

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

MEMORYWEB, LLC,
Patent Owner.

IPR2022-00221
Patent 10,423,658 B2

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

BROWNE, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining Some Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

We have authority to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, we determine that Petitioner, Samsung Electronics Co., Ltd. (“Samsung”), has shown by a preponderance of the evidence that claims 1–13 of U.S. Patent No. 10,423,658 B2 (Ex. 1001, “the ’658 Patent”) are unpatentable, but has not shown by a preponderance of the evidence that claims 14 and 15 are unpatentable. *See* 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2019).

A. Procedural History

The Petition (Paper 2, “Pet.” or “Petition”) requested *inter partes* review of the claims 1–15 of the ’658 Patent (the “challenged claims”). Patent Owner, MemoryWeb, LLC, filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply (Paper 8), and Patent Owner filed a Preliminary Sur-reply (Paper 9). Based upon the record at that time, we instituted *inter partes* review on all challenged claims on the grounds presented in the Petition. Paper 10 (“Institution Decision” or “Dec.”).

After institution, Patent Owner filed a Response (Paper 18, “PO Resp.”), Petitioner filed a Reply (Paper 22, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 34, “PO Sur-reply”).

On June 12, 2023, an oral hearing was held. The transcript of the hearing (Paper 39, “Tr.”) was entered in the record.

B. Real Party-in-Interest

Petitioner states that “Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. are the real parties in interest.” Pet. 108. Patent

Owner states that it, MemoryWeb, LLC, is the real party in interest. Paper 3, 2.

C. Related Matters

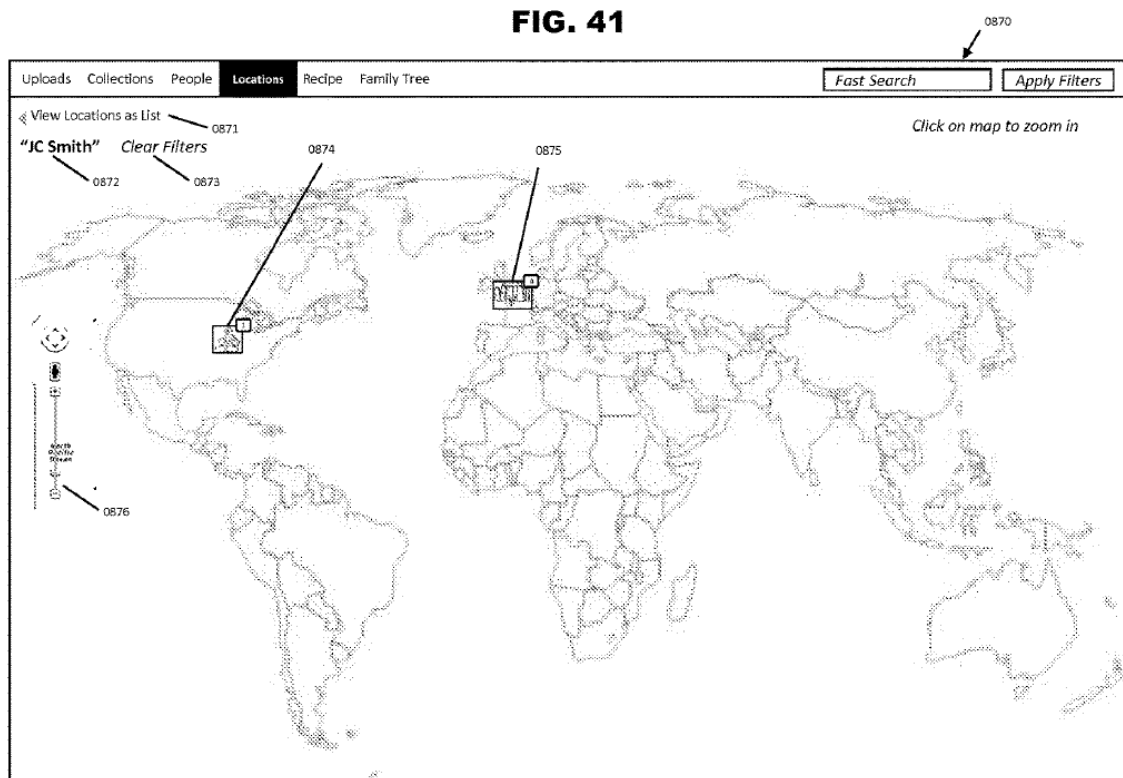
According to the parties, the '658 Patent was asserted in the following district court proceedings: *MemoryWeb, LLC v. Samsung Electronics Co., Ltd. et al.*, 6:21-cv-00411 (W.D. Tex.), Pending; *MemoryWeb, LLC v. Apple, Inc.*, No. 6-21-cv-00531 (W.D. Tex.), Pending; and *MyHeritage (USA), Inc. et al. v. MemoryWeb, LLC*, No. 1-21-cv-02666 (N.D. Ill.), Dismissed. Pet. 109; Paper 3, 2.

Petitioner states that “[t]he '658 patent is also the subject of an IPR proceeding filed by Apple Inc. (IPR2022-00033)” but that “Samsung is not a real party-in-interest to this IPR proceeding.” Pet. 109.

Patent Owner states that “[t]he '658 patent is related to the following U.S. Patents: 9,098,531 (‘the '531 patent’); 9,552,376 (‘the '376 patent’); 10,621,228 (‘the '228 patent’); 11,017,020 (‘the '020 patent’); 11,163,823 (‘the '823 patent’), and 11,170,042 (‘the '042 patent’).” Paper 3, 2. Patent Owner additionally identifies the following IPR proceedings as related matters: *Samsung Electronics Co., LTD. v. MemoryWeb LLC*, IPR2022-00222 (‘228 patent); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00111 (‘020 patent); *Apple Inc. v. MemoryWeb, LLC*, PGR2022-00006 (‘020 patent); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00033 (‘658 patent); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00032 (‘376 patent); *Apple Inc. v. MemoryWeb, LLC*, IPR2022-00031 (‘228 patent); *Unified Patents, LLC v. MemoryWeb, LLC*, IPR2021-01413, (‘228 patent); and U.S. Patent Application No. 17/459,933. *Id.* at 2–3.

D. The '658 Patent

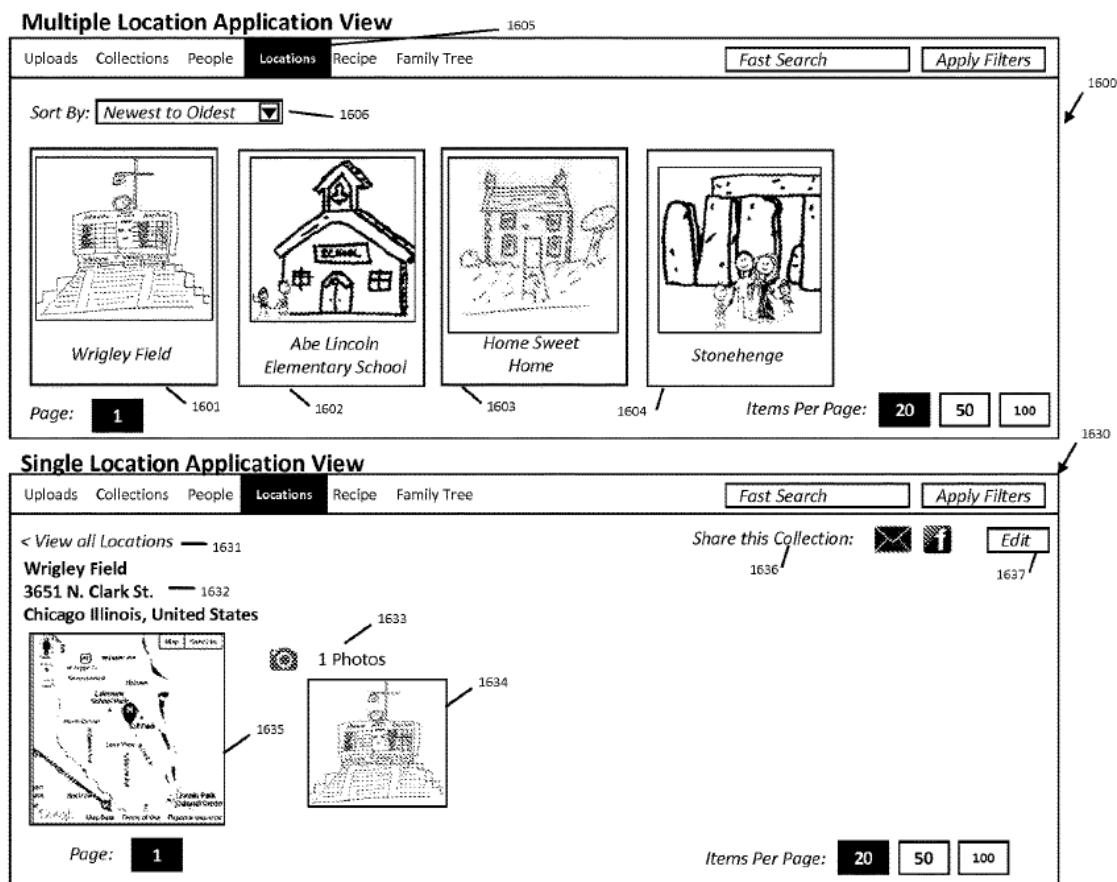
The '658 Patent relates to a computer-implemented system and method for managing and using digital files such as digital photographs. Ex. 1001, 1:16–19. In particular, the '658 Patent aims to provide an “interactive platform” for users to gather, organize, view, navigate, search, share and archive digital files, e.g., digital photographs and videos. *Id.* at 13:12–18, 13:56–59. The interactive platform may be provided via an “Application” having various “Application Views” for interaction with and organization of digital files. *Id.* at 8:59–9:7. A screenshot of an exemplary type of Application View, a “Location Application View,” is shown in Figure 41, reproduced below. *Id.* at 4:3–4.



As shown in the Location Application View interface of Figure 41, “Digital Files are displayed within an interactive map (Google map shown as

an example).” Ex. 1001, 29:25–29. Further, “[i]n this view, individual or groups of Digital Files are illustrated as photo thumbnails (see indicators 0874 and 0875) on the map and the user can select the thumbnail to see all the Digital Files with the same location.” *Id.* at 29:32–36. In the case that the user selects either one of the thumbnails, a “Single Location Application View” interface corresponding to the location is presented to the user, as shown in the bottom portion of Figure 34 reproduced below. *Id.*

FIG. 34

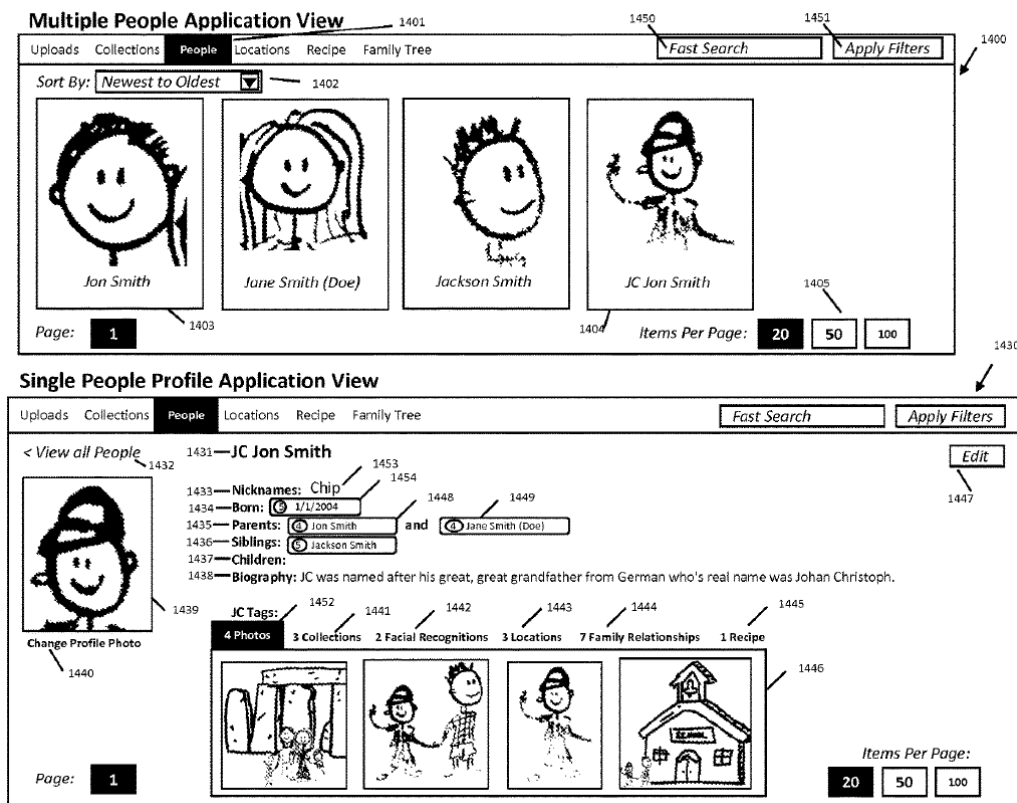


Focusing on the single location (1630) Locations Application View, an “individual location name is displayed at the top of the page (1632).” Ex. 1001, 24:22–24. The single location Locations Application View further displays “[t]humbnails of each Digital File within the specific collections” of

digital files. *Id.* at 24:25–26; *see id.* at 23:56–59, Fig. 33. In the example shown in Figure 34, “one photo (1633) taken at Wrigley Field (1634) that is associated with the location called Wrigley Field” is displayed. *Id.* at 24:26–28.

Turning to another Application View described by the ’658 Patent, a “Multiple People Application View” is shown in Figure 32 reproduced below. *Id.* at 3:58.

FIG. 32



The Multiple People Application View “can be seen by selecting ‘People’ (1401) from any of the Application Views within the Application.” Ex. 1001, 22:46–48. As shown in Figure 32, “Multiple People Application View” 1400 “display[s] all the people that were created within the user's Application.” *Id.* at 22:44–46. “For each person, a thumbnail of their face

along with their name is depicted. In this figure, Jon Smith (1403) and JC Jon Smith (1404) along with some other people are illustrated.” *Id.* at 22:52–55.

