

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner,

v.

VISUAL REAL ESTATE, INC.,
Patent Owner.

Case IPR2014-01339
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. 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 trial based on the following asserted grounds of unpatentability (“grounds”):¹

1. Claims 1, 3–7, and 9–11 as anticipated under 35 U.S.C. § 102(b) by Di Bernardo;
2. Claims 1, 3–7, and 9–11 as unpatentable under 35 U.S.C. § 103 over Di Bernardo and Kawabe; and
3. Claim 8 as unpatentable under 35 U.S.C. § 103 over Di Bernardo and Lachinski.

Paper 10 (“Dec. to Inst.”).

After institution, Patent Owner filed a Patent Owner Response (Paper 22 (“PO Response”)), and Petitioner filed a Reply thereto (Paper 23 (“Reply”)). An oral hearing was conducted on October 28, 2015, and a transcript of the argument 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 proven, by a preponderance of the evidence, that claims 1 and 3–11 of the ’181 patent are unpatentable.

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.

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 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, to generate 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 3:22–25. 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 3–7. 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.

C. 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.

D. 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
Di Bernardo	U.S. Patent App. Pub. No. US 2002/0047895 A1	April 25, 2002	1005
Lachinski	U.S. Patent No. 5,633,946	May 27, 1997	1006
Kawabe	U.S. Patent App. Pub. No. US 2004/0177373 A1	Sept. 9, 2004	1008

E. Instituted Grounds

As we explained in the Introduction section above, we instituted trial based on the grounds set forth in the table below. Dec. to Inst. 28–29.

Reference(s)	Basis	Claim(s) challenged
Di Bernardo	§ 102	1, 3–7, and 9–11
Di Bernardo and Kawabe	§ 103	1, 3–7, and 9–11
Di Bernardo and Lachinski	§ 103	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. *Id.* 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. Fuch’s assessment. Ex. 1010 ¶ 12.

Additionally, we note that the prior art of record in this proceeding—namely, Di Bernardo, Kawabe, 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). (“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 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 construed expressly the claim term “video drive-by data” as “street-level video data.” Dec. to Inst. 6–7. 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 for purposes of this Decision of “video drive-by data.” *Id.* at 7.

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 was not supported by the specification, which uses the term “broadly and generically, and consistent with its plain and ordinary meaning.” *Id.* at 7–8. Patent Owner did not challenge expressly our construction of “geographic location of interest” during trial. Nevertheless, Patent Owner’s arguments surrounding this claim term were based on their proposed definition. *See e.g.*, PO Response 27–28 (“Accordingly, as taught

and claimed by '181 Patent, and consistent with the Institution Decision, a geographic location of interest specified in a user query must be able to be limited to a street address.”). 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 term.

1. “server farm”

In its Patent Owner Response, Patent Owner argues that the term “server farm,” as recited in the preamble of claim 1, “should be given the meaning someone of ordinary skill in the art would subscribe to it: **‘a group of networked servers that are housed in one location.’**” PO Response 24. In response, Petitioner points out 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. 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. 44:22–51:21. 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 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 independent claim 1. Patent Owner 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 complete structure 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 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.” Patent Owner does not direct us to an explicit disclosure in the specification of the ’181 patent that supports Patent Owner’s assertion 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 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 Response 21–24 (citing Exs. 2007–11). 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. Reply 3. To illustrate this point, Petitioner presents evidence showing that, 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 3–4 (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, 1369–70 (Fed. Cir. 2001). For each of these means-plus-function claim terms, Petitioner identified the particular function performed by the means and identified the structure within the specification performing the identified function. *Id.* 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. *Id.* at 9.

The parties agree essentially on the specific function performed by each of these means-plus-function claim limitations. *See* Pet. 10–15, PO Response 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 for computer-implemented inventions, “where the claimed functions are performed by computer software, the corresponding structure is a software algorithm, not merely the computer itself.” PO Response 44 (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 Di Bernardo used or disclosed the same or similar programs as the open source software disclosed in the ’181 patent. PO Response 45 (citing Ex. 2005, 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. 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*, at 1340 (quoting *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999))). Thus, Petitioner maintains “Dr. Fuchs did perform the required analysis of the ’181 patent to identify the corresponding structure and then applied this construction to his analysis of Di Bernardo.” *Id.* at 25 (citing Ex. 1001 ¶¶ 21–24, 84–91, 94–99).

