

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

MEMORYWEB, LLC,
Patent Owner.

PGR2022-00034
Patent 11,163,823 B2

Before LYNNE H. BROWNE, NORMAN H. BEAMER, and
KEVIN C. TROCK, *Administrative Patent Judges*.

TROCK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 328(a)

Denying Patent Owner's Motion to Exclude
37 C.F.R. § 42.64

I. INTRODUCTION

A. Background

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively “Petitioner”) filed a Petition, Paper 3 (“Pet.” or “Petition”) to institute a post-grant review of claims 1–34 (the “challenged claims”) of U.S. Patent No. 11,163,823 B2 (Ex. 1001, “the ’823 Patent”). MemoryWeb, LLC (“Patent Owner”) timely filed a Preliminary Response, Paper 8 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply, Paper 9, and Patent Owner filed a Preliminary Sur-Reply, Paper 10.

On November 17, 2022, we instituted a post-grant review of all challenged claims based on all grounds in the Petition. Paper 11 (“Inst. Dec.”). Patent Owner filed a Response. Paper 17 (“PO Resp.”). Petitioner filed a Reply. Paper 24 (“Pet. Reply”). Patent Owner filed a Sur-reply. Paper 30 (“PO Sur-reply”). An oral hearing was held on September 19, 2023. A transcript of that hearing has been entered into the record. Paper 38 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued under 35 U.S.C. § 328(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that all of the challenged claims are unpatentable.

B. Related Proceedings

The parties identify that the ’823 Patent is related to the following U.S. Patents: 9,098,531 (“the ’531 patent”); 9,552,376 (“the ’376 patent”); 10,423,658 (“the ’658 patent”); 10,621,228 (“the ’228 patent”); 11,017,020 (“the ’020 patent”); and 11,170,042 (“the ’042 patent”) (collectively “the related patents”). Paper 4, 2; Paper 7, 1.

According to the parties, the '823 Patent and the related patents are the subject of the following actions: *MemoryWeb, LLC v. Samsung Electronics Co., Ltd. et al.*, No. 6:21-cv-00411 (W.D. Tex.) (pending); *MemoryWeb, LLC v. Apple, Inc.*, No. 6:21-cv-00531 (W.D. Tex.) (pending); *MyHeritage (USA), Inc. et al. v. MemoryWeb, LLC*, No. 1:21-cv-02666 (N.D. Ill.) (dismissed); *Samsung Electronics Co., Ltd. v. MemoryWeb, LLC*, IPR2022-00222 (pending); *Samsung Electronics Co., Ltd. v. MemoryWeb, LLC*, IPR2022-00221 (pending); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00111 (pending); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00033 (pending); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00032 (pending); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00031 (pending); *United Patents, LLC v. MemoryWeb, LLC*, IPR2021-01413; and U.S. Patent Application No. 17/459,933 (pending). Pet. 97–98; Paper 4, 2–3; Paper 7, 1–2.

Petitioner further identifies a concurrent *inter partes* review proceeding involving the '823 Patent: *Samsung Electronics Co. Ltd. et al. v. MemoryWeb, LLC*, IPR2022-00085 (pending). Pet. 97. Petitioner also identifies the following action involving the '020 patent: *Apple Inc. v. MemoryWeb, LLC*, PGR2022-00006 (pending). Pet. 98; Paper 7, 2.

C. The '823 Patent (Ex. 1001)

The '823 Patent relates to a computer-implemented system and method for managing and using digital files such as digital photographs. Ex. 1001, 1:17–20. Specifically, the '823 Patent describes a storage system that includes a digital file repository for storing and retrieving digital files (such as photos), a digital tagging system configured to assign digital tags to the digital files, a storing system, and a user interface. *Id.* at 4:34–38.

As described by the '823 Patent, the digital tagging system includes various types of data, such as a person's name, a location, a recipe, a date, a

family relationship to the user, an event name, a rating, sharing rights, file type and a document name. *Id.* at 4:39–42. The sorting system allows the digital files to be searched and stored according to a plurality of types of data and is used for creating and organizing special views. *Id.* at 4:42–45. The user interface is user-configurable, and presents the digital files on a user's screen based on these user inputs. *Id.* at 4:45–47.

Figure 18 is a screenshot of a search filter view of a digital file storage system. *Id.* at 3:30–31. Figure 18 is reproduced below.

FIG. 18

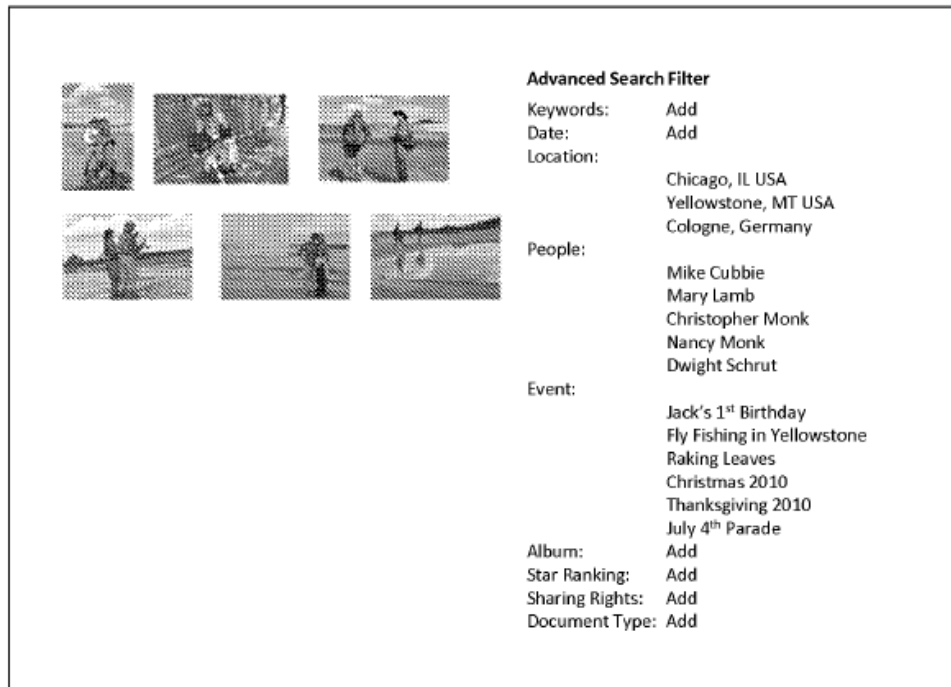


Figure 18, above shows a search filter that allows users to select one or more criteria that will narrow down their results to only the digital files matching input criteria. *Id.* at 7:15–18, 7:42–43. The entire system can be filtered by, for example, key words (or plurality of key words), event names, location, people, albums, star rating, file type, document type, and dates. *Id.* at 7:18–21.

Figure 6 is a screenshot of a people thumbnail view of the digital file storage system. *Id.* at 3:5–6. Figure 6 is reproduced below.

FIG. 6



Figure 6, above, shows a people view (*i.e.*, thumbnail photos of all the people in the system that can be clicked in for a people profile view). *Id.* at 6:20–22.

Figure 7 is a screenshot of a people profile view of the digital file storage system. *Id.* at 3:7–8. Figure 7 is reproduced below.

FIG. 7

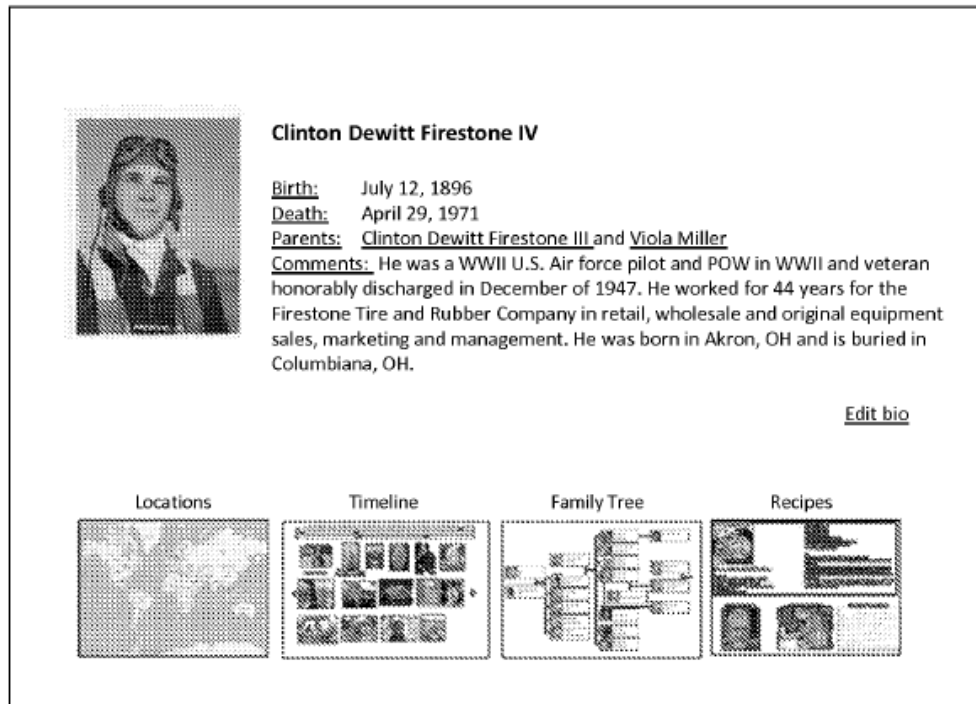


Figure 7, above, shows a people profile view (*i.e.*, a profile picture of an individual, their birth/death information, family relationships, overview (comments) on the person, as well as links to other views that contain that individual in the system (such as a location view)). *Id.* at 6:22–26.

Figure 5 is a screenshot of a location view of the digital file storage system. *Id.* at 3:3–4. Figure 5 is reproduced below.

FIG. 5

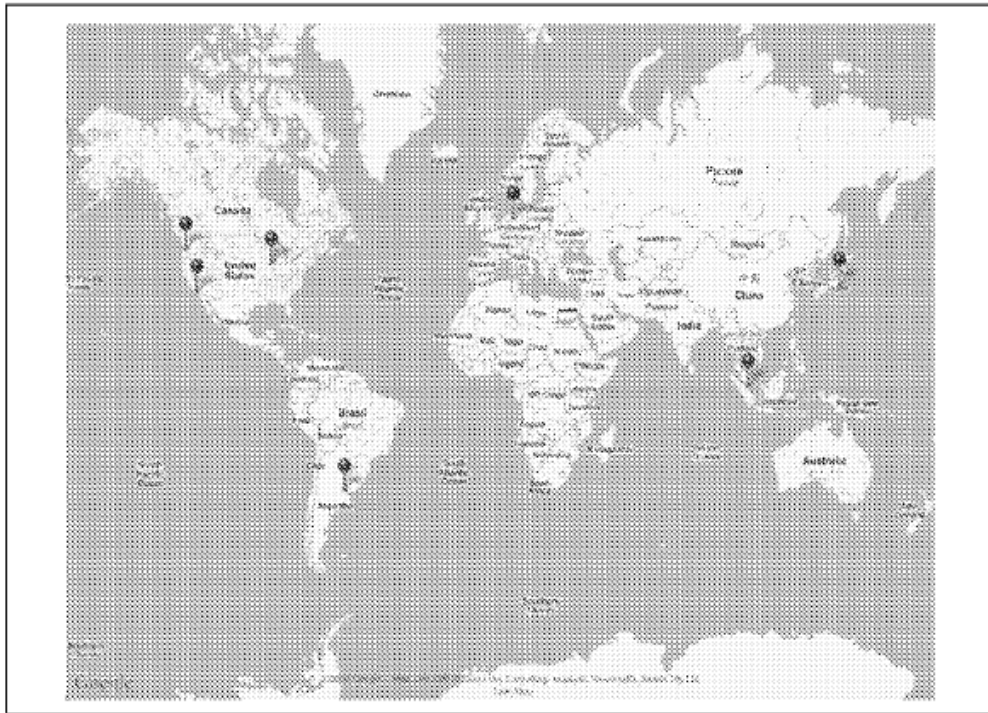


Figure 5, above, shows a location view which identifies within an interactive map where digital files were taken or originated. *Id.* at 6:14–16. The location view can also provide additional outputs such as a journey route that identifies the specific locations for an event or trip that can be customized by users. *Id.* at 6:16–19.

Figure 2 is a screenshot of a photo detail view of the digital file storage system. *Id.* at 2:64–65. Figure 2 is reproduced below.

FIG. 2

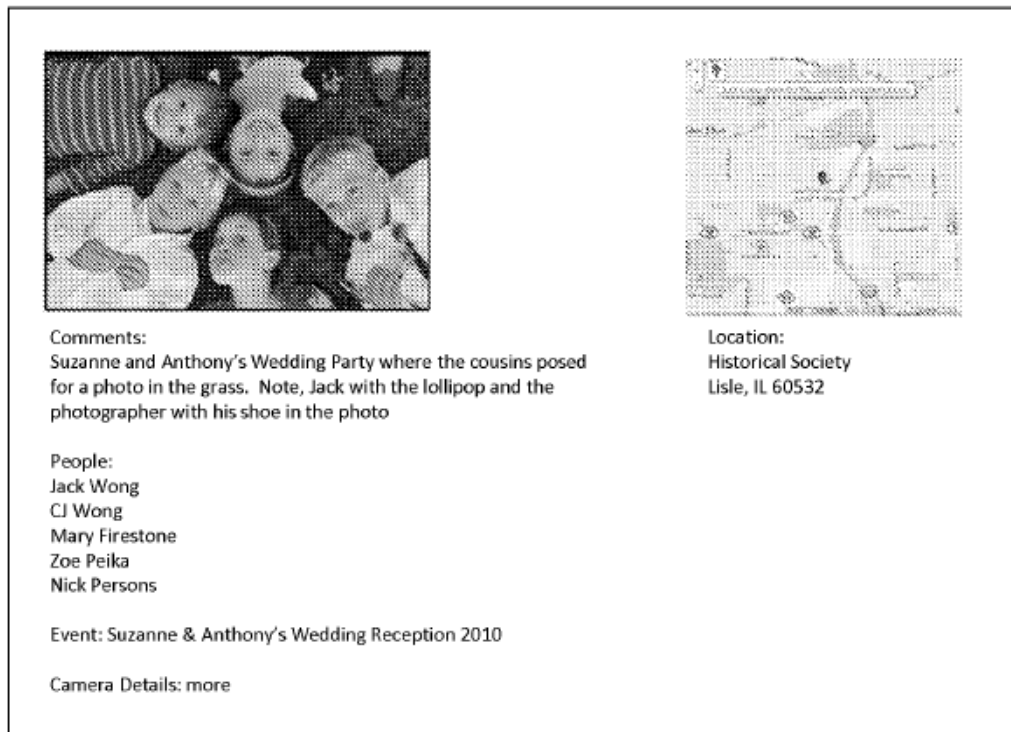


Figure 2, above, shows an individual album or event view which allows one to see the files associated with a specific group. *Id.* at 6:9–10.

D. Challenged Claims

Petitioner challenges claims 1–34 of the '823 Patent. Pet. 1. Claims 1 and 29 are independent. Claim 1 is illustrative.

[1pre] 1. A method comprising:

[1a] causing an interface to display a search-filter view, the search-filter view permitting a user to filter a plurality of digital files based on one or more criteria;

[1b] responsive to a first input within the search-filter view, causing the interface to display a people view including a first image associated with a first person and a second image associated with a second person;

[1c] responsive to an input that is indicative of a selection associated with the first person,

causing a first person view to be displayed on the interface, the first person view including a first digital file associated with the first person;

[1d] responsive to an input that is indicative of a selection associated with the first digital file, causing a first detail view to be displayed on the interface, the first detail view including (i) the first digital file, (ii) first information associated with the first digital file and (iii) a first map image associated with the first digital file, the first digital file having a first size in the first person view and a second size in the first detail view, wherein the second size is greater than the first size;

[1e] responsive to an input that is indicative of a selection associated with the second person, causing a second person view to be displayed on the interface, the second person view including a second digital file associated with the second person;

[1f] responsive to an input that is indicative of a selection associated with the second digital file, causing a second detail view to be displayed on the interface, the second detail view including (i) the second digital file, (ii) second information associated with the second digital file and (iii) a second map image associated with the second digital file; and

[1g] responsive to a second input within the search-filter view, causing the interface to display a locations view including a first name associated with a first

location, and a second name associated with a second location;

[1h] responsive to an input that is indicative of a selection associated with the first location, causing a first set of digital files to be displayed on the interface, each digital file in the first set of digital files being associated with the first location; and

[1i] responsive to an input that is indicative of a selection associated with the second location, causing a second set of digital files to be displayed on the interface, each digital file in the second set of digital files being associated with the second location.

Ex. 1001, 35:2–54 (numbering and formatting designated by Petitioner; *see* Pet. 13–37).

E. Evidence

Petitioner relies upon the following evidence: David Pogue and J.D. Biersdorfer, iPhoto '09 The Missing Manual (2009) (“Pogue”) (Ex. 1005); Adam C. Engst, Visual QuickStart Guide iPhoto '09 (2009) (“Engst”) (Ex. 1006); U.S. Patent App. Pub. No. 2010/0058212 A1 (“Belitz”) (Ex. 1008); and U.S. Patent App. Pub. No. 2005/0116954 A1 (“Ripps”) (Ex. 1009).

Petitioner relies on the declarations of Phillip Greenspun, Ph.D. (Exs. 1003, 1027), and June Ann Munford (Exs. 1010, 1028). Patent Owner relies on the declarations of Glenn Reinman, Ph.D. (Ex. 2020), and Laura A. Whitbeck (Ex. 2021).

F. Asserted Grounds

Petitioner asserts the following grounds of unpatentability in the Petition.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–25, 27–34	103	Pogue, Engst
26	103	Pogue, Engst, Belitz
12–14	103	Pogue, Engst, Ripps

Pet. 8.

II. ANALYSIS

A. Post-Grant Review Eligibility

The parties do not dispute that the ’823 patent is eligible for post-grant review. *See* Pet. 1–7; Prelim. Resp. 9. For the reasons stated in our Decision on Institution, we determine that the ’823 Patent is eligible for post-grant review. *See* Inst. Dec. 11–14.

B. Level of Ordinary Skill in the Art

Petitioner describes a person of ordinary skill in the art as a person having “(1) a bachelor’s degree in computer science, computer engineering, electrical engineering, or a related field, and (2) at least one year of experience designing graphical user interfaces for applications such as photo organization systems.” Pet. 9 (citing Ex. 1003 ¶¶ 26–27). Petitioner also describes that “[a]dditional graduate experience could substitute for professional experience, or significant experience in the field could substitute for formal education.” Pet. 9. Patent Owner does not contest Petitioner’s description of a person of ordinary skill in the art. *See* PO Resp. 22–23.

In the Institution Decision, we applied Petitioner’s proposed description, with the exception of the qualifier “at least,” to keep the description from being vague and extending to a level reflecting that of an expert. Inst. Dec. 20–21. We continue to find that this skill level is

consistent with the record. Thus, we use the same description here that we used in the Institution Decision.

C. Claim Construction

The Board applies the same claim construction standard as that applied in federal courts. *See* 37 C.F.R § 42.100(b) (2019). Under this standard, claim terms “are generally given their ordinary and customary meaning” as understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (citations omitted).

Under *Phillips*, the meaning of claim terms are considered in the context of the specification, the prosecution history, other claims, and even extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises, although extrinsic evidence is less significant than the intrinsic record. *Phillips*, 415 F.3d at 1312–17. Usually, the specification is dispositive, and it is the single best guide to the meaning of a disputed term. *Id.* at 1315.

Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (in the context of an *inter partes* review, applying *Vivid Techs.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

In their initial papers, neither party proposed any claim construction, and both parties agreed that the claims can be afforded their plain and ordinary meaning. *See* Pet. 8–9; PO Resp. 23. In its Response, Patent Owner “offers a discussion of the plain meaning of certain terms and phrases . . . in the event the Board determines that is necessary to resolve Petitioner’s patentability challenges.” PO Resp. 23.

We consider the claim terms and phrases identified by Patent Owner below.

1. *Limitations 1[g] and 29[i]: “responsive to a second input within the search-filter view, [causing/cause] the interface to display a locations view”*

Patent Owner asserts that

[t]he plain and ordinary meaning of the phrase “*responsive to a second input within the search-filter view, [causing/cause] the interface to display a locations view*” requires a cause-effect relationship between (i) the second input within the search-filter view and (ii) causing the locations view to be displayed.

PO Resp. 23–24 (citing Ex. 2020 ¶ 85) (emphasis added). Patent Owner points to the ’823 Patent’s use of the term “*subsequent to*” in claims 25 and 32, as well as case law and extrinsic evidence, to support its view that “the phrase ‘responsive to’ requires more than a straight temporal sequence,” and instead requires “a ‘cause-and-effect relationship’ between two events, where the second event occurs in reaction to the first event.” PO Resp. 25–27.

In its Reply, Petitioner asserts that

to the extent that MemoryWeb is asserting that a “responsive to” relationship precludes any intervening user actions (such as additional clicks or scrolls, for instance), the ’823 patent itself clearly dispels this notion. [Ex.] 1027, ¶5. As Dr. Greenspun previously explained in a related proceeding, a POSITA would have recognized that the term “responsive to” merely requires the second event to happen “subsequent to” the first event based on a combination of user interaction and software implementation. [Ex.] 1032, 42:21-44:22; [Ex.] 1033, 108:20-109:12; [Ex.] 1027, ¶6. That is, a series of related user actions do not destroy the “responsive to” relationship.