Further, “[f]or each person,” there are “tags that are associated to [that] person.” Ex. 1001, 23:4–6. In “Single People Profile Application View” 1430, associated tags are used show that there are, e.g., “four photos (1452) associated with that person.” *Id.* at 23:6–9. In another example, the person “grandma” has been tagged in, and so, is associated with, 100 photos. *Id.* at 24:56–59. Put another way, digital files have tags, e.g., in a “Tag Block of the Relationship Table for the Digital File,” which associate a particular digital file with a particular person or otherwise characterizes and documents the digital file. *See id.* at 20:1–6; 24:42–52.

E. Challenged Claims

Petitioner challenges claims 1–15 of the ’658 Patent. Pet. 1. Claim 1, the only independent claim is reproduced below with Petitioner’s limitation labeling included:

[1pre] 1. A computer-implemented method of displaying at least a portion of a plurality of (i) digital photographs, (ii) videos, or (iii) a combination of (i) and (ii), each of the digital photographs and videos being associated with a geotag indicative of geographic coordinates where the respective digital photograph or video was taken, the method comprising:

[1a] displaying an application view on a video display device including displaying a plurality of selectable elements, the plurality of selectable elements including a location selectable element;

[1b] responsive to a click or tap of the location selectable element, displaying a map view on a video display device, the displaying the map view including displaying:

[1c] (i) a representation of an interactive map;

[1d] (ii) a first location selectable thumbnail image at a first location on the interactive map, the first location being associated with the geographic coordinates of a first geotag, a first set of digital photographs and videos including all of the digital photographs and videos associated with the first geotag;

[1e] (iii) a first count value image partially overlapping the first location selectable thumbnail image, the first count value image including a first number that corresponds to the number of digital photographs and videos in the first set of digital photographs and videos;

[1f] (iv) a second location selectable thumbnail image at a second location on the interactive map, the second location being associated with the geographic coordinates of a second geotag, a second set of digital photographs and videos including all of the digital photographs and videos associated with the second geotag; and

[1g] (v) a second count value image partially overlapping the second location selectable thumbnail image, the second count value image including a second number that corresponds to the number of digital photographs and videos in the second set of digital photographs and videos;

[1h] responsive to a click or tap of the first location selectable thumbnail image, displaying a first location view on the video display device, the displaying the first location view including displaying (i) a first location name associated with the first geotag and (ii) a scaled replica of each of the digital photographs and videos in the first set of digital photographs and videos, the displayed scaled replicas of each of the digital photographs and videos in the first set of digital photographs and videos not being overlaid on the interactive map; and

[1i] responsive to a click or tap of the second location selectable thumbnail image, displaying a second location view on the video display device, the displaying the second location view including displaying (i) a second location name corresponding to the

second geotag and (ii) a scaled replica of each of the digital photographs and videos in the second set of digital photographs and videos, the displayed scaled replicas of each of the digital photographs and videos in the second set of digital photographs and videos not being overlaid on the interactive map.

Ex. 1001, 35:13–36:7; Pet. 5–6.

F. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–15	103	Okamura, ¹ Belitz ²
3, 4	103	Okamura, Belitz, Rasmussen ³
6–12	103	Okamura, Belitz, Gossweiler ⁴
8, 9, 11, 12	103	Okamura, Belitz, Yee ⁵
8, 9, 11, 12	103	Okamura, Belitz, Gossweiler Yee

Pet. 11. In addition to the references listed above, Petitioner relies on the Declaration of Philip Greenspun, Ph.D. (Ex. 1003). Patent Owner submits a Declaration of Glenn Reinman, Ph.D. (Ex. 2001).

¹ Okamura et al., U.S. Patent Publication No. 2011/0122153 A1, published May 26, 2011 (Ex. 1005) (“Okamura”).

² Belitz et al., U.S. Patent Publication No. 2010/0058212 A1, published March 4, 2010 (Ex. 1006) (“Belitz”).

³ Rasmussen, U.S. Patent Publication No. 2006/0206264 A1, published September 14, 2006 (Ex. 1007) (“Rasmussen”).

⁴ Gossweiler et al., U.S. Patent Publication No. 2008/0276279 A1, published November 6, 2008 (Ex. 1038) (“Gossweiler”).

⁵ Yee et al., U.S. Patent Publication No. 2009/0210793 A1, published August 20, 2009 (Ex. 1041) (“Yee”).

II. ANALYSIS

A. *Principles of Law: Obviousness*

A claim is unpatentable as obvious 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 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.⁶ 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 would have

⁶ The current record does not present or address any evidence of nonobviousness.

selected and combined those prior art elements in the normal course of research and development to yield the claimed invention. *Id.*

B. Level of Ordinary Skill

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991).

Petitioner contends that a person of ordinary skill in the art at the time of the invention of the ’658 Patent would have had the following education and experience:

(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 . . . Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education.

Pet. 12 (citing Ex. 1003 ¶ 27). Patent Owner does not challenge this definition of the level of skill at this time. Prelim. Resp. 45.

For purposes of this Decision, we also adopt Petitioner’s proposal as reasonable and consistent with the prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art).

C. Claim Construction

Pursuant to 37 C.F.R. § 42.100(b), we apply the claim construction standard as set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir.

2005) (en banc). Under *Phillips*, claim terms are generally given their ordinary and customary meaning as would be understood by one with ordinary skill in the art 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. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (in the context of an *inter partes* review, applying *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner asserts that “no formal claim constructions are necessary in this proceeding.” Pet. 11–12. For claim 1, Patent Owner proposes claim construction for the terms “application view” and “responsive to a click or tap . . . displaying.” PO Resp. 13–25. For claim 5, Patent Owner proposes claim construction for “the displaying the people view including displaying: . . . a name associated with the first person . . . and . . . a name associated with the second person.” *Id.* at 25–28. For claim 13, Patent Owner proposes claim construction for “the displaying the album view including displaying: . . . a first album name . . . and . . . a second album name.” *Id.* at 29–30. We consider each of Patent Owner’s proposed constructions.

1. *Application View*

Patent Owner contends that the claim term “application view” should be construed to require an “application view that is distinct from the other claimed views.” PO Resp. 13. Specifically, Patent Owner contends that

The claim language dictates that the ‘application view’ is separate and distinct relative to: (i) the map view and first/second location views in claim 1; (ii) the people view in claim 5; (iii) the first/second person views in claims 7 and 10; (iv) the album view in claim 13; and (vi) the first/second album views in claims 14 and 15.

Id. at 13–14. In particular, Patent Owner identifies Figure 35 as “an example of an application view including a plurality of selectable elements that is distinct from the other views.” *Id.* at 17.

Petitioner replies that “the ’658 patent makes clear, [that] FIG. 35 is merely one of various ‘application views’ that are provided as **examples** in the ’658 patent, including those shown in FIGS. 32–34 and 36.” Pet. Reply 2 (citing Ex. 1001, 9:18–22; Ex. 1046, 40:8–21; Ex. 1047 ¶ 4). Petitioner asserts that “the ’658 patent explicitly refers to its people and location views as the ‘People **Application** View’ and the ‘Location **Application** View.’” *Id.* (citing Ex. 1001, Figs. 32, 34, 3:58–4:4). Petitioner asserts further that “[t]here is nothing in the ’658 patent that distinguishes the ‘Uploads Application View’ in FIG. 35 from the other application views in the ’658 patent, other than its focus on ‘Uploads’ as compared to ‘People’ or ‘Location.’” *Id.* (citing Ex. 1047 ¶ 4).

Petitioner replies further that “Dr. Reinman acknowledged during deposition that the specification of the ’658 patent provides ‘examples of different application views’ and that ‘a view like a location view is **also** an application view in the spec of the patent.’” Pet. Reply 3 (citing Ex. 1046,

17:12–18, 42:9–43:15). Petitioner asserts that “according to the specification of the ’658 patent and per Dr. Reinman’s own testimony, a particular view can ‘qualify as both’ an application view and a location view.” *Id.*

The ’658 Patent states, “Application Views—The 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.” Ex. 1001, 9:18–22. Thus, we understand “application view” to mean a customized display of digital tags or files and we adopt this definition of “application view.” *Id.*

Turning to Patent Owner’s contention that the claim language requires the application view of be separate and distinct relative to other claimed views, we do not agree with Patent Owner’s sweeping statement. Rather, each claim must be considered to determine if the structure of the claim requires a view that is separate and distinct from the application view or if the claim further defines the application view.

2. *Responsive to a Click or Tap . . . Displaying*

Patent Owner contends that “the plain and ordinary meaning of the phrase ‘responsive to a click or tap of . . . displaying’ requires a cause-effect relationship between (i) a click or tap of a certain selectable element and (ii) displaying a certain view or content.” PO Resp. 19 (citing Ex. 2023 ¶¶ 126, 130, 147–149, 156, 164). Specifically, for claims 3–5, 7, and 9–15,⁷ which

⁷ Patent Owner does not refer to claim 1, from which these claims depend, which is the first claim to use this claim terminology. We focus our

recite this limitation, Patent Owner contends that “[t]he specification confirms that the phrase ‘responsive to . . . displaying’ requires [direct] causation.” *Id.* at 20; *see also id.* at 22–24. Patent Owner further contends that “the specification does not disclose any examples of additional clicks or taps or intervening views between the relevant click or tap and the display of the relevant view or content.” *Id.* at 24–25 (citing Ex. 2023 ¶¶ 127, 135, 152, 159, 168; *Am. Calcar*, 651 F.3d 1318, 1340 (Fed. Cir. 2011)).

In addition, Patent Owner contends that “[t]he plain meaning of ‘responsive to’ is also confirmed by extrinsic evidence. Patent Owner asserts that the definition of ‘responsive’ is ‘saying or doing something as a reaction to something or someone’ or ‘constituting a response or made in response to something.’” PO Resp. 25 (citing Ex. 2025; Ex. 2026; Ex. 2023 ¶¶ 128, 135, 152, 156, 165). Patent Owner further contends that “[w]hen deposed, Dr. Greenspun acknowledged that for the ‘people view,’ a ‘computer programmer’ would understand the words of these claim limitations to mean ‘a user does something like a click or tap, and then the software causes the people view to be displayed.’” *Id.* (citing Ex. 2024, 81:7–20, 92:3–13, 205:9–207:13).

Petitioner replies, “as Dr. Greenspun explained during deposition, a POSITA⁸ would have recognized that the term ‘responsive to’ merely requires that the second event happen ‘subsequent to’ the first event based on a combination of user interaction and software implementation.” Pet. Reply 4 (citing Ex. 2022, 42:21–44:22; Ex. 2024, 108:20–109:12; Ex. 1047

discussion on claim 1, as the interpretation of this claim terminology must be the same for claims 1, 3–5, 7, and 9–15.

⁸ Person of ordinary skill in the art.

¶ 7). Petitioner asserts that “in the ’658 patent, the people view that is ultimately shown to the user entails not only the initial pressing of ‘People’ (1401) . . . but further the additional selection of a desired display order via a drop-down list (1402).” *Id.* (citing Ex. 1001, Fig. 32, 22:59–67; Ex. 1047 ¶ 7)). Thus, according to Petitioner, “even the ’658 patent itself contemplates having intermediate user actions between the first event (*i.e.*, ‘cause’) and the second event (*i.e.*, ‘effect’).” *Id.* at 4 (citing Ex. 1047 ¶ 7).

Petitioner asserts further that “[w]hen asked during deposition about the possibility of having this intermediate drop-down selection, Patent Owner’s expert Dr. Reinman acknowledged that it would be ‘possible’” to have an intermediate user action and that “additional intervening actions by the user, such as scrolling, that must be done by the user to actually view the desired content would not run afoul of the ‘responsive to’ requirement.” Pet. Reply 5 (citing Ex. 1045, 26:23–27:17; 30:19–32:3; 52:3–23; 55:6–56:1; Ex. 1046, 78:3–79:3; Ex. 1047 ¶ 8).

Patent Owner responds by arguing that during his deposition (Ex. 2033) “Dr. Greenspun admitted, ‘responsive to’ does **not** mean ‘subsequent to’” in his response to the question “[d]oes the phrase ‘responsive to’ then **require a cause/effect relationship** between the first event and the second event?” PO Sur-reply 1–2 (citing Ex. 2033, 17:11–25; Ex. 2024, 81:7–20, 92:3–13, 205:9–207). Patent Owner then states that “[t]he parties’ dispute is 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 that allows an infinite number of intervening events, as Petitioner proposes.” *Id.* at 3.

During the oral hearing, we questioned the parties about the meaning of “responsive to.” Tr. 24–29, 51. In particular, we asked how to reconcile Patent Owner’s definition of “responsive to” with claim 1’s requirement that all of the scaled replicas of each of the digital photographs and videos in the first set of digital photographs and videos be displayed “responsive to a click or tap” and that all of the scaled replicas of each of the digital photographs and videos in the second set of digital photographs and videos be displayed “responsive to a click or tap” in instances when the first and second sets include more than 150 photographs and videos. *Id.*

In response to our questions, Patent Owner’s representative, Ms. Hayes, contended that

both experts testified that when the claims refer to the views, the claim views, it’s not necessarily what you actually see on the screen. Instead, the view refers to what is delivered by the application to the user interface device. And so, when you read the claims with that context, yes, there will be possibly situations where there are more photos than can be displayed on the actual screen of the device.

Tr. 27:3–8. However, as pointed out by Judge Trock, the claim at issue (claim 1) requires displaying all of the scaled replicas of the photographs and videos in the first or second set of photographs and videos “responsive to a click or tap.” *Id.* at 28:11–13; Ex. 1001, 35:54–36:7. If “responsive to a click or tap” is construed to require a direct cause and effect relationship as Patent Owner proposes without any additional actions, the full scope of the claim 1 is not enabled for large sets of photographs or videos. Thus, Patent Owner’s proposed claim construction would invalidate the claim. We decline to adopt such a claim construction. *Alcon Research, Ltd. v. Apotex Inc.*, 687 F.3d 1362, 1368 (Fed. Cir. 2012).

