

Apple Inc. v. MemoryWeb, LLC

IPR2022-00031
U.S. Patent No. 10,621,228

IPR2022-00033
U.S. Patent No. 10,423,658

IPR2022-00032
U.S. Patent No. 9,552,376

PGR2022-00006
U.S. Patent No. 11,017,020

Patent Owner's Demonstrative Exhibit

Overview of the Challenged Patents: Methods of Organizing and Displaying Digital Files that Allow Preservation of Memory Details

Overview of the Challenged Patents

(12) **United States Patent**
Desmond et al. (10) Patent No.: US 10,621,228 B2
(45) Date of Patent: *Apr. 14, 2020

(54) METHOD AND APPARATUS FOR MANAGING DIGITAL FILES
(71) Applicant: NCM IP Holdings II, (US)
(72) Inventors: Christopher J. Desmond, Nancy L. Elyna, II, (US); L. Chicago, IL, (US)

(12) **United States Patent**
Desmond et al. (10) Patent No.: US 10,423,658 B2
(45) Date of Patent: *Sep. 24, 2019

(73) Assignee: NCM IP Holdings II, (US)
(71) Applicant: MemoryWeb, LLC, (US)
(72) Inventors: Christopher J. Desmond, Nancy L. Elyna, II, (US); L. Chicago, IL, (US)

(12) **United States Patent**
Desmond et al. (10) Patent No.: US 9,552,376 B2
(45) Date of Patent: Jan. 24, 2017

(12) **United States Patent**
Desmond et al. (10) Patent No.: US 11,017,020 B2
(45) Date of Patent: May 25, 2021

(54) METHOD AND APPARATUS FOR MANAGING DIGITAL FILES
(71) Applicant: MemoryWeb, LLC, Glen Ellyn, IL, (US)
(72) Inventors: Christopher J. Desmond, Glen Elyna, II, (US); Nancy L. Desmond, Glen Elyna, II, (US); L. Michael Taylor, Chicago, IL, (US)

(56) **References Cited**
U.S. PATENT DOCUMENTS
5,400,044 A 9/1995 Caha
5,694,514 A 12/1997 Evans
(Continued)

FOREIGN PATENT DOCUMENTS
CN 102591922 B 10/2015
EP 2466809 A3 2/2017
(Continued)

OTHER PUBLICATIONS
Yee et al., "Faceted Metadata for Image Search and Browsing," CHI 2003, pp. 401-408, 2003, ACM.
(Continued)

ABSTRACT
A computer-implemented method of associating digital tags with digital files comprises storing a plurality of digital files having embedded therein content data and metadata including tags; receiving, via a user interface device of a client device, a first tag label containing alphanumeric text created and inputted by a user of the client device; modifying, using a controller device, a selected first one of the tags of the metadata in a first of the digital files to include the first tag label; receiving, via the user interface device or another user interface device, an instruction to search for all of the digital files having at least the first tag label; and displaying, on a video display device associated with the client device, a first indication of the first tag label.

59 Claims, 50 Drawing Sheets

What is needed to complement the widespread availability of digital files is a medium that allows people to organize, view, preserve and share these files with all the memory details captured, connected and vivified via an interactive interface. Such a solution would allow digital files, including documents, photos, videos and audio, to tell a full story now, and for generations to come.

[228]EX1001, 1:61-67

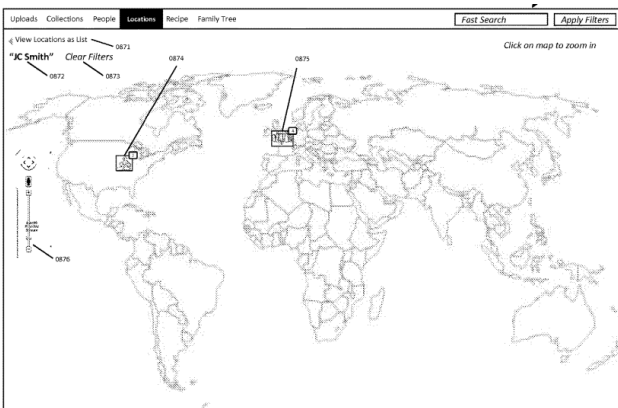
As disclosed in detail herein, the application provides the much needed platform that saves a user significant time, provides significant information with minimal screen space, and provides an appealing and customizable interface that will enhance the user experience.

[228]EX1001, 13:31-35

[228]EX1001; [658]EX1001;
[376]EX1001; [020]EX1001

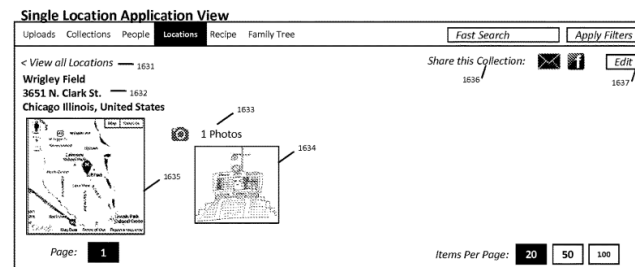
Patents Overview – Views

Map View



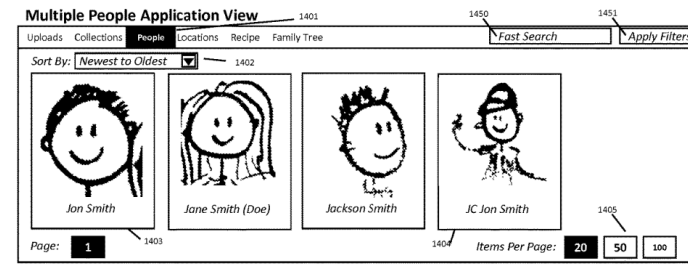
Ex. 1001, FIG. 41

Location View



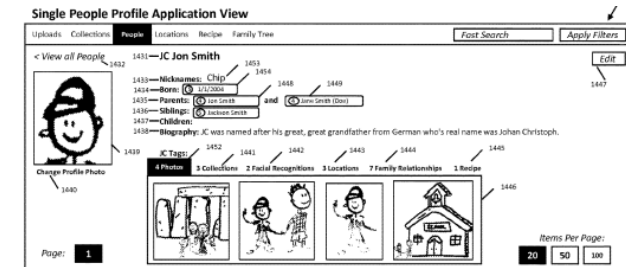
Ex. 1001, FIG. 34

People View



Ex. 1001, FIG. 32

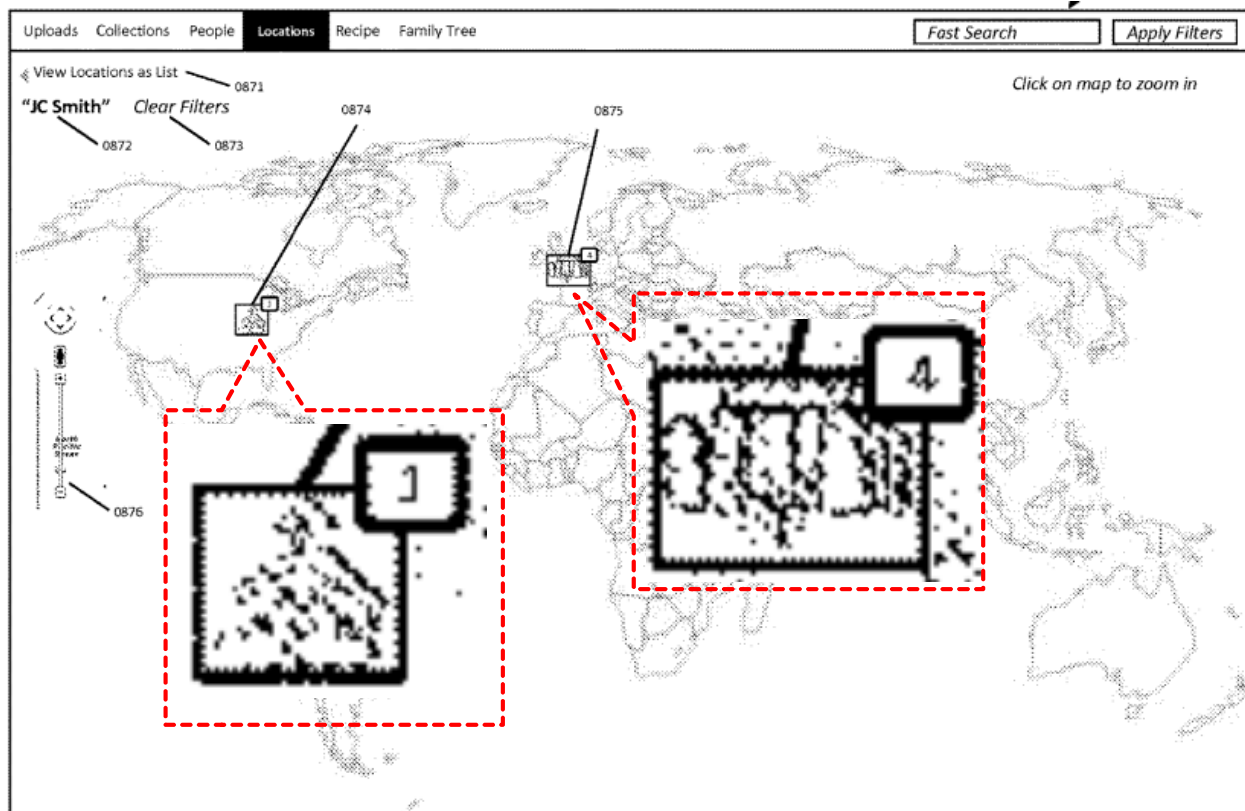
Person View



Ex. 1001, FIG. 7

Overview – the “map view” including an “interactive map”