Pet. Reply 4 (citing Ex. 1027 ¶¶ 6, 8, 10).

In its Sur-reply, Patent Owner frames the issue as “whether ‘responsive to’ requires a *direct* cause-effect relationship between two events, as Patent Owner proposes, or if it also encompasses an indirect cause-effect relationship allowing a seemingly infinite number of intervening events, as Petitioner proposes.” PO Sur-reply 11 (citing Ex. 2025, 88:9–11). We believe Patent Owner misstates Petitioner’s position.

It appears that the views of the parties boil down to whether the phrase “*responsive to*” in limitations [1g] and 29[i] is limited to “a direct cause-effect relationship between two events” as Patent Owner submits (*see* PO Sur-reply 11), or whether the phrase permits “intervening user actions (such as additional clicks or scrolls, for instance)” as Petitioner submits (*see* Pet. Reply 4).

It is not necessary, however, for us to resolve this issue in order to determine patentability of the challenged claims. First, Patent Owner’s lead counsel at the hearing in this matter stated that “although we continue to believe that the plain and ordinary meaning of *responsive to* requires a cause-and-effect relationship, I don’t actually think it’s necessary to reach the right outcome for this particular claim.” Tr. 27:13–16 (emphasis added).

Second, even if we were to adopt Patent Owner’s more restrictive view of the phrase “*responsive to*,” the prior art submitted by Petitioner meets the claim limitation. *See* Section II.E.3.b.(2), below. Claim terms need be construed only to the extent necessary to resolve the controversy, and because the prior art meets Petitioner’s more restrictive view of the claim, an express construction of the phrase “*responsive to*” is not necessary to resolve the question of obviousness. *See Nidec Motor Corp.*, 868 F.3d at 1017 (in the context of an *inter partes* review, applying *Vivid Techs.*, 200 F.3d at 803).

2. *Claims 1, 25, 29 and 32: the “search-filter view,” “locations view,” and “map view” are separate and distinct views*

In its Response, Patent Owner asserts that “[t]he plain language of claims 1 and 29 dictates that the ‘search-filter view,’ ‘locations view,’ and ‘people view’ are separate and distinct views.” PO Resp. 27 (citing Ex. 2020 ¶¶ 89–92. “Likewise,” Patent Owner asserts, “the language of claims 25 and 32 dictates that the ‘map view’ is separate and distinct from the ‘locations view.’” PO Resp. 27 (citing Ex. 2020 ¶¶ 93–94). Patent Owner asserts that “[t]he separate listing of various views – the ‘search-filter,’ ‘people,’ locations,’ and ‘map’ views define separate and distinct views that are displayed on the interface. PO Resp. 28 (citing Ex. 2020 ¶¶ 90, 94).

Citing to Dr. Greenspun’s testimony, Petitioner asserts that “there is no requirement in the ’823 Patent that ‘a search-filter view must be completely distinct from the other views.’” Pet. Reply 7–8 (citing Ex. 1027 ¶ 11). Petitioner points to Dr. Reinman’s testimony that “the filter function in the ’823 Patent can be selected ‘from almost any Application View,’ such as people view and locations view.” Pet. Reply 7 (citing Ex. 2020 ¶ 40 (citing Ex. 1001, 27:64–67, 28:11–13, Fig. 38)). Petitioner argues that “according to the specification of the ’823 Patent and as per Dr. Reinman’s testimony, a particular view can qualify as both a search-filter view as well as a locations/people view.” Pet. Reply 7 (citing Ex. 1001, 27:64–67, 28:11–13, Fig. 35).

In its Sur-reply, Patent Owner argues that Dr. Greenspun’s testimony is inconsistent because “Dr. Greenspun previously testified that ‘the locations view is a different view than the people view.’” PO Sur-reply 15 (citing Ex. 2006, 54:24–55:4; Ex. 2025, 60:14–61:12).

As noted previously, claim terms need be construed only to the extent necessary to resolve the controversy. *Nidec Motor Corp.*, 868 F.3d at 1017. As best we can tell, the only dispute between the parties where the issue of “separate and distinct views” might be material is Patent Owner’s contention that Petitioner has failed to establish obviousness with respect to dependent claims 25 and 32 because “the same World View from Pogue/Engst cannot be both the ‘locations view’ and the ‘map view’ in the claims.” PO Resp. 56–57 (citing Ex. 2020 ¶¶ 124–125).

We begin our analysis with the claim language. Claim 25 depends from, and therefore further limits, independent claim 1. Claim 32 depends from independent claim 29. Dependent claims 25 and 32 are substantially similar and any differences stem essentially from independent claim 1 being drafted as a method claim and independent claim 29 being drafted as a system claim. Dependent claim 25 is exemplary and states:

25. The method of claim 1, subsequent to causing the interface to display the search filter view, *causing the interface to display a map view* including (i) an interactive geographic map, (ii) a first indication on the interactive map 25 that is associated with one or more digital files, and (iii) a second indication on the interactive map that is associated with one or more digital files.

Ex. 1001, 37:22–28 (emphasis added).

Although dependent claim 25 does not recite a “locations view,” independent claim 1 recites the following:

[1g] responsive to a second input within the search-filter view, *causing the interface to display a locations view* including a first name associated with a first location, and a second name associated with a second location.

Id. at 35:39–43 (emphasis added). Reading claim 25 in its entirety (i.e. including claim 1’s limitations) indicates that the recited interface has the ability to display a “*locations view*” and a “*map view*”.

We bear in mind, as Patent Owner points out in its Response, that “[w]here a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.” *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (citing *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004); *Engel Indus., Inc. v. Lockformer Co.*, 96 F.3d 1398, 1404–05 (Fed. Cir. 1996)) (second alteration in original). We are also aware that “the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315 (citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004)).

Claims, however, cannot be read and understood in isolation. *See Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.” (alteration in original)). As the Federal Circuit articulated in *Phillips*,

The claims, of course, do not stand alone. Rather, they are part of “a fully integrated written instrument,” *Markman*, 52 F.3d at 978, consisting principally of a specification that concludes with the claims. For that reason, claims “must be read in view of the specification, of which they are a part.” *Id.* at 979. As we stated in *Vitronics*, the specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” 90 F.3d at 1582.

Phillips, 415 F.3d at 1315.

Moreover, “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313.

The ’823 Patent explains that its “Application” (also called the “MemoryWeb Application” or “System”) “is an online program constructed using a mix of freeware code as well as custom-built proprietary coding with an interface that has many functions including” the ability to “view, sort, annotate, and share Digital Files from the various Application Views.” Ex. 1001, 8:59–9:1. The ’823 Patent explains that its “Application Views utilizes the Application’s ability to associate Digital Tags to Digital Files and display them in customized views such as Uploads, Collections, Slideshow, Location, Timeline, Family Tree, People Profile, and Recipes.” *Id.* at 9:18–22. Thus, we understand the ’823 Patent’s “Application Views” to be customized displays of associated digital tags or files and that the ’823 Patent’s Uploads, Collections, Slideshow, Location, Timeline, Family Tree, People Profile, and Recipes are all examples of the System’s “Application Views.” *Id.*; *see also id.* at Figs. 32–36; 3:58–62 (identifying Figs. 32–36 as screenshots of People Application Views, Collection Application Views, Location Application Views, Uploads Application View, and Recipe Application View, respectively).

The ’823 Patent does not expressly identify a “*map view*” as that term is recited in claims 25 and 32. The ’823 Patent does, however, identify several “*location views*” displaying maps. In particular, the ’823 Patent identifies Figure 5 as “a screenshot of a location view.” *Id.* at 3:3–4. Figure 5 from the ’823 Patent is shown below.

FIG. 5

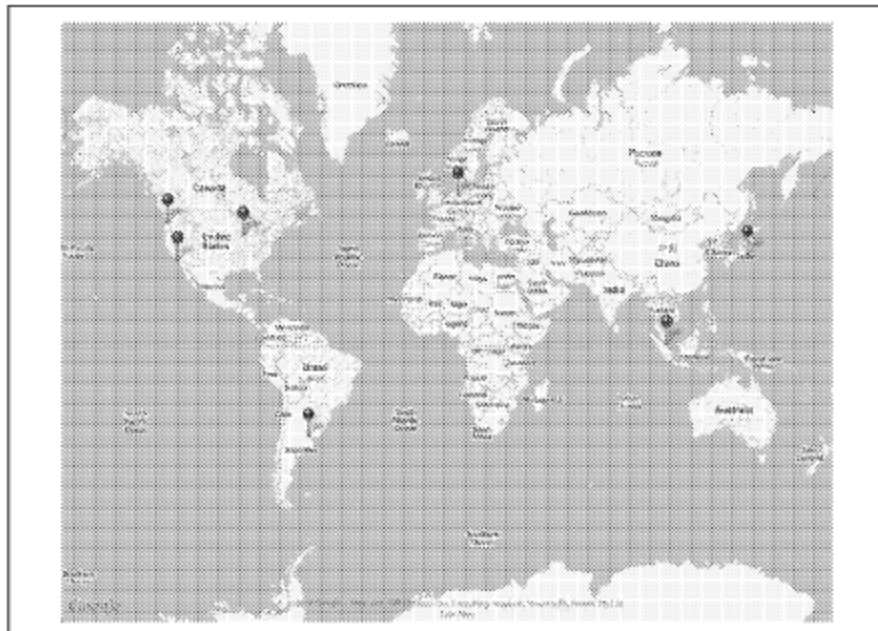


Figure 5 from the '823 Patent, shown above, depicts a world map with several pins set at particular locations on the map. The '823 Patent describes Figure 5 as “[a] location view, as shown in FIG. 5, identifies within an interactive map (Google map shown as an example), where digital files were taken or originated.” *Id.* at 6:14–16.

The '823 Patent also identifies Figure 41 as “a screenshot of the Single Application Dot-Tag Filter in Location Application View.” *Id.* at Figs. 41, 4:3–4. Figure 41 of the '823 Patent is shown below.

FIG. 41

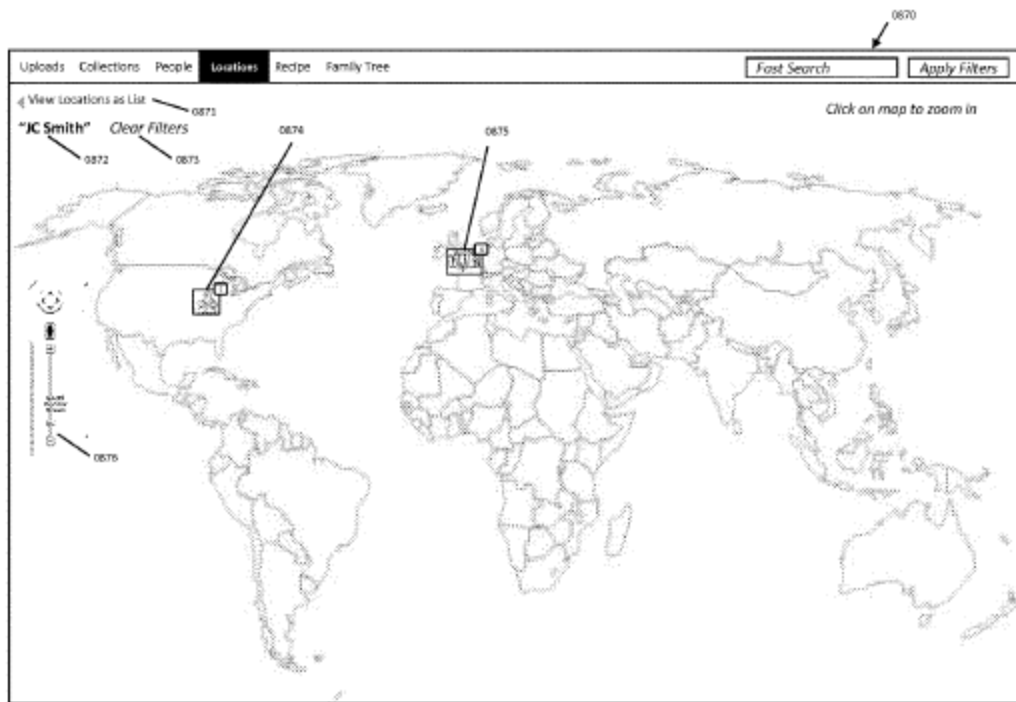


Figure 41 from the '823 Patent depicts a world map with indicators 0874 and 0875 marked on the map. With respect to Figure 41, the '823 Patent explains that “[w]ithin the Location Application View the Digital Files are displayed within an interactive map (Google map shown as an example).” *Id.* at 29:19–21.

The '823 Patent further explains the relationship between “*location views*” and maps where it explains that “the Application utilizes a world map view to illustrate all the locations that are associated to one or more Digital Files for a user *within the Location Application View* (see FIG. 41 (indicator 0880)).” *Id.* at 31:56–60 (emphasis added). The '823 Patent goes on to explain that “the Application Dot-Tags and Digital Files associated with the location or map request are retrieved and then sent (1109) to the Locations Application view. The system will combine the map information along with the Application Dot-Tags and Digital Files and display this information

within the Location Application View (1100).” *Id.* at 32:10–16 (emphasis added).

Dr. Reinman testifies that a person of ordinary skill in the art “would understand from the words of the claims that the ‘map view’ is separate and distinct from the ‘locations view,’” because “the use of the different words ‘locations’ and ‘map’ to modify view,” as “[t]hese words would be superfluous if they did not delineate separate and distinct views.” Ex. 2020

¶ 94. Dr. Reinman also testifies that “[t]he surrounding claim language further confirms that the ‘map view’ and ‘locations view’ are separate views,” and that the “differing conditions for displaying the ‘map view’ and ‘locations view’ reinforces that they are separate and distinct views.” *Id.*

¶ 95. Dr. Reinman further testifies that “the claims specify that these views have different content,” and “[t]he differing content in these views also confirms that they are separate and distinct views.” *Id.* ¶ 96.

Dr. Reinman’s testimony, however, fails to consider the ’823 Patent’s Specification with respect to the recited “*locations view*” and maps, the lack of an express identification of an exemplary “*map view*” in the Specification, the Specification’s identification of Figure 5 depicting a world map as a “*location view*,” and the Specification’s explanation of how the Location Application View displays selected digital files on an interactive map, such as Figure 41, indicating where the digital files were taken or originated. Without consideration of these descriptions and other information from the Specification and its impact on how a person of ordinary skill in the art would understand the relationship between the recited “*locations view*” and “*map view*” in dependent claims 25 and 32, Dr. Reinman’s testimony has limited value.

In its Response, Patent Owner appears to implicitly acknowledge the relationship between “*location views*” and “*map views*” in the ’823 Patent where it identifies Figure 5 as an example of a “*map view*,” even though the ’823 Patent clearly identifies Figure 5 as a “*location view*.” Compare PO Resp. 11 (Patent Owner identifying Figure 5 as an example of a “*map view*”), with Ex. 1001, 3:3–4 (the ’823 Patent identifying Figure 5 as a “*location view*”). Similarly, Patent Owner identifies Figure 41 as a “*map view*” (see PO Resp. 11–12) even though the ’823 Patent identifies Figure 41 as a “Location Application View” (see Ex. 1001, 4:3–4).

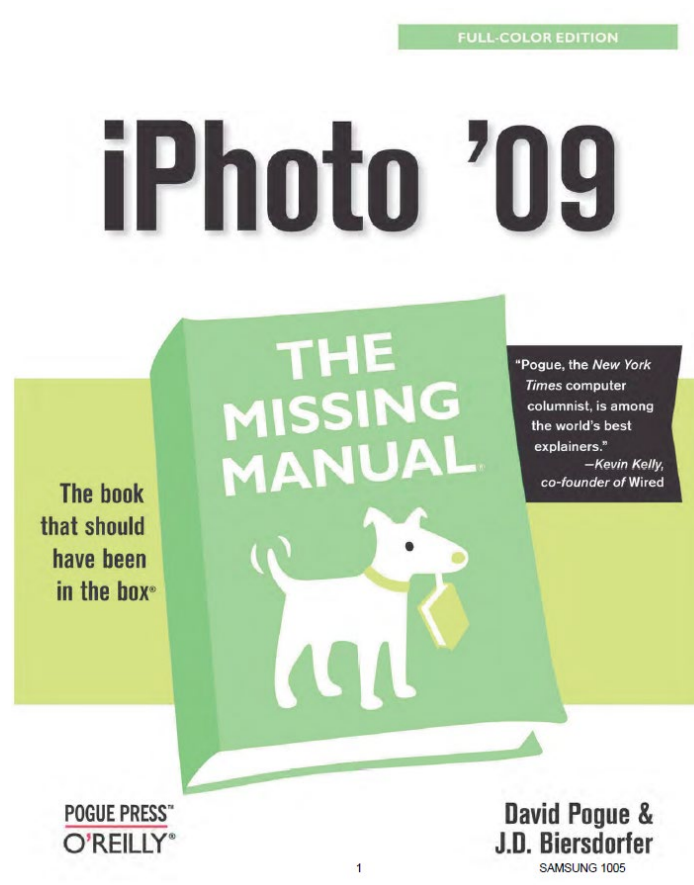
After considering the ’823 Patent in its entirety, we determine that a person of ordinary skill in the art would understand that the “*map view*” recited in dependent claims 25 and 32 is a “Location Application View” where selected digital files are displayed on a geographical map indicating where the digital files were taken or originated. See, e.g., Ex. 1001, 29:17–21 (explaining with respect to Figure 41, that “[w]ithin the Location Application View the Digital Files are displayed within an interactive map”); 6:14–16 (explaining that “[a] location view, as shown in FIG. 5, identifies within an interactive map (Google map shown as an example) where digital files were taken or originated”). We decline to adopt Patent Owner’s sweeping generalization that “the language of claims 25 and 32 dictates that the ‘map view’ is separate and distinct from the ‘locations view.’” PO Resp. 27 (citing Ex. 2020 ¶¶ 93–94).

D. Prior Art Status of Pogue and Engst

Two of the references Petitioner relies upon in its challenge to claims 1–34 of the ’823 Patent are printed publications in the form of books. These two references are 1) David Pogue and J.D. Biersdorfer, *iPhoto ’09 The Missing Manual* (2009) (“Pogue”) (Ex. 1005); and 2) Adam C. Engst, *Visual*

QuickStart Guide iPhoto '09 (2009) (“Engst”) (Ex. 1006). Petitioner has submitted electronic copies of both references into the record as part of our standard trial practice. The Pogue reference is approximately 385 pages long. *See generally* Ex. 1005. The Engst reference is approximately 240 pages long. *See generally* Ex. 1006.

The cover of Pogue (Ex. 1005) is shown below.



On the cover of Pogue, shown above, the title is indicated as “*iPhoto '09—The Missing Manual*.” The authors are indicated as “David Pogue and J.D. Biersdorfer.” The publisher is indicated as “Pogue Press/O’Reilly.” The cover also states: “The book that should have been in the box.” *Id.*

The copyright page of Pogue is shown below.

iPhoto '09: The Missing Manual

by David Pogue & J.D. Biersdorfer

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Published by O'Reilly Media, Inc., 1005 Gravenstein Highway North,
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April 2009: First Edition.

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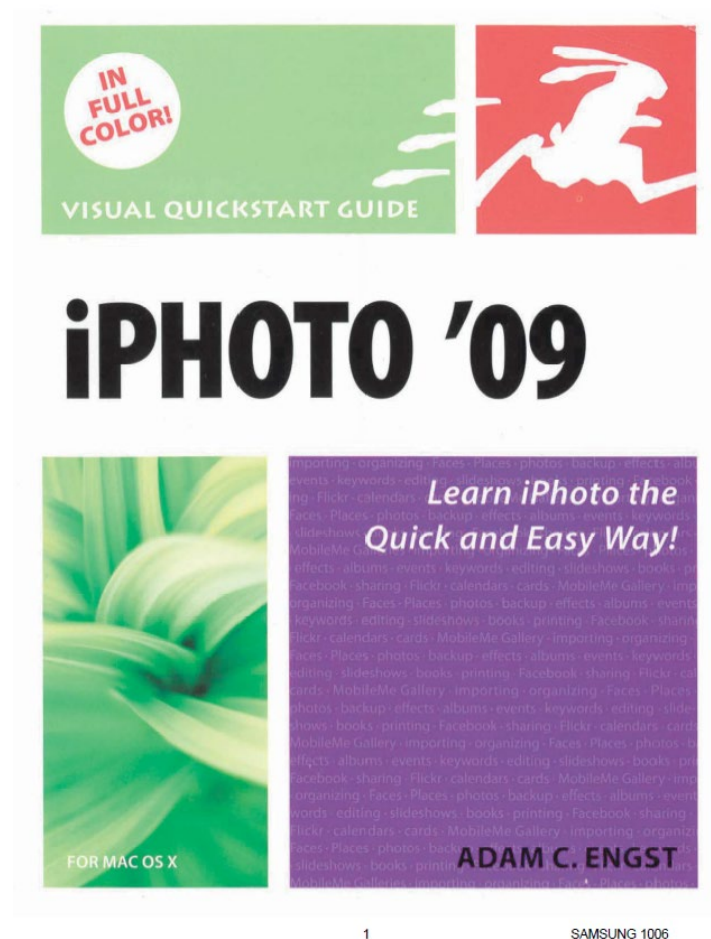
This book uses a durable and flexible lay-flat binding.