We agree with Petitioner that the corresponding structure that performs the claimed function may include any computer system programmed to perform the identified function. *See WMS Gaming* at 1339, 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*, 521 F.3d at 1336.] 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 certain open source computer software is unavailing. Patent Owner does not point us to, nor have we found, where the specification of the ’181 patent adequately describes the algorithms used by the open source computer software. 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 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, “[t]he 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. Thus, for the reasons discussed above, we do not agree with Patent Owner that *the algorithm alone* represents the requisite structure. Instead, 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 Di Bernardo

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, 3–7, and 9–11 as anticipated under 35 U.S.C. § 102(b) by Di Bernardo. Pet. 16–22. In its Petition, Petitioner explains how Di Bernardo 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 Bernardo with respect to each of the required

claim elements, namely a “geographic location of interest,” “server farm,” “desired imaged format,” and “image processing server.” PO Response 12–13.

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, 3–7, and 9–11 of the ’181 patent are anticipated by Di Bernardo. We begin our discussion with a brief summary of the cited references, and then we address the parties’ contentions in turn.

1. Overview of Di Bernardo (Ex. 1005)

Di Bernardo relates generally to a system and method of creating and utilizing visual databases of geographic locations. Ex. 1005 ¶ 2. The data acquisition and processing system of Di Bernardo includes an acquisition device, such as a digital video camera, to record images while moving along a path. *Id.* ¶ 33. At the same time, the acquired GPS position of the moving camera is utilized to determine positional information, which is associated with the recorded video images. *Id.* ¶ 34. A post-processing system “uses the image and position sequences to synthesize the acquired images and create composite images of the location that was filmed.” *Id.* ¶ 44. The composite image is stored in an image database, and “associated with an identifier identifying the particular geographic location depicted in the image.” *Id.* ¶ 46. “[C]lose-ups and fish-eye views of the objects are also extracted from the video sequences using well-known methods, and stored in the image database.” *Id.* Di Bernardo also discloses an object information database containing information regarding objects depicted in the composite

images, and notes that “each record in the object information database is preferably indexed by a city address.” *Id.* ¶ 71. In response to a user inquiry regarding a location, i.e. by entering an address of the location, the host computer accesses “the geographic and object information databases to retrieve maps and information on the businesses in the geographic area,” which is transmitted back and displayed to the user (*id.* ¶ 79) as illustrated in Figure 16 reproduced below:

