.* at 36–37. We agree with Petitioner that the broadest reasonable interpretation of “overhead view” would include a map as disclosed in the ’181 patent, and we recognize that Yoichi discloses a map. Pet. Reply 20 (citing Pet. 37–38; Ex. 1001 ¶ 36–37; Ex. 1002, 3:16–18, 8:61–9:8). Further, we agree with Petitioner that the language of claim 3, as would be understood by a person of ordinary skill in the art, does not require a separate map server. *Id.* Additionally, Petitioner presents evidence that Patent Owner’s argument in this regard is contrary to its infringement contentions from other

proceedings, in which it alleged that “the same single ‘server’ that operates as the ‘video storage server,’ ‘database server,’ and image processing server’ of claim 1 (the ‘Street View server’) also provides the ‘map server.’” *Id.* (citing Ex. 1007, 2, 5, 7, 8, 11).

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes “a map server” capable of presenting “an overhead view” as recited in claim 3.

Next, Patent Owner challenges Petitioner’s contention that Yoichi discloses the claim 5 limitation “wherein the camera array includes a plurality of camera units arranged to provide a 360 degree view of the neighborhood.” PO Resp. 37–38. Specifically, Patent Owner argues that the description in Yoichi of cameras aimed in different directions with different angles does not meet the limitation of cameras “arranged to provide a 360 degree view” because of the need to adjust the camera angles to achieve this 360 degree view. *Id.* Relying on the testimony of Dr. Fuchs, Petitioner’s assertion that this limitation is met by Yoichi’s disclosure of “a plurality of cameras for ‘captur[ing] front, rear and side views,’” is persuasive. Pet. Reply 21 (citing Ex. 1001 ¶ 43; Ex. 1004, 32). The specification of the ’181 patent confirms Petitioner’s position, in explaining that “modifications and variations are possible within the scope of the appended claims” (Ex. 1002, 17:49–51), and that “[t]he number of cameras in the array may also vary” (*id.* at 17:57–58).

Although Patent Owner also contends that Yoichi teaches away from a camera arrangement with a 360 degree view because a 360 degree view would not require adjustment, we note that teaching away is irrelevant to an

anticipation evaluation. *See Seachange Int’l, Inc. v. C-COR, Inc.* 413 F.3d 1361, 1380 (Fed. Cir. 2005).

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes “the camera array” that provides “a 360 degree view” recited in claim 5.

Claim 7 requires a “means for providing a variety of geo-coded data layers in conjunction with the video drive-by data.” Patent Owner challenges Petitioner’s contention that Yoichi’s Service Center satisfies this limitation, arguing that “nothing in Yoichi describes or mentions data layers, no less geo-coded data layers.” PO Resp. 38–39. Specifically, Patent Owner argues that the database in Yoichi is not equivalent to a data layer. *Id.* at 39.

We agree with Petitioner that the structure that satisfies this limitation is not a data layer, rather the “‘means’ for providing the geo-coded data layers.” Pet. Reply 22. For the reasons discussed *supra*, we concluded that the “means for providing the geo-coded data layers” is “any computer system capable of performing the identified function.” Relying on the testimony of Dr. Fuchs, Petitioner argues persuasively that Yoichi’s Service Center implements “algorithms for superimposing location specific information over provided images.” *Id.* (citing Ex. 1001 ¶¶ 44, 45; Ex. 1004 ¶ 97). Specifically, that the Service Center “searches its database to retrieve geo-coded data to provide as layers on an identified image of a geographic location of interest.” *Id.* (citing Ex. 1001 ¶¶ 44-45; Ex. 1004 ¶¶ 50–54, 95–97, Figs. 7, 11).

In considering the record in its entirety, Petitioner has presented sufficient evidence to support a finding that Yoichi describes the “means for

providing a variety of geo-coded data layers in conjunction with the video drive-by data” recited in claim 7.

Patent Owner does not address separately claims 4 and 9 in its Patent Owner Response. We have reviewed the Petition and evidence cited in the Petition regarding these claims, and find that Petitioner has shown by a preponderance of the evidence that Yoichi anticipates these claims as well. *See* Pet. 15–23; *see also* Paper 12, 3 (The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.).

4. Summary

Based on further review of the record, and for the reasons discussed above, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1, 3–5, 7 and 9 of the ’181 patent are anticipated by Yoichi.