ISBN-13: 978-0-596-80144-1

The copyright page of Pogue, shown above, provides the following pertinent information: "***iPhoto '09: The Missing Manual*** by David Pogue & J.D. Biersdorfer"; "Copyright © 2009 David Pogue"; "Published by O'Reilly Media, Inc."; "April 2009: First Edition"; "ISBN-13: 978-0-596-80144-1". *Id.* at Bates No. 6.¹

¹ The citations to Pogue (Ex. 1005) and Engst (Ex. 1006) in Section II.D of this Decision are to the original page numbers of the exhibit unless otherwise indicated as shown here.

The cover of Engst is shown below.



The cover of Engst (Ex. 1006) is shown above. The title is indicated as “*Visual QuickStart Guide—iPhoto '09—for Mac OS X.*” The author is indicated as “Adam C. Engst.” The cover also states: “Learn iPhoto the Quick and Easy Way!” Ex. 1006.

The copyright page of Engst is shown below.

Visual QuickStart Guide
iPhoto '09 for Mac OS X
Adam C. Engst

Peachpit Press

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Editor: Cliff Colby
Production Coordinator: Lisa Brazieal
Copyeditor: Tonya Engst
Compositor: Adam C. Engst
Indexer: James Minkin
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9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

The copyright page of Engst, shown above, provides the following pertinent information: “Visual Quickstart Guide—**iPhoto ’09 for Mac OS X**”; “Adam C. Engst”; “Peachpit Press”; “Copyright © 2009 by Adam C. Engst”; “ISBN-13: 978-0-321-60131-5”. *Id.* at Bates No. 3.

The Petition states that “Pogue and Engst are books describing iPhoto ’09, which has a user interface for organizing photos.” Pet. 13. Petitioner

explains that “Pogue and Engst describe the exact same digital photograph software developed by Apple—namely iPhoto ’09—and its features include organizing digital image files by criteria, such as “Faces” and “Places.” Pet. 18 (citing Ex. 1005, 2, 89, 93, 110; Ex. 1006, 2, 30, 64, 72; Ex. 1003 ¶ 77). Petitioner also explains that “Pogue and Engst are publications that serve as the manual for Apple’s iPhoto ’09 software.” Pet. 18 (citing Ex. 1005, 2–4 (“This book was born to serve as the iPhoto [’09] manual.”); *see also* Ex. 1006, 1 (Explaining that this book is meant to serve as the “manual iPhoto [’09] lacks.”); Ex. 1003 ¶ 77).

Petitioner’s expert, Dr. Greenspun, testifies that he has reviewed the Pogue and Engst references as part of his work on this case. Ex. 1003 ¶ 9. Dr. Greenspun also provides testimony that corroborates and supports Petitioner’s statements regarding Pogue and Engst. *See, e.g., id.* ¶¶ 74, 77.

Petitioner asserts that “the earliest possible priority date of the ’823 Patent is June 9, 2011,” and that “[t]he applied references were published prior to June 9, 2011, and are prior art to the ’823 Patent (under Pre-AIA 102(b) or AIA 102(a)(1)) regardless of whether the ’823 Patent is entitled to its earliest claimed priority.” Pet. 12 (citing Ex. 1010).

Petitioner provides the declaration of Ms. June Ann Munford to support its position that the Pogue and Engst references are prior art publications to the ’823 patent. Ex. 1010. Ms. Munford is a former Library Director with a Master of Science degree from the University of Milwaukee. *See id.* at App. CV. Ms. Munford testifies that she is “fully familiar with the catalog record creation process in the library sector,” and in particular, library catalog records created in preparing acquired library materials for public availability, which Ms. Munford testifies, “are typically written in Machine Readable Catalog” or “MARC” code. *Id.* ¶ 4. Ms. Munford

testifies that she has “reviewed Exhibit 1005 *iPhoto 09 - the Missing Manual* by David Pogue & J.D. Biersdorfer, 1st edition,” and “Exhibit 1006 *iPhoto 09 - Learn iPhoto the Quick and Easy Way* by Adam C. Engst.” *Id.* ¶¶ 7, 11.

Ms. Munford testifies that she herself obtained and reviewed the MARC records for Pogue (Ex. 1005) from the Carnegie Library of Pittsburgh’s public catalog, which “indicates [the] Carnegie Library of Pittsburgh first acquired this book as of January 21, 2009,” and in her determination “was made available to the public shortly after its initial acquisition in January 2009.” Ex. 1010 ¶¶ 8–10.

Ms. Munford also testifies that she obtained the MARC records for Engst (Ex. 1006) from the Illinois State University Library’s public catalog, which “indicates the Illinois State University library first acquired this book as of May 25, 2009,” and in her determination “was made available to the public shortly after its initial acquisition in May 2009.” Ex. 1010 ¶¶ 11–13.

In its Response, Patent Owner contends that Petitioner fails to establish that Pogue and Engst qualify as printed publication prior art. PO Resp. 29–37. Patent Owner asserts that “the Petition is devoid of any explanation as to how Pogue and Engst were publicly accessible so as to qualify as printed publications.” *Id.* at 29 (citing Pet. 12–13). Patent Owner also asserts that “Petitioner’s citation to a librarian declaration without explanation violates the Board’s rules,” and “even if Petitioner’s librarian declaration is considered, it is conclusory and relies on unreliable records that were modified numerous times after their creation date.” PO Resp. 29.

Patent Owner asserts that “[t]he Petition identifies alleged publication dates for Pogue and Engst but is otherwise silent as to how ‘persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence’ could have located Pogue or Engst.” *Id.* at 30 (citing

Pet. 12–13). Patent Owner also asserts that “Petitioner offers . . . the Munford Declaration . . . but cites to it *only once* and fails to state its relevance.” PO Resp. 31 (citing Pet. 12) (emphasis by Patent Owner). Patent Owner argues that “Petitioner’s blanket citation to the Munford Declaration amounts to improper incorporation by reference.” PO Resp. 31.

Patent Owner also asserts that the MARC records cited in the Munford Declaration fail to establish that Pogue and Engst qualify as printed publications for at least four reasons. *Id.* at 33. First, Patent Owner argues that “Ms. Munford provides no indication that either Pogue or Engst ‘was sufficiently indexed, catalogued, and shelved.’” PO Resp. 33. Second, Patent Owner argues that “the MARC records were altered in unknown ways after their creation dates.” *Id.* at 34. Patent Owner speculates that “[i]t is possible that *every* field that was manually inputted when the MARC record was created was subsequently changed or added.” *Id.* at 35 (citing Ex. 2021 ¶¶ 12, 15). Third, Patent Owner argues that “Ms. Munford’s opinions that Pogue and Engst were ‘made available to the public shortly after’ the MARC records were created are conclusory and should be afforded no weight.” PO Resp. 35. Patent Owner argues that “[t]he fact that a library created a MARC record on a given date does not necessarily mean that a skilled artisan could have been able to find it on that date in exercising reasonable diligence.” *Id.* at 36. And fourth, Patent Owner argues that “while Ms. Munford compared scanned ‘selections from’ Pogue from the Carnegie Library of Pittsburgh to [Exhibit] 1005, she failed to perform a similar comparison for Engst.” PO Resp. 36–37 (citing Ex. 1010 ¶¶ 12–13).

In its Reply, Petitioner asserts that “each of Pogue and Engst include various conventional indicia of publication and public availability several years prior to the critical date, including copyright date and ISBN number.”

Pet. Reply 9 (citing Ex. 1005, 6; Ex. 1006, 3). Petitioner also asserts that they “include indicia of publication by an established publisher, namely O’Reilly and Peachpit/Pearson Education, respectively.” Pet. Reply 9. Petitioner cites to Dr. Greenspun’s testimony that “both are widely known book publishers that one of ordinary skill in the art would have looked to for further information/education concerning new software platforms, such as iPhoto ’09.” Pet. Reply 9 (citing Ex. 1027 ¶ 3).

Petitioner also argues that Ms. Munford’s analysis of MARC records from multiple libraries, including Carnegie Library of Pittsburgh, Illinois State University library, Penn State University library, Kent State University library, and the Library of Congress, “all . . . confirm the early public availability dates of Pogue and Engst well before the Critical Date.” Pet. Reply 11 (citing Ex. 1010 ¶¶ 7–13; Ex. 1028 ¶¶ 8–16, 20–26). Petitioner also points to Ms. Munford’s testimony that a particular “field of the MARC record is ‘reserved for denoting the date of creation of the library record itself’ and ‘accurately indicate[s] the date of an item’s public availability.’” Pet. Reply 11 (citing Ex. 1010 ¶¶ 4–5) (alteration in original).

In its Sur-reply, Patent Owner argues that Petitioner’s Reply “improperly offers several new ‘prior art’ theories in an attempt to rectify the undisputed deficiencies in the Petition,” including relying on new MARC records from different libraries, relying on MARC records that pertain to electronic versions of Pogue and Engst, arguing that Pogue and Engst were published by “an established publisher,” that Pogue and Engst were sold to the public through commercial websites, and that Pogue was cited in an IDS during prosecution. PO Sur-Reply 2–3.

Patent Owner also argues that Ms. Munford’s opinions are flawed “because she did not apply the appropriate level of skill in the art” and that

“she offers no evidence that any of the MARC record libraries deviated from the Library of Congress or OCLC definitions of the MARC library cataloging standard.” PO Sur-Reply 4, 6. Patent Owner argues that the Engst and Pogue MARC records (whether the print or electronic version) were “modified in unknown ways” after the critical date (PO Sur-Reply 7–8), and that there is “no evidence as to how or if Pogue or Engst were indexed . . . such that [a person of ordinary skill in the art] exercising reasonable diligence could have located them [PO Sur-Reply 8].”

We agree with Petitioner that the weight of the evidence demonstrates that both Pogue and Engst were disseminated and made available to the public prior to the critical date of the ’823 patent. A person is not entitled to a patent if their invention was “described in a printed publication . . . before the effective filing date of the claimed invention.” 35 U.S.C. § 102(a)(1) (2023). The determination of whether a document is a “printed publication” under 35 U.S.C. § 102 “involves a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018) (citing *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)).

“Because there are many ways in which a reference may be disseminated to the interested public, ‘public accessibility’ has been called the touchstone in determining whether a reference constitutes a ‘printed publication.’” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1348 (Fed. Cir. 2016) (quoting *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986)). “A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *SRI*

Int'l, Inc. v. Internet Sec. Sys., Inc., 511 F.3d 1186, 1194 (Fed. Cir. 2008) (quoting *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006))

Here, Pogue and Engst each include indicia of publication and public availability on their face. The titles of the references themselves, “iPhoto ’09,” reference the version of Apple’s iPhoto software reviewed and described by the references. Ex. 1005; Ex. 1006. Dr. Greenspun testifies that he reviewed each of the references and that “Pogue and Engst are books describing iPhoto ’09, which has a user interface for organizing photos,” and that “Pogue and Engst describe the exact same digital photography software developed by Apple—namely iPhoto ’09—and its features include organizing digital image files by criteria, such as ‘Faces’ and ‘Places.’” Ex. 1003 ¶¶ 20, 74, 77. Patent Owner does not challenge this assessment that Pogue and Engst review and describe Apple’s iPhoto ’09 software.

The references themselves are consistent with Dr. Greenspun’s testimony. For example, Pogue describes “What’s New in iPhoto’09,” explaining that “[t]he most talked-about feature in iPhoto ’09 is *Faces*, a new component of the program that analyzes your photos and groups your collections based on the *people* who are in them.” Ex. 1005, 2. Pogue also explains that “[w]ith its *Places* feature, iPhoto ’09 offers *you* the power of Google Maps and a whole box of little virtual map pins to show off your travels.” *Id.* Given the content of the references themselves, their titles, the testimony of Dr. Greenspun, and the lack of any challenge on this point by Patent Owner, the evidence clearly shows that both Pogue and Engst review and describe Apple’s iPhoto ’09 version of its digital photography software.

The references also contain other indicia of publication and public availability. Both Pogue and Engst display a notice of copyright by their

authors for the year 2009. *See* Ex. 1005, Bates No. 6; Ex. 1006, Bates No. 3. The copyright page of Pogue also indicates a “First Edition” date of April 2009. Ex. 1005, Bates No. 6. The references also provide information about their publishers, Pogue indicates that it was “Published by O’Reilly Media, Inc.” and Engst indicates that “Peachpit Press” was its publisher. *Id.*; Ex. 1006, Bates No. 3. This information is also consistent with Petitioner’s position that Pogue and Engst were made publicly available in 2009.

Petitioner provides additional evidence to establish the public availability of Pogue and Engst through the declaration of Ms. Munford. Ms. Munford testifies that she obtained the MARC records for Pogue from the Carnegie Library of Pittsburgh’s public catalog, which indicates that the Carnegie Library acquired Pogue by January 21, 2009, and in Ms. Munford’s determination, Pogue was made available to the public shortly thereafter. Ex. 1010 ¶¶ 8–10.

Ms. Munford also testifies that she obtained the MARC records for Engst from the Illinois State University Library’s public catalog, which indicates that the library first acquired Engst by May 25, 2009, and was made available to the public shortly thereafter. *Id.* ¶¶ 11–13. Ms. Munford’s testimony is consistent with, and also supports a determination that Pogue and Engst were made publicly available in 2009.

In response to Patent Owner contesting the public availability of Pogue and Engst, Dr. Greenspun provides testimony that

each of Pogue and Engst were well-known publications from established publishers (*i.e.*, O’Reilly and Pearson), and [a person of ordinary skill in the art] would have certainly known to look to them for further information concerning the very popular iPhoto ’09 software. Indeed, the “Missing Manual” series and the “Visual Quickstart Guide” series, of which Pogue and Engst

are a part of, respectively, were popular resources for users wanting to find out more about popular software platforms.

Ex. 1027 ¶ 3.

We credit this testimony from Dr. Greenspun because the record indicates that Apple did not provide a user manual with its iPhoto '09 software, and the stated purpose of publishing Pogue and Engst was to fill that void and provided a much-needed resource. *See, e.g.*, Ex. 1005, Bates No. 1 (“iPhoto '09—The Missing Manual—The book that should have been in the box”), Bates No. 2 (“iPhoto '09 makes it easier than ever to transfer photos . . . but there’s no printed manual”), Bates No. 13 (“Missing Manuals are witty, superbly written guides to computer products that don't come with printed manuals (which is just about all of them)”), Bates No. 20 (“This book was born to serve as the iPhoto manual-the book that should have been in the box. It explores each iPhoto feature in depth, offers shortcuts and workarounds, and unearths features that online help doesn't even mention.”).

Patent Owner criticizes Ms. Munford’s testimony, arguing that “Ms. Munford provides no indication that either Pogue or Engst ‘was sufficiently indexed, catalogued, and shelved.’” PO Resp. 33. But whether or not a publication has been “sufficiently indexed, catalogued, and shelved” is not the test for public accessibility. *See In re Lister*, 583 F.3d 1307, 1312 (Fed. Cir. 2009) (“neither cataloging nor indexing is a necessary condition for a reference to be publicly accessible”). Rather, whether a given reference is publicly accessible is based upon “a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *SRI Int’l*, 511 F.3d at 1194 (quoting *Bruckelmyer*, 445 F.3d at 1378).

Patent Owner’s reliance on *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986)) for its point is also misplaced. *In re Hall* stands for a different proposition, one which states that “competent evidence of the general library practice may be relied upon to establish an approximate time when a thesis became accessible.” *Id.* at 781 F.2d at 898. Although Pogue and Engst are not doctoral theses, the principal espoused in *In re Hall* is still applicable here. Ms. Munford’s testimony provides competent evidence of general library practices which can be relied upon to establish an approximate time when a printed publication became publicly accessible. Accordingly, we credit Ms. Munford’s testimony on general library practices and accept her testimony as credible that Pogue was made available to the public by the Carnegie Library of Pittsburgh shortly after acquiring it on January 21, 2009, and that Engst was made available to the public by the Illinois State University Library shortly after acquiring it on May 25, 2009. Ex. 1010 ¶¶ 8–13.

Patent Owner argues that the MARC records relied upon by Ms. Munford “were altered in unknown ways after their creation dates,” and speculates that “[i]t is possible that *every* field that was manually inputted when the MARC record was created was subsequently changed or added.” PO Resp. 34–35 (citing Ex. 2021 ¶¶ 12, 15). Such speculation, however, has little probative value. Patent Owner cites to the declaration of Ms. Laura Whitbeck as support for its arguments, but we note that Ms. Whitbeck appears to be an employee of the law firm Nixon Peabody LLP, the same law firm that represents Patent Owner in this proceeding. *See* Ex. 2021 ¶¶ 3–4. Accordingly, we ascribe less weight to Ms. Whitbeck’s testimony because of the risk of implicit bias caused by Ms. Whitbeck’s employee relationship with Patent Owner’s counsel.

Based on the complete record, we find that Petitioner has shown by a preponderance of the evidence that Pogue and Engst were disseminated or otherwise made available to the public prior to the critical date of the '823 patent, such that a person of ordinary skill in the art exercising reasonable diligence could locate the references. Therefore, we determine that Pogue and Engst qualify as printed publication prior art to the '823 patent.

E. Patentability Challenges

As indicated above, Petitioner presents three grounds challenging the patentability of particular claims of the '823 Patent under 35 U.S.C. § 103. Specifically, Petitioner contends that: (1) claims 1–25 and 27–34 would have been obvious over the teachings of Pogue and Engst; (2) claim 26 would have been obvious over the teachings of Pogue, Engst, and Belitz; and (3) claims 12–14 would have been obvious over the teachings of Pogue, Engst, and Ripps. *See* Pet. 8, 13, 83, 89.

1. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented 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) objective evidence of nonobviousness,

i.e., secondary considerations.² *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

The Supreme Court has made clear that we apply “an expansive and flexible approach” to the question of obviousness. *KSR*, 550 U.S. at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. Reaching this conclusion, however, requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim under examination. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention. *Id.*

2. Relevant Prior Art

a) Pogue (Ex. 1005)

Pogue is titled “iPhoto ’09 The Missing Manual,” and describes, explains, and provides directions on how to use Apple Inc.’s “iPhoto” software program that is designed to organize, edit and distribute digital photos (*i.e.*, photos). Ex. 1005, 2.³ iPhoto includes a “Faces” feature that analyzes photos and groups photo collections based on the people who are in

² The parties do not present evidence or argument directed to secondary considerations.

³ Citations to Pogue (Ex. 1005) and Engst (Ex. 1006) are to the exhibit’s original page numbering, and not to numbering subsequently applied to the exhibit by counsel, unless otherwise indicated.

the photos. *Id.* iPhoto also includes a “Places” feature that plots photos on an electronic map. *Id.*

As previously described, iPhoto’s Faces feature analyzes unique properties of each face in each photo and automatically groups the photos into photo collections based on its analysis. *Id.* at 89–90. Figure 4-3 is a screenshot of a Faces user interface. *Id.* at 92. Figure 4-3 is reproduced below.



Figure 4-3, above, shows the Faces user interface, selectable from a “Source” list, that displays thumbnail photos that have been tagged and assigned a name by a user. *Id.*

iPhoto also includes an “Events” feature that groups photos that were all taken at approximately the same time. *Id.* at 34. Figure 2-6 is a cropped screenshot of an Events user interface. *Id.* at 46. Figure 2-6 is reproduced below.



Figure 2-6, above, shows thumbnail photos, where each thumbnail represents one “pile” of photos, and where a pile represents an “event” (*i.e.*, a group of photos that were all taken at approximately the same time). *Id.* at 34.

iPhoto also includes an “Albums” feature that organizes subsets of photos for easy access and viewing. *Id.* at 55. Figure 2-13 is a cropped screenshot of an Albums user interface. *Id.* at 59. Figure 2-13 is reproduced below.