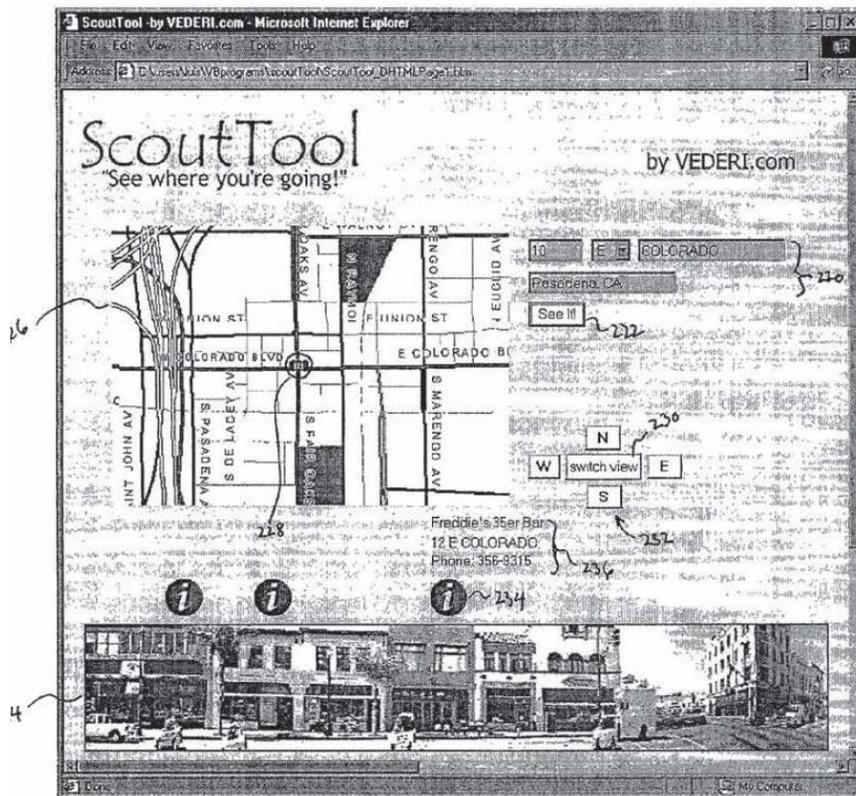


Figure 16 is an exemplary graphical user interface for requesting and receiving information about particular geographic locations.

2. Claim 1

Patent Owner disputes whether Di Bernardo teaches a “server farm” as recited in the preamble of claim 1. PO Response 19–26. Relying on its understanding of server farm as “a group of networked computers housed in

a single location,” Patent Owner argues that the “data acquisition and processing system for acquiring and processing image and position data used to create composite images of a geographic location” disclosed in Di Bernardo is not a “server farm.” *Id.* at 26.

As discussed in our claim construction section *supra*, the term “server farm” recited in the preamble of claim 1 is not considered limiting. In addition, 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.” Petitioner explains persuasively how the networked data acquisition and processing system of Di Bernardo, which includes, among other things, computer 28, computer 34, and image database 32, constitutes a “server farm” because these components are a group of networked servers. Reply 5–6 (citing Pet. 16–19, 30–37; Ex. 1001 ¶¶ 67–74).

Claim 1 also includes the claim limitation “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. Acknowledging that in the Decision on Institution we disagreed with its proposed interpretation of the claim term “geographic location of interest,” Patent Owner nevertheless maintains that the ’181 patent teaches that “a geographic location of interest specified in a user query must be able to be limited to a street address.” PO Response 28. In contrast, Patent Owner contends that Di Bernardo teaches street segments, so that “when a user searches for a particular address, Di Bernardo returns a composite image of the street segment and the user who queried for an address has to guess/approximate where a particular address is within that

segment.” *Id.* at 28. Based on this understanding of Di Bernardo, Patent Owner argues that Di Bernardo teaches away from identifying precisely a “geographic location of interest” because such identification “would involve ‘computationally intensive,’ ‘cumbersome,’ or ‘inefficient’ processes.”” *Id.* (citing Ex. 1005 ¶ 7).

To support this argument, Patent Owner entered into evidence the Declaration of Dr. Grindon regarding the teachings of Di Bernardo. *Id.* (citing Ex. 2002 ¶ 39). Before addressing the merits of the parties’ arguments, we first address the declaratory evidence of Dr. Grindon. It is noteworthy that 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”). Patent Owner avers that in the *Vederi* litigation, Dr. Grindon opined that “[t]he patents-in-suit [Di Bernardo], in seeking to improve upon the so-called ‘computationally intensive’ and ‘cumbersome’ methods of forming composite images in the prior art, teach a single way to form composite images that seeks to minimize this computational burden.” *Id.* (citing Ex. 2002 ¶ 39). 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. Reply 1–2 (citing Ex. 1010). In this rebuttal declaration, Dr. Grindon explained that “his prior testimony ‘was directed toward computational processes that impact the image quality of Di Bernardo’s composite images. At no point in my prior testimony did I address Di Bernardo’s system with respect to the accuracy of associating images with locations.’” *Id.* at 11 (citing Ex. 1010 ¶ 20).

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, 118:3–119:14. Based on the parties argument and all the evidence of record in this trial, and because Dr. Grindon *did not* consider the teachings of Di Bernardo with respect to the challenged claims of the '181 patent, we accord the testimony of Dr. Grindon, specifically his statements suggesting that the Di Bernardo patents, in general, seek to minimize computational burdens, minimal weight. Ex. 2002 ¶ 39 (“The patents-in-suit, in seeking to improve upon the so-called ‘computationally intensive’ and ‘cumbersome’ methods of forming composite images in the prior art, teach a single way to form composite images that seeks to minimize this computational burden.”); *see also* 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”).