Further, we do not agree with Patent Owner that Petitioner’s proposed claim construction “allows an infinite number of intervening events.” PO Sur-reply 3. Rather, Petitioner’s position, as supported by Dr. Greenspun’s testimony, is that “a POSITA would have recognized that the term ‘responsive to’ merely requires that the second event happen ‘subsequent to’ the first event based on a combination of user interaction and software implementation.” Pet. Reply 4 (citing Ex. 2022, 42:21–44:22; Ex. 2024, 108:20–109:12; Ex. 1047 ¶ 7). We credit Dr. Greenspun’s testimony regarding claim construction for “responsive to a click or tap” and adopt this definition as our own. Ex. 1047 ¶¶ 7–11.

3. *“Displaying the People View Including Displaying: . . . a Name Associated With the First Person . . . and a Name Associated With the Second Person”*

Patent Owner contends that “[t]he plain and ordinary meaning of the word ‘and’ in claim 5 requires that ‘the displaying the people view’ must include displaying both a ‘name associated with the first person . . . **and** . . . a name associated with the second person’ at the same time ‘responsive to’ a click or tap of the ‘people selectable element.’” PO Resp. 25–26 (citing Ex. 2023 ¶¶ 131–132). In support of this contention, Patent Owner argues that “a construction where only one name is displayed at a given time renders the express language of claim 5 (i.e., the word ‘and . . . a name associated with the second person’) ‘void, meaningless, or superfluous.’” PO Resp. 26 (citing *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 n.10 (Fed. Cir. 2017)). Patent Owner further argues that “a construction allowing the second name to be displayed ‘at some unspecified time’ after the first name conflicts with a purpose of the invention” and that the claim “requires that both names are displayed ‘responsive to a click or tap of the

people selectable element.”” *Id.* at 27 (citing *Trading Techs. Int’l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1354 (Fed. Cir. 2010); *id.* at 17–25).

Noting that “[t]he only specification support cited by Patent Owner for this overly narrow interpretation appears to be the ’658 patent’s FIG. 32 and its accompanying description,” Petitioner replies that “[a]lthough the example provided in FIG. 32 seems to show both a first name and a second name at the same time, nothing in the ’658 patent requires both names to be visible together to the user at all times.” Pet. Reply 8 (citing PO Resp. 28, Ex. 1047 ¶ 12). Petitioner asserts that “the claim language at issue merely recites displaying a ‘view’ (*e.g.*, ‘people view,’ ‘album view,’ etc.) responsive to a click or tap” and that it “does not state that everything associated with the view is displayed responsive to the click or tap – it states that the **view** is displayed responsive to the click or tap and that the view **includes** various pieces of information.” *Id.* at 9.

Patent Owner responds that claim 5 requires “displaying at least two pairs of thumbnails and names simultaneously.” PO Sur-reply 7. In support of its position, Patent Owner reiterates the arguments presented in its Response. *Id.* at 8–11.

We agree with Petitioner that nothing in the ’658 Patent requires the simultaneous display of the name of the first person and the name of the second person. Pet. Reply 8. Claim 5 requires displaying these names, but does not specify when the names must be displayed. Further, we do not agree with Patent Owner that “a construction where only one name is displayed at a given time renders the express language of claim 5 (*i.e.*, the word ‘and a name associated with the second person’) ‘void, meaningless, or superfluous,’” because without the limitations pertaining to

the second person, claim 5 would only require displaying the name of one person. PO Resp. 26. Thus, the claim language has meaning even if it is not interpreted to require simultaneous display of the first and second names.

For these reasons, we determine that the claim language at issue does not require that the first and second names be displayed at the same time.

4. *“The displaying the album view including displaying: . . . a first album name . . . and . . . a second album name”*

Patent Owner contends that “[t]he plain and ordinary meaning of the word ‘and’ in claim 13 requires that ‘displaying the album view’ must include displaying both the ‘first album name’ **and** the ‘second album name’ in the same view at the same time responsive to a click or tap of the album selectable element.” PO Resp. 29 (citing Ex. 2023 ¶ 157). Patent Owner contends that

Similar to the names in the “people view,” a construction that allows for the “second album name” to be displayed some unspecified time after displaying the “first album name” conflicts with the plain claim language, including the requirement that the album names are “displayed adjacent to” a corresponding album selectable thumbnail image.

Id. (citing Ex. 2023 ¶ 157; *id.* at 25–28). Patent Owner contends further that “[s]uch a construction would also conflict with a purpose of the invention; namely, saving a user time and displaying significant information.” *Id.* (citing Ex. 1001, 13:19–23; Ex. 2023 ¶¶ 160–161).

Petitioner replies that Patent Owner’s contentions are similar to its contentions regarding the “people view.” Pet. Reply. 11. Petitioner asserts that “[f]or similar reasons . . . claim 13 does not require simultaneous display of the first and second album names.” Pet. Reply 11 (citing Ex. 1047 ¶ 15).

We agree with Petitioner that Patent Owner's contentions regarding claim 13 are similar to its contentions regarding claim 5, and that these contentions are similarly flawed for the reasons discussed above, and we determine that the claim language at issue does not require that the first and second album names be displayed at the same time.

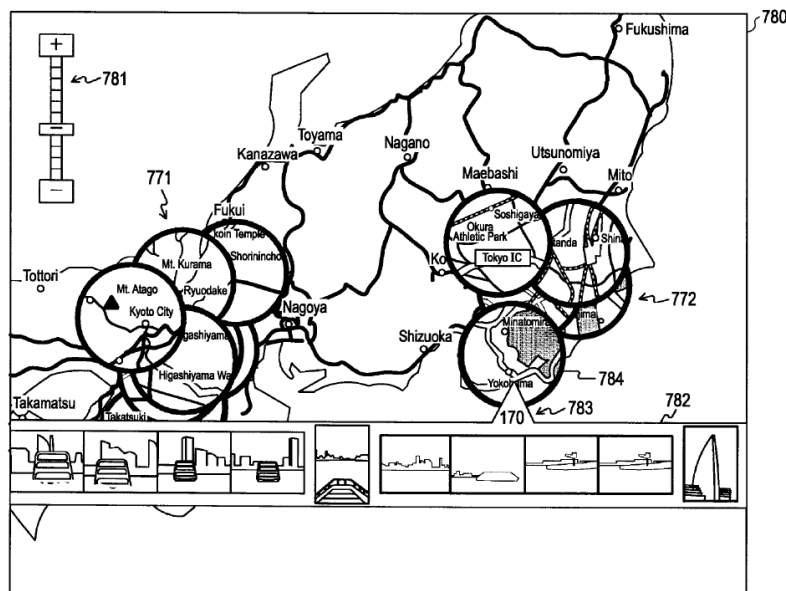
D. Relevant Prior Art

1. Okamura

Okamura is a U.S. Patent Publication titled, "Information Processing Apparatus, Information Processing Method, and Program," published May 26, 2011. Ex. 1005, codes (43), (54). Okamura describes an information processing apparatus which displays contents such as image files. Ex. 1005 ¶ 2. Okamura's information processing apparatus also allows managing of contents such as recorded image files. *Id.* ¶ 91.

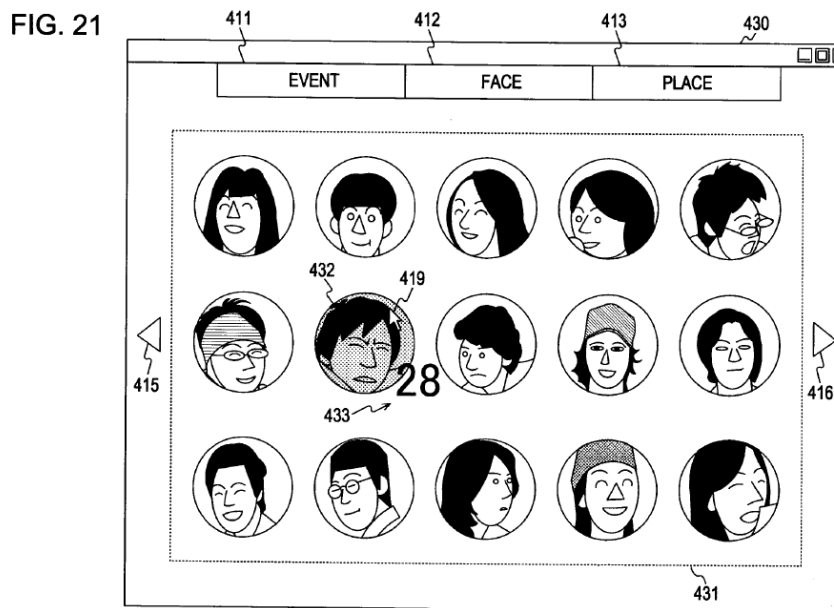
Figure 41, reproduced below, shows an embodiment of a display of Okamura that includes a map view screen.

FIG. 41



Id. at Fig. 41, ¶ 61. As shown in Figure 41, map view screen 780 displays a map including cluster map groups 771, 772. *Id.* A user can change the scale of map view screen 780 and can select a desired cluster map such that a listing of its contents is displayed in content listing display area 782. *Id.* at Fig. 41, ¶¶ 355–356. For example, cluster map 784 within cluster map group 772 is selected to show it has 170 contents that can be displayed in content listing display area 782. *Id.* at Fig. 41, ¶ 356. Overlapping cluster maps are spread out in accordance with a predetermined condition such that “graphical correspondence between contents can be intuitively grasped.” *Id.* at Fig. 41, ¶ 358.

Figure 21, reproduced below, shows another embodiment of a display of Okamura that includes an index screen.

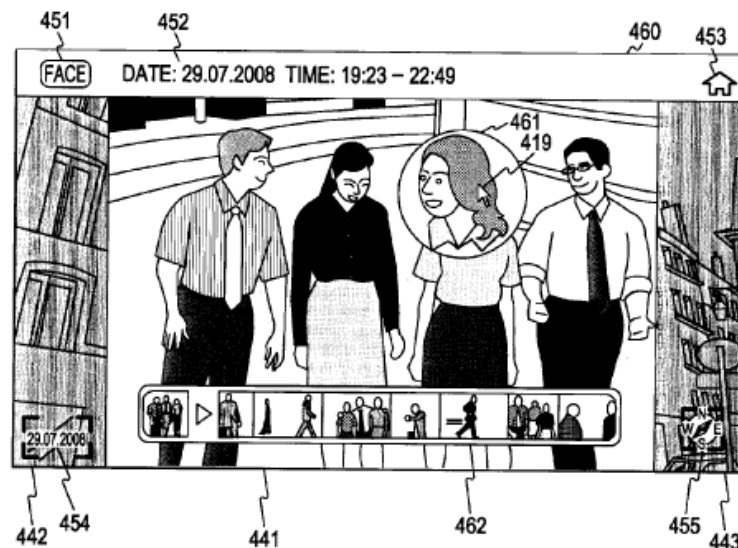


Id. at Fig. 21, ¶ 41. As shown in Figure 21, an index screen displays indexed images generated on the basis of face information. *Id.* at Fig. 21, ¶ 234. The index screen includes cursor 419 for pointing to an object of instruction or operation on the screen. *Id.* at Fig. 21, ¶ 234. The index

screen includes “EVENT” tab 411, “FACE” tab 412, and “PLACE” tab 413 that are used for displaying a different index screen. *Id.* at Fig. 21, ¶¶ 235–236. Okamura discloses that in the face cluster image display area 431 shown in Figure 21, images representing face clusters are displayed such that “an image representing a face cluster, for example, a thumbnail image of each of faces included in contents belonging to the face cluster can be used” by extracting faces and contents belonging to the face cluster. *Id.* at Fig. 21, ¶ 246. For example, thumbnail image 432 in face cluster image display area 431 has 28 contents indicated for its pieces of information 433, that can be accessed by a user. *Id.* at Fig. 21, ¶ 247.

Figure 24, reproduced below, shows another embodiment of a display of Okamura that includes a content playback screen.

FIG. 24

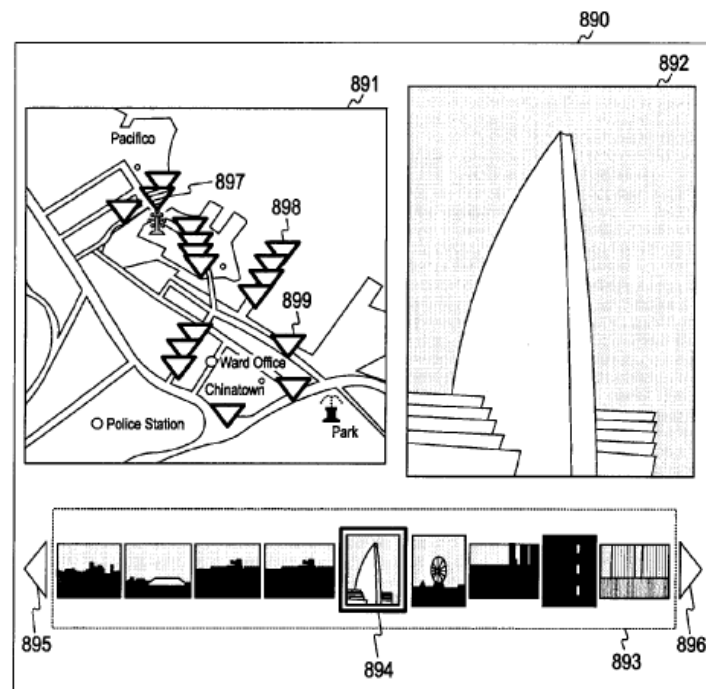


Id. at Fig. 24, ¶ 44. As shown in Figure 24, content playback screen 460 can be displayed “when the mouse is placed over the face portion” in another content playback screen. *Id.* at Fig. 24, ¶ 261. Content playback screen 460

includes image 461 of the vicinity of the face displayed in magnified form and content listing display area 462 in content display area 411. *Id.* at Fig. 24, ¶ 261. Content listing display area 462 shows a listing of contents included in the face cluster (from Figure 21 for example) and also thumbnail images of the content. *Id.* at Fig. 24, ¶ 261.

Figure 50, reproduced below, shows another embodiment of a display of Okamura that includes a play view screen.