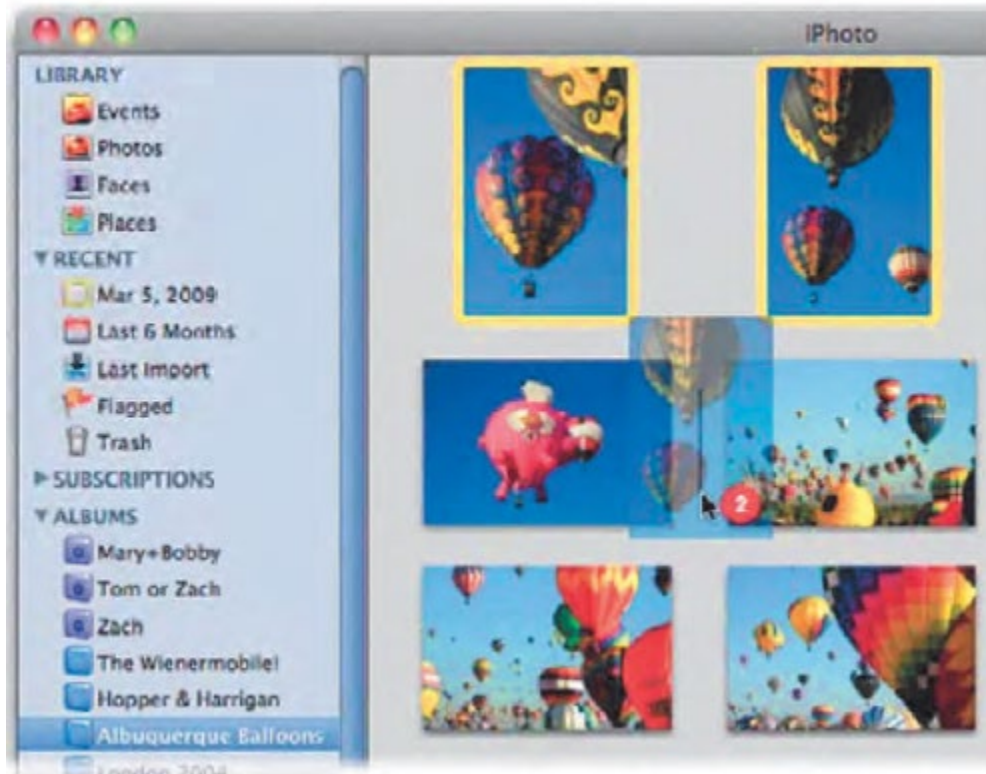


Figure 2-13, above, shows a group of photos either manually or automatically organized into an album. *Id.*

As previously described, iPhoto's Places feature associates longitude and latitude coordinates into each taken photo. *Id.* at 101. Figure 4-16 is a user interface of a Places user interface. Figure 4-16 is reproduced below.

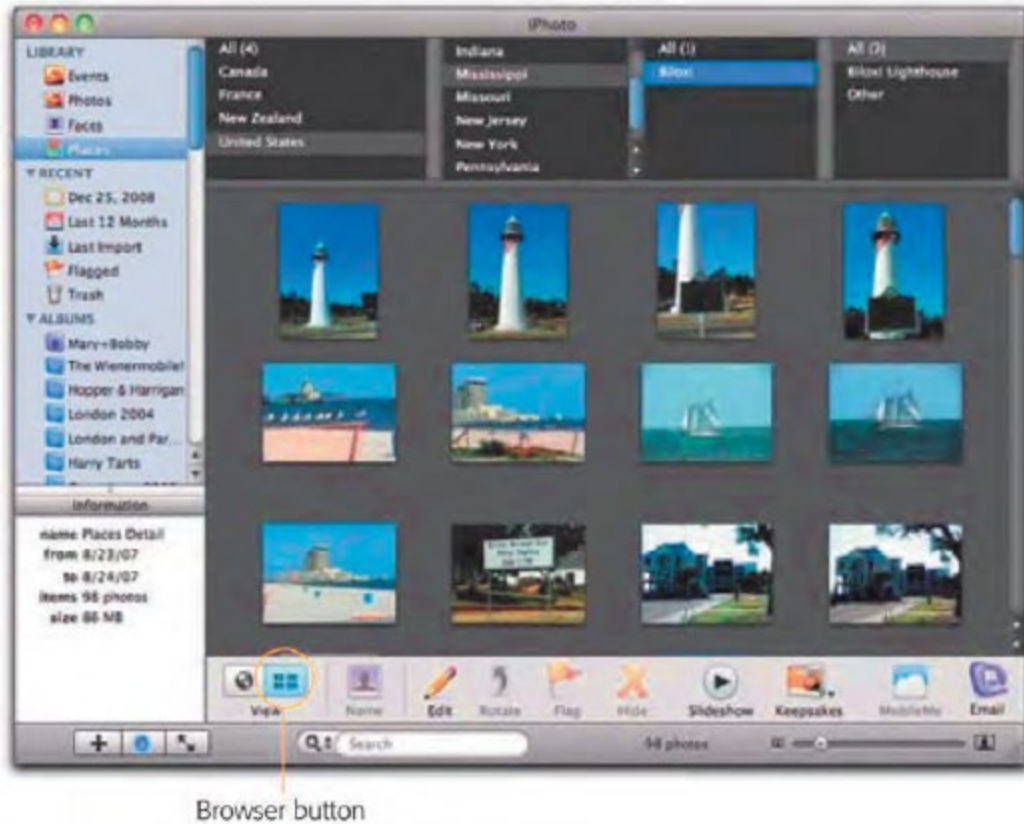


Figure 4-16, above, shows a series of lists in the top part of the window, and the actual photos in each list underneath. *Id.* at 108–110.

iPhoto also includes a search feature that allows a user to search photos based on a user-entered phrase. *Id.* at 79. Figure 3-2 is a screenshot of a user interface that provides a search feature. Figure 3-2 is reproduced below.



Figure 3-2, above, shows a user interface that provides a search feature. *Id.* at 80. A user types a phrase in a search box, and, as the user types the phrase, iPhoto hides all photos except the photos that have the typed phrase somewhere in their titles, keywords, descriptions, faces, places, file names, or Event titles. *Id.*

iPhoto also allows a user to add additional information to a photo. *Id.* at 106. Figure 4-14 is a screenshot of a photo's "Info" box. Figure 4-14 is reproduced below.



Figure 4-14, above, shows a photo's Info box. *Id.* The Info box stores information including names, dates, and ratings. *Id.* at 107. The Info box also allow a user to use the stored information to search for the photo and to add the photo to an album. *Id.* The Info box also displays a map. *Id.*

b) Engst (Ex. 1006)

Engst is titled "Visual QuickStart Guide iPhoto '09" and also describes, explains, and provides directions on how to use Apple's iPhoto software program. Ex. 1006, 1.

According to Engst, iPhoto includes an "organize mode," where the organize mode includes a user interface that displays a "source pane," and the source pane allows a user to create photos and work with photo

collections. *Id.* at 30–31. Figure 3.2 is a screenshot of iPhoto's organize mode, which includes a source pane and a Photos view. *Id.* at 31. Figure 3.2 is reproduced below.

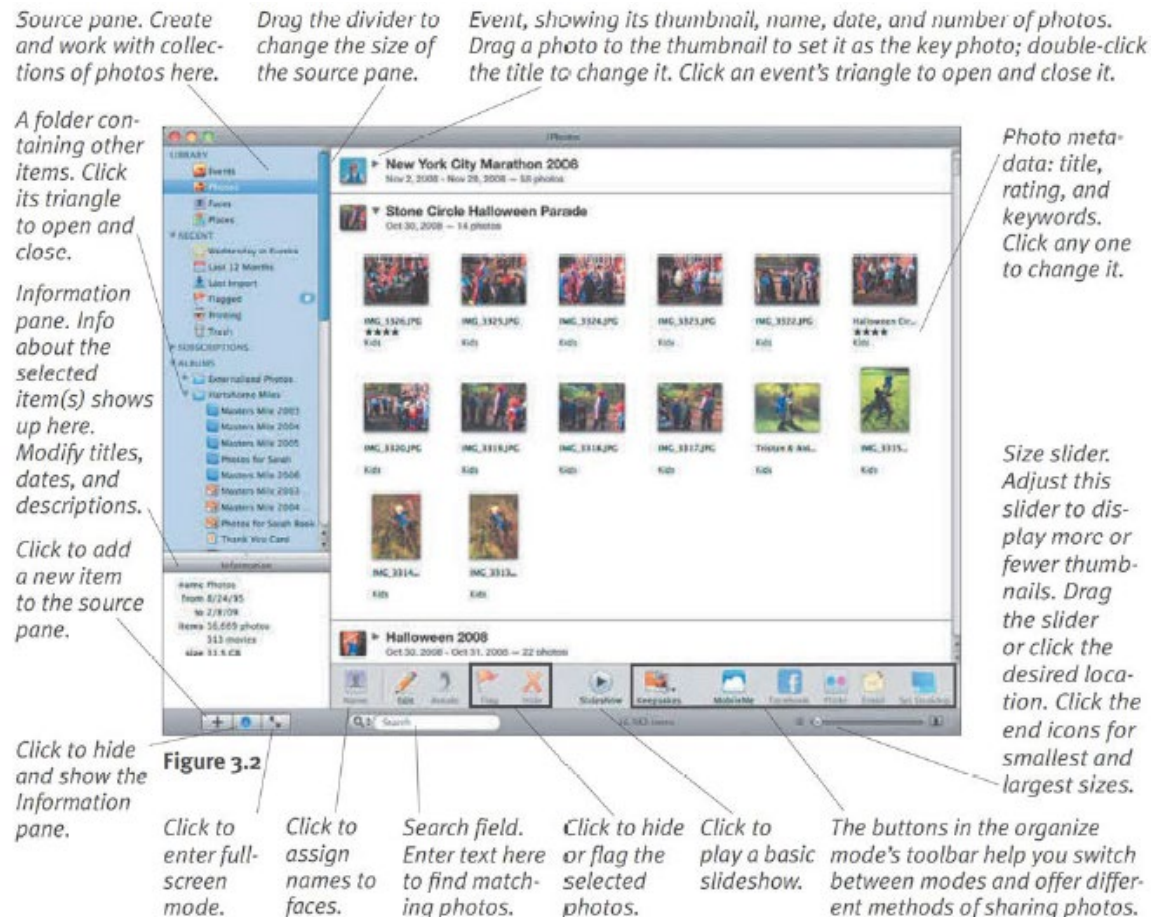


Figure 3.2, above, shows the controls available in organize mode. *Id.* The organize mode displays photos and photo metadata associated with a specific event, where the photo metadata includes: title, rating, and keywords. *Id.*

Engst also describes the Faces feature of iPhoto. *Id.* at 64. Engst describes that iPhoto offers a number of different views, depending on whether a user is naming faces found in a photo, browsing through photos including identified faces, or training iPhoto to recognize a face in a photo.

Id. Figure 4.1 is a screenshot of a naming view. *Id.* Figure 4.1 is reproduced below.



Figure 4.1, above, shows that the naming view magnifies a photo and displays a name lozenge under any faces iPhoto has detected within the photo. *Id.*

Figure 4.2 is a screenshot of a Faces user interface. *Id.* Figure 4.2 is reproduced below.



Figure 4.2, above, shows a Faces user interface, selectable from a source pane, that displays a photo of each named person. *Id.*

Figure 4.3 is a screenshot of a user interface that displays all photos identified as containing a selected person. *Id.* Figure 4.3 is reproduced below.



Figure 4.3, above, shows a user interface, selectable from the Faces user interface via a “double-click” of a person’s snapshot, that displays all photos that have been identified as containing the selected person. *Id.*

Figure 4.4 is a screenshot of a user interface that displays all photos identified as either containing a selected person or potentially containing the selected person. *Id.* Figure 4.4 is reproduced below.



Figure 4.4, above, shows a user interface, selectable from the Faces user interface via a “double-click” of a person’s snapshot, that displays all photos that have been identified as either containing the selected person or potentially containing the selected person. *Id.* The user interface includes a “Confirm Name” button that, when selected by a user, allows a user to confirm that a photo either contains the selected person or does not contain the selected person. *Id.*

Engst further describes that iPhoto presents basic information about photos in two places: an “Information dialog” and an “Information pane.” *Id.* at 61. Figure 3.62 is a screenshot of an Information dialog. Figure 3.62 is reproduced below.



Figure 3.62, above, shows the Information dialog of a selected photo. *Id.* The information dialog displays the following fields: title; date; time; rating; keyword; kind; size; description; and location. *Id.* The information dialog also displays a map showing the location. *Id.*

Figure 3.63 is a screenshot of an Information pane. Figure 3.63 is reproduced below.

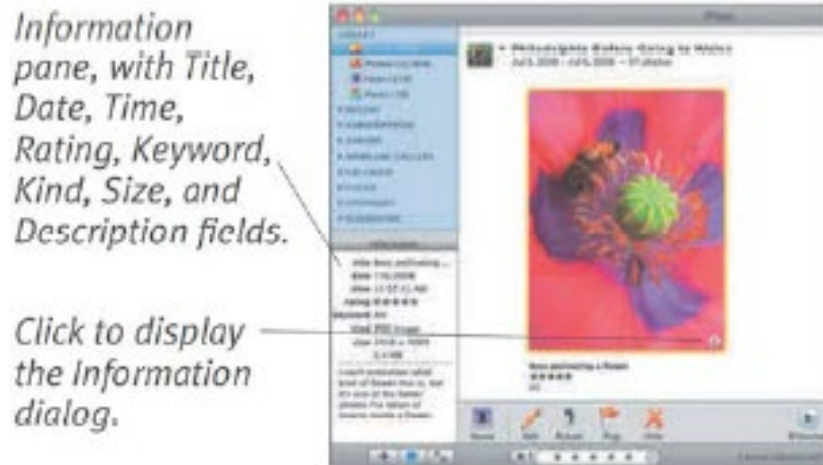


Figure 3.63, above, shows the Information pane of a selected photo. *Id.* The information pane displays the following fields: title; date; time; rating; keyword; kind; size; and description. *Id.*

c) Belitz (Ex. 1008)

Belitz is titled “User Interface, Device and Method for Displaying Special Locations on a Map,” and describes a “user interface comprising a controller configured to display a map and to display at least one marked location on said map.” Ex. 1008, codes (54), (57). Figures 4a, 4b, and 4c are screenshots of a user interface, and are reproduced below. *Id.* ¶ 36.

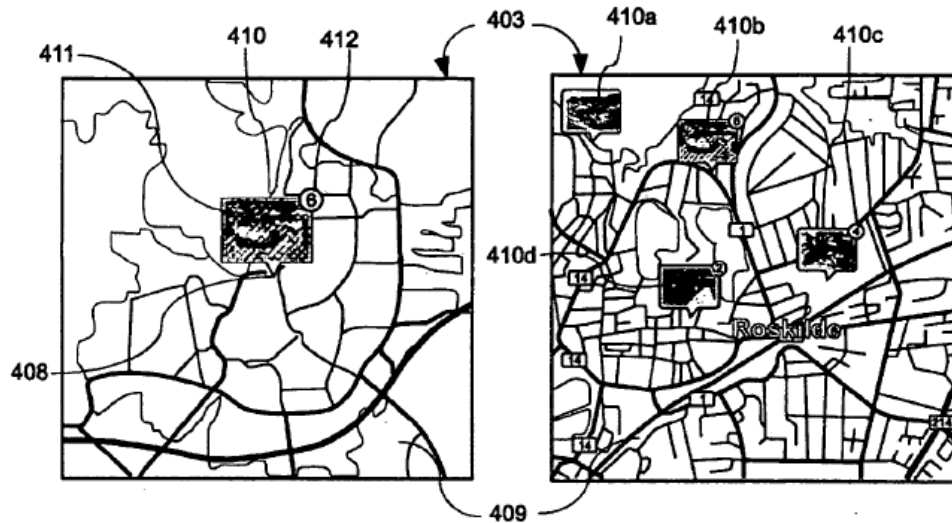


Fig. 4a

Fig. 4b

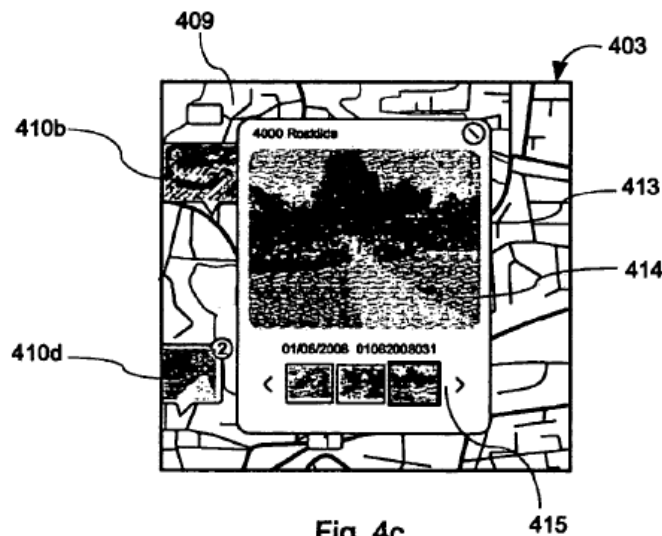


Fig. 4c

Figures 4a, 4b, and 4c are screenshots of display 403 of a user interface. *Id.* ¶¶ 51, 55, 60. In the screenshot of display 403 illustrated in Figure 4a, a map 409 is displayed of a town. *Id.* ¶ 51. A location 408 is marked by a graphical object 410. *Id.* The graphical object 410 has a visual representation 411 which is a photograph (*i.e.*, photo) that is associated with the location. *Id.* ¶ 52.

In the screenshot of display 403 illustrated in Figure 4b, the map 408 has been zoomed in showing the area in greater detail. *Id.* ¶ 55. When

displaying the zoomed in map 409, the controller is configured to determine whether the graphical objects overlap or not, and the graphical object 410 displayed in Figure 4a which comprised thirteen other graphical objects has been split up into four graphical objects 410a, 410b, 410c, and 410d. *Id.* ¶ 55.

In the screenshot of display 403 illustrated in Figure 4c, a graphical object 410c has been selected by a user. *Id.* ¶ 60. A popup window 413 is displayed over or instead of the graphical object 410c. *Id.* The popup window shows at least some of the visual representations 411 of the graphical object 410c. *Id.*

d) Ripps (Ex. 1009)

Ripps is titled “Method and System for Generating a Family Tree” and discloses a method and system for generating a graphical output display of a family tree and a graphical output display of a chronological timeline, which are displayed in conjunction with each other. Ex. 1009, codes (54) and (57). Figure 3 depicts an input screen with a set of data being input to a computer program. *Id.* ¶ 20. Figure 3 is reproduced below.

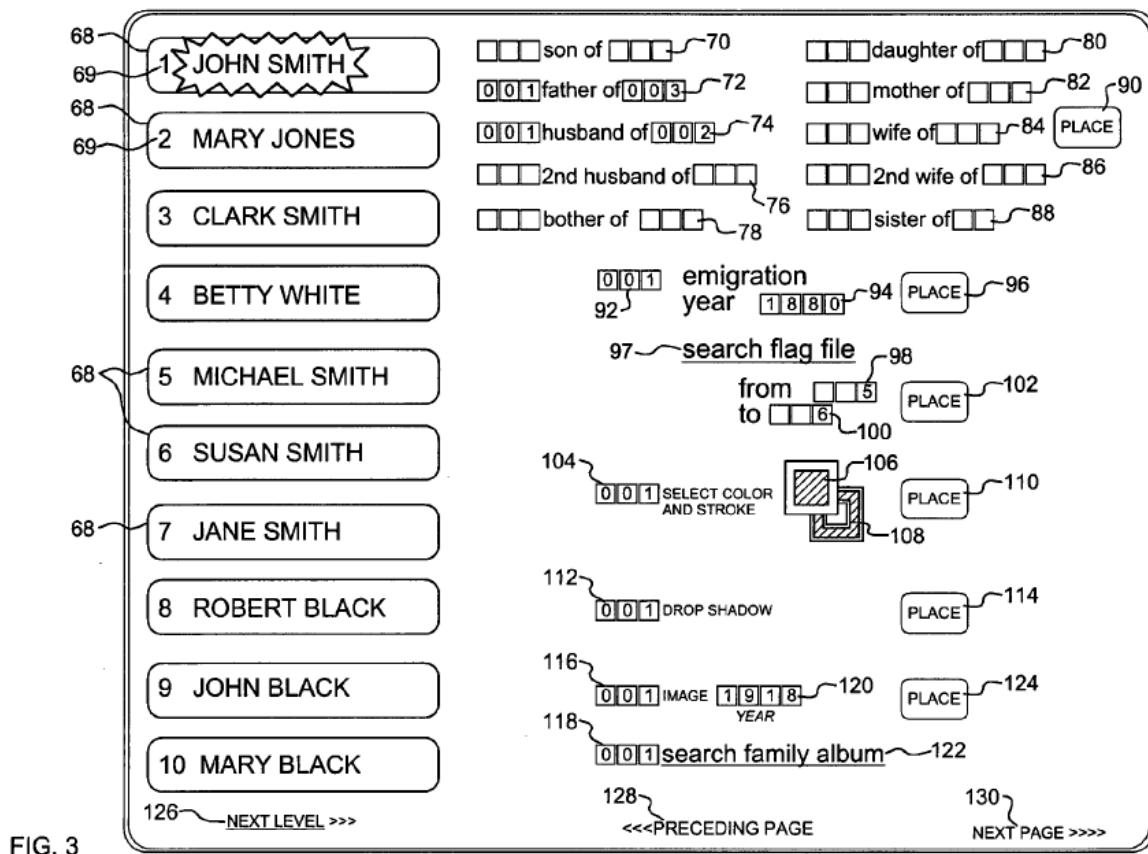


Figure 3, above, shows a data input screen which focus on family relationships and other secondary data. *Id.* ¶ 41. Data describing the family relationships is input into the data input screen. *Id.* ¶¶ 41–49.

Figure 5A depicts another data input screen that includes a family tree that is generated based on the data input into the input screen of Figure 3. *Id.* ¶¶ 22–23, 49–50. Figure 5A is reproduced below.