5

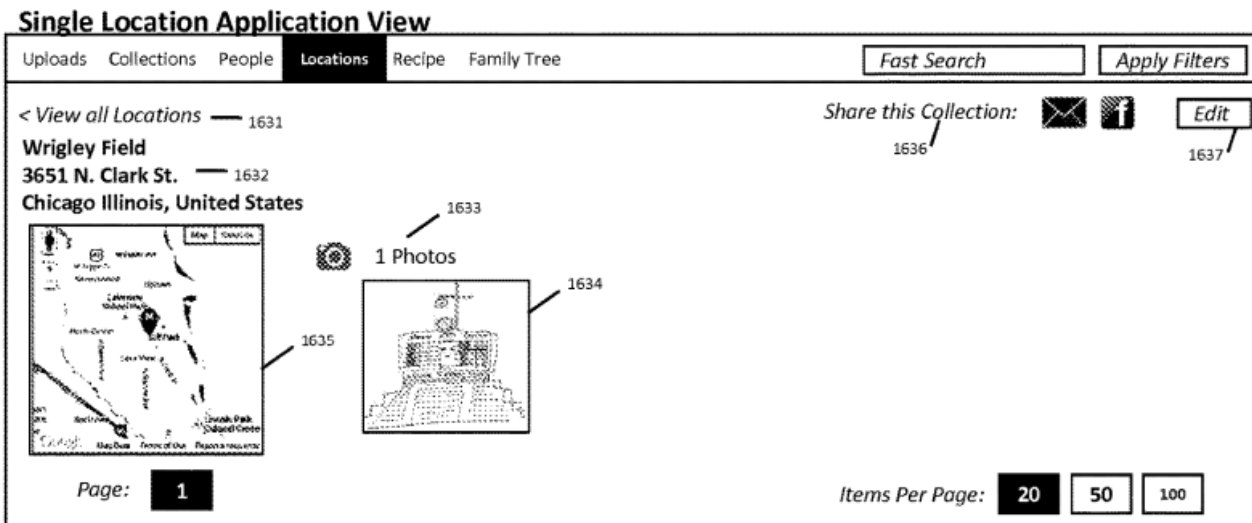


EX1001, FIG. 41

In 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 (as seen FIG. 34 (indicator **1630**)) or the user can use the **interactive map** and narrow the map view by either using the **zoom in/zoom out** bar (**0876**) on the left or simply selecting the map.

[228]EX1001, 29:48 – 55

Patent Overview – “location view”

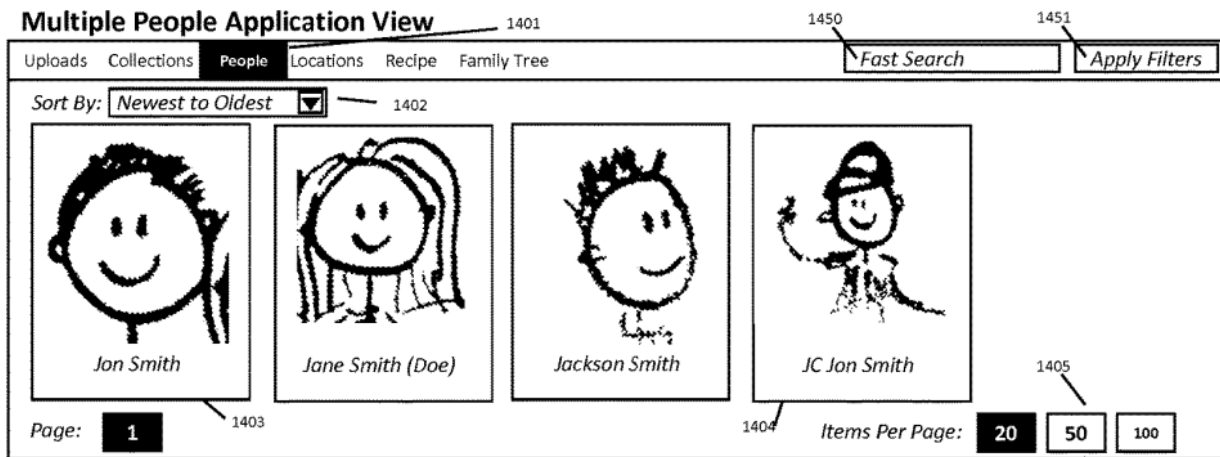


EX1001, FIG. 34

In the second Locations Application View within FIG. 34, a single location (1630) is illustrated. The individual location name is displayed at the top of the page (1632). Thumbnails of each Digital File within the specific collections are illustrated.

[228]EX1001, 24:37-41

Patent Overview – “people view”

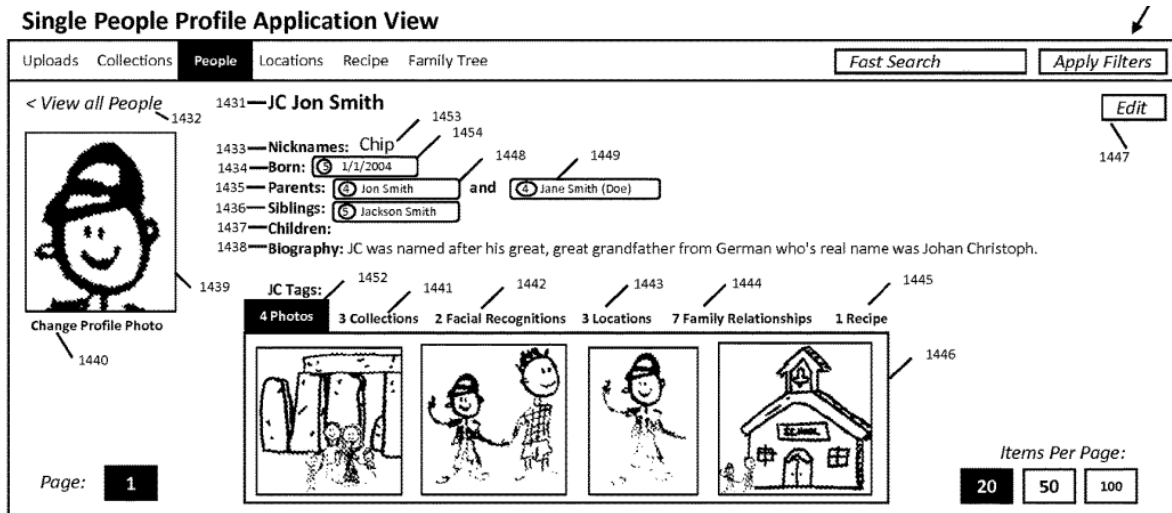


EX1001, FIG. 32 (excerpted)



EX1001, FIG. 7

Patent Overview – “person view”



EX1001, FIG. 32



Clinton Dewitt Firestone IV

Birth: July 12, 1896

Death: April 29, 1971

Parents: Clinton Dewitt Firestone III and Viola Miller

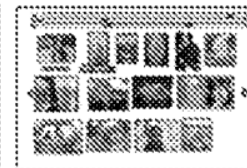
Comments: He was a WWII U.S. Air force pilot and POW in WWII and veteran honorably discharged in December of 1947. He worked for 44 years for the Firestone Tire and Rubber Company in retail, wholesale and original equipment sales, marketing and management. He was born in Akron, OH and is buried in Columbiana, OH.

[Edit bio](#)

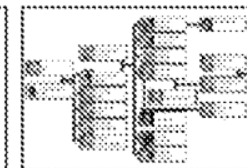
Locations



Timeline



Family Tree

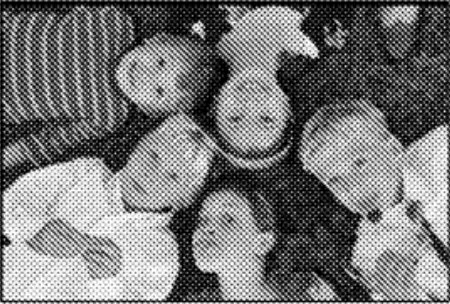


Recipes



EX1001, FIG. 7

Patent Overview – “detail view”




Comments:
Suzanne and Anthony's Wedding Party where the cousins posed for a photo in the grass. Note, Jack with the lollipop and the photographer with his shoe in the photo

People:
Jack Wong
CJ Wong
Mary Firestone
Zoe Peika
Nick Persons

Event: Suzanne & Anthony's Wedding Reception 2010

Camera Details: more



Location:
Historical Society
Lisle, IL 60532

EX1001, FIG. 2

Each digital file can be enlarged, **from any view or chart**, by clicking an information (“i”) button to show an enlarged version of the digital media file with all the tags that are assigned to that digital file, as illustrated in FIG. 2.

[658]EX1001, 5:64-6:1

Patent Overview – Ease of Navigation and Organization

63. The claims require arranging the views in a particular manner with each view having particular selectable elements. The claims then require a particular flow through the views based on selection of identifying elements, allowing the user to see only the desired useful information, *e.g.*, photo/video files of particular people in the user's web of memories, particular locations where digital files were taken, and/or the numbers of those photos associated with people and/or locations. The claimed flow of views and methods provide the ease of navigation and organization previously lacking in the prior art as discussed below.

[228]EX2025, ¶163; [658]EX2025, ¶164; [376]EX2025, ¶165; [228]EX2025, ¶163

The '020 Patent – Claim 1

1. A method comprising:

causing an interface to display a people view, the people view including:

a first thumbnail image associated with a first person, a first name associated with the first person, a second thumbnail image associated with a second person, and a second name associated with the second person;

responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including:

a first digital file associated with the first person, the first name associated with the first person, and a first map image;

responsive to an input that is indicative of a selection of the first map image in the first person view, causing a first location view to be displayed on the interface, the first location view including:

an interactive geographic map, a first indication positioned at a first location on the interactive geographic map, and a second indication positioned at a second location on the interactive geographic map; and

responsive to an input that is indicative of a selection of the first digital file in the first person view, causing a slideshow to be displayed on the interface, the slideshow including a plurality of images associated with the first person.