Turning back to the merits of the parties’ arguments, we agree with Petitioner that Patent Owner’s “teaching away” argument is unavailing because “teaching away” is not relevant to an anticipation analysis. Reply 10 (citing *Celeritas Techs., Ltd. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998)). Moreover, we agree with Petitioner that the cited passage of Di Bernardo is inapposite because it refers to the prior art practice of “generating a high quality composite image due to a high image sampling density—not to the accuracy of identifying an image matching a requested street address.” *Id.* (citing Ex. 1005 ¶¶ 7–8; Ex. 1010 ¶ 20).

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. Inst. 7–8. Now, based on the full record, 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, as this argument also is not commensurate in scope with claim 1. We agree with Petitioner that the "recitation of 'correspond to' does not require that the image be limited to only the requested geographic location without any surrounding buildings, objects, or other visual context." Reply 7 (citing Ex. 1010 ¶ 23). Petitioner explained persuasively how the data query in Di Bernardo from the user "corresponds to a geographic location of interest" and in what manner 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 of the '181 patent. Reply 8–9.

Claim 1 further recites the limitation "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, 18:16–20. Patent Owner argues that Di Bernardo does not teach this limitation, and that in the Decision on Institution, we "did not construe 'image format' or 'converting' in the context of an 'image processing server,'" and that the Specification of the '181 patent provides the requisite context. PO Response 33.

To support its contentions, Patent Owner first directs our attention to passages in the specification of the '181 patent addressing the "desired image format" and "converting" claim terms. *Id.* at 33–34. For example, the specification describes how the "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 33 (citing Ex. 1002, 6:53–56). Additionally, the specification cites the use of “open source MENCODER software ‘to convert the compressed MPED2 data in lossless TIFF image files’” (*id.* (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)). Next, Patent Owner cites a computing dictionary definition of “conversion program,” namely “a program that is capable of changing a file from one format to another.” *Id.* at 34 (citing Ex. 2073).² Patent Owner concludes that the specification of the ’181 patent “describes the ‘desired image format’ as depending on the particular application that the user will presumably view the image” and “never describes saving a file in the same format, or as a compressed file as ‘converting’ from one file format to a ‘desired image format.’” *Id.*

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 “desired image format” and “converting” in the specification of the ’181 patent. Rather, we considered these passages in the context of the claims, but declined to import limitations from a particular embodiment 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

² We note that Ex. 2073 is not of record in this proceeding, as such, we are unclear as to what evidence Patent Owner is referring to.

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.”).

With respect to Di Bernardo, Patent Owner argues that, because the image data are stored in its original form or as a compressed file, Di Bernardo does not disclose the claimed “‘converting’ to a desired format in response to a query.” PO Response 34 (citing Ex. 1005 ¶ 41). Again, we decline to import limitations from a particular embodiment into the claims. We agree with Petitioner that “[t]he broadest reasonable interpretation of claim 1 does not require the ‘converts’ function to be performed ‘in response to the query,’ and does not require the ‘converts’ function to provide a different “file” format.” Reply 13. Petitioner explains persuasively how Di Bernardo meets both the limitation of transferring “post processed video data in response to a user query” (Reply 15 (citing Ex. 1005 ¶¶ 83–84)) and “converting video drive-by data into a desired image format (a composite image)” (*id.* (citing Ex. 1005 ¶¶ 37, 41, 44; Ex. 1001 at ¶¶ 65, 74)). Moreover, we agree with Petitioner’s assertion that “neither the claims nor the specification require converting an image to a different ‘file format,’” rather, the claims broadly recite “any desired image format.” Reply 16.

Patent Owner also challenges Dr. Fuchs’s testimony “that a [person of ordinary skill in the art] ‘would have recognized that Di Bernardo’s **post-processing system converts** the street-level video to post processed video data corresponding to a desired format, and transfers the post processed video data via post-processing network to the communications network **in response to the query.**” PO Response 35 (citing Ex. 1001 ¶ 74). In particular, Patent Owner cites Dr. Grindon’s testimony from the *Vederi*