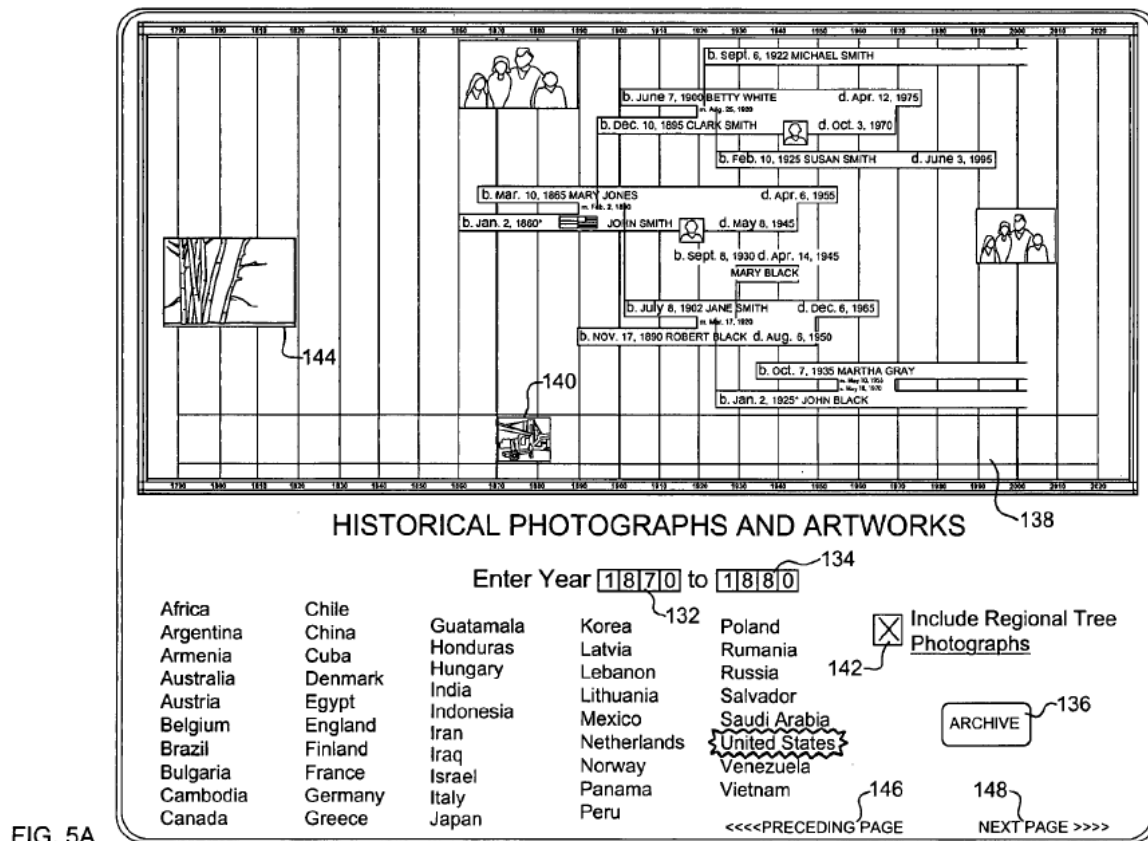


Figure 5A, above, shows a data input screen that displays a constructed timeline chart with a fully constructed family tree. *Id.* ¶ 50. This data input screen allows additional images, in the form of historical photographs and artworks, to be added to the program output. *Id.*

3. Obviousness Based on Pogue and Engst (Ground 1A)

Petitioner contends claims 1–25 and 27–34 are unpatentable under 35 U.S.C. § 103(a) over Pogue and Engst. Pet. 13–83. Claims 1 and 29 are independent and recite substantially similar limitations, with claim 1 directed to a method and claim 29 directed to a system. *See* Ex. 1001, 35:2–54, 37:42–38:35. Claim 1 is representative.

Patent Owner disputes Petitioner’s contentions and provides arguments contesting Petitioner’s evidence of obviousness, the rationale to combine the teachings of Pogue and Engst, and certain claim limitations.

We first address the rationale to combine Pogue and Engst and then consider the issues contested by Patent Owner with respect to the claims.

a) Rationale to Combine Pogue and Engst

Petitioner asserts that a person of ordinary skill in the art “would have found it obvious to combine Pogue and Engst (collectively “iPhoto ’09” or “iPhoto”).” Pet. 17 (citing Ex. 1003 ¶ 77). “Among other things,” Petitioner states, “both references (as well as the ’823 Patent) come from the same field of endeavor: ‘managing and using digital files such as photographs.’” Pet. 17 (citing Ex. 1001, 1:19–20; Ex. 1005, 2, 4; Ex. 1006, 1, 8). “More critically,” Petitioner asserts, “Pogue and Engst describe the exact same digital photograph software developed by Apple—namely iPhoto ’09—and its features include organizing digital image files by criteria, such as ‘Faces’ and ‘Places.’” Pet. 17–18 (citing Ex. 1005, 2, 89, 93, 110; Ex. 1006, 2, 30, 64, 72; Ex. 1003 ¶ 77).

Petitioner points to Dr. Greenspun’s testimony, who states that a person of ordinary skill in the art “would have combined Pogue and Engst for various reasons.” Pet. 18 (citing Ex. 1003 ¶ 77). “For instance,” Petitioner explains, “each of Pogue and Engst are publications that serve as the manual for Apple’s iPhoto ’09 software.” Pet. 18 (citing Ex. 1005, 2–4 (“This book was born to serve as the iPhoto [’09] manual.”); *see also* Ex. 1006, 1 (Explaining that this book is meant to serve as the “manual iPhoto [’09] lacks.”); Ex. 1003 ¶ 77). “That is,” Petitioner explains, “Pogue and Engst describe the same iPhoto ’09 software, thereby providing a [a person of ordinary skill in the art] with an express motivation to combine their teachings as a single, comprehensive documentation describing the various features of iPhoto ’09.” Pet. 18 (citing Ex. 1003 ¶ 77). Petitioner explains that “[t]he publications thus detail various aspects of the iPhoto ’09 software

and provide an explicit motivation to combine.” Pet. 18 (citing *Cimline, Inc. v. Crafcro, Inc.*, 413 F. App’x 240, 245 (Fed. Cir. 2011) (for determining if there is a motivation to combine a “fact finder may rely on the prior art references themselves”). “Aside from the express teaching to combine,” Petitioner asserts, “a motivation to combine may be found based on the ‘background knowledge, creativity, and common sense of [a] person of ordinary skill.’” Pet. 18 (citing *Cimline Inc.*, 413 F. App’x at 240, 245) (alteration in original).

“For these reasons,” Petitioner argues, a person of ordinary skill in the art “would have understood each of these publications as detailing the various features of the same iPhoto ’09 software, and therefore would have been motivated to combine the teachings of Pogue and Engst and consider their teachings together.” Pet. 19 (citing Ex. 1003 ¶ 78). “Indeed,” Petitioner argues, “a [person of ordinary skill in the art] (e.g., an employee of a competitor or a potential customer) would have been motivated to learn as much as possible about the iPhoto ’09 software for competitive intelligence, customer acceptance, usability, and/or other reasons relevant to those persons.” Pet. 19 (citing Ex. 1003 ¶ 78). “With these motivations,” Petitioner asserts, “and particularly because iPhoto ’09 did not include an official manual from Apple, a [person of ordinary skill in the art] would have been motivated to seek out multiple descriptions of the iPhoto ’09 software and would have found it obvious to consider the teachings of Pogue and Engst together.” Pet. 19 (citing Ex. 1003 ¶ 78).

In its Response, Patent Owner argues that “Petitioner never explained why a [person of ordinary skill in the art] would combine particular aspects of Pogue and Engst to arrive at the inventions claimed in the ‘823 patent.” PO Resp. 55 (citing Pet. 17–19). For example, Patent Owner argues that

“Petitioner offers no analysis as to why a [person of ordinary skill in the art] would have been motivated to combine Engst’s alleged ‘first-person view’ and ‘first digital file’ teachings with the ‘Info box’ teachings of Pogue to achieve limitations [1c]–[1d].” PO Resp. 53–54. Patent Owner argues that “Petitioner’s proposed combination of Pogue and Engst is akin to saying that it would have been obvious to combine two prior art patents into a third prior art patent containing both of the original patents’ disclosures.” PO Resp. 54.

In its Reply, Petitioner points out that “Dr. Greenspun previously provided various reasons why a [person of ordinary skill in the art] would have been motivated to combine the teachings of Pogue and Engst, among other things, because a [person of ordinary skill in the art] would have viewed each of Pogue and Engst as describing related but different aspects of the iPhoto ’09 software and thus would have been led to combine their respective teachings.” Pet. Reply 21 (citing Ex. 1003 ¶¶ 77–78). Petitioner also point out that “[a] motivation to combine may be found” in “interrelated teachings of multiple patents,” such as those provided by Pogue and Engst.” Pet. Reply 21 (quoting *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1374 (Fed. Cir. 2019)) (alteration in original).

Petitioner argues that “[s]imilar to the combination at issue in *Realtime Data*, the Petition relies on Engst simply ‘to demonstrate that a person of ordinary skill in the art would have understood that the [iPhoto functionality] disclosed in [Pogue] was, in fact, a type of [functionality]’ that meets the Challenged Claims.” Pet. Reply 21–22 (quoting *Realtime Data*, 912 F.3d at 1372–1373) (second, third, and fourth alterations in original). “In these circumstances,” Petitioner argues, “there is ‘no obligation to find a

motivation to combine.” Pet. Reply 22 (quoting *Realtime Data*, 912 F.3d at 1373).

Petitioner asserts that “the Petition ‘brings in [Engst] to provide a more explicit teaching of [the iPhoto functionality]’ described in Pogue and ‘a person of ordinary skill in the art would have looked to [Engst]’ because Engst discloses features that ‘share striking similarities’ to the features of Pogue.” Pet. Reply 22 (quoting *Realtime Data*, 912 F.3d at 1374) (alterations in original). “Indeed,” Petitioner asserts, “Engst and Pogue offer disclosure of the same features of the same iPhoto ’09 product. With this background, the motivation to combine is readily apparent.” Pet. Reply 22.

In its Sur-reply, Patent Owner argues that “Petitioner’s obviousness theory is flawed because Petitioner did not explain why a [person of ordinary skill in the art] would have combined specific features from Pogue and Engst to arrive at the claimed invention.” PO Sur-reply 20. Patent Owner argues that “the Petition relies on Engst to provide teachings of features not described in Pogue,” and “it is not enough for Petitioner to say that Pogue and Engst are related and can be combined –Petitioner must show that the claimed invention is obvious.” PO Sur-reply 22.

For purposes of obviousness, a reason to combine teachings from the prior art “may be found in explicit or implicit teachings within the references themselves, from the ordinary knowledge of those skilled in the art, or from the nature of the problem to be solved.” *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1355 (Fed. Cir. 1999) (citing *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)). Indeed, “[u]nder the correct [obviousness] analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *KSR*, 550 U.S. at 420.

Patent Owner argues that Petitioner's case is flawed because "Petitioner never explained why a [person of ordinary skill in the art] would combine particular aspects of Pogue and Engst to arrive at the inventions claimed in the '823 patent." *See* PO Resp 55; *see also* PO Sur-reply 20. But "the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418. Moreover, "an analysis of obviousness . . . may include recourse to logic, judgment, and common sense available to the person of ordinary skill in the art that do not necessarily require explication in any reference or expert opinion." *Perfect Web Technologies, Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009).

Here, Petitioner asserts that Pogue and Engst "describe the same iPhoto '09 software, thereby providing a [person of ordinary skill in the art] with an express motivation to combine their teachings as a single, comprehensive documentation describing the various features of iPhoto '09. The publications thus detail various aspects of the iPhoto '09 software and provide an explicit motivation to combine." Pet. 18 (citing Ex. 1003 ¶ 77). Petitioner also asserts that a person of ordinary skill in the art "would have understood each of these publications as detailing the various features of the same iPhoto '09 software, and therefore would have been motivated to combine the teachings of Pogue and Engst and consider their teachings together." Pet. 19 (citing Ex. 1003 ¶ 78).

Petitioner also asserts that a person of ordinary skill in the art "(e.g., an employee of a competitor or a potential customer) would have been motivated to learn as much as possible about the iPhoto '09 software for competitive intelligence, customer acceptance, usability, and/or other

reasons relevant to those persons.” Pet. 19. Petitioner further argues that “because iPhoto ’09 did not include an official manual from Apple, a [person of ordinary skill in the art] would have been motivated to seek out multiple descriptions of the iPhoto ’09 software and would have found it obvious to consider the teachings of Pogue and Engst together.” Pet. 19.

Petitioner further asserts that a person of ordinary skill in the art would have found it obvious to combine Pogue and Engst because “Pogue and Engst describe the exact same digital photograph software developed by Apple—namely iPhoto ’09—and its features include organizing digital image files by criteria, such as ‘Faces’ and ‘Places.’” Pet. 17–18 (citing Ex. 1005, 2, 89, 93, 110; Ex. 1006, 2, 30, 64, 72; Ex. 1003 ¶ 77). Petitioner also points out that both Pogue and Engst indicate that their publication was intended to serve as the manual for Apple’s iPhoto ’09 software. *See* Ex. 1005, 2–4 (“This book was born to serve as the iPhoto [’09] manual.”); *see also* Ex. 1006, 1 (Explaining that this book is meant to serve as the “manual iPhoto [’09] lacks.”); Ex. 1003 ¶ 77. Petitioner’s arguments directed to a rationale for combining Pogue and Engst are supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 77–78.

Although Patent Owner provides a different point of view and argues that Petitioner is incorrect, based on the entirety of this record, Petitioner’s arguments and evidence show that a person of ordinary skill in the art at the time of the claimed invention would have had adequate reasons for combining Pogue and Engst in the manner explained in the Petition and for making the design choices that Petitioner describes. *See, e.g., id.* ¶¶ 99–100 (Dr. Greenspun opining on a person of ordinary skill in the art modifying the display of digital files in the disputed “*first detail view*”).

Based on the complete record, we determine that Petitioner has shown by a preponderance of the evidence that a person of ordinary skill in the art would have had sufficient reasons for combining Pogue and Engst in the manner described by Petitioner.

b) Independent Claims 1 and 29 – Contested Limitations

For independent claims 1 and 29, Patent Owner substantively contests Petitioner’s evidence and arguments with respect to limitations [1d]/[29f] (“*first detail view*”), and [1g]/[29i] (“*locations view*”). See PO Resp. 37–51. We discuss these contested limitation below.

(1) Limitations [1d]/[29f] (“first detail view”)

Limitation [1d] recites:

[1d] *responsive to an input that is indicative of a selection associated with the first digital file, causing a first detail view to be displayed on the interface, the first detail view including (i) the first digital file, (ii) first information associated with the first digital file and (iii) a first map image associated with the first digital file, the first digital file having a first size in the first person view and a second size in the first detail view, wherein the second size is greater than the first size;*

Ex. 1001, 35:15–25. Limitation [29f] is similar. See *id.* at 37:60–38:3.

For this limitation, Petitioner relies on both Pogue and Engst’s description of the selection of an “info box” that Petitioner asserts “can serve as an input that is indicative of a selection associated with the first digital file.” Pet. 28 (citing Ex. 1005, 88; Ex. 1006, 61; Ex. 1003 ¶ 94). According to Petitioner, “[t]he info box icon ‘appears when you wave the mouse over the lower-right corner of *any photo* in the library.’” Pet. 28 (citing Ex. 1005, 88, 103). “Alternatively,” Petitioner explains, “a user can ‘select one

or more photos and choose Get Info . . . from the File menu.” Pet. 28 (citing Ex. 1006, 61).

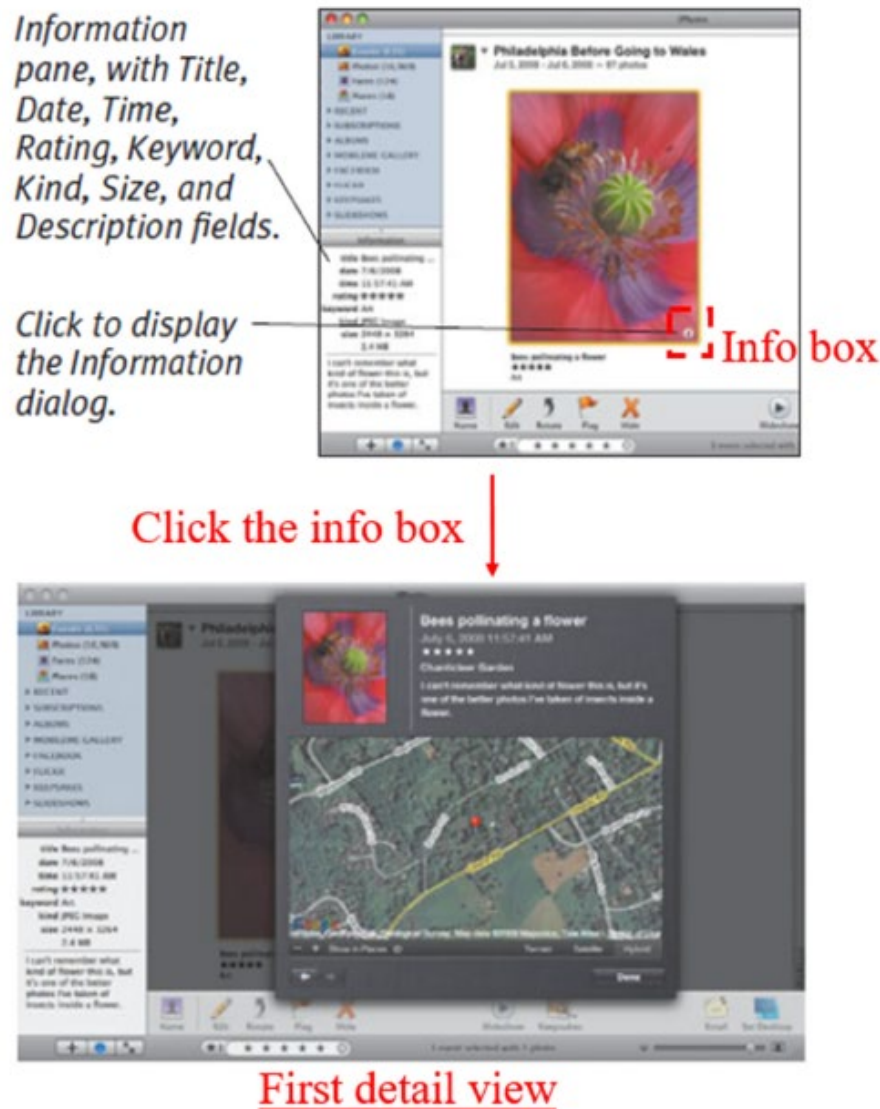
Petitioner provides annotated Figures 4.3 and 3.63 from Engst, shown below.



Petitioner’s annotated Figure 4.3 from Engst, shown above on top, is designated by Petitioner as a “First person view” that depicts “all the photos that have been identified as containing that person,” according to Petitioner. Pet. 26–27. Petitioner’s annotated Figure 3.63 from Engst, shown above on the bottom, depicts an “info box,” that “appears when you wave the mouse over the lower-right corner of *any photo* in the library,” according to Petitioner. Pet. 28 (citing Ex. 1005, 88, 103).

Petitioner explains that “[s]electing the info box in any one of [the] digital files in the first person view causes a first detail view (FIG. 3.62, FIG. 4-14) to be displayed on the interface.” Pet. 29 (citing Ex. 1006, 61; Ex. 1005, 107; Ex. 1003 ¶ 96).

Petitioner provides annotated Figures 3.63 and 3.62 from Engst, shown below.



Petitioner’s annotated Figure 3.62 from Engst, shown above on the bottom, is designated by Petitioner as a “First detail view”, and shows a

satellite map along with information about the selected photo, including the digital file (“*the first digital file*”) associated with the info box selected. Pet. 29–30.

According to Petitioner, “[t]he first detail view includes (i) the first digital file, (ii) first information associated with the first digital file, and (iii) a first map image associated with the first digital file.” Pet. 31. To show this, Petitioner provides Pogue’s Figure 4-14 annotated by Petitioner below.



Petitioner’s annotated Figure 4-14 from Pogue, above, is designated a “Detail view” and shows, according to Petitioner, a “First digital file,” a “First information,” and a “First map image.” Pet. 31.

According to Petitioner, Pogue’s Figure 4-14 includes the first digital file’s name (“Netbun”), date (“January 30, 2009”), rating (five stars), address (“201 Spear St”), and comments (“Harry checks his Twitter feeds”) correspond to the claimed first information. [Ex.] 1005, 107; [Ex.] 1006, 61; [Ex.] 1003 ¶ 97. Additionally, the first map image (“a map showing

the location”) includes a location pin that corresponds to “201 Spear St,” the location associated with the first digital file, e.g., the location where the first digital file was taken. *Id.*

Pet. 31.

Petitioner concedes that the references do not “expressly teach that a second size (size of the first digital file in the first detail view) is greater than a first size (size of the first digital file in the first person view).” Pet. 32.

Petitioner explains, however, that the references describe using “the slider in the bottom-right corner of the iPhoto window to increase or decrease the size and number of headshots in a row.” Pet. 32 (citing Ex. 1005, 93, Fig. 4-3; Ex. 1006, 31, Fig. 3.2; Ex. 1003 ¶ 98).

Petitioner further explains that

a user can scroll the slider to the left to further reduce the first size, thereby making it smaller than the second size (if it’s not already smaller). *Id.* This would allow the user to, for instance, view a greater number of thumbnail images in the first person view without having to scroll down. *Id.* For example, as shown below, the second size is greater than the first size when the slider in the first person view is adjusted to zoom out (“Drag the slider all the way to the left, and you get micro-thumbnails so small that you can fit hundreds of them in the iPhoto window”). [Ex.] 1005, 42, 93; [Ex.] 1006, 61; [Ex.] 1003 ¶ 98.