The '020 Patent – Claim 31

1. A method comprising:
causing an interface to display a people view, the people view including:

a first thumbnail image associated with a first person,
a first name associated with the first person,
a second thumbnail image associated with a second person, and
a second name associated with the second person;

responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including:

a first digital file associated with the first person,
the first name associated with the first person, and
a first map image;

responsive to an input that is indicative of a selection of the first map image in the first person view, causing a first location view to be displayed on the interface, the first location view including:

an interactive geographic map,
a first indication positioned at a first location on the interactive geographic map, and
a second indication positioned at a second location on the interactive geographic map; and

responsive to receiving a year input, grouping a plurality of digital files based on year and causing at least one of the plurality of digital files to be displayed on the interface;

responsive to receiving a month input, grouping the plurality of digital files based on month and causing at least one of the plurality of digital files to be displayed on the interface; and

responsive to receiving a day input, grouping the plurality of digital files based on day and causing at least one of the plurality of digital files to be displayed on the interface.

The '228 Patent – Claim 1

1. A method comprising:

responsive to a first input, causing a map view to be displayed on an interface, the map view including:

- (i) an interactive map;
- (ii) a first location selectable thumbnail image at a first location on the interactive map; and
- (iii) a second location selectable thumbnail image at a second location on the interactive map;

responsive to an input that is indicative of a selection of the first location selectable thumbnail image, causing a first location view to be displayed on the interface, the first location view including (i) a first location name associated with the first location and (ii) a representation of at least a portion of one digital file in a first set of digital files, each of the digital files in the first set of digital files being produced from outputs of one or more digital imaging devices, the first set of digital files including digital files associated with the first location;

responsive to an input that is indicative of a selection of the second location selectable thumbnail image, causing a second location view to be displayed on the interface, the second location view including (i) a second location name associated with the second location and (ii) a representation of at least a portion of one digital file in a second set of digital files, each of the digital files in the second set of digital files being produced from outputs of the one or more digital imaging devices, the second set of digital files including digital files associated with the second location; and

responsive to a second input that is subsequent to the first input, causing a people view to be displayed on the interface, the people view including:

- (i) a first person selectable thumbnail image including a representation of a face of a first person, the first person being associated with a third set of digital files including digital photographs and videos;
- (ii) a first name associated with the first person, the first name being displayed adjacent to the first person selectable thumbnail image;
- (iii) a second person selectable thumbnail image including a representation of a face of a second person, the second person being associated with a fourth set of digital files including digital photographs and videos; and
- (iv) a second name associated with the second person, the second name being displayed adjacent to the second person selectable thumbnail image.

The '376 Patent – Claim 1

1. A computer-implemented method of displaying digital files, comprising:
 storing, on one or more non-transitory computer-readable storage media, a plurality of digital files, each of the digital files having embedded therein content data and metadata including tags, the content data including a digital photograph or image or video, the metadata including a geotag indicative of geographic coordinates where the digital photograph or image or video was taken;

displaying a map view on a video display device, the displaying the map view including displaying:

- (i) a representation of an interactive map, the representation of the interactive map comprising a majority portion of a first screenshot of the video display device;
- (ii) a first user selectable thumbnail image at a first location on the interactive map corresponding to the geographic coordinates of a first geotag, a first set of digital files including all of the digital files having the first geotag;
- (iii) a first count value image partially overlapping or directly connected to the first user selectable thumbnail image, the first count value image including a first number that corresponds to the number of digital photographs or images or videos in the first set of digital files;
- (iv) a second user selectable thumbnail image at a second location on the interactive map corresponding to the geographic coordinates of a second geotag, a second set of digital files including all of the digital files having the second geotag; and
- (v) a second count value image partially overlapping or directly connected to the second user selectable thumbnail image, the second count value image including a second number that corresponds to the number of digital photographs or images or videos in the second set of digital files;

responsive to a click or tap of the first user selectable thumbnail image, displaying a first location view on the video display device, the first location view comprising a majority portion of a screenshot of the video display device, the displaying the first location view including displaying (i) a first location name corresponding to the first geotag, (ii) a scaled replica of each of the digital photographs or images or videos in the first set of digital files, and (iii) a first map image indicating the geographic coordinates of the first geotag, the displayed scaled replicas of each of the digital photographs or images or videos in the first set of digital files not being overlaid on the first map image and the second screenshot of the video display device not including the interactive map; and

responsive to a click or tap of the second user selectable thumbnail image, displaying a second location view on the video display device, the second location view comprising a majority portion of a third screenshot of the video display device, the displaying the second location view including displaying (i) a second location name corresponding to the second geotag, (ii) a scaled replica of each of the digital photographs or images or videos in the second set of digital files, and (iii) a second map image indicating the geographic coordinates of the second geotag, the displayed scaled replicas of each of the digital photographs or images or videos in the second set of digital files not being overlaid on the second map image and the third screenshot of the video display device not including the interactive map.

The '658 Patent – Claim 1

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:

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;

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:

- (i) a representation of an interactive map;
- (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;
- (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;
- (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
- (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;

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

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.

A3UM (Ex. 1005) is not prior art

Public accessibility requires more than technical accessibility

Acceleration Bay, LLC v. Activision Blizzard Inc.,
908 F.3d 765, 773 (Fed. Cir. 2018)

“The Board then correctly noted that ‘public accessibility’ requires more than technical accessibility. . . . [D]espite some indexing and search functionality on the website, Lin was not publicly accessible. . . .”

Samsung Elecs. Co. v. Infobridge Pte. Ltd.,
929 F.3d 1363, 1372 (Fed. Cir. 2019)

“a work is not publicly accessible if the only people who know how to find it are the ones who created it”

“Samsung did not offer evidence, apart from the speculation of Mr. Bross, that a person of ordinary skill, exercising reasonable diligence, would have located the JCT-VC website or even known to look for it. . . . even a person who found the JCT-VC website lacked a reasonable way of locating the WD4 reference unless they already knew what to look for and where to look for it.”

The A3UM HTML
files on apple.com

Petitioner failed to show that a POSITA exercising reasonable diligence would have located A3UM via apple.com

Petitioner relies on a POSITA having a *a priori* knowledge of Aperture 3 and A3UM

The Petition

In 2010, a skilled artisan would have known to visit www.apple.com for information about Aperture 3 and could have readily located A3UM on the apple.com website. EX1003, ¶¶99-102.

[020]Petition, 19; [658]Petition, 16; [376]Petition, 17; [228]Petition, 17

Dr. Terveen

shown below, a skilled artisan interested in locating A3UM or learning about Apple's Aperture 3 software would have been able to locate A3UM via www.apple.com by simply visiting the dedicated Aperture 3 support page on Apple.com, which as annotated below in red contained embedded links to the

[020]EX1003, ¶100; [658]EX1003, ¶101; [376]EX1003, ¶101; [228]EX1003, ¶100

Corning Optical Comm's LLC v. Dali Wireless, Inc.
IPR2021-00762, Paper 37 at 20 (PTAB Oct. 11, 2022)

“we determine whether the evidence before us shows persons interested in and ordinarily skilled in the subject matter or art, exercising reasonable diligence, would have been able to locate FlexWave Prism Manual in the EAS database **without a priori knowledge of the reference**”

There is no evidence that a POSITA would have known of Aperture 3 and A3UM

Dr. Terveen was unaware of Aperture 3's existence

46. As an expert in the field of graphical user interfaces since prior to 2011, I am qualified to provide an opinion as to what a person of ordinary skill in the art would have understood, known, or concluded as of 2011.

[020]EX1003, ¶46; [658]EX1003, ¶ 43; [376]EX1003, ¶ 43; [228]EX1003, ¶ 43

Q. But prior to the summer of 2021, you had not heard of Aperture 3, correct?

A. That's correct.

EX2023, 49:14-50:11, 52:2-4

There is no evidence that a POSITA would have known of Aperture 3 and A3UM

Petitioner's proposed searches require *a priori* knowledge of Aperture

(ii) searching for “Aperture support” would

locate the Aperture support webpage on apple.com (*Id.*, 187:12-189:5) (iii) the

Aperture support page could be located with a Google search for “Aperture support”

And Aperture 3 webpages would be found by searching “Aperture” using apple.com’s search function.

[020]Reply, 10; [658]Reply, 10; [376]Reply, 4; [228]Reply, 4-5

Corning Optical Comm’s LLC v. Dali Wireless, Inc.
IPR2021-00762, Paper 37 at 20 (PTAB Oct. 11, 2022)

“we determine whether the evidence before us shows persons interested in and ordinarily skilled in the subject matter or art, exercising reasonable diligence, would have been able to locate FlexWave Prism Manual in the EAS database **without a priori knowledge of the reference**”

There is no evidence that a POSITA would have known of Aperture 3 and A3UM

Q. What if you put the phrase you're searching for in quotes, "Photo editing and management software," as your search?

MR. SCHWARTZ: Objection to form, scope.

A. I mean, when you say as one of the hits, what do you mean precisely?

Q. When you do a Google search you get a list of matching websites that match the term of your search, right?

A. So I would imagine that you would get a hit in the sense that of the things returned from Google, you would get this in the list. But it might not be at the top of the list.

EX1089, 204:9-24

Apple Press Release

CUPERTINO, California—February 9, 2010—Apple® today introduced Aperture™ 3, the next major release of its powerful photo editing and management software, with over 200 new features including Faces, Places and Brushes.

EX1048, 1

Corning Optical Comm'ns LLC v. Dali Wireless, Inc.
IPR2021-00762, Paper 37 at 20 (PTAB Oct. 11, 2022)

“Mr. Stravitz did not opine and the record evidence does not show, whether one of ordinary skill in the art or one interested in the subject matter would have used ‘ADS Telecommunications’ as a search term, absent *a priori knowledge* of the FlexWave Prism Manual”

Petitioner cannot establish what was allegedly on its website in 2010

The website and associated analytics no longer exist

Would Apple track the number of users who accessed the user manual on its website?

A Yes.

Q And the -- those analytics are also not currently available. Correct?

A That is correct.

EX2026, 49:14-17

The webpage contents were not captured by the Internet Archive

Dr. Terveen

Although the

Wayback Machine does not contain 2010 captures of the contents of individual

sections, that does not indicate to me that they were not published, only that they

[020]EX1003, ¶102; [658]EX1003, ¶103; [376]EX1003, ¶103; [228]EX1003, ¶102

Mr. Birdsell

Q So Exhibit 1021 does not include the captures of the contents of the various sections of the Aperture 3 user manual. Correct?