litigation to support its argument that Dr. Fuchs relied on two incompatible embodiments from Di Bernardo in reaching this conclusion. *Id.* at 35–36 (citing Ex. 2002 ¶¶ 38, 39). Petitioner challenges Patent Owner’s interpretation of Dr. Grindon’s previous testimony by having Dr. Grindon clarify his previous statement. Reply 16–17 (citing Ex. 1010 ¶ 24 (“My previous declaration does not state that the embodiments described by Di Bernardo are mutually exclusive . . . [i]n fact, a [person of ordinary skill in the art] (especially by a time as late as August 2004) would have realized that the alternative embodiment[s] . . . [described by Di Bernardo] could have been readily combined.”)). We find Dr. Grindon’s clarifying statement in his rebuttal declaration persuasive, especially given that Dr. Grindon’s testimony in the *Vederi* Litigation was based on the perspective of one of ordinary skill in the art in 2000, as compared to the changed perspective of one of ordinary skill in the art in 2004 applied in this proceeding.

Nonetheless, Patent Owner’s unsupported attorney argument challenging the testimony of Dr. Fuchs is not persuasive. PO Response 35–37. As Petitioner points out, Patent Owner does not explain sufficiently how the embodiments in Di Bernardo are “mutually exclusive” and “inoperable” or “what elements are supposedly drawn from these different, allegedly ‘mutually exclusive’ embodiments.” Reply 17 (citing PO Response 36–37). Patent Owner overlooks that the Petition relied on the embodiment that includes the post-processing system to demonstrate how Di Bernardo discloses this limitation. *Id.* at 18 (citing Pet. 30–37).

Along this vein, Patent Owner also asserts that Dr. Fuchs’ inherency conclusion fails. PO Response 35–37. Like Petitioner, we disagree with this unsupported assertion because Patent Owner mischaracterizes the relevant

testimony of Dr. Fuchs. Reply 18 (citing Ex. 1001 ¶¶ 69–93). For convenience, the relevant portion of Dr. Fuch’s testimony is reproduced below:

[a]ccordingly, based upon my knowledge and experience and my review of the ’181 patent and the prior art publications listed above, I believe that a [person of ordinary skill in the art] would have recognized that Di Bernardo’s post-processing system 38 converts the street-level video 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. 1001 ¶ 74. In our view, this cited testimony from Dr. Fuchs does not amount to an inherency argument because he is analyzing what the reference expressly discloses in the post-processing system.

In summary, we have reviewed the limitations of claim 1 in light of Di Bernardo, 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 and taught by Di Bernardo.

3. Claims 3–7 and 9–11

With regard to claim 3, Patent Owner contends that Di Bernardo does not disclose the claim element of a “map server that provides a static image of an overhead view of the geographic location of interest.” PO Response 39. Specifically, that the Petition’s analysis “provides no support for anticipating or suggesting the limitation of an ‘overhead view’ of the ‘geographic location of interest’” and that Di Bernardo does not disclose a map server. *Id.* 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 Di Bernardo discloses a map. Reply 18

(citing Pet. 37–38; Ex. 1001 ¶ 75; Ex. 1002, 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 identification of the “geographic location of interest” in the overhead view, as Patent Owner asserts, but rather the inclusion of the “geographic location of interest” in the overhead view. Reply 19. Petitioner explains persuasively how “Di Bernardo teaches that ‘the map is preferably centered around the requested address and includes **a current location cursor 228 placed on a position corresponding to the address.**’” *Id.* (citing Ex. 1005 ¶ 84).

As to Patent Owner’s further contentions regarding a map server, we note that the plain language of claim 3 does not require that the map server be a separate server. Nonetheless, Petitioner explains persuasively how the geographic information database 128 of Di Bernardo functions as a separate “map server.” *Id.* (citing Ex. 1005 ¶ 61; Ex. 1001 ¶ 75).

Next, Patent Owner argues that Di Bernardo does not disclose 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 Response 39–40. Specifically, Patent Owner argues that the description in Di Bernardo regarding how to “record” or “film” objects in different directions by aiming the cameras in different directions does not teach the “360 degree view of the neighborhood” recited in claim 5. *Id.* at 40. Petitioner’s assertion that this limitation is met by Di Bernardo’s disclosure of the use of twelve cameras in view of the ’181 patent’s disclosure of 6 cameras, is persuasive. Reply 19–20 (citing Ex. 1001 ¶ 82; Ex. 1002, 12:56–58). The specification of the ’181 patent confirms our 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).