FIG. 50



Id. at Fig. 50, ¶ 70. As shown in Figure 50, play view screen 890 shows “images related to a cluster corresponding to the cluster map on which a determining operation has been made are displayed,” including “a listing of contents belonging to the cluster, a content’s magnified image, and the like.” *Id.* at Fig. 50, ¶ 440. Play view screen 890 includes map display area 891, magnified image display area 892, and content listing display area 893. *Id.*

at Fig. 50, ¶ 441. Map display area 891 includes a map related to the corresponding cluster with marks indicating the generated positions of contents belonging to the corresponding cluster. *Id.* at Fig. 50, ¶ 442. Content listing display area 893 shows a listing of contents belonging to the corresponding cluster which are displayed as thumbnails. *Id.* at Fig. 50, ¶ 444. Magnified image display area 892 includes an image corresponding to the content selected from box 894 of the content listing display area 893, which is displayed in magnified form. *Id.* at Fig. 50, ¶ 443.

2. *Belitz (Ex. 1006)*

Belitz is a U.S. Patent Publication that published on March 4, 2010, more than one year before the earliest priority date of the '658 Patent. Ex. 1001, code (22), (60); Ex. 1006, code (43).

Belitz relates to a “user interface . . . configured to display a map and to display at least one marked location on said map.” Ex. 1006, code (57). By way of background, *Belitz* explains that “[i]t is common to mark special locations on a map by associating a graphical object with that location. Examples of such locations are service points, restaurants, tourist attractions, visited places etc[.] and examples of graphical objects are photographs taken at such a location.” *Id.* ¶ 2. *Belitz* further explains “[i]f many locations are located close to one another they overlap and the view of the associated images become cluttered and it is difficult to discern between the various objects and the user is not provided with a good view of what location is associated with what.” *Id.* *Belitz* presents a user interface attempting to address those concerns. *Id.* ¶ 5. Figures 4a and 4b, reproduced below, show screenshots of the user interface. *Id.* ¶ 51, 55.

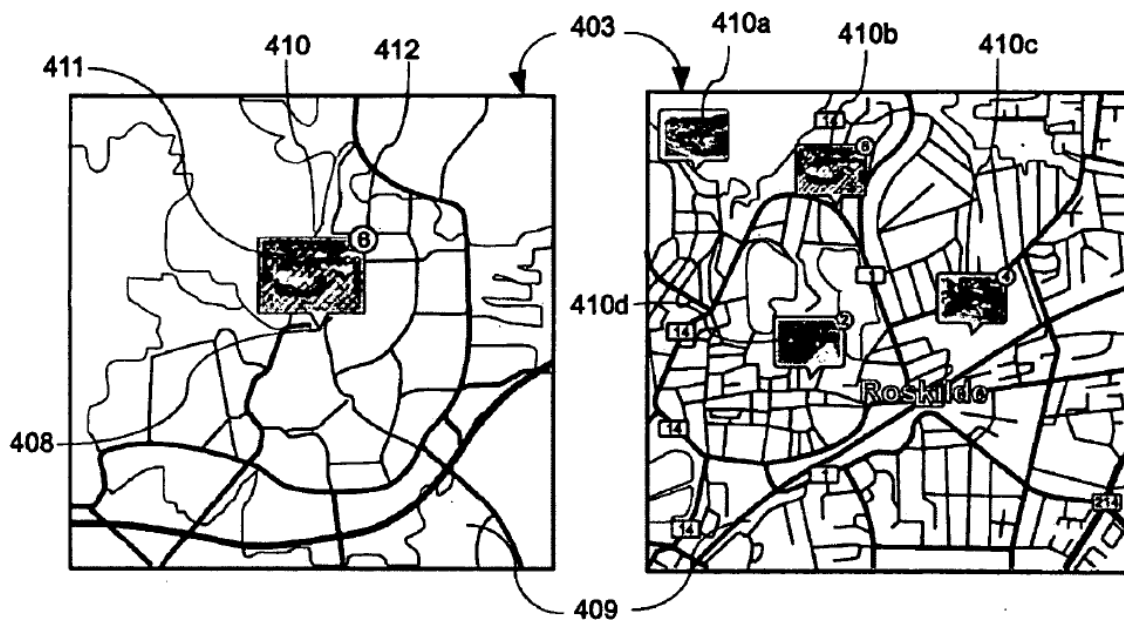


Fig. 4a

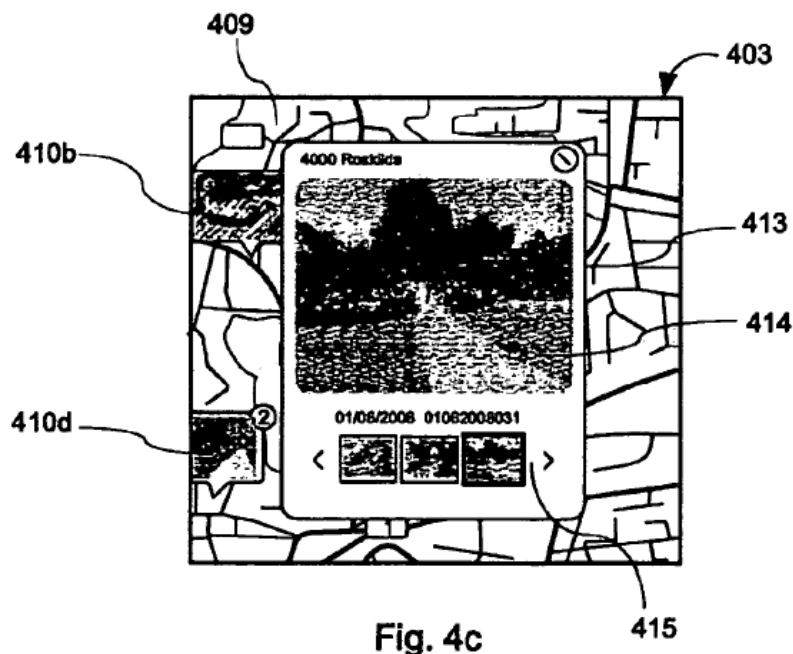
Fig. 4b

As shown in Figure 4a, a "map 409 is displayed of a town called Roskilde. A location 408 is marked by a graphical object 410." *Id.* ¶ 51. "[G]raphical object 410 has a visual representation 411 which in this embodiment is a photograph that is associated with the location." *Id.* ¶ 52. Furthermore, "graphical object 410 carries a number indicator 412 which presents a viewer with a number. The number indicates how many graphical objects 410 are associated with that location and are stacked into one graphical object 410." *Id.* ¶ 54. Furthermore, "graphical objects stacked in the displayed graphical object or graphical group object 410 . . . can be associated with other locations that are in close proximity to the marked location 408" because "if the graphical objects associated with each location were to be displayed separately they would overlap which would clutter the view and be confusing to a user." *Id.*

Figure 4b shows map 408 having been "zoomed in showing the area in greater detail." *Id.* ¶ 55. At this zoom level, graphical object 410 is "split

up into 4 graphical objects 410a, 410b, 410c and 410d” because the display of those graphical objects would not overlap. *Id.* Those graphical objects themselves also consist of some number of graphical objects. *Id.*

When a graphical object, e.g., graphical object 410, 410a, 410b, 410c, or 410d, is selected, a popup window is displayed over the graphical object. *Id.* ¶ 60. Figure 4c, reproduced below, is a screenshot showing the user interface after the selection of graphical object 410c. *Id.*



As shown in Figure 4c, the “popup window shows at least some of the visual representations 411 of the graphical object 410c.” “One 414 of the visual representations 411 or images as they are in this embodiment is shown in a larger size than the others which are shown in a list 415.” *Id.* In some embodiments, “graphical objects are photographs that are associated with the location where they were taken. The visual representations are thumbnails of the photographs.” *Id.* ¶ 62.

3. *Yee (Ex. 1041)*

Yee is a U.S. Patent Application Publication that published on August 20, 2009, more than one year before the earliest priority date of the '658 Patent. Ex. 1001, code (12), (45).

Yee relates to information-retrieving systems that allow a user to traverse digital records based on multiple dimensional attributes. Ex. 1041 ¶ 1.

“One embodiment of the present invention provides a system that facilitates traversing digital records with dimensional attributes. The system stores a number of digital records and associates a respective digital record with a number of attributes. A respective attribute can be specified in a number of levels of abstraction.” Ex. 1041 ¶ 5. “The system allows a user to control a presentation of the stored digital records based on . . . attributes” such as “Place,” “People,” or “Event.” *Id.* ¶¶ 5, 49. “The user can set one or more criteria for the attributes of the digital records to be presented.” *Id.* ¶ 5. The user can “specify the value of at least one fixed attribute of the digital records to be presented, changing at least one non-fixed attribute of the digital records to be presented, and/or specifying a level of abstraction for the fixed and/or non-fixed attribute of the digital records to be presented.” *Id.* “The system then presents a set of digital records to the user based on the attribute criteria set by the user.” *Id.* “In a variation on this embodiment, a respective digital record comprises one or more of a photograph, a piece of video, a piece of audio, and a piece of text.” *Id.* at 6.

E. Ground 1 - Obviousness of Claims 1–15 Based on the Combined Teachings of Okamura and Belitz

Petitioner asserts that claims 1–15 are unpatentable over the combination of Okamura and Belitz under 35 U.S.C. § 103(a). Pet. 21–103. Patent Owner disputes Petitioner’s assertions. PO Resp. 30–90.

1. Independent Claim 1

For each limitation of claim 1, Petitioner asserts that Okamura alone or in combination with Belitz meets that limitation. Pet. 34–64. Petitioner also provides the testimony of Dr. Greenspun in support of its position with respect to the limitations of claim 1. Ex. 1003 ¶¶ 99–148. Patent Owner does not contest Petitioner’s findings for every limitation. For the uncontested limitations, we have considered Petitioner’s evidence and arguments with respect to these limitations, including the relevant testimony of Dr. Greenspun and Dr. Reinman. For the uncontested limitations of claim 1, we determine that Petitioner has shown by a preponderance of the evidence that the combined teachings of Okamura and Belitz meet the uncontested limitations. Accordingly, we focus our discussion of this challenge on the contested limitations and Patent Owner’s arguments.

*a) Displaying of First and Second Location
Selectable Thumbnails As Required by Limitations [1b]–
[1g]*

Petitioner asserts that “Okamura discloses a map view that displays cluster maps on a map for a user ‘to intuitively grasp the geographical correspondence between the cluster maps.’” Pet. 38 (citing Ex. 1005 ¶ 312). Petitioner asserts that “Okamura’s map view screen is ‘a display screen that displays cluster maps in an overlaid manner on a map, and corresponds to the map view screen 780 shown in FIG. 41.’” *Id.* (citing Ex. 1005 ¶ 431;

Ex. 1003 ¶ 107). In addition, Petitioner asserts that Okamura’s “*clusters* a[re] ‘thumbnail’ images of a portion of a map” and “to the extent that the location-based *clusters* in Okamura’s map view are not ‘thumbnail image[s]’ as claimed, a POSITA would have been motivated to combine Okamura and Belitz such that Okamura’s map view displays selectable thumbnail images as disclosed in Belitz to obtain additional benefits.” *Id.* at 22–23 (citing Ex. 1005 ¶¶ 135, 221–223, 229–231; Ex. 1003 ¶ 86) (emphasis added).

Patent Owner contends that “Petitioner proposes three combinations of Okamura and Belitz” and argues each combination separately. PO Resp. 30–60. We discuss each argument below.

(1) *First Proposed Combination*

For its first proposed combination Petitioner asserts that a person of ordinary skill in the art would have replaced the cluster map group 771 shown in Okamura Fig. 41 with Belitz’s graphical objects 410a–d. *See* Pet. 22–26. Patent Owner contends that replacing Okamura’s cluster maps with Belitz’s graphical objects “would entirely defeat Okamura’s stated purpose of using cluster maps.” *Id.* at 33 (citing Ex. 2023 ¶ 178; *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1068 (Fed. Cir. 2016); *Google LLC f/k/a Google Inc. v. Singular Computing LLC*, IPR2021-00155, Paper 62 at 74 (PTAB May 23, 2022)). In support of this position, Patent Owner quotes Okamura’s statements that “a cluster map is a map” and that “[O]n the basis of positional information associated with each of contents belonging to a cluster, an area corresponding to the cluster can be identified, and a map covering this identified area can be used as a map (cluster map) corresponding to the cluster.” *Id.* a 33–34 (quoting Ex. 1005 ¶¶ 213, 331; citing Ex. 2023 ¶ 179; Ex. 1024, 48:8–15).

Patent Owner contends further that “[u]nlike Okamura’s cluster maps, none of Belitz’s thumbnails 410a-410d convey geographical information to enable them to be used as a map” and that “[r]eplacing Okamura’s cluster maps with Belitz’s thumbnails 410a-410d entirely eliminates all cluster map information (including the textual location labels) and the cluster map’s utility in relation to the background map.” PO Resp. 36 (citing Ex. 2024, 49:22–50:9, 181:16–182:6; Ex. 2022, 74:15–75:6, 80:9–81:19; Ex. 2023 ¶¶ 187–188).

In addition, Patent Owner contends that “a POSITA reviewing Okamura would be discouraged from turning to Belitz because the first combination carries the same disadvantages as the ‘related art’ references (Fujiwara and Takakura) associated with presenting a background map with generic markers.” PO Resp. 38 (citing Ex. 1005 ¶¶ 4–10; Ex. 2002; Ex. 2019; Ex. 2033 ¶ 192). Patent Owner contends that Okamura’s discussion of these disadvantages amounts to a teaching away from the proposed combination. *See id.* at 39–44.

Patent Owner also contends that “Petitioner’s first combination also would not have been obvious because it conflicts with Belitz’s stated objectives.” PO Resp. 44 (citing Ex. 2023 ¶ 207). Specifically, Patent Owner asserts that “[i]n the first combination, at least some of Belitz’s thumbnails overlap on the map” which is contrary to Belitz’s teaching “that the thumbnails should not touch or even be close to one another because otherwise this ‘would clutter the view and be confusing to a user.’” *Id.* at 44–45 (citing Ex. 1006 ¶¶ 54–58; Ex. 2023 ¶ 208).