A Correct.

EX2026, 49:14-17

Petitioner mischaracterizes Mr. Birdsell's speculative and uncorroborated testimony

The Reply

*First, A3UM was accessible via Apple's website after February 9, 2010. In contrast to Patentee's *theories* why a skilled artisan *might* not have found A3UM on Apple's website (Response, 30), Mr. Birdsell testified that *at least 100,000 individuals actually did access it* between February and June of 2010, based on his recollection of Apple analytical reports of "documentation.apple.com[.]" EX2026,*

[020]Reply, 7; [658]Reply, 7; [376]Reply, 1; [228]Reply, 2

Mr. Birdsell's Testimony

Q And how do you know what the access volume was between February and June of 2010?

A It's basically just based on memory. But I remember unique page visits were six figures. Some page visits were in the millions but that could be repeat customers. And so, you know, that -- by extrapolation, a bare minimum of 100,000 customers doesn't sound outside the ballpark.

Q And you said you -- you didn't do any investigation, though, to determine the precise number of page visits. Correct?

A You mean to go back to view -- to review the analytics again? The analytics don't -- no longer exist. So I could not go back and review specific numbers. I can only rely on memory.

EX2026, 54:15-55:4

[020]POSR, 7; [658]POSR, 7; [376]POSR, 8; [228]POSR, 8

Ex. 1005 is inconsistent with Petitioner's Internet Archive printout

Ex. 1005

Welcome to Aperture

Aperture is a powerful and easy-to-use digital image management system that can track thousands of digital images and provides the avid photographer with high-quality image management and adjustment tools.

With Aperture, you can efficiently import digital images, perform a photo edit, adjust and retouch images, publish images for the web or print, export libraries for use on other Aperture systems, merge libraries, and back up your entire image library for safekeeping. Aperture lets you work with high-quality JPEG, TIFF, and RAW image files—and even HD video files—directly from your camera or card reader and maintain that high quality throughout your workflow.

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EX1005, 1

Petitioner's Internet Archive Printout

- ▶ Making Brushed Adjustments
- ▶ Printing Your Images
- ▶ Exporting Your Images
- ▶ Creating Slideshow Presentations
- ▶ Using the Light Table
- ▶ Creating Books
- ▶ Creating Webpages
- ▶ Sharing Your Images Online
- ▶ Backing Up Your Images
- ▶ Customizing the Aperture

<https://web.archive.org/web/20100726152004/http://documentation.apple.com/en/aperture/usermanual/>

EX1021, 6

Complete Internet Archive Printout

- ▶ Making Brushed Adjustments
- ▶ Printing Your Images
- ▶ Exporting Your Images
- ▶ Creating Slideshow Presentations
- ▶ Using the Light Table
- ▶ Creating Books
- ▶ Creating Webpages
- ▶ Sharing Your Images Online
- ▶ Backing Up Your Images
- ▶ Customizing the Aperture Workspace
- ▶ Appendix A: Calibrating Your Aperture System
- ▶ Appendix B: Setting Up an Aperture System
- Glossary

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<https://web.archive.org/web/20100726152004/http://documentation.apple.com/en/aperture/usermanual/>

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EX2009

Mr. Birdsell's testimony should be given little weight

Checkpoint Sys., Inc. v. All-Tag Sec., S.A.,
412 F.3d 1331, 1339 (Fed. Cir. 2005)

“Thus, [t]he Supreme Court recognized over one hundred years ago that testimony concerning invalidating activities can be ‘unsatisfactory’ due to ‘the forgetfulness of witnesses, their liability to mistakes, their proneness to recollect things as the party calling them would have them recollect them’”

Carella v. Starlight Archery & Pro Line Co.,
804 F.2d 135, 138 (Fed. Cir. 1986)

“unsupported oral testimony” offered “to prove prior knowledge or use...must be regarded with suspicion”

Parrot S.A. v. Qfo Labs, Inc.,
IPR2018-01690, Paper 40 at 63-64 (PTAB Feb. 20, 2020)

affording party testimony little weight when not corroborated by “objective record evidence”

A3UM on an
installation DVD

A POSITA exercising reasonable diligence would not have located the **hidden** HTML files on an installation DVD

A3UM was hidden on Aperture 3 installation DVDs

Dr. Terveen's Declaration

77. Initially, I configured the Mac laptop to show all files (both visible and "invisible"). Next, I inserted the Aperture 3 installation DVD into the DVD drive on the Mac laptop. Upon inserting the installation DVD, the following

79. I also inspected the ordinarily hidden package files (*.pkg) on the Aperture 3 installation DVD. I did that by navigating to the Packages folder

[020]EX1003, ¶¶77, 79; [658]EX1003, ¶¶78, 80;
[376]EX1003, ¶¶78, 80; [228]EX1003, ¶¶77, 79

Dr. Terveen's Deposition

Q. What other types of files in your experience are invisible files?

A. Could be configuration files, for example. It could be OS might decide to hide files that have been marked for deletion, older version of files. Various things can be hidden.

Q. And those types of files, configuration files, things marked for deletion, older versions, why would those be hidden or invisible?

A. Well, they can be hidden just to -- to -- if you're doing sort of standard use of a system, they might not be relevant, so you want to, you know, literally hide them to make the display to a user more compact.

EX2023, 67:23-68:14

A3UM was hidden on Aperture 3 installation DVDs

Dr. Terveen was guided by “tips” from counsel to find the hidden HTML files

How did you get to those files? Did someone from Apple or counsel walk you through that?

A. Well, I did all the steps on my own that I report here. I think I had sort of gotten some general tips from counsel, but yeah, everything I did here -- everything I report here I did on my own. Nobody was sitting next to me or on the phone telling me what to do or anything.

EX2023, 63:23-64:5

Q. Okay. So I just want to be sure I understand your testimony. No one from Apple or counsel told you that the user manual was in the invisible or hidden files.

Is that your testimony?

A. I can't recall the details of what -- what was told to me.

EX2023, 73:10-16

Q. So it's possible that you found out about the existence of the hidden files and the need to do that through your conversations with counsel; is that right?

A. Yeah, yeah, it's possible. I mean, yeah, yeah, that's possible. Of course I could have found it anyway. And, you know, one thing to point

EX2023, 73:17-23

A POSITA lacked a reasonable way to locate the hidden HTML files

There is no search functionality on the DVD for locating the HTML files

Dr. Surati

118. Dr. Terveen's declaration does not discuss any search functionality within the Aperture 3 installation DVD. After navigating to the previously-hidden Packages folder I attempted to search for the user manual HTML files using multiple search queries. Searching "manual," "user manual," and "usermanual" did not yield any results when searching in the Finder search bar within the "Packages" folder.

119. I also tried searching "manual," "user manual," and "usermanual" in the Finder search bar in the Aperture.pkg and this also yielded no results.

[020]EX2025, ¶¶118-19; [658]EX2025, ¶¶119-20;
[376]EX2025, ¶¶125-26; [228]EX2025, ¶¶110-11

Acceleration Bay, LLC v. Activision Blizzard Inc.,
908 F.3d 765, 773 (Fed. Cir. 2018)

"The Board then correctly noted that 'public accessibility' requires more than technical accessibility. . . . [D]espite some indexing and search functionality on the website, Lin was not publicly accessible. . . ."

Samsung Elecs. Co. v. Infobridge Pte. Ltd.,
929 F.3d 1363, 1372 (Fed. Cir. 2019)

" . . . even a person who found the JCT-VC website lacked a reasonable way of locating the WD4 reference unless they already knew what to look for and where to look for it."

Accessing the HTML files requires copying and decompressing a specific file package

Dr. Terveen used “tips” from counsel as a shortcut to finding the HTML files

80. The Aperture.pkg package contains compressed files including one named “Archive.pax.gz.” I copied this file to the desktop of the local hard drive of the Mac and decompressed it, which yielded an “Archive” folder on the desktop containing three subfolders (System, Applications, Library) (below). The Applications folder contained the Aperture.app file.

[020]EX1003, ¶180; [658]EX1003, ¶181; [376]EX1003, ¶181; [228]EX1003, ¶180

Q. Okay. And I guess my question is, as part of the tips or discussion with counsel about where these things are, did anyone say to you, Hey, they're in this Packages folder and to look there? Could that have happened?

A. **It could have.** I mean, it's -- it

EX2023, 79:10-15

Petitioner offered no evidence of Aperture 3 sales

Mr. Birdsell's uncorroborated speculation is insufficient

Mr. Birdsell's Declaration

During 2010, the Mac App Store did not yet exist so the only way to obtain a copy of Aperture 3 product was to buy a retail box containing an Aperture 3 installer DVD.

EX1020, ¶5

7. Aperture 3 was very popular and was purchased by a large number of users. Based on my experience with the utilization levels of the help resources on the Apple.com website at the time, I believe more than 100,000 customers had purchased and were using the Aperture 3 product between February and June of 2010.

EX1020, ¶7

Mr. Birdsell's Deposition

Q When you were preparing your declaration, did you perform any investigation to determine the actual number of sales between February and June of 2010?

A I did not.

Q Why didn't you do that?

A I'm here to testify to the veracity of how the product was -- how the user guide was produced and published. The number of sales is outside of the scope for me.

Q Paragraph 7 of your declaration, you state that you believe more than 100,000 customers had purchased and were using the Aperture 3 product between February and June of 2010.

Do you see that?

A Yes. And I believe that is correct.

Q You believe it's correct but you just testified that you weren't here to testify about the number of sales.

A I don't have a specific number of sales of -- of products sold. But the amount of volume of customers that accessed documentation at Apple.com and reviewed the user manual documentation at Apple.com supports that roughly 100,000 people had purchased the product and were using it actively.

EX2026, 53:16-54:14

There is no evidence that users who upgraded from a prior version had the DVD

Mr. Birdsell could not remember whether upgrading to Aperture 3 required a DVD

Q If a user had an earlier version of Aperture 3, like Aperture 2, would they still need the Aperture 3 installation disk in order to run Aperture 3?