Lastly, claim 7 requires a “means for providing a variety of geo-coded data layers in conjunction with the video drive-by data.” Patent Owner takes the position that nothing in Di Bernardo describes or mentions data layers, and, in particular, the use of geocoded data layers. PO Response 40–41. Patent Owner characterizes the data structure in Di Bernardo as a database, and argues that “[a] database is not equivalent to parcel data” and Di Bernardo does not disclose parcel data. *Id.* at 41. We agree with Petitioner that the ordinary and customary meaning of “geo-coded data layers” as would be understood by a person of ordinary skill in the art, does not require that the geo-coded layers be “parcel data.” Reply 20. Moreover, we agree with Petitioner “that the equivalent corresponding structure in Di Bernardo is the object information database working in conjunction with the host computer to implement the steps performed by the system of Di Bernardo to add geo-coded data layers to images.” *Id.* at 21 (citing Petition 44–45; Ex. 1001 ¶¶ 84–86).

Patent Owner does not address separately claims 4, 6, 9, 10 and 11 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 Di Bernardo anticipates these claims as well. *See* Pet. 16–22.

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, 3–7, and 9–11 of the ’181 patent are anticipated by Di Bernardo.

D. Obviousness Based on Di Bernardo and Kawabe

The Petition also challenges the patentability of claims 1, 3–7, and 9–11 under 35 U.S.C. § 103(a) as obvious based on Di Bernardo and Kawabe. Pet. 26–29. As support for this contention, Petitioner relies upon the Declaration of Dr. Fuchs to explain how the combination Di Bernardo and Kawabe discloses the claimed subject matter. *Id.*; Ex. 1001 ¶¶ 100–02. Patent Owner argues that combining Kawabe with Di Bernardo does not cure the deficiencies of Di Bernardo, and further argues that Di Bernardo teaches away from such a combination. PO Response 41–42.

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).

Having considered the explanations and supporting evidence presented, we are persuaded that Petitioner presents sufficient evidence to demonstrate, by a preponderance of the evidence, that challenged claims 1, 3–7, and 9–11 are obvious over Di Bernardo and Kawabe as discussed below.

1. Overview of Kawabe (Ex. 1008)

Kawabe discloses a system and method of “storing and accumulating video images of targets at places that [cannot] be shot by a monitoring camera and distributing the accumulated video images to one or more devices.” Ex. 1008, Abstract. The generated video data is converted to a video data format and stored in the video storage/distribution device. *Id.* ¶ 6. A video distribution method is provided by which the stored video data is distributed to a terminal in response to a request from the terminal. *Id.* ¶ 9.

2. Discussion

Patent Owner argues that like Di Bernardo, “nowhere in Kawabe is there any teaching or suggestion of identifying street view images for a ‘geographic location of interest,’” and that Kawabe does not cure the deficiencies of Di Bernardo. PO Response 41. Because we determined above that Di Bernardo discloses identifying street view images for a “geographic location of interest,” there is no such deficiency to cure.

Next, Patent Owner argues that “a combination with Kawabe would be contrary to the teachings of Di Bernardo which explicitly teach away from adding any additional computational processing” to avoid computational overload. *Id.* Specifically, that “a [person of ordinary skill in the art] would have been taught away from combining Di Bernardo with Kawabe whose additional processing (Ex. 1006, ¶ 38) would add to computational overhead for Di Bernardo.” *Id.* A reference teaches away from a combination when, for example, a person of ordinary skill in the art would be discouraged from following the path set out in the reference, or would be led in a direction divergent from that chosen by the inventor. *See In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994) (“[I]n general, a reference

will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.”). For the reasons discussed above, we accord Dr. Grindon's testimony from the *Vederi* litigation minimal weight. As such, Patent Owner's arguments and evidence does not persuade us that any additional processing as a result of combining the teachings of Di Bernardo with Kawabe would result in computational overload. Moreover, we agree with Petitioner that the discussion identified in Di Bernardo regarding “dense sampling of images of an object/scene” as being ‘computationally intensive and hence cumbersome and inefficient,’” is not a disparagement of any and all computationally intensive processes. Reply 21 (citing Ex. 1005 ¶¶ 7–8; Ex. 1010 ¶¶ 18–20).