Turning to Petitioner’s reasoning in support of the proposed combination, Patent Owner contends that Petitioner’s alleged “motivations”

lack merit. PO Resp. 45. Specifically, Patent Owner contends that “[a] POSITA reviewing Okamura would have understood that replacing cluster maps with Belitz’s thumbnails would have undermined” the goal of improving the user experience because Okamura’s cluster maps convey far more information regarding a particular location than Belitz’s thumbnail images. *Id.* at 46 (citing Ex. 2023 ¶ 211). Patent Owner contends further that “to the extent this alleged ‘motivation’ relates to displaying an image associated with a particular location to provide ‘a good view of what location is associated with what,’ Okamura’s Fig. 41 embodiment already achieves that objective” because “[i]n Okamura, when cluster map 784 is selected, a ‘listing of contents [images] belonging to the selected cluster map is displayed in a content listing display area 782.’” *Id.* at 47–48 (citing Pet. 24; Ex. 2023 ¶¶ 209–210, 216–217; Ex. 1005 ¶ 356, Fig. 41; Ex. 2024, 67:22–68:20).

Patent Owner further contends that Petitioners reasoning that “[i]t would have been obvious to a POSITA to incorporate Belitz’s thumbnail images . . . to provide added functionality that allows a user to preview pictures associated with a given location” is flawed because “Okamura **already** allows one to preview pictures for a given location via the content listing area 782 (a/k/a ‘filmstrip’) of FIG. 41.” PO Resp. 48 (quoting Pet. 24–25; citing Ex. 1005 ¶ 356; Ex. 2023 ¶¶ 218–220; Ex. 2024, 67:22–68:20).

In addition, Patent Owner argues that Belitz’s thumbnail images are not functionally equivalent to or known, predictable alternatives to Okamura’s cluster maps because Okamura and Belitz both teach that

cluttering, as seen in Picasa and Panoramio,⁹ is undesirable and can confuse the user. PO Resp. 49–50 (citing Ex. 1005 ¶¶ 312, 324–325; Ex. 1006 ¶¶ 54–57; Ex. 2023 ¶ 26).

Finally, Patent Owner contends that “[a] POSITA would not have understood that Okamura’s Fig. 41 embodiment is used with the index screens embodiment” because “Okamura **does** not disclose transitioning from Fig. 41 to any of the index screens in Figs. 18–21.” PO Resp. 52 (citing Ex. 2023 ¶¶ 230–232; Ex. 1005, Fig. 49, ¶¶ 429–438).

Petitioner replies that even if it were true that none of Belitz’s thumbnails convey geographical information, “a POSITA would still have been motivated to combine Okamura and Belitz to obtain ‘additional benefits’” such as “better managing digital content” and an enhanced user experience “by providing ‘a good view of what location is associated with what.’” Pet. Reply 12 (citing Ex. 1003 ¶¶ 84–98; Pet. 22–30; Ex. 1005 ¶ 91; Ex. 1006 ¶ 2). Petitioner replies further that

Even if the benefits obtained by incorporating Belitz’s thumbnails into Okamura were to come at the expense of some other benefit offered by Okamura, a POSITA pursuing the combination would have nevertheless been capable of weighing potential benefits associated with each, for instance recognizing that the benefits of viewing location-specific thumbnail images may be achieved in one instance and those of viewing location-specific cluster maps may be achieved in another.

Id. at 13 (citing *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000); Ex. 1047 ¶¶ 17–18).

⁹ Shankland (Ex. 1022), which includes a photo of “Picasa,” and Panoramio (Ex. 1023) are of record in this proceeding, but not relied upon as the basis of this challenge.

Replying to Patent Owner’s contention that the proposed combination suffers from the same disadvantages as Fujiwara and Takakura (PO Resp. 38–44), Petitioner asserts that in Fujiwara and Takakura “it can be difficult to grasp the geographical correspondence between digital files because their thumbnails are not placed directly on the map.” Pet. Reply 14 (citing Ex. 1047 ¶ 20; Ex. 2002, Fig. 12; Ex. 2019, Fig. 1). In contrast, according to Petitioner, “it is **not** difficult to grasp the geographical correspondence between digital files in Belitz . . . by virtue of the location of the thumbnails on the map.” *Id.* (citing Ex. 1047 ¶ 20; Ex. 1006, Figs. 4a–4b). Thus, according to Petitioner, “the alleged problems with Fujiwara and Takakura that ‘may make it difficult to grasp the geographical correspondence’ of their images are not manifested in the same manner in Belitz.” *Id.* (citing Ex. 1047 ¶¶ 20–21; PO Resp. 39).

Replying to Patent Owner’s contention that “the Okamura-Belitz combination somehow conflicts with Belitz’s stated objectives of reducing clutter,” Petitioner asserts that Patent Owner relied on “a cropped reproduction of an illustration originally provided by Dr. Greenspun” and that “a portion of Dr. Greenspun’s illustration that was **not** shown by Patent Owner clearly shows that the combination can be achieved without any overlap.” Pet. Reply 14–15 (citing PO Resp. 44–45).

Turning to Patent Owner’s contentions regarding its reasoning in support of the proposed combination, Petitioner replies that Patent Owner ignores “the careful explanation previously provided by Dr. Greenspun.” Pet. Reply 16 (citing PO Resp. 45–48). Specifically, Petitioner asserts that Patent Owner ignores Dr. Greenspun’s explanation “in his first declaration that incorporating the thumbnails of Belitz into Okamura would have

resulted in the ‘added functionality that allows a user to preview pictures associated with a given location’ and do so in a manner that allows the user to more ‘clearly see the associations.’” *Id.* (citing Ex. 1003 ¶¶ 88–89). Thus, according to Petitioner, “instead of having to click on individual clusters as in Okamura to ascertain which pictures are associated with which locations, Belitz provides a way for Okamura to provide such information all at once for multiple locations on the map.” *Id.* (citing Ex. 1047 ¶¶ 22–24). Petitioner asserts further that “the incorporation of Belitz’s thumbnails allows the user to quickly associate multiple preview pictures with multiple locations on the map without having to individually navigate through each of the clusters” such that “the combination of Okamura and Belitz helps improve user experience and overall content awareness by providing the user with a preview of the digital files associated with multiple corresponding locations.” *Id.* (citing Ex. 1047 ¶ 25). Petitioner asserts that “[i]n short, instead of changing the ‘hallmark aspects of either of these references’ as Patent Owner contends, the proposed combination of Okamura and Belitz provides a known and predictable alternative to displaying and managing digital content in a manner that can help improve user experience.” *Id.* at 16–17 (citing Ex. 1003 ¶ 89; Ex. 1047 ¶ 25).

Replying to Patent Owner’s argument that “Petitioner has ‘failed to demonstrate that the first combination (based on Okamura’s second embodiment) would have been used with Okamura’s FACE index screen 410,’” Petitioner asserts that Dr. Greenspun “explained in great detail how, *inter alia*, ‘the use of Okamura’s map view from FIG. 41 in conjunction with Okamura’s face view from FIG. 21 . . . is appropriate and obvious” and that “[t]o the extent Okamura does not explicitly disclose this transition, a

POSITA would have certainly found it obvious.” Pet. Reply 17 (citing PO Resp. 52; Ex. 1003 ¶¶ 96–98, Ex. 1047 ¶ 26).

Patent Owner responds by reiterating its arguments that Belitz has the same disadvantages as Fujiwara and Takakura, that Okamura and Belitz are not functionally equivalent, and that the proposed combination conflicts with Belitz’s objectives. PO Sur-reply 23–29.

Having considered the full record in this proceeding, we determine that Petitioner has shown by a preponderance of the evidence that claim 1 is unpatentable over the combined teachings of Okamura and Belitz as explained in Petitioner’s first proposed combination. The crux of Patent Owner’s arguments with respect to the first proposed combination is that the resulting combination would not be as good as Okamura without modification in that it would obviate some of Okamura’s features. This argument, however, discounts the advantages gained as a result of the combination. Further, it over simplifies the obviousness analysis.

“The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.”

Winner Int’l, 202 F.3d at 1349 n.8. Patent Owner contends that the proposed combination eliminates the “map” features of Okamura’s clusters (i.e., its depiction of buildings, roads, and the like). PO Resp. 33–34. Patent Owner contends further that Belitz’s thumbnails do not convey geographical information. *Id.* at 36. We do not agree that Belitz’s thumbnails do not convey geographical information. Rather, we credit Dr. Reinman’s

testimony that Belitz “shows the association of at least some pictures with the geographic location on the map.” Ex. 1045, 107:10–22.

Further, even if we assume Patent Owner is correct that the proposed combination eliminates Okamura’s “map” features, that is not the end of the analysis. Petitioner asserts that the proposed combination adds functionality in that it allows a user to preview pictures associated with a given location without having to click on individual clusters and that it allows users to preview pictures for multiple locations on the map. Pet. Reply 16. We find that this added functionality provided by the use of Belitz’s thumbnails outweighs the potential loss of any map information provided by Okamura’s cluster maps.

In addition, we agree with Petitioner that “Belitz’s thumbnail images displayed on the interactive map are functionally equivalent to Okamura’s location-based clusters” in that “(1) both Belitz’s thumbnail images and Okamura’s clusters are associated with a given location, (2) both are displayed on the interactive map, and (3) both are dynamically generated/modified based on user interaction including zooming in/out on the map.” Pet. 24. We also agree with Petitioner that the use of thumbnails on interactive maps was well known at the time of the invention and that it would have been obvious to one of ordinary skill in the art to substitute Belitz’s thumbnails for Okamura’s cluster maps. *Id.* at 25.

Moreover, we do not agree with Patent Owner that Belitz’s thumbnails are subject to the same disadvantages as Fujiwara and Takakura, that present a background map with generic markers, because Belitz’s thumbnails are not generic. PO Resp. 38. Belitz’s thumbnails are photographs associated with a location. Ex. 1006 ¶ 52. We also do not

agree with Patent Owner that the proposed combination would result in some overlap on the map as we credit Dr. Greenspun's full testimony demonstrating how the combination can be achieved without overlap. PO Resp. 44; Ex. 1003 ¶ 86; Ex. 1047 ¶ 23).

Turning to Petitioner's reasoning in support of the proposed combination, we do not agree with Patent Owner that Petitioner's "motivations" lack merit. PO Resp. 45. For the reasons discussed above, we determine that Petitioner has shown by a preponderance of evidence that the proposed combination adds functionality that improves the user experience which outweighs any potential loss of functionality due to elimination of some geographic information.

We do not agree with Patent Owner's argument that "Petitioner's combination results in no 'added [preview] functionality' because Okamura already has it." PO Resp. 48–49 (citing *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1369 (Fed. Cir. 2012)). We credit Dr. Greenspun's testimony that "incorporating the thumbnails of Belitz into Okamura would have resulted in the 'added functionality that allows a user to preview pictures associated with a given location' and would have been done so in a manner that allows the user to more 'clearly see the associations.'" Ex. 1047 ¶ 24 (citing Ex. 1003 ¶¶ 88–89).

We also do not agree with Patent Owner that Belitz's thumbnails are not functionally equivalent to Okamura's cluster maps. For the reasons discussed above, we determine that Petitioner has demonstrated by a preponderance of the evidence that it would have been obvious to a person of ordinary skill in the art to replace Okamura's cluster maps with Belitz's thumbnails.

For these reasons, we determine that Petitioner has shown by a preponderance of the evidence that the combined teachings of Okamura and Belitz as proposed in Petitioner's first combination would have rendered displaying of first and second location selectable thumbnails as required by limitations [1b]–[1g] obvious to one of ordinary skill in the art at the time of the invention.

(2) *Second Proposed Combination*

Petitioner's second proposed combination, involves replacing 'Okamura's map view screen shown in FIG. 41 with Belitz's geographic map view.'" See Pet. 26–27, 31–33. Patent Owner asserts further that "[w]hile the second combination places thumbnail images on Belitz's map rather than Okamura's background map, the second proposed combination nevertheless replaces Okamura's cluster maps with Belitz's thumbnail images." *Id.* at 54. Thus, according to Patent Owner, [t]his combination carries the same deficiencies as Petitioner's first combination because the second combination proposes replacing cluster maps with thumbnail images that are not maps." *Id.* (citing *id.* at 31–53; Ex. 2023¶ 235).

Patent Owner contends further that "the second combination carries additional disadvantages that would have led a POSITA away from the combination." PO Resp. 55. According to Patent Owner, "the second combination proposes replacing displaying multiple images corresponding to a location (e.g. content listing display area 782) with a single image (e.g. a Belitz thumbnail)." *Id.*

In addition, Patent Owner contends that "Belitz's popup window feature obscures far more of the underlying map 409 than the content listing area 782 in Okamura" such that "[i]ncorporating this obscuring pop-up

window—rather than Okamura’s content listing area 782 at the bottom of the screen—would not be desirable to a POSITA because it would limit the amount of information that can be conveyed at a given time.” PO Resp. 55–56 (citing Ex. 2023 ¶¶ 238–239). Patent Owner also contends that “much of the information shown in FIG. 41 of Okamura would be lost if it were displayed according to Belitz.” *Id.* at 56 (citing Ex. 2023 ¶ 240).

Petitioner replies that Patent Owner attempts to exaggerate the alleged loss of geographical information as a result of the proposed combination by providing an inaccurate illustration including “a conspicuously large and opaque border around Belitz’s thumbnail images.” Pet. Reply 18. Petitioner replies further that “even if such a border were to be originally present, both Dr. Reinman and Dr. Greenspun agree that reducing clutter through simple design changes, which would include minimizing any obtrusive borders, would have been well-known to a POSITA.” *Id.* at 19 (citing Exc. 1045, 99:3–100:18; Ex. 1047 ¶ 29). In addition, Petitioner replies that “the second combination can improve user experience and content awareness by providing the user with a preview of the digital files associated with the corresponding location.” *Id.* (citing Ex. 1003 ¶ 91).

Patent Owner responds that Petitioner does not dispute that the second combination eliminates the entirety of Okamura’s content listing display area 782. PO Sur-reply 28. Patent Owner also reiterates its argument that in the second proposed combination Okamura’s cluster map’s geographic information would be entirely lost. *Id.* at 29.