A I can't remember.

Q Is it possible that users could download whatever software was needed to upgrade from Aperture 2 to Aperture 3?

MR. SMITH: Objection. Foundation.

THE WITNESS: I believe that there was a upgrade, like a discounted upgraded, like a discount upgrade pass. So you paid less money to upgrade to version 2 to version 3. But I can't remember the exact mechanics of it, how that transaction occurred, and what the process was for upgrading the person's personal -- the customer's personal files -- or personal instance of the application.

Q If a user downloaded software to upgrade from version 2 to version 3, then they would not have access to the HTML file set on the installation DVD. Right?

MR. SMITH: Objection. Form. Foundation.

THE WITNESS: Again, I can't remember what -- how that transaction occurred.

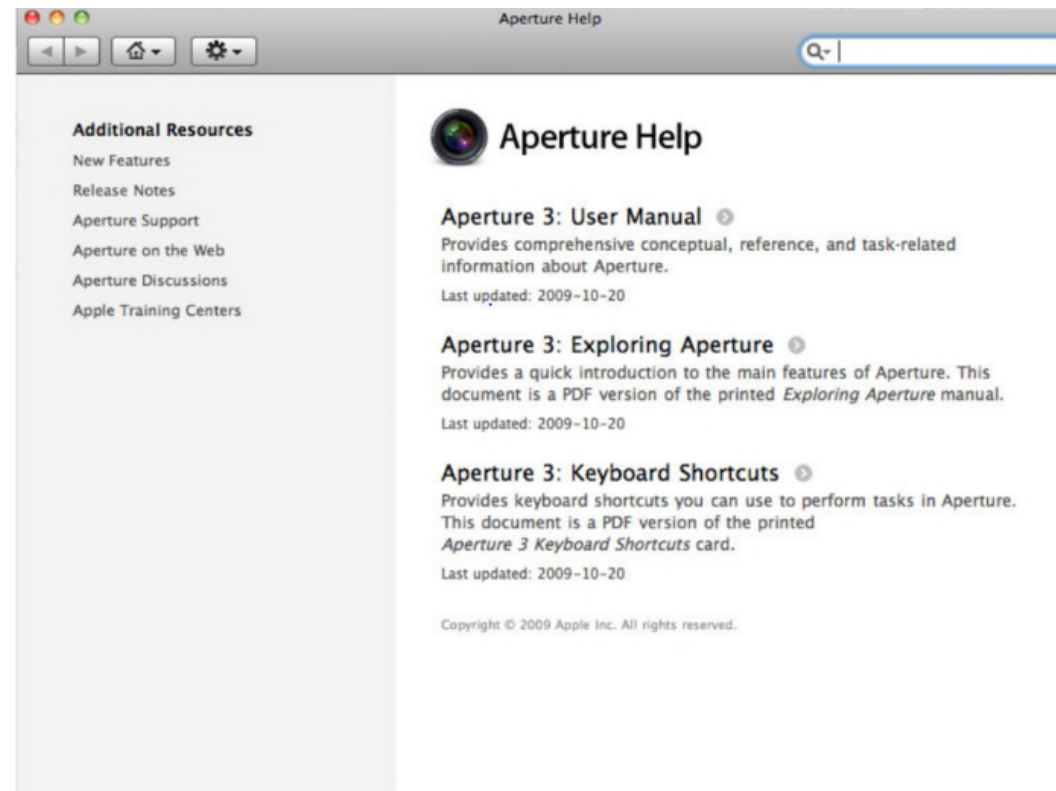
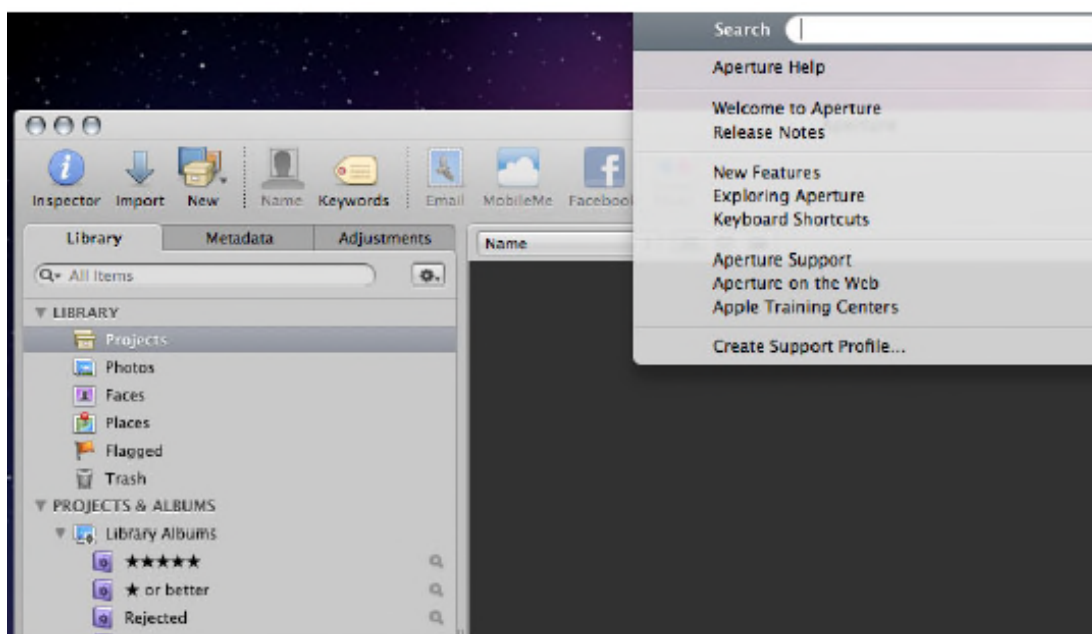
EX2026, 62:23-63:20; 65:5-13

A3UM after
installing Aperture 3

Petitioner failed to show that A3UM as installed on a Mac computer is a printed publication

The A3UM Help window is a software product, not a printed publication

Part of an executing software product is not a printed publication



[020]EX1003, ¶¶86-88; [658]EX1003, ¶¶87-89; [376]EX1003, ¶¶87-89; [228]EX1003, ¶¶86-88

Patent Owner's Motion to Exclude

Petitioner failed to
properly authenticate
Ex. 1005

Petitioner did not authenticate Ex. 1005

Dr. Terveen

A3UM (EX1005) is a true and accurate copy of the underlying HTML files containing the Aperture 3 User Manual that is made available to users through the in-application Help functionality of the Aperture 3.0 product.

[020]EX1003, ¶173

Q. You didn't read all 1122 pages to confirm that what's in Exhibit 1005 matched up with what you may have found on -- in the HTML files after installing the Aperture 3 disk?

A. I did not check all 1122 pages, but I **spot-checked** a whole lot of them, and it was tedious. But I **probably checked a couple hundred**, and they all matched up, so I was pretty satisfied it was the same.

EX2023, 61:9-17

Mr. Birdsell

I have reviewed Exhibit 1005, and can confirm it is an accurate copy of the Aperture 3 User Manual that was distributed with the initial version of the Aperture 3 product (*i.e.*, version 3.0).

EX1020, ¶14

Q How do you know that the version of the HTML file set that is Exhibit 1005 is the same as what was available in 2010?

A Because I **spot-checked it** against the files that were on disk and in the app. Also, the copyright 2009 is a dead give-away.

EX2026, 41:11-16

Petitioner failed to show that the challenged claims are unpatentable

Outline of Presentation: Petitioner failed to show the challenged claims are unpatentable

- '020, claim 1
 - A3UM does not disclose displaying a selectable “map image” responsive to an input indicative of a selection of the first person
 - A POSITA would not modify the A3UM Faces browser
 - A3UM does not disclose displaying a “slideshow”
- '020, claims 13-16 and 45-48
 - A3UM does not disclose different “first” and “second” map images
- '658, claims 7-12
 - A3UM does not disclose displaying a person-location selectable element “responsive to” a click or tap of a person selectable thumbnail image
 - A3UM does not disclose distinct “first” and “second” person-location selectable elements
- '228, claim 15; '658, claims 3-4; '376, claim 1 (and 12)
 - Petitioner’s characterizations of the A3UM Places view are incorrect
- '228, claim 1; '658, claim 5; '020, claim 24
 - A3UM does not disclose or render obvious including videos within the Faces feature
- '376, claim 1
 - A3UM does not disclose an interactive map comprising a majority portion of a screenshot
- '228, claims 8-9
 - Belitz does not disclose modifying the indication feature responsive to zooming in or out
- '658, claim 1:
 - Petitioner did not identify a distinct “application view” in A3UM
- '228, claim 1; '658, claim 1; '376, claim 1 (and 12)
 - A POSITA would not combine A3UM and Belitz
- '020, claims 11 and 43
 - A3UM does not disclose a “group image”
- '020, claim 3 and 35
 - A POSITA would not have modified the A3UM Places toolbar button function
- '020, claims 7 and 39
 - A POSITA would not have modified the A3UM Places toolbar button position
- '376, claim 5 (and 12)
 - Petitioner failed to show that claim 5 of the '376 patent is obvious over A3UM
- '020, claims 6-7 and 38-39
 - These claims do not lack written description

A3UM does not
disclose
“responsive
to...causing”

‘020 Patent, claims 1
and 31

'020: "responsive to...causing" requires a cause-effect relationship

Patent	Claim Term	Patent Owner's Construction	Petitioner's Construction
'020	" <u>responsive to</u> an input indicative of a selection of the first person . . . <u>causing</u> a first person view to be displayed on the interface" (claims 1, 31)	Plain and ordinary meaning: a cause-effect relationship between (i) an input that is indicative of a selection associated with the first person and (ii) causing a first person view to be displayed on the interface [020]POR, 8-12	"the [claimed] phrase can encompass methods that, after the 'input indicative of a selection,' include intervening actions by the computer and/or a user that enable or are directly associated with 'causing' the action" [020]Reply, 4
'020	" <u>responsive to</u> an input that is indicative of a selection of the first digital file in the first person view, <u>causing</u> a slideshow to be displayed on the interface, the slideshow including a plurality of images associated with the first person" (claim 1)	Plain and ordinary meaning: requiring a cause-effect relationship between (i) an input that is indicative of a selection of the first digital file in the first person view and (ii) causing a slideshow to be displayed on the interface [020]POR, 15-16	