In its Petition, Petitioner proffered several reasons why a person of ordinary skill in the art would have modified Di Bernardo's system for deriving images corresponding to a geographic location of interest from video data, using Kawabe's system that transfers a video corresponding to a particular request from a video storage device to an image processing system for conversion into a suitable display format. Pet. 28–29. In the Decision on Institution, we were persuaded that Petitioner's proffered rationale and evidence was sufficient to support the proposed modification. Now, with the record fully developed, Patent Owner does not proffer arguments or evidence to persuade us otherwise.

3. *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, 3–7, and 9–11 of the '181 patent are unpatentable under 35 U.S.C. § 103 as obvious based Di Bernardo and Kawabe.

E. Obviousness Based on Di Bernardo and Lachinski

We next consider Petitioner's challenge of dependent claim 8 as rendered obvious under 35 U.S.C. § 103(a) over Di Bernardo and Lachinski. Pet. 23–25. We have reviewed the parties' contentions and supporting evidence. Given the evidence developed during the course of trial, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that challenged claim 8 is obvious over Di Bernardo and Lachinski. A detailed analysis of our determination follows a brief overview of Lachinski.

1. Overview of Lachinski (Ex. 1006)

Lachinski relates to the collection and processing of visual and spatial position information. Ex. 1006, Abstract. In order to determine the centerline of a street, Lachinski discloses that the true spatial position of the vehicle is combined with the video image to calculate the spatial position of the center of the street that corresponds to the vehicle position. Ex. 1006, 10:37–60.

2. Discussion

Petitioner argues that Di Bernardo discloses the claim 8 limitation of a “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.” Pet. 23–24. In addition to the teachings of Di Bernardo, Petitioner argues that Lachinski discloses the “means for

creating vector data which is superimposed onto the post processed video data that is transferred to the communications network” as recited by claim 8. *Id.*

Patent Owner challenges the combination of Di Bernardo and Lachinski on the basis that Di Bernardo teaches away from using computationally intensive techniques. PO Response 43. To support this argument, Patent Owner again relies on the testimony of Dr. Grindon from the *Vederi* litigation. *Id.* (citing Ex. 2002, 11:3–12:5). For the reasons discussed *supra*, we accord Dr. Grindon’s testimony that the Di Bernardo patents, in general, seek to minimize computational burdens, minimal weight. Other than attorney argument, Patent Owner does not proffer sufficient arguments or evidence to support its contention that Di Bernardo teaches away from using computationally intensive techniques.

We find persuasive Petitioner’s articulated reason to combine Di Bernardo’s system for deriving video images corresponding to a geographic location of interest using Lachinski’s teachings regarding superimposing vector data onto post processed video data “to display a path of travel of a vehicle capturing the video data of Di Bernardo.” Pet. 25. Petitioner also argues, and we agree, that this proffered combination “allow[s] users viewing images presented by the system of Di Bernardo to readily identify a center of a street and more intuitively and quickly identify an orientation for a particular image with respect to a street depicted in the image.” *Id.*

3. Summary

Based on further review of the record, and for the reasons discussed above, Petitioner has demonstrated by a preponderance of the evidence that

claim 8 of the '181 patent is unpatentable under 35 U.S.C. § 103 as obvious based Di Bernardo and Lachinski.

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. Paper 30 (“Mot.”). Petitioner, in turn, filed an opposition to Patent Owner’s motion. Paper 34. (“Opp.”) 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).

With respect to the Exhibit 1001, Patent Owner moves to exclude portions of Dr. Fuch’s testimony for, among other reasons, relevance. Mot. 1-2. In particular, Patent Owner moves to excludes Exhibit 1001, ¶¶ 12, 16, 25–64, 66, 83, and 108–111. A motion to exclude, for instance, must state why the evidence is inadmissible (e.g., based on relevance or hearsay), identify the corresponding objection in the record, and explain the objection. *See* 37 C.F.R. § 42.64(c); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012). Because Patent Owner does not explain adequately its objections to the cited portions of Dr. Fuch’s testimony, Patent Owner has not met its burden of demonstrating that the cited portions of Dr. Fuch’s testimony should be excluded.