Pet. 32–33.

To illustrate, Petitioner provides annotated Figures 4.3 (below left) and 3.62 (below right) from Engst.



Petitioner's annotated Figure 4.3 from Engst (above left) is designated as "First person view" and indicates that the slider is "zoomed out". Petitioner's annotated Figure 3.62, also from Engst, (above right) is designated as "First detail view" and indicates that "Second size is greater out." Pet. 33.

Petitioner also argues that a person of ordinary skill in the art would have found it obvious to display the first digital file in the first detail view to be larger than the thumbnails in the first person view, because, *inter alia*, the first detail view displays a single digital file (the first digital file), as opposed to many thumbnails as in the first person view ("all the photos that have been identified as containing [the first] person"). [Ex.] 1006, 64; [Ex.] 1003 ¶ 99.

Pet. 33.

In addition, Petitioner also argues that

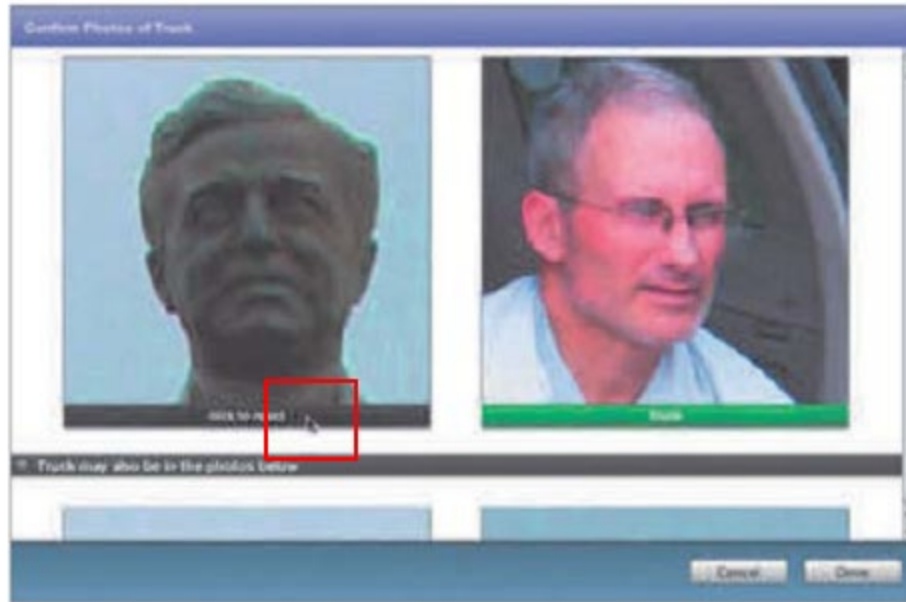
the first detail view provides greater granularity for a user looking for "various bits of information" about the first digital file. [Ex.] 1005, 103; [Ex.] 1003 ¶ 99. Thus, a [person of ordinary skill in the art] would have found it obvious that the second size would be greater than the first size to provide such detailed information. [Ex.] 1003 ¶ 99. In fact, when a large number of images are associated with the first person, a [person of ordinary

skill in the art] would have found it obvious for the thumbnail size of the images associated with the first person to be relatively small to enable presentation of the large number of images in iPhoto's first person view. [Ex.] 1003 ¶ 99. In this case, upon selection of the info box associated with one of the relatively small thumbnails, a [person of ordinary skill in the art] would have found it obvious that the version of the image presented in the pop-up Info Box is presented in a larger size than the relatively small thumbnail selected. [Ex.] 1003 ¶ 99. Indeed, because the pop-up Info Box would occupy a larger area of the interface than the thumbnail images and is directed to providing information about the selected thumbnail image, a [person of ordinary skill in the art] would have found it obvious for the image presented in the Info Box to be larger than the thumbnail in the first person view. [Ex.] 1003 ¶ 99.

Pet. 33–34.

In its Response, Patent Owner argues that “Petitioner’s assumption that the ‘info box’ would appear for ‘any photo in the library,’ including photos within the alleged ‘first person view,’ is faulty because this is simply not true for every photo in every view in the library.” PO Resp. 51 (citing Ex. 2006, 98:23–99:25, 100:3–101:7). Patent Owner argues that “there is at least one mode within Faces (which contains the alleged first person view) in which the ‘info box’ does *not* appear when waving the mouse over the corner of a photo.” PO Resp. 50 (citing Ex. 2006, 98:23–99:25, 100:3–101:7).

To illustrate this point, Patent Owner provides an annotated version of Figure 4.12 from Engst, shown below.



EX1006, FIG. 4.12 (annotated)

Patent Owner's Annotated Figure 4.12, shown above, is a screen shot of two photos shown side-by-side in confirmation mode, which allows a user to click already-recognized photos to fix mistaken recognition. Ex. 1006, 67. A red box (annotation) has been placed by Patent Owner around the mouse cursor's pointer shown in the left photo. Patent Owner asserts that the "info box" does not appear "when waving the mouse over the corner of [the] photo." PO Resp. 50.

Other than this issue regarding the "info box," Patent Owner does not contest Petitioner's evidence with respect to the other portions of limitations [1d] and [29f]. *See* PO Resp. 48–51.

In its Reply, Petitioner points out that Patent Owner only provides attorney argument directed at the "info box," and does not cite to any support from its expert, Dr. Reinman. Pet. Reply 20 (citing PO Resp. 48–51). Petitioner also points out that Patent Owner "does nothing to rebut the Petition's alternative argument that the detailed information view for the

photograph is displayed when the user ‘select[s] one or more photos and choose[s] Get Info [] from the File menu.’” Pet. Reply 20 (citing Ex. 1006, 61) (alterations in original). Petitioner also criticizes Patent Owner’s annotated Figure 4.12, arguing that “the mouse is certainly not on the lower-right corner.” Pet. Reply 19 (citing Ex. 1027 ¶¶ 18–19).

In its Sur-reply, Patent Owner argues with respect to its annotated Figure 4.12 that the mouse “is in the bottom right quadrant.” PO Sur-reply 23 (citing Pet. Reply 19–20; Ex. 2025, 122:14–23). Patent Owner also argues that “there are examples . . . where the ‘info box’ is visible when the mouse is positioned a similar distance from the lower-right corner as the mouse in FIG. 4.12 of Engst, confirming that it is not present in Engst’s FIG. 4.12.” PO Sur-reply 24 (citing Ex. 2025, 123:7–124:9, 125:24–126:2).

We disagree with Patent Owner. Patent Owner’s argument that “there is at least one mode within Faces (which contains the alleged first person view) in which the ‘info box’ does *not* appear when waving the mouse over the corner of a photo” is unavailing. First, this is mere attorney argument, which is entitled to little weight, and is not supported or corroborated by the testimony Dr. Reinman. *See, e.g.*, Ex. 2020 ¶¶ 98–121; *see Icon Health & Fitness, Inc. v. Strava Inc.*, 849 F.3d 1034, 1046 (Fed. Cir. 2017) (“Attorney argument is not evidence or explanation in support of a conclusion.”); *Invitrogen Corp. v. Clontech Lab., Inc.*, 429 F.3d 1052, 1068 (Fed. Cir. 2005) (“Unsubstantiated attorney argument regarding the meaning of technical evidence is no substitute for competent, substantiated expert testimony.”).

Whether or not “there is at least one mode within Faces . . . in which the ‘info box’ does *not* appear when waving the mouse over the corner of a photo,” as Patent Owner argues is beside the point, because “[e]ven if a

reference discloses an inoperative device, it is prior art for all that it teaches.” *Beckman Instruments v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed. Cir. 1989).

Here, Pogue expressly teaches that the info box icon “appears when you wave the mouse over the lower-right corner of any photo in the library.” Ex. 1005, 103. Pogue also confirms and teaches this feature visually in Figure 4-8, shown below.



Pogue’s Figure 4-8, shown above, is a head and shoulders photograph of a person labelled “Lou,” showing a mouse cursor arrow over the lower right-hand corner of the photo with the info-box icon visible. *Id.* at 98.

With respect to Figure 4-8, Pogue explains that one can “[w]ave the mouse over the lower-right corner of any face and click the [info-box] icon to spin the picture around so you can edit its info box.” *Id.* Dr. Greenspun’s testimony corroborates this understanding. *See* Ex. 1027 ¶¶ 18–20.

Regardless of whether the info box actually shows up in all of the photos in the library, Pogue expressly teaches that the info box “appears when you wave the mouse over the lower-right corner.” Ex. 1005, 103.

Moreover, Patent Owner’s argument does not address the alternative teaching of the recited limitation in the prior art identified by Petitioner,

where a user can select “Get Info” directly from the file menu. *See* Ex. 1006, 61. Dr. Greenspun’s testimony corroborates this feature. *See* Ex. 1003 ¶ 94 (quoting Ex. 1006, 61) (“Alternatively, a user can ‘select one or more photos and choose Get Info [] from the File menu.’” (alteration in original)); Ex. 1027 ¶ 18.

Based on the arguments and evidence of record, we determine that Petitioner has demonstrated that the asserted prior art meets limitations [1d]/[29f] (“*first detail view*”) of the ’823 Patent.

(2) *Limitations [1g]/[29i] (“locations view”)*

Limitation [1g] recites: “*responsive to a second input within the search-filter view, causing the interface to display a locations view including a first name associated with a first location, and a second name associated with a second location.*” Ex. 1001, 35:39–43. Limitation [29i] is similar. *See id.* at 38:19–23.

Petitioner explains that

iPhoto ’09 provides, within the search-filter view, a locations view that displays digital image files associated with a selected location. [Ex.] 1005, 110; [Ex.] 1003, ¶76. The locations view can be displayed with an interactive map with red pins marking “every place on the map where you’ve got geotagged photos,” as shown in FIG. 4-15.

Pet. 16 (citing Ex. 1005, 108; Ex. 1003 ¶ 76).

Petitioner provides two annotated images to illustrate the identified “*locations view*” in the prior art. The first image is an annotated Figure 4-16 from Pogue, shown below.



SAMSUNG-1005, FIG. 4-16

Petitioner's annotated Figure 4-16, shown above, is a screen-shot of an i-Photo Places Browser view window annotated by Petitioner as "Locations view" in red, which displays lists of geographic information across the top, a series of photo images in the center, an icon tool bar across the bottom, and a source pane along the left identifying the "Second input" in red. In this screen shot the "Browser button" is identified in the lower icon tool bar. Pet. 16.

Petitioner's second image illustrating a "*locations view (map)*" is annotated Figure 4-15 from Pogue, shown below.



SAMSUNG-1005, FIG. 4-15

Petitioner’s annotated Figure 4-15, shown above, is a screen-shot of an iPhoto Places World view window annotated by Petitioner as “Locations view (map)” in red, which displays a global map in the center with several colored pins placed at various geographic locations, an icon tool bar across the bottom, and a source pane along the left. In this screen shot the “Globe icon” is identified in the lower icon tool bar. Pet. 17.

Petitioner explains that “iPhoto describes a second input within the search-filter view.” Pet. 40. “For example,” Petitioner explains, “selection of the ‘Places’ tab in the source pane is the second input that causes the interface to display a locations view.” Pet. 40 (citing Ex. 1005, 110; Ex. 1003 ¶ 105). Petitioner asserts that “[t]he locations view includes a first name associated with a first location and a second name associated with a second location.” Pet. 41.

Petitioner explains that

iPhoto describes a panel within the locations view: “the column farthest to the left has the big overall location: the individual countries where you have tagged photos. As you move to the right, countries get divided into states or provinces, which get narrowed down to cities or towns.” [Ex.] 1005, 109. As shown in FIG. 4-16, for example, “Mississippi” is the first name associated with the first location (which can be narrowed down further to “Lighthouse”), and “Pennsylvania” is the second name associated with the second location. [Ex.] 1005, 110; [Ex.] 1003 ¶ 106.

Pet. 41.

In its Response, Patent Owner argues that “Pogue does *not* disclose causing the display of the Browser View (alleged locations view) responsive to selecting the Places tab in the source pane to the left (alleged second input).” PO Resp. 39. “Instead,” Patent Owner argues, “Pogue discloses causing the display of the Browser View (alleged locations view) responsive to selecting the Browser button at the bottom of the interface.” PO Resp. 39–40 (citing Ex. 2020 ¶ 102).

Patent Owner also argues that “selecting the Browser button is *not* a “second input *within the search-filter view*” as required by claims 1 and 29.” PO Resp. 40 (citing Ex. 2020 ¶ 103). “Rather,” Patent Owner argues, “selecting the Browser button is an input within the World View, which Petitioner and Dr. Greenspun allege corresponds to the ‘map view’ in claims 25 and 32.” PO Resp. 40–41 (Ex. 2020 ¶¶ 99–100, 103; Pet. 76–77; Ex. 1003 ¶ 150; Ex. 2006, 137:19–22). Patent Owner points out that “[c]licking the Places tab is ‘within the search-filter view,’ but the Browser View is not displayed ‘responsive to’ that input.” PO Resp. 42 (citing Ex. 2020 ¶ 103).

In its Reply, Petitioner argues that even if
going from the search-filter view . . . to the locations view
requires two separate clicks as MemoryWeb alleges, the display

of the locations view is nonetheless “responsive to” the selection of the “Places” tab in the search-filter view, particularly because . . . the ’823 patent does not preclude intervening user actions in a “responsive to” relationship.

Pet. Reply 15–16 (citing Ex. 1027 ¶¶ 6–10, 15).

Petitioner also argues that Engst “discloses that selecting ‘Places’ can directly lead to either the map view or the locations view, depending on which of the two corresponding buttons (*i.e.*, the World View button or the Browser View button) was previously selected by the user.” Pet. Reply 16 (citing Ex. 1006, 72; Ex. 1027 ¶ 16). Petitioner asserts that “Dr. Reinman acknowledged during deposition that transitioning directly from the search-filter view to the locations view (as opposed to the map view) would be ‘plausible’ in view of such disclosure.” Pet. Reply 17 (citing Ex. 1029, 58:2–17).

In its Sur-reply, Patent Owner argues that a person of ordinary skill in the art “would consider displaying the alleged locations view (the third event) responsive to selecting the Browser button (the second event) – not selecting the Places tab (the first event),” pointing to Dr. Greenspun’s testimony. PO Sur-reply 17–18 (citing Ex. 2025, 99:21–100:24). Patent Owner also argues that “Petitioner never relied on Engst for this claim limitation and cannot do so now.” PO Sur-reply 19. Nonetheless, Patent Owner argues that “Engst instructs users to select the ‘Places’ tab to see the World View and to select the Browser button to see the alleged locations view . . . confirm[ing] that selecting the Browser button is necessary to display the alleged locations view.” PO Sur-reply 20 (citing Ex. 1006, 76–77; Ex. 2025, 118:16–119:21).

Here, Patent Owner concedes that the recited “*second input*” identified by Petitioner in the prior art is “within the search-filter view.” *See* Pet. 40

(“selection of the “Places” tab in the source pane is the second input that causes the interface to display a locations view”); PO Resp. 42 (“[c]licking the Places tab is ‘within the search-filter view’”). The dispute between the parties with respect to this limitation is whether the prior art teaches that the “*locations view*” identified by Petitioner is displayed “*responsive to*” the second input.

The parties do not agree on the meaning of the term “responsive to,” as discussed in Section II.C.1, above. However, it is not necessary for us to construe this term in order to resolve whether the prior art meets this limitation because even if we adopt Patent Owner’s more restrictive view of this term, one requiring a direct cause-effect relationship between the “*second input*” and the display of the “*locations view*,” the prior art still meets the limitation.

In response to Patent Owner’s argument that “Pogue does ***not*** disclose causing the display of the Browser View (alleged locations view) responsive to selecting the Places tab in the source pane to the left (alleged second input)” (PO Resp. 39), Dr. Greenspun testifies that “there is nothing in either Pogue or Engst to suggest that iPhoto always defaults to first showing the ‘map view’ after clicking the Places tab, such that the ‘Browser button’ must necessarily be clicked again,” as Patent Owner contends. Ex. 1027 ¶ 16 (citing Ex. 2006, 128:12–131:6). Dr. Greenspun testifies that “Pogue mentions that the World View button (*i.e.*, ‘globe icon’) should be clicked to get to the map view, further suggesting that there will be instance[s] in which the system does not default to showing the map view (meaning that the locations view was shown first).” *Id.* ¶ 17 (citing Ex. 1005, Fig. 4-15).

Dr. Greenspun also points out that Engst supports this understanding that “selecting ‘Places’ can directly lead to ***either*** the map view or the locations view, depending on which of the two corresponding buttons (*i.e.*,

the World View button or the Browser View button) was previously selected by the user.” *Id.* ¶¶ 16–17 (citing Ex. 1006, 72, 76). Dr. Reinman agrees that this behavior “is not foreclosed by this description in Engst” and “would be a plausible implementation of iPhoto.” Ex. 2020 ¶ 112.

We credit Dr. Greenspun testimony, which provides a reasoned and supported explanation of the teachings of Pogue and Engst and how they would be understood by a person of ordinary skill in the art. The weight of the evidence shows that Patent Owner’s argument that the prior art, in particular Pogue, “does *not* disclose causing the display of the Browser View (alleged locations view) responsive to selecting the Places tab in the source pane to the left (alleged second input)” (PO Resp. 39), is incorrect. Based on the evidence of record, a person of ordinary skill in the art would understand that iPhoto, as described by Pogue, and corroborated by Engst, does not default to showing the World view as Patent Owner contends, but that selecting the “Places” tab on the source pane can directly lead to either the “*Locations view*” (Browser view window shown in Pogue 4-16) or the “*Locations view (map)*” (World view window shown in Pogue 4-15) identified by Petitioner. *See* Pet. 16–17.

Based on the arguments and evidence of record, we determine that Petitioner has demonstrated that the asserted prior art meets limitations [1g]/[29i] (“*locations view*”) of the ’823 Patent.

c) Independent Claims 1 and 29 - Uncontested Limitations⁴

Patent Owner does not substantively contest Petitioner’s evidence and arguments directed to the following portions of independent claims 1 and 29.

⁴ Although we may use the general term “limitation” to identify the portions of independent claims 1 and 29, including the preambles, we make no determination as to whether the preambles of these claims are limiting.

See PO Resp. 37–57. We consider Petitioner’s evidence and arguments with respect to these limitations below.

(1) [1pre]/[29pre] (“preamble”)

The preamble of independent claim 1 recites: “[a] *method comprising.*” Ex. 1001, 35:2. The preamble of independent claim 29 recites: “[a] *digital file storage system comprising.*” *Id.* at 37:42.

For the preamble of claim 1, Petitioner directs us to Engst, which, according to Petitioner “describes a method of ‘organizing and keeping track of all these photos’ including ‘software to help you import, organize, edit, and share your photos.’” Pet. 19 (citing Ex. 1006, 1; Ex. 1003 ¶ 85).

For the preamble of claim 29, Petitioner directs us to Pogue, which, according to Petitioner, “describes a digital file storage system, e.g., ‘a Mac that has a G4, G5, or Intel chip, Mac OS X 10.5.6 or later, and 1 gigabyte of memory or more.’” Pet. 79 (citing Ex. 1005, 10; Ex. 1003 ¶ 154). “The Mac also includes a hard drive as part of iPhoto’s digital file storage system.” Pet. 79.

Petitioner’s arguments and evidence directed to these preambles is supported by the testimony of Dr. Greenspun. See Ex. 1003 ¶¶ 85, 154.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about the preambles of claim 1 and 29. See generally PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in the preambles of independent claims 1 and 29.

(2) [29a] (“*storage medium*”)

Limitation [29a] recites “*a non-transitory computer-readable storage medium storing a plurality of digital files and instructions.*” Ex. 1001, 37:43–44.

For this limitation, Petitioner first directs us to Pogue, which according to Petitioner, explains how one can “[u]se this command to add photos to your iPhoto Library from your hard disk, a CD, or some other disk.” Pet. 80 (citing Ex. 1005, 338) (alteration in original). Petitioner then argues that “[a] Mac’s ‘hard disk’ that ‘stores images’ or ‘hard drive’ where ‘the photos are safe’ is a non-transitory storage medium that stores a plurality of digital files.” Pet. 80 (citing Ex. 1005, 16; Ex. 1006, 11; Ex. 1003 ¶ 155). Petitioner argues that “iPhoto describes that iPhoto runs on the Mac, thus the Mac’s hard drive includes the instructions to run iPhoto.” Pet. 80. “Moreover,” Petitioner argues, “the Mac’s memory as discussed at [29pre] includes instructions that run the iPhoto software, and the memory is a part of the non-transitory computer-readable storage medium.” Pet. 80 (citing Ex. 1003 ¶ 155).

Petitioner’s arguments and evidence directed to this limitation is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶ 155.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitation [29a] (“*storage medium*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [29a].

(3) [29b] (“processors”)

Limitation [29b] recites “*one or more processors configured to execute the instructions to:*” Ex. 1001, 37:45–46.

For this limitation, Petitioner cites to both Pogue and Engst and points out that “iPhoto describes one or more processors, e.g., ‘a G4, G5, or Intel chip,’ configured to execute the instructions, e.g., ‘to run iPhoto.’” Pet. 80 (citing Ex. 1005, 10; Ex. 1006, 2; Ex. 1003 ¶ 156).