'020: “responsive to...causing” requires a cause-effect relationship

Petitioner does not attempt to distinguish any of the authority in Patent Owner’s Response construing “responsive to” or “in response to” as requiring a cause-effect relationship

Am. Calcar, Inc. v. Am. Honda Motor Co.,
651 F.3d 1318, 1339-40 (Fed. Cir. 2011)

construing the phrase “in response to” as requiring a “cause-and-effect relationship”

Progressive Semiconductors Sols. LLC v. Qualcomm Techs. Inc.,
2014 WL 4385938, *5 (C.D. Cal. Sept. 4, 2011)

“[t]he plain meaning of ‘in response to’ conveys a stimulus and an effect”

Power Integrations, Inc. v. Semiconductor Components Indus., LLC,
IPR2018-00180, 2019 WL 2237863, *8 (PTAB May 23, 2019)

“[t]he phrase ‘in response to’ connotes a cause-and-effect relationship”

Fujitsu Ltd. v. Belkin Int’l, Inc.,
No. 10-CV-03972-LHK, 2012 WL 4497966, at *28
(N.D. Cal. Sept. 28, 2012)

construing the phrase “in response to” as “connoting a cause-and effect relationship rather than a straight temporal sequence”

'020: "responsive to...causing" requires a cause-effect relationship

Dr. Surati's declaration testimony is un rebutted

125. The claims require that the "first person view" is displayed "responsive to" the "input indicative of a selection associated with the first person." A POSITA would understand based on the plain meaning of the claim language that there is a **cause-effect relationship** between the input indicative of a selection associated with the first person (the cause) and causing the first person view—including the first digital file, the first name, and the first map image—to be displayed (the effect). In other words, there is a **causal connection** between the input indicative of a selection associated with the first person and causing the first person view to be displayed.

[020]EX2025, ¶125

135. The claims require that the "slideshow" is displayed "responsive to" the "input that is indicative of a selection of the first digital file in the first person view." For the same reasons discussed above, a POSITA would understand based on the plain meaning of the claim language that there is a **cause and effect relationship** between (1) the input that is indicative of a selection of the first digital file in the first person view and (2) causing a slideshow to be displayed on the interface. In other words, there is a **casual connection** between the input that is indicative of a selection of the first digital file in the first person view and causing the slideshow to be displayed.

[020]EX2025, ¶135

'020: "responsive to...causing" requires a cause-effect relationship

The specification confirms Patent Owner's construction

128. The '020 patent specification confirms this understanding of the claim language. For example, the '020 patent discloses "[a] people view, as shown in FIG. 6, shows thumbnail photos of all the people in the system that can be clicked in for a people profile view," which is shown in FIG. 7. Ex. 1001, 6:24-30. A POSITA would understand that **the people profile view of FIG. 6 is caused to be displayed responsive to clicking one of the thumbnails in the people view of FIG. 7, i.e., the "effect" is causing FIG. 6 to be displayed and its "cause" is clicking one of the thumbnails in FIG. 7.** This is shown below:

[020]EX2025, ¶128



[020]EX1001, FIGS. 6-7

'020: "responsive to...causing" requires a cause-effect relationship

responsive

adjective

US  /rɪˈspɔːn.sɪv/ UK  /rɪˈsɒn.sɪv/



saying or doing something as a reaction to something or someone, especially in a quick or positive way:

EX2028

re·spon·sive \-n(t)siv, -sēv also -səv\ *adj* [MF or LL; MF *responsif*, fr. LL *responsivus*, fr. L *responsus* + *-ivus* -ive]
1 : giving or serving as an answer : constituting a response or made in response to something ⟨a ~ glance⟩ ⟨prairie fires sprang up ~ to the draught⟩ **2** *obs* : CORRESPONDENT, COR-

EX2029

'020: Petitioner mischaracterizes Dr. Surati's testimony

[020]Claim 1: “responsive to an input causing a slideshow to be displayed that is indicative of a selection of the first digital file in the first person view, on the interface, the slideshow including a plurality of images associated with the first person”

Petitioner's question

Q. So on the top -- this is a piece of the patent we've been looking at, the '020 patent that starts at line 57 and goes to line 262. And then on column 22 is the option which involves the user who wants to see a moving slideshow. I just want to understand whether if a person performs these steps, these two actions, whether it falls within the scope of that last clause of claim 1.

EX1089, 379:18-380:12

Dr. Surati's answer

A. So in thinking about this and looking at this, because this isn't something I considered as part of my report. In my report I looked at the arguments Dr. Terveen presented. He didn't discuss this particular issue. He said it was -- he said that A3UM disclosed this claim limitation. And I wrote a report about it, and I think that in this particular case I would say that figure -- I want to caveat this with I haven't spent as much time as I think I would want to thinking about it,

but I think that I would say my first reaction to this is that that would constitute -- like, what they're describing in the last claim, which if you're just saying does that last claim limitation seem to be described in that claim, yes, but I don't know -- I haven't considered whether the whole claim would apply to it. So that's something that I'd have to think about.

And I would just leave it at it seems like what's being described in both places is similar.

EX1089, 381:11-25

[020]POSR, 9

'020: "responsive to...causing" requires a cause-effect relationship

For any of the views, the user can click on the digital file to start a slideshow feature that will allow them to scroll through an enlarged view of the digital file as illustrated in FIG. 17.

[020]EX1001, 7:15-18

136. The '020 patent specification confirms this understanding of the claim language. For example, the '020 patent discloses "[f]or any of the views, the user can click on the digital file to start a slideshow feature that will allow them to scroll through an enlarged view of the digital file as illustrated in FIG. 17." Ex. 1001, 7:15-18. A POSITA would understand from this description that the slideshow is displayed responsive to clicking the digital file, i.e., there is a causal connection or relationship between clicking the digital file and causing the slideshow to be displayed on the interface.

[020]EX2025, ¶136

TIP Systems, LLC v. Philips & Brooks/Gladwin, Inc.
529 F.3d 1364, 1373 (Fed. Cir. 2008)

"[T]he claims of the patent need not encompass all disclosed embodiments. . . . Our precedent is replete with examples of subject matter that is included in the specification, but is not claimed. . . . [T]he mere fact that there is an alternative embodiment disclosed in the '828 patent that is not encompassed by the district court's claim construction does not outweigh the language of the claims."

'020: Petitioner agrees the “map image” is displayed in the “person view”

The Reply

Patentee argues that element 1[b] requires *the map images* to be “displayed ‘responsive to’ selecting one of the snapshots in the Faces view...” Response, 60-63. That is incorrect—1[b] states that the action “responsive” to the selection of a thumbnail is “causing *a first person view to be displayed* on the interface,” which A3UM shows. Petition, 25-35. **The specification also nowhere shows map images displayed independently of the “person view.”**

[020]Reply, 24

Claims 1 and 31

responsive to an input that is indicative of a selection associated with the first person, **causing a first person view to be displayed** on the interface, the first person view including:
 a first digital file associated with the first person,
 the first name associated with the first person, and
a first map image;

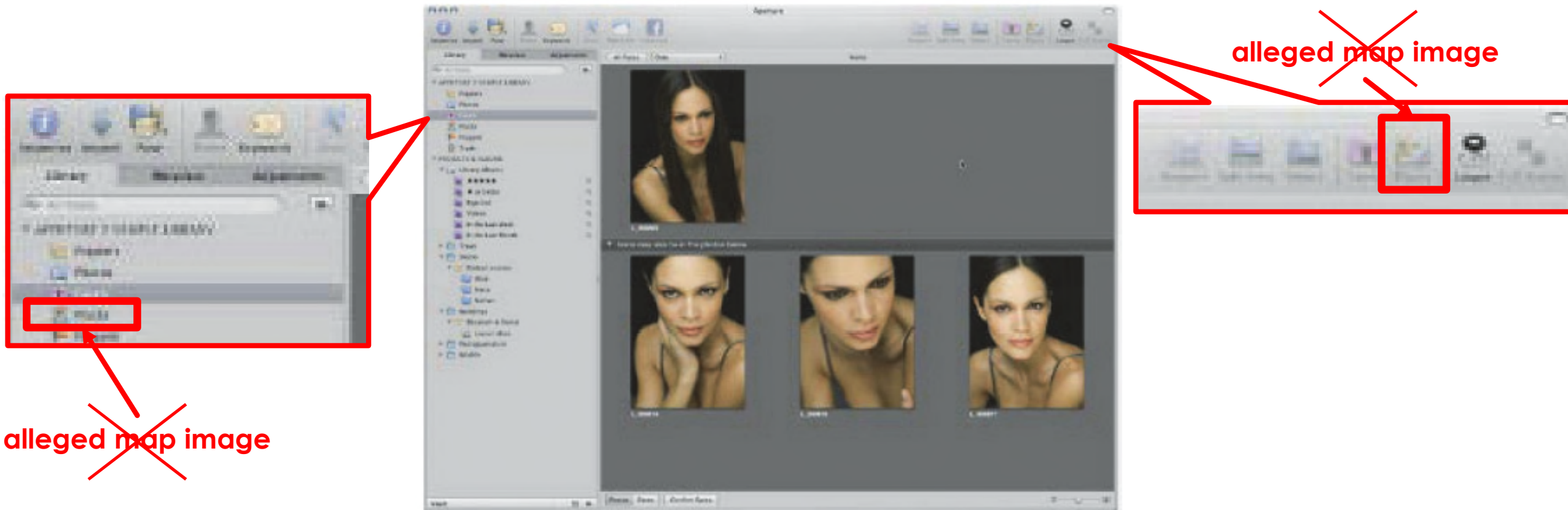
Dr. Surati

A POSITA would understand based on the plain meaning of the claim language that there is a cause-effect relationship between the input indicative of a selection associated with the first person (the cause) and **causing the first person view—including the first digital file, the first name, and the first map image—to be displayed (the effect).**