Although, we agree with Patent Owner, that Petitioner does not dispute that in its second combination Okamura’s cluster maps and their associated geographic information would be lost, we do not see how this

observation renders the proposed combination untenable. Petitioner has shown how the proposed combination meets limitations [1b]–[1g] of claim 1. Pet. 26–28, 37–56. To the extent that Patent Owner’s arguments regarding the Petitioner’s first proposed combination apply to its second proposed combination, those arguments are unconvincing for the reasons discussed above. In particular, we determine that the benefits of “better managing digital content” and an enhanced user experience “by providing ‘a good view of what location is associated with what’” outweigh any loss of geographical information. See Pet. 22–30.

For these reasons, we determine that Petitioner has shown by a preponderance of the evidence that the combined teachings of Okamura and Belitz as combined in Petitioner’s second combination would have rendered displaying of first and second location selectable thumbnails as required by limitations [1b]–[1g] obvious to one of ordinary skill in the art at the time of the invention.

(3) Third Proposed Combination

Petitioner’s third proposed combination replaces a 3x5 matrix of cluster maps in FIG. 18 of Okamura (the first embodiment) with Belitz’s map.” See Pet. 26–28. Patent Owner asserts that “[f]or the same or similar reasons discussed above for the first proposed combination, a POSITA would not replace cluster map display area 414 in FIG. 18 with Belitz’s map because this would completely eliminate Okamura’s cluster maps.” *Id.* (citing *id.* at 31–57; Ex. 2023 ¶¶ 243–244).

Patent Owner contends further that “[i]f the content from Okamura’s FIG. 18 were displayed according to Belitz, the content in Tokyo,

represented by separate cluster maps in FIG. 18, would be zoomed out to a scale large enough to capture Japan and Hawaii.” PO Resp. 59 (citing Ex. 2023 ¶¶ 247–248). According to Patent Owner, “[t]his presents the same exact scaling problem Okamura identifies and seeks to eliminate through its cluster maps.” *Id.* at 59–60 (citing Ex. 2024, 60:7–61:20, 62:5–17; Ex. 2023 ¶¶ 245–249). Thus, according to Patent Owner, “Okamura would lead a POSITA away from making the third combination.” *Id.* at 60.

Petitioner replies that “the proposed combination is not a physical extraction of components from Belitz that are grafted onto Okamura.” Pet. Reply 19–20 (citing *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012); *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (*en banc*)). Petitioner asserts that “[a]mong other things, a POSITA, if cognizant of the fact that the Okamura-Belitz combination works less effectively at certain map scales, would know how to adjust the display of Okamura-Belitz depending on the zoom level.” *Id.* at 20 (citing Ex. 1047 ¶ 31). As an example, Petitioner asserts that “for a zoomed-out map, the display shown in Okamura’s FIG. 41 may be preferred,” whereas “[f]or a zoomed-in map, on the other hand, the incorporation of Belitz’s thumbnails may be preferred.” *Id.*

Petitioner has not adequately explained the proposed combination. Petitioner’s reply to Patent Owner’s contentions does not even rely on the proposed combination. Rather, Petitioner appears to rely on a mix of the proposed first and second combinations.

For these reasons, we determine that Petitioner has not demonstrated by a preponderance of the evidence that the combined teachings of Okamura and Belitz as proposed in Petitioner’s third combination would have rendered displaying the first and second location selectable thumbnails as

required by limitations [1b]–[1g] obvious to one of ordinary skill in the art at the time of the invention.

*b) Displaying an Application View as Required by
Limitation 1[a]*

Petitioner asserts that “Okamura displays an application view (index screen 410) and a plurality of selectable elements (‘an ‘EVENT’ tab 411, a ‘FACE’ tab 412, a ‘PLACE’ tab 413’).” Pet. 36 (citing Ex. 1005 ¶¶ 235–236, Figs. 18–21; Ex. 1003 ¶¶ 103–104). Petitioner asserts further that “‘PLACE’ tab 413 is a location selectable element (‘depressed using the cursor 419 by a user operation on the index screen 420’).” *Id.*

Noting that the Petition also identifies Figure 19 as one example of the claimed “map view,” Patent Owner contends that “Petitioner identifies the content playback screen 410 as corresponding to both the ‘application view’ and the ‘map view’ in claim 1. However, claim 1 requires that the ‘application view’ and ‘map view’ are separate views.” PO Resp. 62 (citing *id.* at 13–17). According to Patent Owner, “[t]he index playback screen 410 is one view – it cannot be both the claimed ‘application view’ and the claimed ‘map view.’” *Id.* (citing Ex. 2023 ¶ 255).

Petitioner replies that “for the reasons discussed above, ‘an application view’ should not be so narrowly construed in this instance.” Pet. Reply 21. Petitioner replies further that “to the extent that an application view must be distinct from a map view, Okamura discloses such an application view as detailed in the Petition.” *Id.* Specifically, Petitioner asserts that “as Dr. Greenspun explained in his original declaration, Okamura discloses an application view that is different from other claimed views in claim 1.” *Id.*

As an example, Petitioner asserts that “the index screen 410 portion of Okamura’s interface (which includes selectable tabs 411-413 and an area for content display based on which tab is selected) is different from Okamura’s map view (e.g., the cluster map display area 414 from Okamura’s FIG. 18).” Pet. Reply 21 (citing Pet. 37, 40; Ex. 1003 ¶¶ 104–105; Ex. 1047 ¶ 32). Petitioner asserts further that “a POSITA would have recognized that the index screen 410 and the cluster map display area 414 are different, at least because the index screen 410 includes the plurality of selectable elements.” *Id.* citing (Ex. 1003 ¶ 104; Ex. 1005 ¶¶ 235–236, Figs. 18–21; Ex. 1047 ¶ 33).

Patent Owner responds that “[a] POSITA would consider index screen 410 to be one view – not two.” PO Sur-Reply 32 (citing PO Resp. 62; Ex. 2023 ¶¶ 251–254; Ex. 2024, 36:5–12, 38:8–39:4).

In Section II.C.1, we construed the claim term “application view” in accordance with the discussion of “Application View” in the Specification of the ’658 Patent, and determined that an “application view” is “a customized display of digital tags or files.” Ex. 1001, 9:18–22. Nothing in this definition precludes one “application view” from encompassing another or requires that only one “application view” be visible at a time.

Petitioner identifies Okamura’s index screen 410 as corresponding to the “application view” required by limitation [1a]. Pet. 37–38. The ’658 Patent describes index screen 410 as having tabs such as the “EVENT” tab 411, the “FACE” tab 412, and the “PLACE” tab 413 and a cluster map display area 414, as well as left and right buttons 415 and 416. Ex. 1005 ¶ 235. We agree with Petitioner that Okamura’s index screen 410 meets the definition of ‘Application View’ as that term is used in the ’658 Patent.

Petitioner identifies Okamura's map view screen 780 as corresponding to the claimed "map view." Pet. 38. Map view screen 780 also meets the definition of "application view" in that it is a customized display of digital tags or files. Map view screen 780 is clearly different than index screen 410. Thus, in Petitioner's first proposed combination, there is no question that two different "application views" are relied upon to meet the limitations of claim 1 requiring an "application view" and a "map view."

Turning to Petitioner's second proposed combination, Patent Owner is correct that the Petition identifies Okamura's cluster map display area 414 as corresponding to the claimed "map view." Pet. 40. Okamura describes cluster map display area 414 as displaying a listing of marks (cluster maps) representing clusters generated by tree restructuring section 160 and stored in cluster information storing section 240. Ex. 1005 ¶ 237. Cluster map display area 414 also meets the definition of "application view" in that it is a customized display of digital tags or files. Given that there is nothing in the definition of "application view" that precludes another view from being displayed within it, we determine that the second proposed combination also meets the limitations of claim 1 requiring an "application view" and a "map view."

Thus, Petitioner has demonstrated by a preponderance of the evidence that both Okamura's map view screen 780 and its cluster map display area 414 meet the requirement for a "map view" as recited in limitation [1a].

c) Conclusion Re Claim 1

Having considered the evidence, testimony, and arguments in the record, we determine that Petitioner has shown that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the

manner proposed in this challenge to claim 1. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 1 is unpatentable over the combined teachings of Okamura and Belitz.

2. *Dependent Claims 2–15*

For each limitation of claims 2–15, Petitioner asserts that Okamura alone or in combination with Belitz meets that limitation. Pet. 65–103. Petitioner also provides the testimony of Dr. Greenspun in support of its position with respect to the limitations of claim 2–15. Ex. 1003 ¶¶ 149–202. Patent Owner contends that “[b]ecause Petitioner has failed to show that any of the references identified in Grounds 1-5 render obvious claim 1, it also fails to meet its burden for dependent claims 2–15 in each of Grounds 1–5.” PO Resp. 62. Patent Owner also presents further arguments for claims 3–5, 7–10, 12, 14, and 15. *Id.* at 63–90.

We disagree with Patent Owner’s argument that Petitioner fails to show that claim 1 is unpatentable for the reasons discussed in Section II.E.1 above. Patent Owner does not present separate arguments for claims 2, 6, and 11. *See generally*, PO Resp. Having considered the evidence, testimony, and arguments in the record for these claims, we determine that Petitioner has shown that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claims 2, 6, and 11 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 2, 6, and 11 are unpatentable over the combined teachings of Okamura and Belitz.

We discuss claims 3–5, 7–10, and 12–15 below.

3. *Dependent Claims 3 and 4*

Claim 3 depends from claim 1 and adds the limitation “further comprising responsive to a click or tap of a first one of the displayed scaled replicas in the first location view, displaying a first digital photograph associated with the first scaled replica in the first location view and a first map image indicating the geographic coordinates of the first geotag.” Claim 4 depends from claim 1, and adds the limitation “further comprising responsive to a click or tap of a first one of the displayed scaled replicas in the second location view, displaying a first digital photograph associated with the first scaled replica in the second location view and a second map image indicating the geographic coordinates of the second geotag.”

To meet the limitations of claim 3, Petitioner asserts that Okamura describes “selecting a content with ‘selection box 894’ from ‘content listing display area 893’ (that displays scaled replicas) causes the content (first digital photograph associated with the first scaled replica) to be displayed on ‘magnified image display area 892.’” Pet. 65–66 (citing Ex. 1005 ¶¶ 439–444, Fig. 50; Ex. 1003 ¶ 150). Petitioner asserts further that “Okamura displays a first map image in ‘map display area 891’ that displays ‘a map related to the corresponding cluster’ (relating to the selected cluster from the map view screen.” *Id.* at 66 (citing Ex. 1005 ¶ 442, Fig. 50; Ex. 1003 ¶ 151). Noting that Patent Owner “has contended that ‘indicating ... geographic coordinates’ represents merely displaying a location on a map,” Petitioner asserts that based “on such an interpretation, Okamura alone (referring to first map image 891 from FIG. 50) renders [claim 3] obvious.” *Id.* (citing Ex. 1003 ¶ 152).

For claim 4, Petitioner asserts that “Okamura discloses multiple scaled replicas in its second location view; any one of Okamura’s contents in content listing display area 893 is a first one of the scaled replicas.” Pet. 69 (citing Ex. 1005 ¶¶ 439–444, Fig. 50; Ex. 1003 ¶ 155). Petitioner asserts further that “operations that can be applied to Okamura’s first location view that is displayed in response to selection of a first thumbnail are equally applicable to Okamura’s second location view that is displayed in response to selection of a second thumbnail” and that “a POSITA would have understood and found obvious that the images in the second location view would change to those associated with the second location upon selection of a thumbnail associated with the second location.” *Id.*

Patent Owner contends that “Okamura does not disclose, and Petitioner does not argue, that the map in display area 891 (alleged [first/second] map image) is displayed ‘responsive to’ a click or tap of selection box 894 (alleged scaled replica), as claimed.” PO Resp. 64. Patent Owner contends that in Okamura “the play view screen 890 and map in display area 891 display when ‘one of [the] cluster maps [is] selected on the map view screen.’” *Id.* (citing Ex. 1005 ¶¶ 440–442) (footnote omitted). In other words, Patent Owner contends, “Okamura’s alleged *map image* is already displayed responsive to a selection in the map view, and **before** any click or tap in the *first location view*” and “[a]n element that is already displayed before a click or tap is not displayed ‘responsive to’ the click or tap.” *Id.* (citing Ex. 2023 ¶ 259; *id.* at 17–25).

Petitioner replies that “as explained in the Petition, the corresponding map image of Okamura is displayed **in response** to the user’s selection.” Pet. Reply 23 (citing Pet. 65–70, Ex. 1003 ¶ 155; Ex. 1047 ¶ 36). Petitioner

asserts that “a POSITA would have understood that the identified map image of Okamura ‘would change to those associated with’ the location selection via the thumbnail.” *Id.* (citing Pet. 69–70, Ex. 1003 ¶ 155; Ex. 1047 ¶ 36). Petitioner replies further, that “even assuming for sake of argument that the underlying map in Okamura does not change, the coordinates certainly do, thereby displaying, responsive to the selection, a map image with coordinates of the selected photo.” *Id.* (citing Pet. 65–70, Ex. 1003 ¶ 155; Ex. 1047 ¶ 37).

Patent Owner replies that Okamura “discloses that upon selecting a scaled replica, the ‘mark 897 . . . is displayed in a different manner of display from that of the other marks,’” but “[e]ven if the shading of a map marker may change responsive to a selection of a scaled replica, the underlying map image was already displayed and, therefore, is not the claimed [first/second] map image.” PO Sur-reply 32–33 (citing Ex. 1005 ¶ 442; Ex. 2023 ¶¶ 124–128, 258–259).

In order to evaluate the parties’ positions regarding claims 3 and 4 we need to understand Okamura’s disclosure as it pertains to map display area 891 and content listing display area 893. Paragraphs 441 and 444 of Okamura, reproduced below with emphasis added, are instructive.

[0441] The play view screen 890 includes, for example, three display areas, *a map display area 891*, a magnified image display area 892, and *a content listing display area 893*. It should be noted that although not shown in FIG. 50, in the area other than these three display areas, *a wide-area map (cluster wide-area map) related to the corresponding cluster can be displayed as a background image*. In this case, the wide-area map may be displayed in an inconspicuous color (for example, grey).