D. Obviousness Based, in Part, on Yoichi

The Petition also challenges the patentability of claims 6, 10, and 11 under 35 U.S.C. § 103(a) as obvious based on Yoichi and Di Bernardo. Pet. 24–30, 43–47. As support for this contention, Petitioner relies upon the Declaration of Dr. Fuchs to explain how the combination of Yoichi and Di Bernardo discloses the claimed subject matter. Ex. 1001 ¶¶ 48–58. In addition, the Petition challenges the patentability of claim 8 under 35 U.S.C. § 103(a) as obvious based on Yoichi and Lachinski. Pet. 30–32, 47–49. Petitioner again relies on Dr. Fuchs to explain how the combination of Yoichi and Lachinski disclose the claimed subject matter. Ex. 1001 ¶¶ 59–63.

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze these grounds based on obviousness in accordance with the above-stated principles.

1. Patent Owner’s Arguments Solely Directed to Obviousness Based on Yoichi and Di Bernardo

At pages 39–42 of the Patent Owner Response, Patent Owner asserts that claims 6, 10, and 11 are not obvious over Yoichi and Di Bernardo. PO Resp. 39. In particular, Patent Owner asserts that “[t]he Petition fails to provide any meaningful obviousness analysis.” *Id.* Yet, the arguments presented in support of this assertion are directed to a non-instituted ground based on Yoichi alone and challenging claims 1, 3–5, 7, and 9. *See e.g.*, (“Petitioner also requests inter partes review of the exact same claims as being obvious over Yoichi (Ground 2), as an alternative to Ground 1. Pet at 23”). *Id.* at 39–40. Patent Owner’s arguments are inapposite because they

do not address directly the instituted grounds based on obviousness over Yoichi and Di Bernardo.

Next, Patent Owner argues that “[t]he problem solved and realized by the invention enabled the use of video-drive-by data for professional use.” *Id.* at 41–42. Specifically, Patent Owner argues that methodology described in Yoichi, Di Bernardo and Lachinski does not disclose an “exact address,” but rather a “range of addresses.” These arguments, however, are based on Patent Owner’s overly narrow construction of “geographic location of interest,” which, for the reasons discussed *supra*, are not persuasive.

2. Patent Owner’s Arguments Directed to Both Grounds Based on Obviousness

Turning to Patent Owner’s combined arguments challenging the two grounds asserted against claims 6, 8, 10 and 11, Patent Owner argues further that Yoichi fails to teach or suggest all of the claims elements of independent claim 1, from which these claims depend, and that Petitioner does not rely on Di Bernardo nor Lachinski to cure the alleged deficiencies of claim 1. *Id.* at 51–52. Petitioner counters that it relied on Di Bernardo and Lachinski to address the additional recitations in claims 6, 8, 10 and 11, and not to cure any alleged deficiency in Yoichi. Pet. Reply 22–23.

In the Decision on Institution, we were persuaded that Petitioner’s proffered rationale and evidence was sufficient to support the proposed modification of claims 6, 8, 10 and 11. Now, with the record fully developed, Patent Owner does not proffer arguments or evidence to persuade us otherwise. See generally PO Resp. 39–41. We, therefore, discern no reason to address or alter our determination in this regard for the purposes of this Final Written Decision.

Thus, based on our further review of the record, and for the reasons discussed above, Petitioner has demonstrated, by a preponderance of the evidence, that: (1) claims 6, 10, and 11 of the '181 patent are unpatentable under 35 U.S.C. § 103(a) as obvious based Yoichi and Di Bernardo; and (2) claim 8 is unpatentable under 35 U.S.C. § 103(a) as obvious based Yoichi and Di Bernardo.

III. MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude Evidence under 37 C.F.R. § 42.64, seeking to exclude certain portions of the Declaration of Dr. Fuchs (Exhibit 1001); certain portions of the rebuttal declaration of Dr. Grindon (Exhibit 1010); and Exhibits 1004, 1011, 1012, and 1013 in their entirety. Mot. to Exclude. Petitioner, in turn, filed an opposition to Patent Owner's motion. Opp. Exclude. For the reasons discussed below, Patent Owner's Motion to Exclude is *denied*.