[020]EX2025, ¶125

'020: A3UM does display a "first person view" including a "first map image" responsive to an input

Claims 1, 31: "responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including: . . . a first map image "



'020: A3UM does not disclose a "first person view" including a "first map image"

Claims 1, 31: "responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including: . . . a first map image "

Dr. Surati

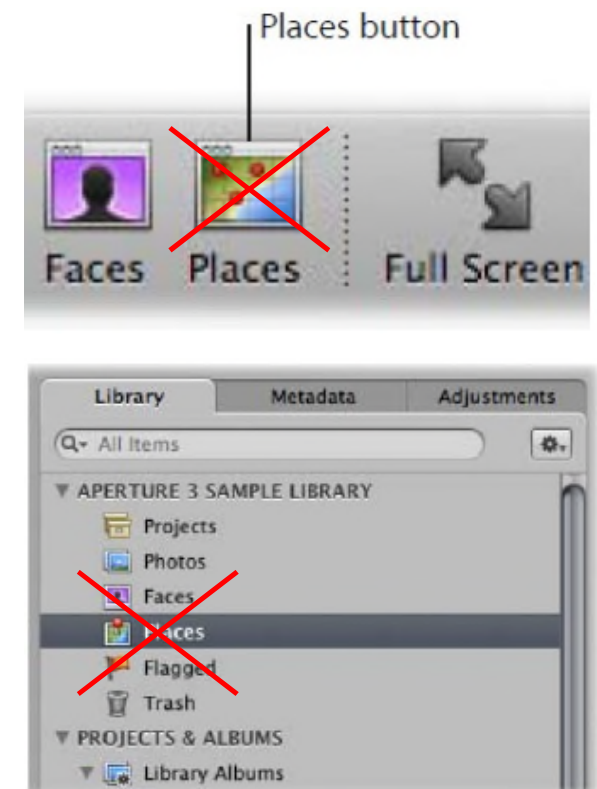
160. To the extent the Places link in the Library inspector is found to be a "first map image," the display of the Places link (the alleged first map image) has no causal connection to double-clicking one of the snapshots in the alleged people view (the alleged input indicative of a selection associated with the first person).

A3UM expressly states that the Library inspector, which includes the Places link, is displayed as soon as Aperture 3 is first opened. Ex. 1005, p. 6. A3UM also states that "[t]he inspector pane is shown by default." Ex. 1005, p. 46. Double-clicking one of the snapshots in the alleged people view (the alleged input indicative of a selection associated with the first person) has no impact whatsoever on the display of anything within the inspector pane. This is shown by a

[020]EX2025, ¶160

162. To the extent the Places button in the toolbar is found to be a "first map image" despite not being selectable, the display of the Places button in the toolbar (the alleged map image) has no causal connection to double-clicking one of the snapshots in the alleged people view (the alleged input indicative of a selection associated with the first person). As with the inspector pane, the toolbar is shown by default in Aperture 3 as soon as it is launched. Ex. 1005, p. 6. A3UM states that the "[t]he toolbar is shown by default." Ex. 1005, p. 64. A3UM further states that the Places button is one of the default buttons on the right side of the toolbar. Ex. 1005, pp. 64-65. Double-clicking one of the snapshots in the alleged people view (the alleged input indicative of a selection associated with the first person) has no impact whatsoever on the display of anything within the toolbar, including the Places button (alleged first map image).

[020]EX2025, ¶162



[020]Petition, 30

[020]POR, 60-63; [020]POSR, 13-14

A3UM does not disclose a selectable “first map image”

‘020 Patent, claims 1 and 31

'020: A3UM does not disclose a “first person view” including a selectable “first map image”

Claims 1, 31: “responsive to an input that is indicative of a selection of the first map image in the first person view, causing a first location view to be displayed on the interface”

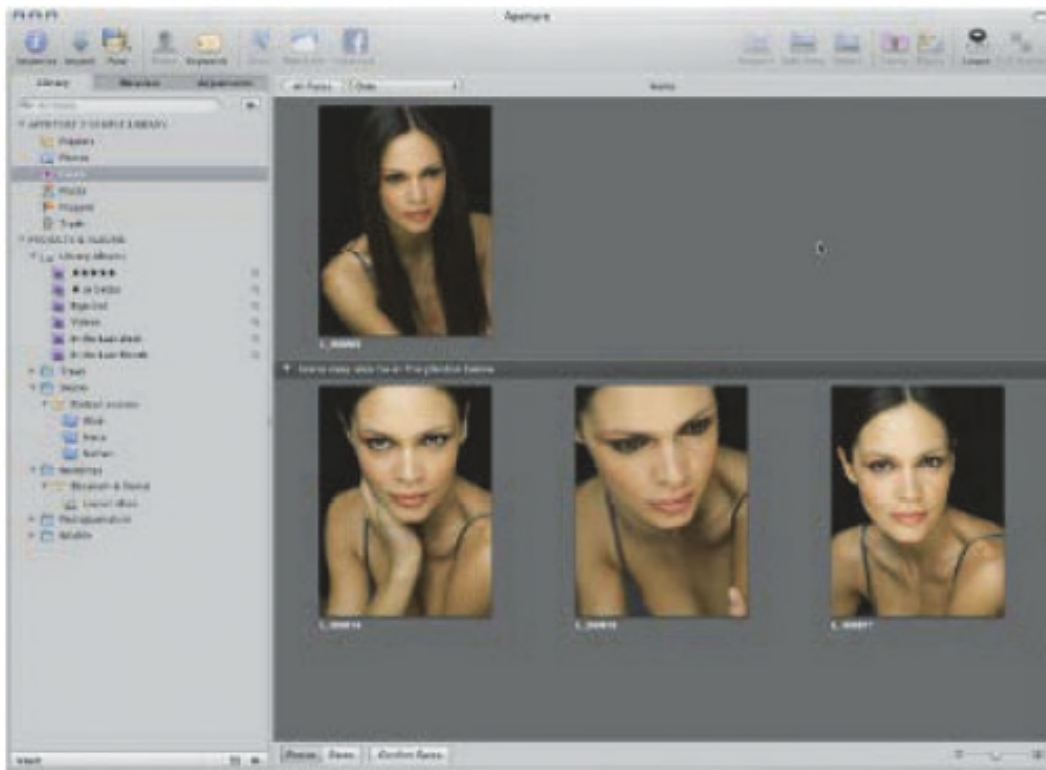
Claim Term	Patent Owner's Construction	Petitioner's Construction
selection of the first map image	Plain and ordinary meaning: first map image that <u>is selectable</u>	N/A

[020]POR, 12-13; [020]POSR, 11

[020]Reply, 4

'020: A3UM does not disclose a “first person view” including a selectable “first map image”

A3UM Faces Browser (alleged first person view)



alleged map image



174. A POSITA would understand that the grayed-out Places button in the toolbar in the Faces Link Embodiment is not selectable. That is, a user cannot click or otherwise select the Places button in this state. The Places button in the toolbar in the Faces Link Embodiment cannot correspond to the claimed “first map image” because the claims require that the first map image is selectable to cause the “first location view” to be displayed on the interface.

[020]EX2025, ¶174

'020: The Reply is contradicted by Dr. Terveen's testimony

The Reply

Patentee *incorrectly* claims there “is no dispute” a blurry callout it provided in its Response proves the map images are not selectable. Response, 66-67 (below). But the original image it uses shows every icon with that blurry appearance. Petition, 29; EX1005, 419. **The lack of resolution doesn't prove the icons are not selectable.**

[020]Reply, 24

Dr. Terveen's Deposition

If you look in the toolbar in this image on the top of 419 that has the three faces, the Places button is **grayed out and inactive, correct?**

A. **That's correct.**

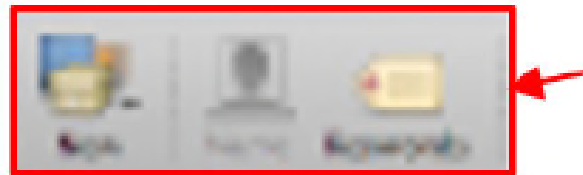
Q. And to go back to the Places button being grayed out, that means that it's inactive, cannot be used or implemented. Nothing would happen if you hit it, right?

A. That's what I – yes, **that's what being grayed out means. It's inactive.**

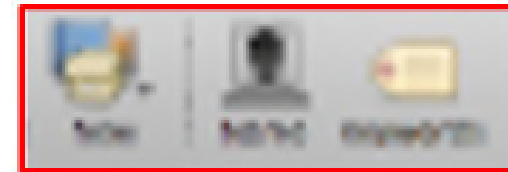
EX2023, 180:20-24, 145:11-16

'020: A3UM does not disclose a "first person view" including a selectable "first map image"

Dr. Terveen's Declaration also confirmed that grayed out buttons are inactive



"Name" button INACTIVE when picture of airplanes selected



"Name" button ACTIVE when video of person selected

A skilled artisan would understand that the "Name" button being active and not greyed out means that A3UM's system has detected a face in the selected media file, and A3UM's functionality for that "Name" button is available to associate the media file with a given person. EX1005, 64.