Petitioner’s arguments and evidence directed to this limitation is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶ 156.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitation [29b] (“processors”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [29b].

(4) [1a]/[29c] (“search-filter view”)

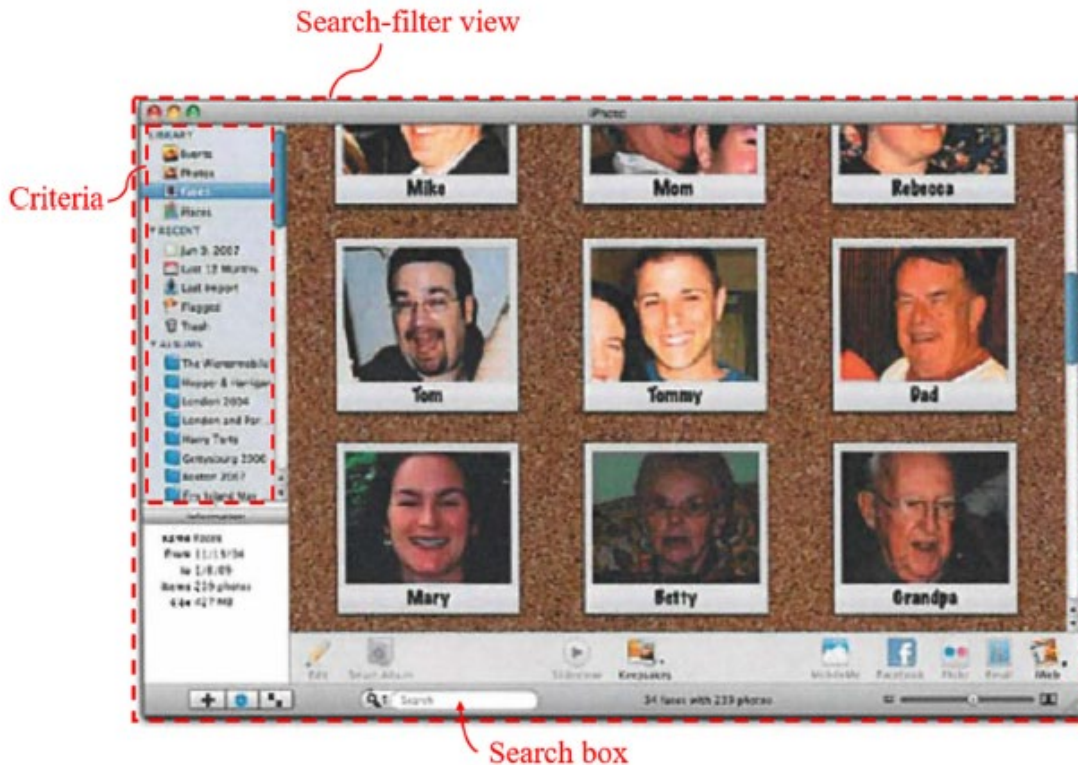
Limitation [1a] recites “*causing an interface to display a search-filter view, the search-filter view permitting a user to filter a plurality of digital files based on one or more criteria.*” Ex. 1001, 35:3–5. Limitation [29c] is similar. *See id.* at 37:47–49.

For this limitation, Petitioner explains that

iPhoto describes causing an interface to display a search-filter view. For example, as shown below, iPhoto’s interface permits a user to filter a plurality of digital files based on multiple criteria, e.g., ‘Events,’ ‘Faces,’ ‘Places,’ and ‘Albums.’” [Ex.] 1005, 46, 59, 93, 97, 110; [Ex.] 1006, 30-31, 64; [Ex.] 1003 ¶ 86. Among the criteria, the ‘Faces’ tab in the source pane ‘analyzes your photos and groups your collections based on the people who are in them.’ [Ex.] 1005, 2; [Ex.] 1003 ¶ 86.

Pet. 20.

Petitioner provides an annotated version of Pogue's Figure 4-3, below.



Petitioner's annotated version of Pogue's Figure 4-3, above, is designated by Petitioner as "search-filter view", and depicts a computer software display window showing several photographs of people's faces with a vertical listing of "criteria" along the left-hand side of the window. Pet. 20 (citing Ex. 1005, Fig. 4-3).

Petitioner also explains that "[i]n addition to filtering by 'Faces,' iPhoto's search-filter view permits a user to filter based on location, event, and album." Pet. 21 (citing Ex. 1005, 46, 59, 110; Ex. 1003 ¶ 87).

Petitioner explains that "[i]n addition to filtering, iPhoto describes a 'Search box below the window,' where a user can search 'the Event, album, folder, or whatever.'" Pet. 23 (citing Ex. 1006, 94–95; Ex. 1003 ¶ 88).

Petitioner argues that “[b]y providing filter functionality and search functionality as discussed above, iPhoto’s interface is caused to provide a search-filter view.” Pet. 24 (citing Ex. 1003 ¶ 89). “In addition,” Petitioner points out that “iPhoto’s search-filter view permits a user to filter a plurality of digital files based on one or more criteria (e.g., Events, Faces, Places, and Albums).” Pet. 24.

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 86–89, 157.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1a]/[29c] (“*search-filter view*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1a]/[29c].

(5) [1b]/[29d] (“*people view*”)

Limitation [1b] recites “*responsive to a first input within the search-filter view, causing the interface to display a people view including a first image associated with a first person and a second image associated with a second person.*” Ex. 1001, 35:6–9. Limitation [29d] is similar. *See id.* at 37:50–54.

For this limitation, Petitioner explains that “iPhoto describes a first input within the search-filter view, for example an input selecting the ‘Faces’ tab.” Pet. 24 (citing Ex. 1005, 2, 89; Ex. 1006, 30). “Responsive to selection of the ‘Faces’ tab in the source pane,” Petitioner explains, “iPhoto causes the interface to display a people view (referred to as the ‘Faces corkboard’).” Pet. 25 (citing Ex. 1006, 64; Ex. 1003 ¶ 90). “For example,” Petitioner points out, “iPhoto allows a user to ‘Click Faces in the source

pane to display the Faces corkboard, which shows a snapshot for each person you’ve named (Figure 4.2).” Pet. 25.

Petitioner explains that

iPhoto’s people view includes a first image associated with a first person and a second image associated with a second person. For example, a thumbnail of Tonya can be the first image associated with a first person (Tonya), and a thumbnail of Truck can be the second image associated with a second person (Truck).

Pet. 25 (citing Ex. 1003 ¶ 91).

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 90–91, 158.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1b]/[29d] (“*people view*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1b]/[29d].

(6) [1c]/[29e] (“*first person view*”)

Limitation [1c] recites “*responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including a first digital file associated with the first person.*” Ex. 1001, 35:10–14. Limitation [29e] is similar. *See id.* at 38:55–59.

For this limitation, Petitioner explains that

iPhoto describes an input that is indicative of a selection associated with the first person. For example, in iPhoto, a user can “double-click a person’s snapshot to display all the photos that have been identified as containing that person.” [Ex.] 1006, 64; [Ex.] 1003 ¶ 92. In this example, the “double-click” of the person’s snapshot is the input that is indicative of a selection

associated with the first person and, responsive to this input, iPhoto causes a first person view to be displayed on the interface, which includes “all the photos that have been identified as containing that person.” *Id.*

The first person view also includes a first digital file associated with the first person. For example, selecting Tonya’s snapshot in the people view causes a first person view of all the photos associated with Tonya—*e.g.*, all photos in which Tonya appears—on the interface. [Ex.] 1006, 64; [Ex.] 1003 ¶ 93. Of course, the same concept holds true for all other people shown in the people view. *Id.* In this way, as illustrated below in FIGS. 4.2 and 4.3 below, iPhoto receives a selection of a first person from the people view and then displays a first person view that includes digital files associated with the first person. *Id.*

Pet. 26.

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 92–93, 159.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1c]/[29e] (“*first person view*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1c]/[29e].

(7) [1e]/[29g] (“*second person view*”)

Limitation [1e] recites “*responsive to an input that is indicative of a selection associated with the second person, causing a second person view to be displayed on the interface, the second person view including a second digital file associated with the second person.*” Ex. 1001, 35:26–30.

Limitation [29g] is similar. *See id.* at 38:4–9.

For this limitation, Petitioner refers to its evidence and arguments for limitations [1b] and [1c]. Pet. 36. Petitioner also explains that

iPhoto describes an input that is indicative of a selection associated with the second person, e.g., double-clicking a second person's snapshot in the people view. [Ex.] 1006, 64; [Ex.] 1003, ¶ 102. Any one of the person's snapshots in the people view is a second image associated with a second person that is different than the first person referenced in [1c]. *Id.* Furthermore, a [person of ordinary skill in the art] would have found it obvious that operations applied to a first image associated with a first person (as discussed at [1c]) are equally applicable to a second image associated with a second person, including causing a second person view to be displayed on the interface. *Id.*

Pet. 37–38.

Petitioner's arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 101–103, 161.

Patent Owner does not present evidence or arguments specifically directed to Petitioner's assertions about limitations [1e]/[29g] (“*second person view*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1e]/[29g].

(8) [1f]/[29h] (“*second detail view*”)

Limitation [1f] recites:

responsive to an input that is indicative of a selection associated with the second digital file, causing a second detail view to be displayed on the interface, the second detail view including (i) the second digital file, (ii) second information associated with the second digital file and (iii) a second map image associated with the second digital file.

Ex. 1001, 35:31–38. Limitation [29h] is similar. *See id.* at 38:10–17.

For this limitation, Petitioner refers to its evidence and arguments from limitation [1d]. Pet. 40. Petitioner also asserts that “iPhoto describes

an input that is indicative of a selection associated with the second digital file; for example, any one of the digital files in the second person view is the second digital file.” Pet. 40 (citing Ex. 1006, 64; Ex. 1003 ¶ 104).

“Furthermore,” Petitioner argues, a person of ordinary skill in the art “would have found it obvious that operations applied to a first digital file associated with a first person (as discussed at [1d]) are equally applicable to a second image associated with a second person, including causing a second detail view to be displayed on the interface.” Pet. 40 (citing Ex. 1005, 88, 103, 122). Petitioner asserts that “[a]s discussed at [1d], the second detail view would include (i) the second digital file, (ii) second information associated with the second digital file, and (iii) a second map image associated with the second digital file.” Pet. 40 (citing Ex. 1003 ¶ 104).

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 104, 162.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1f]/[29h] (“*second detail view*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1f]/[29h].

(9) [1h]/[29j] (“*first set digital files*”)

Limitation [1h] recites “*responsive to an input that is indicative of a selection associated with the first location, causing a first set of digital files to be displayed on the interface, each digital file in the first set of digital files being associated with the first location.*” Ex. 1001, 35:39–43.

Limitation [29j] is similar. *See id.* at 38:19–23.

For this limitation, Petitioner explains that

iPhoto describes an input that is indicative of a selection associated with the first location. For example, ‘to see all the photos you’ve taken in the United States, for example, click United States in the left column.’ [Ex.] 1005, 109. A user may click ‘the state’s name’ to ‘see all the photos taken in a particular state,’ which represents a selection associated with the first location (e.g., ‘Mississippi’ as discussed at [1g]).

Pet. 42 (citing Ex. 1005, 109; Ex. 1003 ¶ 107).

Petitioner also explains that

iPhoto describes causing a first set of digital files to be displayed on the interface: ‘The photos from each set appear in the iPhoto window, so you can see them as you click through the columns.’ [Ex.] 1005, 110. Each digital file in the first set of digital files is associated with the first location, e.g., ‘all the photos taken in a particular state.’

Pet. 42 (citing Ex. 1005, 109; Ex. 1003 ¶ 108).

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 107–108, 163.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1h]/[29j] (“*first set digital files*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1h]/[29j].

(10) [1i]/[29k] (“*second set digital files*”)

Limitation [1i] recites “*responsive to an input that is indicative of a selection associated with the second location, causing a second set of digital files to be displayed on the interface, each digital file in the second set of*

digital files being associated with the second location.” Ex. 1001, 35:39–43. Limitation [29k] is similar. *See id.* at 38:19–23.

For this limitation, Petitioner refers to its arguments and evidence for limitation [1h]. Pet. 43. Petitioner also explains that

iPhoto describes multiple locations because multiple locations are displayed in the columns in the locations view; any one of the locations (e.g., as annotated below) displayed in the column is a second location, as long as it is different from a first location (e.g., ‘Mississippi’). [Ex.] 1005, 109–110; [Ex.] 1003 ¶¶ 109. A [person of ordinary skill in the art] would have found it obvious that, similar to how the first set of digital files is displayed on the interface, a second set of digital files associated with the second location is displayed on the interface. *Id.*

Pet. 43.

Petitioner’s arguments and evidence directed to these limitations is supported by the testimony of Dr. Greenspun. *See* Ex. 1003 ¶¶ 109, 164.

Patent Owner does not present evidence or arguments specifically directed to Petitioner’s assertions about limitations [1i]/[29k] (“*second set digital files*”). *See generally* PO Resp.

Based on the complete record, we are persuaded that Petitioner has demonstrated that the asserted prior art meets the subject matter recited in limitation [1i]/[29k].

d) Conclusion on Independent Claims 1 and 29

We have considered the evidence and arguments with respect to Petitioner’s assertions that Pogue and Engst meet the limitations of independent claims 1 and 29, as well as the testimonial evidence of Drs. Greenspun and Reinman. Based on the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Pogue and Engst satisfy the subject matter recited by

independent claims 1 and 29 and that a person of ordinary skill in the art would have had sufficient reason to combine the teachings of the asserted art in the manner described in the Petition.

e) Dependent Claims 2–25, 27–28, and 30–34

Petitioner challenges dependent claims 2–25, 27–28, and 30–34 as obvious over Pogue and Engst. *See* Pet. 44–79, 82–83. Patent Owner only substantively disputes Petitioner’s challenge to dependent claims 25 and 32, which we address below.

(1) Dependent Claims 25 and 32

Dependent claims 25 and 32 are similar, except that claim 25 is written as a method claim and claim 32 is written as a system claim. Claim 25 is exemplary. The claims read as follows:

25. The method of claim 1, subsequent to causing the interface to display the search filter view, causing the interface to display a map view including (i) an interactive geographic map, (ii) a first indication on the interactive map that is associated with one or more digital files, and (iii) a second indication on the interactive map that is associated with one or more digital files.

Ex. 1001, 37:22–28.

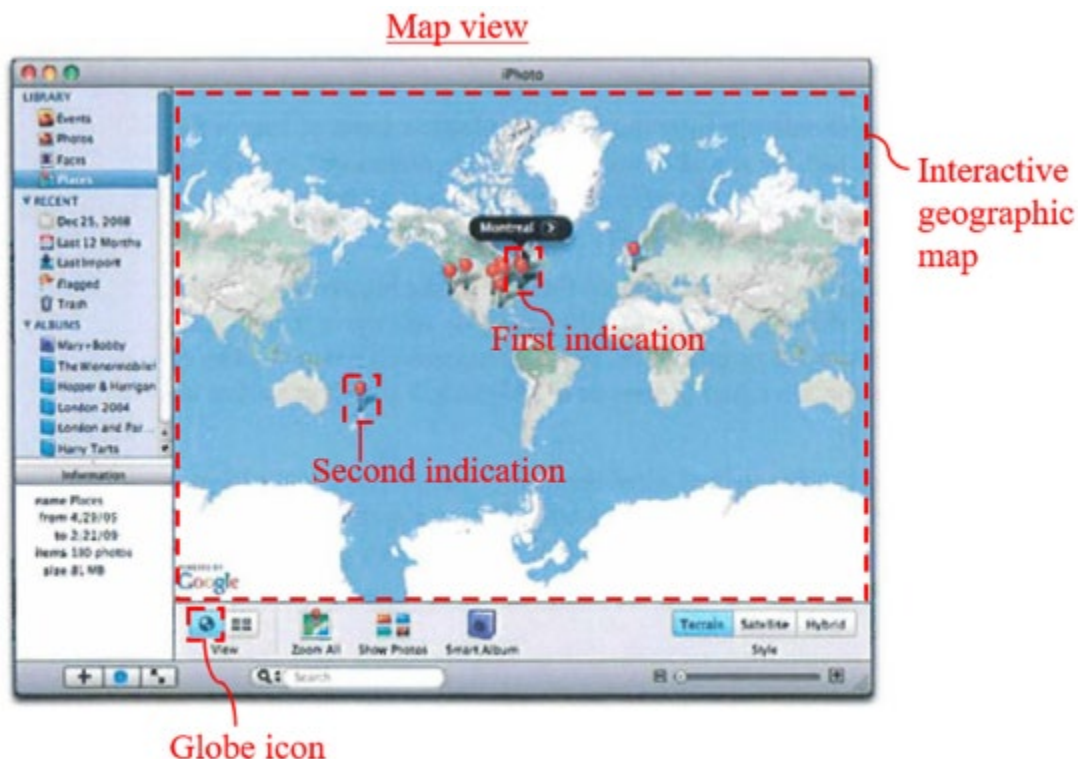
32. The digital file storage system of claim 29, wherein, subsequent to the interface displaying the search filter view, the one or more processors are configured to execute the instructions to further cause the interface to display a map view including (i) an interactive geographic map, (ii) a first indication on the interactive map that is associated with one or more digital files, and (iii) a second indication on the interactive map that is associated with one or more digital files.

Id. at 38:49–57.

With respect to claim 25, Petitioner asserts that “iPhoto describes displaying a map view, upon selection of “Places” in the source pane and “click[ing] the globe icon to see your photo locations in World view.” Pet.

76 (citing Ex. 1005, 108; Ex. 1003 ¶ 150) (alteration in original). “The map view,” Petitioner explains, “includes an interactive geographic map (below), and first and second indications (‘red pins mark every place on the map where you’ve got geotagged photos’).” Pet. 76. Petitioner asserts that “iPhoto’s map is interactive, at least because the map can be ‘zoom[ed] in or out by dragging the slider in the bottom-right corner of the iPhoto window.” Pet. 76 (alteration in original). Petitioner asserts that “[t]he first and the second indications are associated with one or more digital files: ‘little red pins representing all the pictures you’ve geotagged. To see the photos attached to a pin, point to that pin and click the > next to the place name.’” Pet. 76.

Petitioner’s annotated version of Pogue’s Figure 4-15 is shown below.



SAMSUNG-1005, FIG. 4-15

Figure 4-15, above, is a screen shot of an iPhoto Places World view window annotated by Petitioner as “Map view” in red across the top, which displays an interactive geographic map in the center with several colored pins placed at various geographic locations, two of which are identified as “First indication” and “Second indication” in red. In an icon tool bar running across the bottom, the “Globe icon” is identified in red. A source pane runs vertically along the left. Pet. 77.

In its Response, Patent Owner argues that

the “locations view” and “map view” are separate and distinct views. *Supra*, §V.B. Accordingly, even if Dr. Greenspun’s new opinion that the Pogue/Engst World View corresponds to the claimed “locations view” is accepted (which it should not be), then he has not identified separate and distinct “locations” and “map” views in Pogue/Engst. EX2020, ¶¶124-125; EX1003, ¶¶106, 150. In other words, the same World View from Pogue/Engst cannot be both the “locations view” and the “map view” in the claims.

PO Resp. 56–57 (citing Ex. 2020 ¶¶ 124–125; PO Resp. § VI.B.1.b.).

We disagree with Patent Owner. There is no prohibition against a single embodiment in the prior art satisfying more than one claim limitation. *See, e.g., Google LLC v. Personal Audio, LLC*, 2017-1162; -1166; -2110; at 12 (Fed. Cir. Aug. 1, 2018) (non-precedential). In *Google*, the Federal Circuit explained that

We find no error in the Board’s legal analysis. The Board agreed with Google’s argument that the “skip” and “go” commands can be rendered obvious by the same portions of prior art. The Board’s holding is consistent with the principle that in infringement or obviousness analysis, a single element, feature, or mechanism can ordinarily satisfy multiple claim limitations, including by performing multiple claimed functions. *See Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1231–32 (Fed. Cir. 2011); *Linear Tech. Corp. v. ITC*, 566 F.3d 1049, 1055 (Fed. Cir.

2009); *Rodime PLC v. Seagate Tech., Inc.*, 174 F.3d 1294, 1305 (Fed. Cir. 1999) (“[A] particular means may perform more than one function.”); *In re Kelley*, 305 F. 2d 909, 915-16 (CCPA 1962) (same).

Id. (alteration in original).

Petitioner identifies two versions of the claimed “*locations view*” in Pogue, one version showing the iPhoto Places Browser view window (“*locations view*” Fig. 4-16) and a second version showing the iPhoto Places World view window (“*Locations view (map)*” Fig. 4-15). *See* Pet. 16–17 (showing screen shots of Ex. 1005, Figs. 4-16, 4-15). With respect to these versions, Petitioner explains that

as shown in FIG. 4-16 of Pogue, iPhoto ’09 provides, within the search-filter view, *a locations view that displays digital image files* associated with a selected location. SAMSUNG-1005, 110; SAMSUNG-1003, ¶76. *The locations view can be displayed with an interactive map* with red pins marking “every place on the map where you’ve got geotagged photos,” as shown in FIG. 4-15.