As an initial matter, we note that the party moving to exclude evidence bears the burden of proving that it is entitled to the relief requested—namely, that the material sought to be excluded is inadmissible under the Federal Rules of Evidence. *See* 37 C.F.R. §§ 42.20(c), 42.62(a). A motion to exclude must, among other things, explain each objection. *See* 37 C.F.R. § 42.64(c); *Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012).

With respect to the Exhibit 1001, Patent Owner moves to exclude certain portions of Dr. Fuchs's testimony for, among other reasons, relevance. Mot. to Exclude 1–2. In particular, Patent Owner moves to exclude paragraphs 12, 16, 59, and 83 of Dr. Fuchs's testimony. *Id.*

Because Patent Owner does not explain adequately its objections to the cited portions of Dr. Fuchs's testimony, Patent Owner has not met its burden of demonstrating that the cited portions of Dr. Fuchs's testimony should be excluded.

As to the Rebuttal Declaration of Dr. Grindon (Ex. 1010), Patent Owner moves to exclude paragraphs 13, 23, 28, 30 and 31 of Dr. Grindon's rebuttal testimony based on relevance. Mot. to Exclude 2. According to Patent Owner, the evidence in these paragraphs was offered by Petitioner for the first time in its Reply, and "should have been included as part of Petitioner's original petition[,] and should have been included as part of Petitioner's *prima facie* case of invalidity." *Id.* at 3.

In considering the declaratory evidence of Dr. Grindon, it is noteworthy that Dr. Grindon was introduced into this proceeding by Patent Owner as evidence to support arguments made in its Patent Owner Response. PO Resp. 11, 15. Specifically, Dr. Grindon's Declaration was used to support Patent Owner's position that in contrast to the '181 patent, Yoichi and Di Bernardo sought to avoid "computationally intensive" and "cumbersome" post-processing methods." *Id.* at 10–11 (citing Ex. 2002 ¶ 39). Dr. Grindon was retained by Petitioner as an expert consultant in an unrelated matter that did not involve the '181 patent, namely, *Vederi, LLC v. Google, Inc.*, No. 2:10-cv-07747 (C.D. Cal.). Ex. 2002 ("Vederi litigation"). As a result of Patent Owner's introduction of Dr. Grindon into this proceeding, Petitioner sought clarification from Dr. Grindon regarding his testimony in the *Vederi* litigation, via a rebuttal declaration. Pet. Reply 1–2 (citing Ex. 1010). The parties confirmed our understanding regarding the insertion of Dr. Grindon into this proceeding and the relevance of his

testimony at oral argument. Tr. 87:22–98:1, 119:3–120:14. Nonetheless, in this proceeding Patent Owner’s reliance on Dr. Grindon was minimal, and we did not rely upon the testimony of Dr. Grindon in reaching this Final Written Decision. Accordingly, this aspect of Patent Owner’s Motion to Exclude is moot.

Further, Patent Owner moves to exclude Exhibit 1011, 1012 and 1013 on the basis of relevance. Mot. to Exclude 3. In particular, Patent Owner alleges that this evidence was proffered by Petitioner for the first time in its Reply, and “should have been included as part of Petitioner’s original petition and should have been included as part of Petitioner’s *prima facie* case of invalidity.” *Id.* at 4. Because our Decision does not rely on any of these challenged exhibits, this aspect of Patent Owner’s Motion to Exclude is also moot.

For these reasons, we *deny* Patent Owner’s Motion to Exclude.

IV. MOTION FOR OBSERVATION

Patent Owner filed a Motion for Observation on the cross-examination testimony of Petitioner’s rebuttal witness, Dr. Grindon. Obs. Petitioner, in turn, filed a Response.⁶ Obs. Resp. As discussed above, we did not rely upon the testimony of Dr. Grindon in reaching this Final Written Decision. Thus, Patent Owner’s observations are moot.

⁶ Petitioner’s response exceeds the 15-page limit specified by 37 C.F.R. § 42.24(b)(3). As such, only the first 15 pages of Petitioner’s response has been considered. See Obs. Resp. 1–15.

V. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated, by a preponderance of the evidence, the unpatentability of: (1) claims 1, 3–7 and 9–11 of the '181 patent as anticipated by Yoichi; (2) claims 6, 10, and 11 as obvious based on Yoichi and Di Bernardo; and (3) claim 8 as obvious based on Yoichi and Lachinski.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1 and 3–11 of the '181 patent are held to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is DENIED; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2014-01338
Patent 7,389,181 B2

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