[0444] In the content listing display area 893, a listing of contents belonging to the corresponding cluster is displayed as

thumbnails. For example, if there is a large number of contents to be listed for display, only some of the contents to be listed for display may be displayed in the content listing display area 893, and the other contents may be displayed by a scroll operation. For example, the other contents may be scroll displayed by a scroll operation using a left button 895 and a right button 896. Also, at least one content can be selected from among the listing of contents displayed in the content listing display area 893. *In the example shown in FIG. 50, the content displayed at the center portion of the content listing display area 893 is selected.* The content thus selected is displayed while being attached with the selection box 894 indicating the selected state. This selection box 894 can be in, for example, yellow color. A selecting operation on a content can be made by using a cursor. An image corresponding to the content attached with the selection box 894 in the content listing display area 893 is displayed in magnified form in the magnified image display area 892. Editing, processing, and the like can be performed on each content by a user operation.

Ex. 1005 ¶¶ 441, 444.

Petitioner's assertions that "the corresponding map image [891] of Okamura is displayed *in response* to the user's selection" and that "a POSITA would have understood that the identified map image of Okamura 'would change to those associated with' the location selection via the thumbnail" are supported by the paragraphs quoted above, because the content that is displayed is selected by selection of a thumbnail in content listing display area 893. Ex. 1005 444.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claims 3 and 4 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the

evidence that claims 3 and 4 are unpatentable over the combined teachings of Okamura and Belitz.

4. *Dependent Claim 5*

Claim 5 requires, the method of claim 1:

wherein the plurality of selectable elements further includes a people selectable element, the method further comprising responsive to a click or tap of the people selectable element, displaying a people view, the displaying the people view including displaying:

(i) a first person selectable thumbnail image including an image of a face of a first person, a third set of digital photographs and videos including digital photographs and videos associated with the first person;

(ii) a name associated with the first person, the name associated with the first person being displayed adjacent to the first person selectable thumbnail image;

(iii) a second person selectable thumbnail image including an image of a face of a second person, a fourth set of digital photographs and videos including digital photographs and videos associated with the second person; and

(iv) a name associated with the second person, the name associated with the second person being displayed adjacent to the second person selectable thumbnail image.

Ex. 1001, 36:30–49.

For each limitation of claim 5, Petitioner asserts that Okamura alone or in combination with Belitz meets that limitation. Pet. 70–77. Petitioner also provides the testimony of Dr. Greenspun in support of its position with respect to the limitations of claim 5. See Ex. 1003 ¶¶ 156–164. For the uncontested limitations of claim 5, we have considered Petitioner’s evidence and arguments with respect to these claims, including the relevant testimony of Dr. Greenspun and Dr. Reinman. We determine that Petitioner has shown by a preponderance of the evidence that the combined teachings of Okamura

and Belitz meet the requirements of the uncontested limitations of the claim. We focus our discussion below of the contested limitations of claim 5.

Petitioner asserts that “Okamura describes that, ‘when the mouse is placed over a thumbnail image 432 by a user operation on the index screen 430 shown in FIG. 21, the color of the thumbnail image 432 changes, and pieces of information 433 related to the thumbnail image 432 are displayed.’” Pet. 74 (citing Ex. 1005 ¶ 247). According to Petitioner, “Okamura explains that, ‘as the **pieces of information 433** related to the thumbnail image 432, for example, other pieces of information such as the **name of the person** corresponding to the face may be displayed as well.’” *Id.* (citing Ex. 1005 ¶ 247). Petitioner asserts further that as Okamura displays the number of digital files next to its associated thumbnail image, its “user interface would display the name **adjacent** to the first person selectable thumbnail image.” *Id.* (citing Ex. 1005 ¶¶ 99, 110, 139, 232–248, 267, Fig. 21; Ex. 1003 ¶ 162).

In addition, Petitioner asserts that

Okamura discloses multiple person selectable thumbnail images and, because Okamura’s multiple face-based thumbnails are displayed on the index screen (FIG. 21), any one of the person selectable thumbnail images (e.g., as annotated below) displayed on the index screen is a second person selectable thumbnail image, as long as it is different from a first person selectable thumbnail image (e.g., thumbnail 432).

Pet. 75 (citing Ex. 1005 ¶¶ 234, 246–260, 267, Fig. 21; Ex. 1003 ¶ 163).

Patent Owner contends that “in Okamura, the information 433 (allegedly containing the name) in the face cluster display area 431 (the alleged people view) is **not** displayed in response to selecting FACE tab 412 (the alleged people selectable element),” “[i]nstead, the user must make a

separate input that involves placing ‘the mouse . . . over a thumbnail image 432 by a user operation’ (i.e., a mouse-over) to display information 433.” PO Resp. 65 (citing Ex. 2023 ¶ 263; Ex. 1005 ¶ 247). Thus, according to Patent Owner, “any alleged ‘name’ in the face cluster display area 431 is not displayed responsive to a click or tap of the FACE tab 412.” *Id.* (citing Ex. 2023 ¶ 263).

Patent Owner contends further that “Okamura does not disclose displaying both a ‘name associated with the first person’ **and** a ‘name associated with the second person’ in the same view as required by claim 5” because “[t]he **only** way to display an alleged name in Okamura is to mouse-over a particular thumbnail image.” PO Resp. 66 (citing Ex. 2023 ¶¶ 264–265; Ex. 1005 ¶ 247).

In Section II.C.2 above, we rejected Patent Owner’s narrow claim construction interpreting the claim term “responsive to” to require a direct cause and effect relationship and adopted Petitioner’s claim construction. Applying the claim construction we adopted in Section II.C.2, we determine that the intervening mouse roll-over required to display the first or second name does not preclude Okamura from meeting the limitations of claim 5 requiring display of first and second names, because the claim does not preclude subsequent user interaction or software implementation.

In Section II.D.2 above, we rejected Patent Owner’s narrow claim construction interpreting the first and second name displaying terms in claim 5 to require simultaneous display of both names. Nothing in claim 5 precludes the display of a first name followed by the display of a second name. We determine that Okamura meets these claim limitations.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claim 5 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 5 is unpatentable over the combined teachings of Okamura and Belitz.

5. *Dependent Claims 7 and 10*

Claim 7 requires, the method of claim 1, “further comprising responsive to a click or tap of the first person selectable thumbnail image, displaying a first person view, the displaying the first person view including displaying (i) the name associated with the first person and (ii) a scaled replica of each of the digital photographs and videos in the third set of digital photographs.” Ex. 1001, 36:56–62. Claim 10 requires, the method of claim 7, “further comprising responsive to a click or tap of the second person selectable thumbnail image, displaying a second person view, the displaying the second person view including displaying (i) the name associated with the second person and (ii) a scaled replica of each of the digital photographs and videos in the fourth set of digital photographs.” Ex. 1001, 37:4–11.

Petitioner asserts that “Okamura describes that selecting, by a click or tap, a face-based thumbnail image (‘when a desired cluster is determined **by a user operation**’ . . . ‘for example, **a click operation** with the mouse’) causes the user interface to display ‘contents included in the face cluster.’” Pet. 80 (citing Ex. 1005 ¶¶ 261–262, Figs. 21, 24; Ex. 1003 ¶ 168). Petitioner asserts further that “[c]ontent display area 441 includes a scaled replica of each digital file in the third set of digital files.” *Id.* at 81 (citing

Ex. 1003 ¶ 169). Petitioner asserts further that “[b]ecause Okamura describes multiple person selectable thumbnail images, Okamura describes display of a second person view responsive to a selection of the second person selectable thumbnail image.” *Id.* at 92 (citing Ex. 1003 ¶ 187).

Patent Owner contends that “the content playback screen 460 of Fig. 24 (alleged [first/second] person view) is **not** displayed responsive to a click or tap in the index screen 430 of FIG. 21,” “[i]nstead, there are multiple intervening steps and views between FIG. 21 (the alleged people view) and FIG. 24 (the alleged person view).” PO Resp. 69 (citing Ex. 2023 ¶¶ 272–278; *id.* at 17–24).

Patent Owner’s argument rests on its overly narrow construction of the claim term “responsive to” which we rejected in Section II.C.2 above. Okamura discloses display of the claimed scaled replicas “responsive to” a click or tap of a first or second person selectable thumbnail as required by claims 7 and 10.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claims 7 and 10 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 7 and 10 are unpatentable over the combined teachings of Okamura and Belitz.

6. *Dependent Claim 8*

Claim 8 requires, the method of claim 7, “wherein the displaying the first person view further includes displaying a first-person-location selectable element.” Ex. 1001, 36:63–65. Petitioner asserts that

“Okamura’s position cluster transition button 455 in the corner of the first person view . . . is a first-person-location selectable element.” Pet. 83 (citing Ex. 1005 ¶¶ 236, 253, 258; Ex. 1003 ¶ 172). Patent Owner does not contest this assertion. *See, generally*, PO Resp. Instead, Patent Owner contends that Petitioner’s reliance on Yee in combination with Okamura and Belitz is flawed. PO Resp. 81–85. We understand this argument to pertain only to Ground 4 and not to Ground 1.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claim 8 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 8 is unpatentable over the combined teachings of Okamura and Belitz..

7. *Dependent Claims 9 and 12*

Claim 9 requires, the method of claim 8, “further comprising responsive to a click or tap of the first-person location selectable element, displaying a representation of all locations having a digital photograph or video associated with the first person.” Ex. 1001, 36:66–37:3. Claim 12 requires, the method of claim 11,¹⁰ “further comprising responsive to a click or tap of the second-person-location selectable element, displaying a representation of all locations having a digital photograph or video associated with the second person.” *Id.* at 37:16–20.

For claim 9, Petitioner asserts that “through Okamura’s disclosure of condition setting and sub-clustering, a POSITA would have found it obvious

¹⁰ We note that claim 11 depends from claim 10, which depends from claim 9, but Patent Owner does not address these claims in this argument.

to display, in Okamura's first person view, a first-person-location selectable element (e.g., position cluster transition button 455) that, responsive to a click or tap, displays sub-cluster information that presents locations where images/videos of the first person were taken." Pet. 89–90 (citing Ex. 1005 ¶¶ 98–101, 204, 236, 253, 258, 265–266, 271–280, Figs. 25–26). Petitioner asserts further that "[a] POSITA would have found it obvious to display all of the location sub-clusters associated with the first person" and that "[a] POSITA would have viewed display of all locations as a matter of obvious design choice and selection of one of a finite number of display options (e.g., all or less than all) that would have been obvious to try." *Id.* at 90. Petitioner refers to this discussion in addressing claim 12. *Id.* at 93.

Patent Owner contends that "Petitioner failed to show that the position cluster transition button 455 can be clicked or tapped as required by claims 9 and 12." PO Resp. 76. According to Patent Owner, "Okamura's FIG. 26 shows 'a content playback screen 470 that is displayed **when the mouse is placed over** the position cluster transition button 455 on the content playback screen 450 shown in FIG. 23.'" *Id.* (citing Ex. 1005 ¶ 265). Thus, Patent Owner contends that "the position cluster transition button 455 is not clicked or tapped because it is replaced with the cluster map 471 as soon as the mouse moves over it." *Id.* (citing Ex. 2023 ¶ 294).

Petitioner replies that "Dr. Greenspun has previously explained that this 'button' would indeed be considered to be clicked/tapped by a POSITA." Pet. Reply 27 (citing Ex. 2024, 146:12–150:6).

We do not agree with Petitioner's position. We do not agree that a mouse roll-over is the same as a "click or tap" as required by claims 9 and 12. Our analysis of the meaning of the claim term "responsive to" in Section

II.C.2 above, makes clear that mouse roll-over is not a “click or tap.” Further, Petitioner has not adequately explained why a person of ordinary skill in the art would have found it obvious to display all of the location sub-clusters associated with the first person or why such display was an obvious matter of design choice and selection of one of a finite number of display options. Instead, Petitioner relies on conclusory statements of obviousness.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would not have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claims 9 and 12 for this ground. For these reasons, we determine that Petitioner has not demonstrated by a preponderance of the evidence that claims 9 and 12 are unpatentable over the combined teachings of Okamura and Belitz.

8. *Dependent Claim 13*

Claim 13 require, the method of claim 1:

wherein the plurality of selectable elements further includes an album selectable element, the method further comprising responsive to a click or tap of the album selectable element, displaying an album view, the displaying the album view including displaying:

(i) a first album selectable thumbnail image including a scaled representation of at least one digital photograph in a third set of digital photographs and videos that includes all of the digital photographs and videos associated with a first album tag;

(ii) a first album name associated with the first album, the first album name being displayed adjacent to the first album selectable thumbnail image;

(iii) a second album selectable thumbnail image including a scaled representation of at least one digital photograph in a fourth set of digital photographs and videos that includes all of

the digital photographs and videos associated with a second album tag; and

(i[v]) a second album name associated with the second album, the second album name being displayed adjacent to the second album selectable thumbnail image.

Ex. 1001, 37:22–38:13.

For each limitation of claim 13, Petitioner asserts that Okamura alone or in combination with Belitz meets that limitation. Pet. 93–100. Petitioner also provides the testimony of Dr. Greenspun in support of its position with respect to the limitations of claim 13. See Ex. 1003 ¶¶ 190–198. For the uncontested limitations of claim 13, we have considered Petitioner’s evidence and arguments with respect to these claims, including the relevant testimony of Dr. Greenspun and Dr. Reinman. We determine that Petitioner has shown by a preponderance of the evidence that the combined teachings of Okamura and Belitz meet the requirements of the uncontested limitations of the claim. We focus our discussion below of the contested limitations of claim 13.