Pet. 16 (citing Ex. 1005, 108; Ex. 1003 ¶ 76) (emphasis added).

Petitioner’s prior art evidence is not inconsistent with the ’823 Patent. As we explain in Section II.C.2, above, the ’823 Patent does not expressly identify a “*map view*” as that term is recited in claims 25 and 32, but it does identify several “*location views*” that display maps, in particular, Figures 5 and 41. *See* Ex. 1001, Figs 5, 41, 3:3–4, 4:3–4). Patent Owner appears to implicitly recognize the dual nature of these figures in the ’823 Patent as it identifies both of these “*location view*” figures as “*map views.*” *See* PO Resp. 11–12. Our review of the evidence in this case, and in particular the ’823 Patent as a whole, leads us to conclude that a person of ordinary skill in the art would understand that the “*map view*” recited in dependent claims 25 and 32 is a “Location Application View” where selected digital files are

displayed on a geographical map indicating where the digital files were taken or originated.

Based on the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the asserted prior art satisfies the subject matter recited by dependent claims 5 and 32, and that a person of ordinary skill in the art would have had sufficient reason to combine the teachings of the asserted art in the manner described in the Petition.

(2) Dependent Claims 2–24, 27–28, 30–31, 33–34

Petitioner challenges dependent claims 2–24, 27–28, 30–31, and 33–34 as obvious over Pogue and Engst. *See* Pet. 44–83. Dr. Greenspun provides testimony supporting Petitioner’s challenges of these claims. *See* Ex. 1003 ¶¶ 110–172.

Patent Owner does not substantively address Petitioner’s challenges to these dependent claims other than to argue that “[b]ecause Petitioner has failed to carry its burden under Ground 1A as to claims 1 and 29, Petitioner has also failed to do so in relation to dependent claims 2–25, 27–28, and 30–34 as they incorporate the same limitations.” PO Resp. 56. Dr. Reinman also does not specifically address Petitioner’s evidence or arguments directed to these dependent claims. *See* Ex. 2020 ¶¶ 97–125.

We have considered Petitioner’s evidence and arguments with respect to these uncontested dependent claims, as well as the testimonial evidence of Dr. Greenspun, which stands unrebutted. Based on the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the asserted prior art satisfies the subject matter recited by dependent claims 2–24, 27–28, 30–31, and 33–34, and that a person of

ordinary skill in the art would have had sufficient reason to combine the teachings of the asserted art in the manner described in the Petition.

4. *Obviousness Based on Pogue, Engst, and Belitz (Ground 1B)*

Petitioner contends that dependent claim 26 is unpatentable as obvious under 35 U.S.C. § 103 over Pogue, Engst, and Belitz. Pet. 83–89.

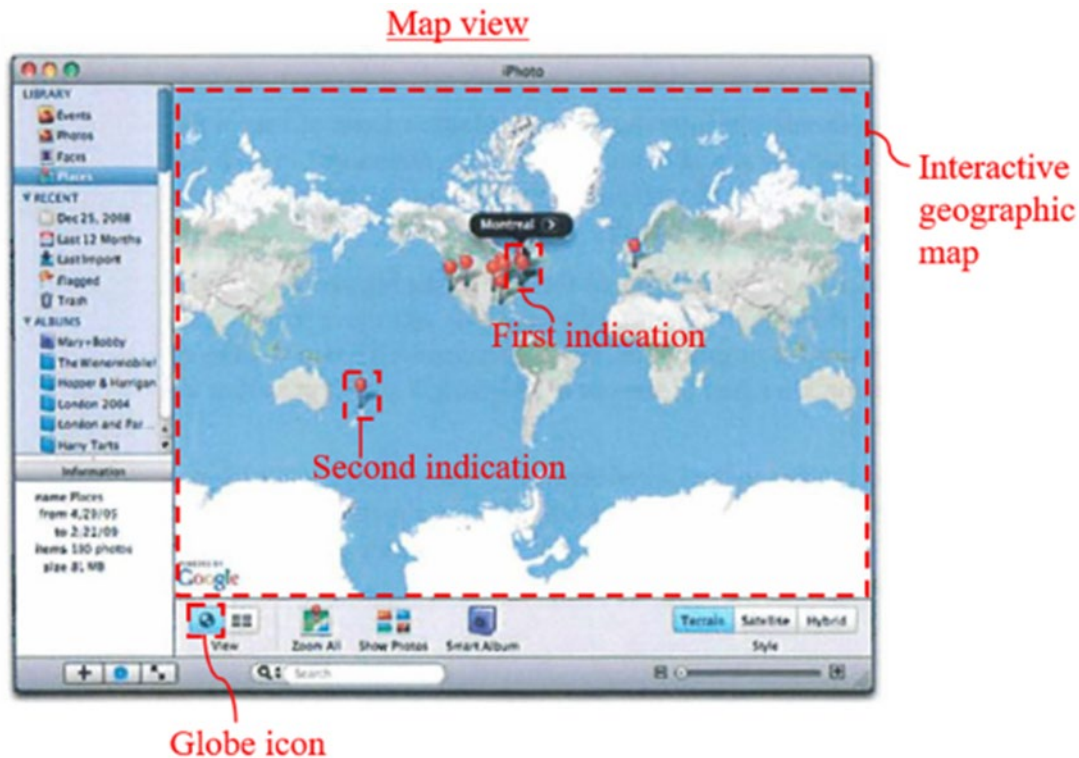
Claim 26 recites: “*The method of claim 25, wherein the first indication on the interactive geographic map is a third image and the second indication on the interactive geographic map is a fourth image.*” Ex. 1001, 37:29–32.

Petitioner asserts that “iPhoto displays the first and the second indications by ‘red pins’ and does not expressly describe displaying the first and the second indications by images. Pet. 85 (citing Ex. 1005, 108; Ex. 1003 ¶ 174). “However,” Petitioner asserts, “Belitz describes displaying thumbnail images (e.g., ‘a graphical object 410’) on the interactive geographic map (e.g., ‘the map 409’).” Pet. 85 (citing Ex. 1008 ¶¶ 51–52, Figs. 4a–4b). Petitioner argues that a person of ordinary skill in the art “would have found it obvious to combine iPhoto and Belitz to display third and fourth images on the interactive geographic map by a simple substitution.” Pet. 85 (citing Ex. 1003 ¶ 174). Petitioner asserts that “[b]oth iPhoto and Belitz address the same problem (also purportedly solved by the ’823 patent): ‘managing and using digital files such as digital photographs.’” Pet. 85–86 (citing Ex. 1001, 1:17–20; Ex. 1005, 2, 4; Ex. 1006, 1, 8; Ex. 1008 ¶¶ 2–5). “Moreover,” Petitioner continues, “iPhoto and Belitz describes analogous techniques—both describe use of an interactive map with user-selectable markers (location pins or thumbnail images) specifying the locations of photos and/or videos, and use of those markers to retrieve the digital photos and/or videos linked to those locations.” Pet. 86 (citing

Ex. 1005, 108–109; Ex. 1006, 72–73; Ex. 1008 ¶¶ 39, 50–55, 62). “With this background,” Petitioner argues, a person of ordinary skill in the art “would have readily turned to Belitz when reviewing iPhoto and would have found it obvious to incorporate features of Belitz in iPhoto.” Pet. 86 (citing Ex. 1003 ¶ 174).

Petitioner points to Dr. Greenspun’s testimony that a person of ordinary skill in the art would have combined iPhoto and Belitz in two, alternative ways. Pet. 86. “First,” Petitioner asserts, a person of ordinary skill in the art “would have found it obvious to replace the location pins on iPhoto’s map view (shown in FIG. 4-15) with the thumbnails used in Belitz’s map view.” Pet. 86 (citing Ex. 1003 ¶ 175). “Adopting the thumbnail images of Belitz in iPhoto’s interactive geographic map,” Petitioner argues, “would have resulted in an interactive map that includes a third image and a fourth image.” Pet. 86. Petitioner argues that a person of ordinary skill in the art “would have been motivated to make this modification because Belitz teaches that ‘it would be useful to be able to present a user with an overview of associated images to special locations which enables [the] user to clearly see the associations.’” Pet. 86 (citing Ex. 1008 ¶¶ 4, 15) (alteration in original). Petitioner also argues that a person of ordinary skill in the art “would have considered Belitz’s thumbnail technique to be a known and predictable alternative to iPhoto’s location pins, and that using thumbnails could appeal to certain users, thereby improving usability for such users.” Pet. 86–87 (citing Ex. 1003 ¶ 175). “For example,” Petitioner argues, a person of ordinary skill in the art “would have known, prior to the Critical Date, that certain users preferred interactive maps that used thumbnails to identify the locations of photos.” Pet. 87 (citing Ex. 1019, 4).

Petitioner's annotated Figure 4-15 is shown below.



SAMSUNG-1005, FIG. 4-15

Petitioner's annotated Figure 4-15, above, is a screen shot of an iPhoto Places World view window annotated as "Map view" in red across the top, which displays an interactive geographic map in the center with several colored pins placed at various geographic locations, two of which are identified as "First indication" and "Second indication" in red. In an icon tool bar running across the bottom, the "Globe icon" is identified in red. A source pane runs vertically along the left.

"Second," Petitioner argues, "as an alternative way of viewing the combination of iPhoto and Belitz, a [person of ordinary skill in the art] would have found it obvious to use Belitz's interactive geographic map in place of iPhoto's interactive map." Pet. 88 (citing Ex. 1003 ¶ 176). Petitioner argues that a person of ordinary skill in the art "would have been

motivated to use Belitz's interactive map in place of iPhoto's interactive map to gain the benefits of Belitz's interactive map (e.g., improving user experience and content awareness by providing the user with a preview of the digital photographs and/or videos associated with the corresponding location, without having to click on a location pin as described by iPhoto) and would have found it obvious as a simple substitution of one known map for displaying digital image files (iPhoto's map) for another (Belitz's map).” Pet. 88.

“Both ways of combining iPhoto and Belitz.” Petitioner argues, “would require only routine knowledge of software technologies (e.g., application programming interfaces and/or substituting one known graphical element or interface for another), which were well within the skill of a [person of ordinary skill in the art] prior to the Critical Date.” Pet. 88 (citing Ex. 1003 ¶ 177). Petitioner argues that a person of ordinary skill in the art “would have viewed the implementation of (1) iPhoto's map view in a manner that applied Belitz's thumbnail images and (2) substituting iPhoto's map views with Belitz's map view as merely the predictable result of combining known prior art elements according to known methods.” Pet. 88. “The resulting combination,” Petitioner argues, “does not change the hallmark aspects of either of these references because the resulting combination provides a photo/video management system designed to enable a user to efficiently find photos/videos of interest, for example, based on location.” Pet. 88–89. “Indeed,” Petitioner argues, “the combination retains an interactive map with user-selectable markers specifying the locations of photos and/or videos, and use of those markers to retrieve the digital photos and/or videos linked to those locations.” Pet. 89 (citing Ex. 1005, 108–109; Ex. 1006, 72–73; Ex. 1008 ¶¶ 39, 50–55, 62).

In its Response, Patent Owner argues that a person of ordinary skill in the art “would not modify Pogue/Engst with Belitz in [the] way” described by Petitioner, because “[r]eplacing the red pins with thumbnails clutters the interface and obscures much of the underlying map.” PO Resp. 58–60 (citing Ex. 2020 ¶¶ 128–132). Patent Owner argues that “Belitz discourages a [person of ordinary skill in the art] from modifying the Pogue/Engst World View in a way that causes the thumbnails to ‘overlap’ and cause the view to ‘become cluttered,’ thereby making it ‘difficult to discern between the various objects’ so that ‘the user is not provided with a good view of what location is associated with what.’” PO Resp. 61 (citing Ex. 1008 ¶¶ 2, 54; Ex. 2020 ¶ 133). Patent Owner argues that “Ppetitioner fails to meet its burden because it does not specifically identify anything desirable about its proposed combination and ignores the numerous drawbacks to the combination.” PO Resp. 63.

Patent Owner also argues that a person of ordinary skill in the art would not use “Belitz’s interactive geographic map in place of iPhoto’s interactive map.” PO Resp. 67 (citing Ex. 2020 ¶ 140). Patent Owner argues that a person of ordinary skill in the art “would not replace the Pogue/Engst world map with Belitz’s Roskilde map,” because “[i]f the world map were replaced with a map of a single town (Roskilde), there would be no way to position indications for images associated with another other location in the world.” PO Resp. 69 (citing Ex. 2020 ¶ 149). Patent Owner also argues that “replacing the Pogue/Engst World View map with Belitz’s map would remove numerous benefits afforded by the Pogue/Engst World View map.” PO Resp. 69 (citing Ex. 2020 ¶ 141). Patent Owner argues that “replacing the Pogue/Engst World View with Belitz’s map would worsen the user experience,” for example by “remov[ing] the benefits

associated with the navigational methods available in iPhoto.” PO Resp. 69–71 (citing Ex. 2020 ¶¶ 142–144).

In its Reply, Petitioner disagrees with Patent Owner, pointing out that Belitz “teach[es] that ‘it would be useful to be able to present a user with an overview of associated images to special locations which enables [the] user to clearly see the associations,’” and “Belitz provides a way for iPhoto to provide both location and image preview information all at once for multiple locations on the map,” thus “improv[ing] user experience and overall content awareness by providing the user with a preview of the digital files associated with multiple corresponding locations.” Pet. Reply 22–23 (citing Ex. 1027 ¶ 21); Ex. 1003 ¶ 175 (citing Ex. 1008 ¶¶ 4, 15).

In its Sur-reply, Patent Owner asserts that Petitioner mischaracterizes Dr. Reinman’s testimony and that Dr. Reinman’s testimony in another proceeding is irrelevant. PO Sur-reply 25. Patent Owner also argues that Dr. Greenspun failed to weigh benefits and drawbacks in his obviousness analysis, such that Petitioner failed to meet its burden to show that a person of ordinary skill in the art would have combined the asserted prior art. PO Sur-reply 26.

We are persuaded that a person of ordinary skill in the art would have sufficient reason to combine the asserted art in the manner proposed by Petitioner. Petitioner explains that a person of ordinary skill in the art would have found it beneficial to replace the location pins on iPhoto’s map view with the thumbnails used in Belitz’s map view as they would have been motivated to make this modification because Belitz teaches that it would be useful to be able to present a user with an overview of associated images to special locations that enables the user to clearly see the associations. Pet. 86 (citing Ex. 1008 ¶¶ 4, 15; Ex. 1003 ¶ 175).

Petitioner also describes an alternative combination of iPhoto and Belitz, whereby a person of ordinary skill in the art would have found it beneficial to use Belitz's interactive geographic map in place of iPhoto's interactive map in order to gain the benefits of Belitz's interactive map by providing the user with a preview of the digital photographs and/or videos associated with the corresponding location, without having to click on a location pin as described by iPhoto. Pet. 88 (citing Ex. 1003 ¶ 176).

Petitioner explains that both ways of combining iPhoto and Belitz would require only routine knowledge of software technologies (e.g., application programming interfaces and/or substituting one known graphical element or interface for another), which were well within the skill of a person of ordinary skill in the art providing predictable results by combining known prior art elements according to known methods. Pet. 88 (citing Ex. 1003 ¶ 177). Petitioner points out that the combination retains an interactive map with user-selectable markers specifying the locations of photos and/or videos, and use of those markers to retrieve the digital photos and/or videos linked to those locations. Pet. 89 (citing Ex. 1005, 108–109; Ex. 1006, 72–73; Ex. 1008 ¶¶ 39, 50–55, 62).

Patent Owner criticizes Petitioner's combination, arguing that the resulting combination would "become cluttered," thereby making it "difficult to discern between the various objects" so that "the user is not provided with a good view of what location is associated with what." PO Resp. 61 (citing Ex. 1008 ¶¶ 2, 54; Ex. 2020 ¶ 133). Patent Owner also argues that that "replacing the Pogue/Engst World View with Belitz's map would worsen the user experience," by "remov[ing] the benefits associated with the navigational methods available in iPhoto." PO Resp. 69–71 (citing Ex. 2020 ¶¶ 142–144).

We disagree with Patent Owner. As Dr. Greenspun points out, “displaying images instead of pins in iPhoto would have improved usability and convenience for many users of iPhoto. For instance, while the pins in iPhoto simply convey location information, thumbnail images as in Belitz convey both location and image preview information all at once for multiple locations on the map.” Ex. 1027 ¶ 21. Dr. Greenspun explains that “[t]his would help improve user experience and overall content awareness by additionally providing the user with a preview of the digital files associated with multiple locations.” *Id.*

Dr. Greenspun further explains that a person of ordinary skill in the art “would have recognized that the benefits of viewing location-specific thumbnail images may be achieved in one instance, while the benefits of viewing location-specific cluster maps may be achieved in another. A [person of ordinary skill in the art] would have found each of these options as obvious designs to pursue in view of the disclosures of Pogue, Engst, and Belitz.” *Id.* ¶ 23. We agree with Petitioner that the proposed combination retains an interactive map with user-selectable markers specifying the locations of photos and/or videos, and use of those markers to retrieve the digital photos and/or videos linked to those locations. *See* Pet. 89 (citing Ex. 1005, 108–109; Ex. 1006, 72–73; Ex. 1008 ¶¶ 39, 50–55, 62).

We have considered the evidence and arguments with respect to Petitioner’s assertions that the asserted art meets the limitations of dependent claim 26, as well as the testimonial evidence of Drs. Greenspun and Reinman. Based on the complete record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that the combined teachings of Pogue, Engst, and Belitz satisfies the subject matter of dependent claim 26 and that a person of ordinary skill in the art would have

had sufficient reason to combine the teachings of the asserted art in the manner described in the Petition.

5. *Obviousness Based on Pogue, Engst, and Ripps (Ground 1C)*

Petitioner contends that claims 12–14 are unpatentable as obvious under 35 U.S.C. § 103 over Pogue, Engst, and Ripps. Pet. 89–94. Because we have determined that these claims are unpatentable based on other grounds, we do not reach Petitioner’s arguments based on this ground.

F. *Motion to Exclude*

Patent Owner filed a Motion to Exclude Exhibits 1003, 1010, 1028, and 1030–1033. Paper 31. Petitioner opposes the motion. Paper 32. For the reasons explained below, we deny Patent Owner’s motion.

Patent Owner first moves to exclude Exhibits 1030–1033, which Patent Owner identifies as the deposition transcripts of Dr. Reinman and Dr. Greenspun from other proceedings. Paper 31, 2–6. Patent Owner objects to these exhibits as inadmissible hearsay. *Id.*

Petitioner opposes Patent Owner’s motion, arguing that prior testimony of Dr. Reinman and Dr. Greenspun is admissible and should not be excluded. Paper 32, 1–4.

We do not rely on Exhibits 1030–1033 in making our final determination in this case. Accordingly, Patent Owner’s motion to exclude Exhibits 1030–1033 is denied as moot.

Patent Owner next moves to exclude Exhibit 1003, the declaration of Dr. Greenspun, in its entirety, arguing that portions of Dr. Greenspun’s declaration were copied from a third-party’s position in a separate proceeding. Paper 31, 6–11. Petitioner opposes Patent Owner’s motion, arguing that Patent Owner mischaracterizes Dr. Greenspun’s declaration and

provides alternative explanations for Patent Owner's observations. Paper 32, 4–7.

Patent Owner's objections to Dr. Greenspun's testimony go more to credibility and weight than to admissibility. We are in an adequate position to assess the credibility of Dr. Greenspun's testimony and to assign the appropriate weight to it. Accordingly, Patent Owner's motion to exclude Exhibit 1003 is denied.

Finally, Patent Owner moves to exclude Exhibits 1010 and 1028, the declarations of Ms. Munford. Patent Owner objects to these declarations, arguing that they are unreliable and fail to comply with Board's rules. Paper 31, 11–15. Petitioner opposes Patent Owner's motion, arguing that Ms. Munford's testimony is admissible. Paper 32, 7–9. As we pointed out with respect to Dr. Greenspun's testimony, Patent Owner's objections go more to credibility than to admissibility, and we are in an adequate position to assess the credibility of Ms. Munford's testimony and to assign the appropriate weight to it. We are also not persuaded that the declarations are noncompliant with our rules. Accordingly, Patent Owner's motion to exclude Exhibits 1010 and 1028 is denied.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–34 of U.S. Patent No. 11,163,823 B2 are unpatentable on the bases set forth in the following table.

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–25, 27– 34	103	Pogue, Engst	1–25, 27–34	
26	103	Pogue, Engst	26	
12–14	103	Pogue, Engst, Ripps ⁵		
Overall Outcome			1–34	

⁵ Because each of these challenged claims is held unpatentable on other grounds, we do not reach this ground in the Petition.

IV. ORDER⁶

In consideration of the foregoing, it is hereby

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 1–34 of U.S. Patent No. 11,163,823 B2 are unpatentable;

FURTHER ORDERED that Patent Owner’s Motion to Exclude is denied; and

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

⁶ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Final Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

PGR2022-00034
Patent 11,163,823 B2

FOR PETITIONER:

Walter Renner
Jeremy Monaldo
Hyun Jin In
axf-ptab@fr.com
jjm@fr.com
in@fr.com

FOR PATENT OWNER:

Jennifer Hayes
George Dandalides
Matthew Werber
jenhayes@nixonpeabody.com
gdandalides@nixonpeabody.com
mwerber@nixonpeabody.com