As to the Declaration of Dr. Grindon (Ex. 1010), Patent Owner moves to exclude ¶¶ 13, 21, 23, 28, 30 and 31 based on relevance. *Id.* at 3.

According to Patent Owner, the evidence in these paragraphs was offered by Petitioner for the first time in its Reply, “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.* Because Patent Owner does not explain adequately its objections to the cited portions of Dr. Grindon’s testimony, Patent Owner has not met its burden of demonstrating that the cited portions of Dr. Grindon’s testimony should be excluded. Moreover, we agree with Petitioner that “a motion to exclude is not the proper mechanism to raise the issue of testimony in a rebuttal declaration exceeding the permissible scope of reply testimony.” *Opp.* 7–8 (citing (*Chicago Mercantile Exchange, Inc. v. 5th market, Inc.*, Case CBM2014-00114, slip op at 52 (PTAB Aug. 18, 2015) (Paper 35); *see also Vibrant Media Inc. v. General Electric Co.*, Case IPR2013-00170, slip op. at 31 (PTAB June 26, 2014) (Paper 56) (“Whether a reply contains arguments or evidence that are outside the scope of a proper reply under 37 C.F.R. § 42.23(b) is left to our determination.”); *Liberty Mutual Inc. Co. v. Progressive Casualty Inc. Co.*, Case CBM2012-00002, slip op. at 62 (PTAB Jan. 23, 2014) (Paper 66) (“a motion to exclude . . . is not a mechanism to argue that a reply contains new arguments or relies on evidence necessary to make out a prima facie case.”)).

Patent Owner also objects to Dr. Grindon’s definition of “a person of ordinary skill in the art” “[because] it is different than the one proposed by Petitioner’s original expert.” *Id.* at 3–4 (citing Ex. 1001¶ 14, Ex. 1010, ¶¶ 9, 10, and 12). A motion to exclude is not the proper mechanism to direct our attention to differences in the evidence, rather the proper mechanism is a Motion for Observation. We recognize that Patent Owner has filed a Motion

for Observation on the cross-examination testimony of Dr. Grindon. As we explain below, we have considered Patent Owner's observations and Petitioner's responses in rendering this Decision, and accorded Dr. Grindon's rebuttal testimony appropriate weight where necessary.

Further, Patent Owner moves to exclude Exhibit 1004, the Yoichi Patent, based on relevance. Mot. 2. Specifically, Patent Owner argues that, because Petitioner does not rely on Exhibit 1004 in the Petition, nor was it relied upon in the Decision on Institution, this exhibit should be excluded. *Id.* at 3. Patent Owner likewise moves to exclude Exhibit 1011, 1012 and 1013 on the basis of relevance. *Id.* at 4. 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 4–5. Because our Decision does not rely on any of these challenged exhibits, Patent Owner's request is moot.

For these reasons, we deny Petitioner'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. Paper 29 ("Obs."). Petitioner, in turn, filed a Response. Paper 35 ("Resp."). To the extent Patent Owner's Motion for Observation pertains to testimony purportedly impacting Dr. Grindon's credibility, we have considered Patent Owner's observations and Petitioner's responses in rendering this Decision, and accorded Dr. Grindon's rebuttal testimony appropriate weight as explained above. *See* Obs. 1–15; Resp. 1–15. Moreover, Petitioner's

responses are 17 pages, and thus, exceed the 15-page limit specified by 37 C.F.R. § 42.24(b)(3). As such, only the first 15 pages of Petitioner's responses have been considered. *See* Resp. 1–15.

V. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated, by a preponderance of the evidence, the unpatentability of claims 1, 3–7 and 9–11 of the '181 patent as anticipated by Di Bernardo; claims 1, 3–7 and 9–11 as obvious based on Di Bernardo and Kawabe; and claim 8 as obvious based on Di Bernardo 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 unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude Evidence 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.

IPR2014-01339
Patent 7,389,181 B2

PETITIONER:

John C. Phillips
phillips@fr.com

Michael T. Hawkins
IPR19473-0323IP2@fr.com

PATENT OWNER:

Charles R. Macedo
cmacedo@arelaw.com

Brian A. Comack
VRE-IPR@arelaw.com