Petitioner asserts that “Okamura’s plurality of selectable elements include ‘*EVENT*’ **tab 411** (‘album selectable element’) for enabling display, responsive to a click or tap, of index screen 421 based on ‘date and time information.’” Pet. 94 (citing Ex. 1005 ¶¶ 234–236, 242–247; Ex. 1003 ¶ 191). Petitioner asserts further that “Okamura’s organizing digital files based on event is an example of an album.” *Id.*

In addition, Petitioner asserts that “Okamura describes a first album selectable thumbnail image (e.g., ‘*thumbnail image 422*’) that represents a third set of *associated digital files*,” and that “Okamura displays a first album tag ‘02.03-01.04.2004’ [i.e. name] adjacent to the first thumbnail

image.” Pet. 95, 97 (citing Ex. 1005 ¶¶ 244–247; Ex. 1003 ¶ 192). Petitioner asserts further that “[b]ecause Okamura’s album selectable thumbnail images are associated with different events, any one of Okamura’s album selectable thumbnail images displayed on index screen 421 is a second album selectable thumbnail image . . . as long as it is different from a first album selectable thumbnail image” and that because “Okamura discloses multiple album selectable thumbnail images (as shown below) and renders obvious a second album name, including displaying a second album name adjacent to the second album selectable thumbnail image.” Pet. 99 (citing Ex. 1005 ¶¶ 244–247, Fig. 20; Ex. 1003 ¶¶ 197–198).

Patent Owner contends that “any alleged ‘album name’ in the index screen 420 (FIG. 20) is not displayed ‘responsive to’ a click/tap of the Event tab 411 (the alleged album selectable element)” because “Okamura explains that the information 433 is only displayed ‘when the mouse is placed over a thumbnail image 432 by a user operation on the index screen 430.’” PO Resp. 87 (citing Ex. 2023 ¶ 327; Ex. 1005 ¶ 247).

Patent Owner contends further that “Okamura does not disclose any view including both the first album name and the second album name.” PO Resp. 88 (citing Ex. 2023 ¶ 328).

Patent Owner’s first argument hinges on its overly narrow construction of the claim term “responsive to.” Applying the claim construction we adopted in Section II.C.2 above, we determine that the intervening mouse roll-over required to display the first or second album name does not preclude Okamura from meeting the limitations of claim 13 requiring display of first and second album names.

In Section II.D.3 above, we rejected Patent Owner’s narrow claim construction interpreting the first and second album name displaying terms in claim 13 to require simultaneous display of both album names. Nothing in claim 13 precludes the display of a first album name followed by the display of a album second name. We determine that Okamura meets these claim limitations.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claim 13 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 13 is unpatentable over the combined teachings of Okamura and Belitz.

9. *Dependent Claims 14 and 15*

Claim 14 requires, the method of claim 13,

further comprising responsive to a click or tap of the first album selectable thumbnail image, displaying a first album view, the displaying the first album view including displaying (i) the first album name associated with the first album and (ii) a scaled replica of each of the digital photographs and videos in the third set of digital photographs and videos.

Ex. 1001, 38:14–20. Claim 15 requires, the method of claim 14,

[F]urther comprising responsive to a click or tap of the second album selectable thumbnail image, displaying a second album view, the displaying the second album view including displaying (i) the second album name associated with the second album and (ii) a scaled replica of each of the digital photographs and videos in the fourth set of digital photographs and videos.

Id. at 38:21–28.

For claim 14, Petitioner asserts that “Okamura describes selecting the first album selectable thumbnail image with ‘a mouse pointer used to point to an object of instruction or operation on the screen displayed on the display section 181.’” Pet. 100 (citing Ex. 1005 ¶ 234). Petitioner asserts further that “[w]hile Okamura focuses its figures on selection of a face-based thumbnail and display of a person view . . . a POSITA would have found it obvious that Okamura displays a similar album view in response to selection of an album selectable thumbnail image.” *Id.* at 100–101 (citing Ex. 1005 ¶ 254; Ex. 1003 ¶ 199). Petitioner also asserts that a person of ordinary skill in the art would have found it obvious to display a first album view “that includes a scaled replica of each of a third set of digital files associated with the selected album, because a POSITA would have understood that operations applied to a person selectable thumbnail image can be similarly applied to an album selectable thumbnail image.” *Id.* at 101. In addition, Petitioner asserts that “a POSITA would have found it obvious to display the album name (e.g., as part of content information 452) to improve recognition of the album/event (as similarly done in the people view).” *Id.* (citing Ex. 1005 ¶¶ 245–247). For claim 15, Petitioner makes similar assertions regarding a second album and second album name. Pet. 102–103.

Patent Owner contends that “as discussed for claim 5, Okamura does **not** disclose navigating from any of FIGS. 18–21 directly to FIG. 24; there are one or more intermediate views and inputs.” PO Resp. 90 (citing Ex. 2023 ¶ 333; *id.* at 25–29). Patent Owner contends further that “the content listing display area 462 in Okamura (the alleged scaled replicas) is limited to ‘a listing of contents included in the face cluster to which the content displayed in the content display area 441 belongs’” and that “Okamura does

not describe displaying the content listing display area 462 in a case where there is no face in the displayed image.” *Id.* (citing Ex. 1005 ¶ 251; Ex. 2023 ¶ 334). Moreover, Patent Owner contends that “Okamura does not disclose any ‘album’ containing a set of digital photographs and videos where a scaled replica of **each** photograph and video in the set is displayed” and that “[w]hile Petitioner argues that it would be ‘obvious that a first album view would include display of . . . scaled replicas,’ this conclusory assertion is insufficient.” *Id.* (citing *TQ Delta, LLC v. Cisco Systems, Inc.*, 942 F.3d 1352, 1359 (Fed. Cir. 2019)).

Petitioner replies that “intervening user actions do not eliminate the ‘responsive to’ relationship.” Pet. Reply 28 (citing Ex. 1047 ¶ 45). Petitioner replies further that “Okamura is not dogmatic in dictating how to navigate between its various screens and a POSITA would have found it obvious to eliminate any intervening steps to the extent necessary for improved user convenience.” *Id.*

We agree with Patent Owner that Okamura does not describe displaying the content listing display area 462 when there is no face in the displayed image and that to extent that Okamura discloses “albums” it does not disclose that such “albums” contain a set of digital photographs and videos where a scaled replica of each photograph and video in the set is displayed. PO Resp. 90. Given this lack of disclosure, we determine that Petitioner has not adequately explained why a person of ordinary skill in the art would modify Okamura to include albums as claimed. Petitioner’s conclusory statements are insufficient.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would not have

combined the teachings of Okamura and Belitz in the manner proposed in the challenge to claims 14 and 15 for this ground. For these reasons, we determine that Petitioner has not demonstrated by a preponderance of the evidence that claims 14 and 15 are unpatentable over the combined teachings of Okamura and Belitz.

F. Ground 2

Ground 2 applies to claims 3 and 4. Pet. 11. It adds Rasmussen to the Okamura-Belitz combination. *Id.* As we have determined that claims 3 and 4 are unpatentable over the combined teachings of Okamura and Belitz, we also determine that Petitioner has demonstrated by a preponderance of the evidence that claims 3 and 4 are unpatentable over the combined teachings of Okamura, Belitz, and Rasmussen.

G. Ground 3

Ground 3 applies to claims 6–12. Pet. 11. It adds Gossweiler to the Okamura-Belitz combination. *Id.* As we have determined that claims 6–8, 10, and 11 are unpatentable over the combined teachings of Okamura and Belitz, we also determine that Petitioner has demonstrated by a preponderance of the evidence that these claims are unpatentable over the combined teachings of Okamura, Belitz, and Gossweiler.

In Section II.E.7 above, we determined that claims 9 and 12 are not unpatentable over the combined teachings of Okamura, and Belitz. Although, claims 9 and 12 are included in Ground 3, the Petition does not address Gossweiler in its challenge to these claims. Thus, Gossweiler does not cure the deficiencies in the Okamura-Belitz combination discussed in Section II.E.7. Accordingly, we determine that Petitioner has not demonstrated by a preponderance of the evidence that claims 9 and 12 are

unpatentable over the combined teachings of Okamura, Belitz, and Gossweiler.

H. Ground 4

Ground 4 applies to claims 8, 9, 11, and 12. Pet. 11. It adds Yee to the Okamura-Belitz combination. *Id.* As we have determined that claims 8 and 11 are unpatentable over the combined teachings of Okamura and Belitz, we also determine Petitioner has demonstrated by a preponderance of the evidence that these claims are unpatentable over the combined teachings of Okamura, Belitz, and Yee.

As discussed above regarding Ground 3, we determined that Petitioner has not demonstrated that claims 9 and 12 are unpatentable over the combined teachings of Okamura and Belitz. In this ground, the Petition addresses Yee in its challenge to these claims. Pet. 90, 93. Specifically, Petitioner asserts that

Although Yee discloses an embodiment where all displayed locations are also limited to a time period (*id.*, [0047]), this embodiment is sufficient to meet the claimed “all locations” because the ’658 Patent similarly describes using time as a filter condition and a POSITA would have understood the display to cover “all locations” of the current set of digital files, even if that set is time limited.

Id. at 90 (citing Ex. 1003 ¶ 185).

Patent Owner contends that “Yee does not disclose ‘displaying a representation of **all** locations having a digital photograph or video associated with the [first/second] person’ responsive to a click or tap of the ‘[first/second]-person-location selectable element.’” PO Resp. 81–82 (citing Ex. 2023 ¶ 313). Specifically, Patent Owner contends that in Yee “the representations of locations on the map are limited” to a particular time

period. *Id.* at 82 (citing Ex. 1041 ¶ 45, Fig. 1; Ex. 2023 ¶ 313). Responding to Petitioner’s argument that Yee’s time limited disclosure is sufficient “because the ’658 Patent similarly describes using time as a filter condition,” Patent Owner asserts that “[t]he disclosure of time filters in the ’658 Patent is a non-sequitur.” *Id.*

Patent Owner also contests Petitioner’s argument that “it would have been ‘obvious for the time period selected in Yee to encompass all images/videos of the selected person.’” PO Resp. 82 (citing Pet. 91). Specifically, Patent Owner contends that “even if such a scenario were possible, this would require the user to manipulate the sliding indicator 112 so that all photographs/videos happened to be encompassed in the selected timeframe.” *Id.* at 82–83 (citing Ex. 1041 ¶ 45; Ex. 2023 ¶ 316). In addition, Patent Owner contends that a “POSITA would not have modified Yee to remove the sliding time attribute from FIG. 1 . . . because Yee requires traversing ‘digital records based on **multiple** dimensional attributes’ and states that its system ‘hinges on conceptualizing a digital record as the intersection of **multiple** dimensional attributes.’” *Id.* at 83 (citing Ex. 1041 ¶¶ 1, 24; Ex. 2023 ¶ 323).

Petitioner replies that “Dr. Greenspun previously explained how a POSITA would have viewed a display of all locations as a matter of obvious design choice, particularly in view of the teachings of Yee.” Pet. Reply 27 (citing Ex. 184–186). Petitioner replies further that “as further clarified by Dr. Greenspun, ‘Yee already contains the ability to show all the photos -- or all the locations of all the photos in the database over all time, or shrink it down to just a day, or anything in between.’” *Id.* (citing Ex. 2024, 158:6–22; Ex. 1041 ¶ 45; Ex. 1047 ¶ 43).

Patent Owner replies that Dr. Greenspun admitted that “Yee only displays representations for limited time frames such that less than ‘all locations’ would be displayed.” PO Sur-Reply 33 (citing Ex. 2024, 173:14–174:14; PO Resp. 81–82; Ex. 1041 ¶ 45). Patent Owner replies further that “Petitioner only relied on Yee’s FIG. 1 where the ‘[t]ime attribute [is] the sliding attribute,’ and as established in the POR, a POSITA would not remove the sliding time attribute.” *Id.* (citing PO Resp. 81–85; Ex. 1041 ¶ 50; Ex. 2033, 139:3–144:10; Pet. Reply 27).

We agree with Patent Owner that Yee teaches the use of a sliding time attribute. PO Resp. 82–83, PO Sur-reply 33. We do not agree, however, that Yee’s teaching precludes a time frame that includes all photographs associated with a particular person. Although, the specific example where the focus is set to “Paul” also sets a time attribute, there is nothing in Yee that requires that a time attribute be set. Further, we credit Dr. Greenspun’s testimony in his second declaration that Yee has “the ability to show all of the photo[graph]s” of a particular person or location. Ex. 1047 ¶ 43.

Having considered the evidence, testimony and arguments in the record, we determine that a person of ordinary skill in the art would have combined the teachings of Okamura, Belitz, and Yee in the manner proposed in the challenge to claims 9 and 12 for this ground. For these reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 9 and 12 are unpatentable over the combined teachings of Okamura, Belitz, and Yee.

I. Ground 5

Ground 5 applies to claims 8, 9, 11, and 12. Pet. 11. It adds Gossweiler and Yee to the Okamura-Belitz combination. *Id.* As we have

determined that claims 8 and 11 are unpatentable over the combined teachings of Okamura and Belitz, we also determine Petitioner has demonstrated by a preponderance of the evidence that claims 8 and 11 are unpatentable over the combined teachings of Okamura, Belitz, Gossweiler, and Yee. Further, as we have determined that claims 9 and 12 are unpatentable over the combined teachings of Okamura, Belitz, and Yee, we also determined that Petitioner has demonstrated by a preponderance of the evidence that claims 9 and 12 are unpatentable over the combined teachings of Okamura, Belitz, Gossweiler, and Yee.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–13 of U.S. Patent No. Patent 10,423,658 B2 are unpatentable, but has not demonstrated by a preponderance of the evidence that claims 14 and 15 are unpatentable on the bases set forth in the following table.¹¹

¹¹ 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).

Claims	35 U.S.C. §	References	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–15	103(a)	Okamura, Belitz	1–8, 10, 11, 13–15	9, 12, 14, 15
3, 4	103(a)	Okamura, Belitz, Rasmussen	3, 4	
6–12	103(a)	Okamura, Belitz, Gossweiler	6–8, 10, 11	9, 12
8, 9, 11, 12	103(a)	Okamura, Belitz, Yee	8, 9, 11, 12	
8, 9, 11, 12	103(a)	Okamura, Belitz, Yee, Gossweiler	8, 9, 11, 12	
Overall Outcome			1–13	14, 15

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 1–13 of U.S. Patent No. Patent 10,423,658 B2 are unpatentable; 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.

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Patent 10,423,658 B2

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