[020]EX1003, ¶¶279-280

A POSITA would
not modify A3UM's
Faces Browser

'020 Patent, claims 1
and 31

'020: A POSITA would not modify the A3UM Faces Browser

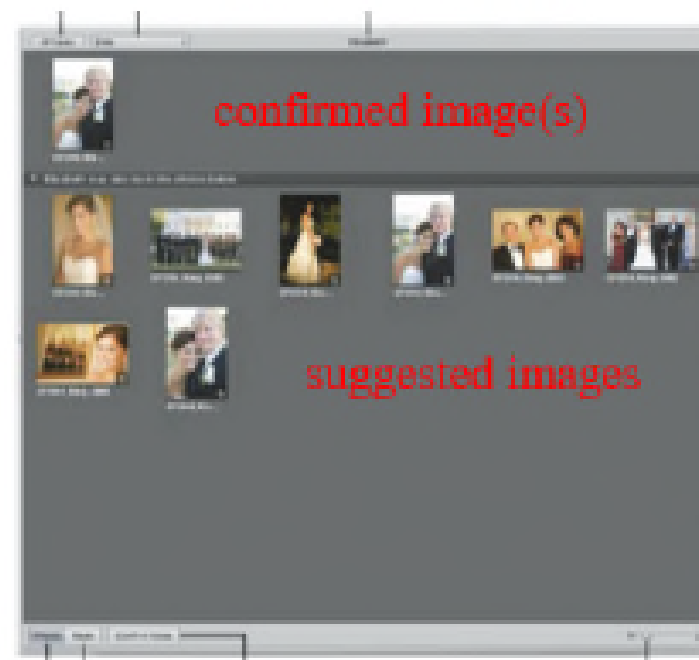
[020]Claim 1: responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including: a first digital file associated with the first person..."

The Petition

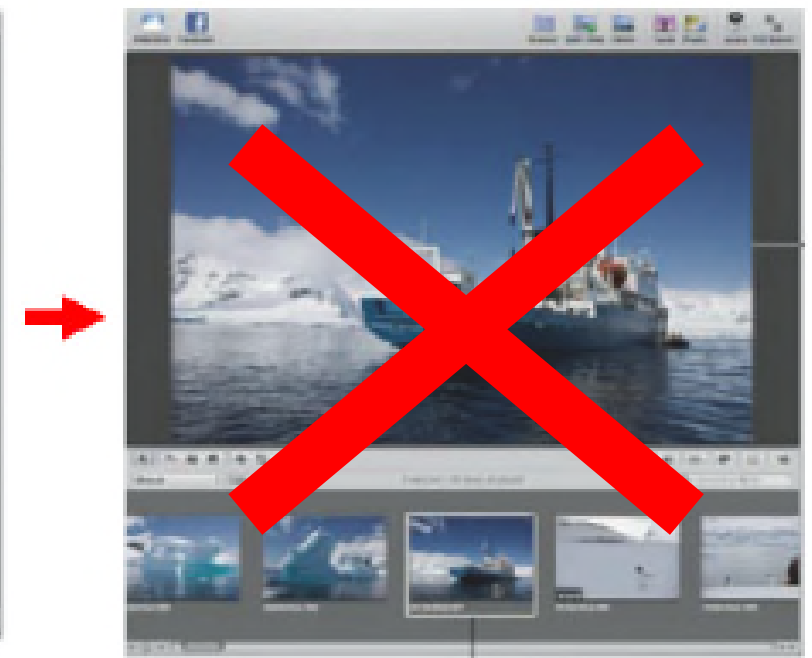
It would have been obvious to a skilled artisan by early 2010 to modify A3UM's Faces browser to display confirmed images of a person using A3UM's Viewer and Browser interfaces. EX1003, ¶129.

[020]Petition, 32

A3UM Faces browser



Petitioner's modification



[020]POSR, 18

'020: A POSITA would not modify the A3UM Faces Browser

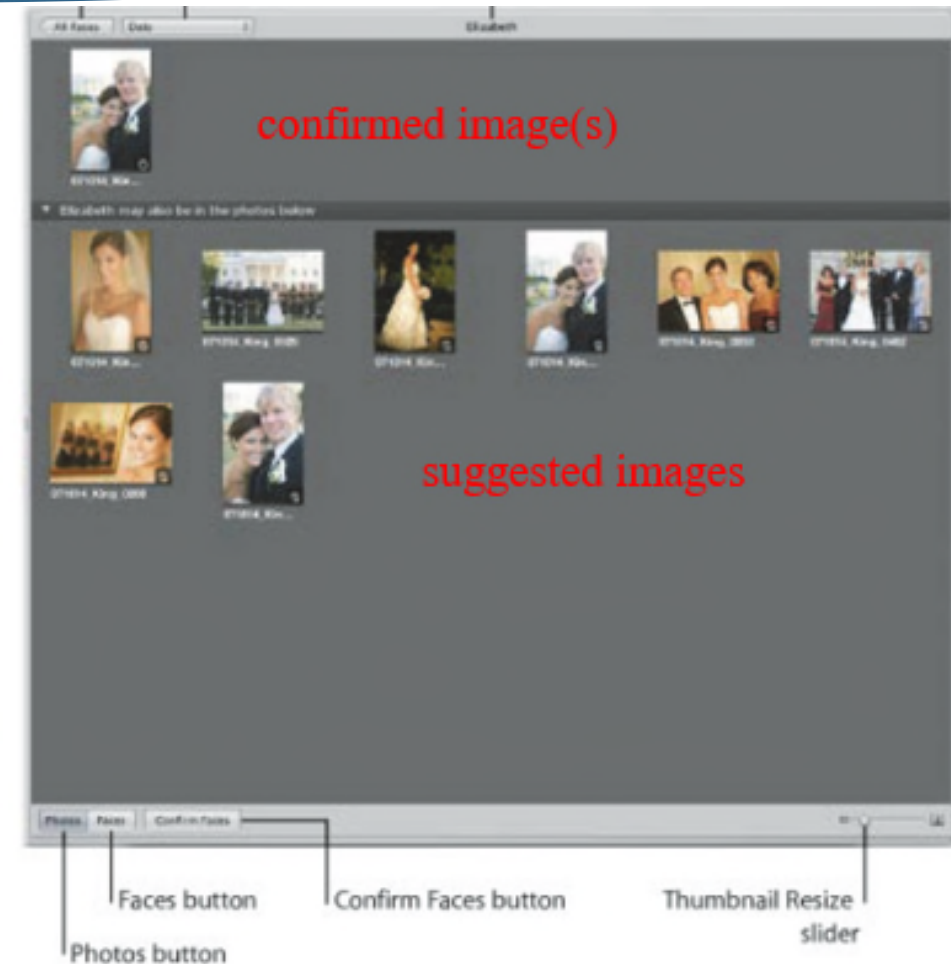
58

Dr. Surati

180. As shown above, the Faces browser is divided into two sections or panes: the top section includes confirmed images of the person and the bottom section includes suggested/unconfirmed images that *may* include the person. The dark gray bar or line between these sections readily differentiates the confirmed images from the suggested/unconfirmed images. A3UM explains that as the user “confirm[s] suggested images, the images move up to the group of confirmed images above.” Ex. 1005, p. 29.

183. A POSITA would recognize that displaying the confirmed images simultaneously with the suggested/unconfirmed images in the Faces browser, as shown in A3UM, would aid a user in determining whether suggested images should be confirmed.

[020]EX2025, ¶¶180-183



EX1005, 80 (annotated)

[020]POR, 68-69; [020]POSR, 17-18

'020: A POSITA would not modify the A3UM Faces Browser

The Reply argument is inconsistent with Dr. Terveen's testimony

The Reply

The two that don't are irrelevant. First, it claims Petitioner "failed to address where suggested images would go." Response, 71. They "go" nowhere—they remain in the library but are *not displayed*—A3UM teaches that the Faces browser can select/display desired images (*e.g.*, confirmed using keywords). EX1005, 223-224. Dr. Terveen's analysis also was not "incomplete"—he fully explained *his* combination.

[020]Reply, 27-28

Q. So in your modification, the unconfirmed images just disappear from the entirety of the -- of the platform, right?

MR. SMITH: Objection. Form.

THE WITNESS: Well, no. And if you look down on -- you know, you pointed me to 132, and if I continue on reading there, paragraph 133 says:

* * *

So I -- you know, I guess basically I said look for -- above I was saying it would be obvious to display a full-sized image for the confirmed thumbnail images, and it would also appear I'm saying it would have been obvious to have a modification where you would display a full-size image for both the confirmed and unconfirmed. So I wasn't -- they weren't exclusive, you know, one or the other.

'020: A POSITA would not modify the A3UM Faces Browser

60

Dr. Surati's Unrebutted Testimony

189. A POSITA would not modify A3UM so that only the confirmed images would be displayed because that would be completely contrary to the intended purpose and functionality of the Faces browser, which as described above, is to allow users to compare suggested images to confirmed images and, if appropriate, confirm the suggested images.

[020]EX2025, ¶189

***Plas-Pak Indus., Inc. v. Sulzer Mixpac AG,*
600 F. App'x 755, 758 (Fed. Cir. 2015)**

“... combinations that change the ‘basic principles under which the [prior art] was designed to operate,’ *In re Ratti*, 46 CCPA 976, 270 F.2d 810, 813 (1959), or that render the prior art ‘inoperable for its intended purpose,’ *In re Gordon*, 733 F.2d 900, 902 (Fed.Cir.1984), may fail to support a conclusion of obviousness.”

***In re Fritch,*
972 F.2d 1260, 1265 n.12 (Fed. Cir. 1992)**

“A proposed modification [is] inappropriate for an obviousness inquiry when the modification render[s] the prior art reference inoperable for its intended purpose”

'020: A POSITA would not modify the A3UM Faces Browser

None of the alleged “benefits” identified in the Petition provide a motivation to modify A3UM

	Alleged Benefit (Petition, 35)	Already Present before Modification
1	“examine an image at its full size”	Yes: [020]EX2025, ¶¶199-204; EX1005, 80, 425; EX2023, 130:13-131:24, 137:4-11, 142:8-15)
2	“apply adjustments, keywords, and metadata to an image”	Yes: [020]EX2025, ¶¶205-208; EX1005, 54, 58, 61, 247; EX2023, 146:17-147:1
3	“customize how images are displayed, such as ‘at full resolution’ and with ‘metadata’”	Yes: [020]EX2025, ¶¶209-210
4	“use the Loupe tool, i.e., a magnifying glass”	Yes: [020]EX2025, ¶¶211-212; EX1005, 29, 65, 247; EX2023, 146:9-16

Kinetic Concepts, Inc. v. Smith & Nephew, Inc.
688 F.3d 1342, 1369 (Fed. Cir. 2012)

“[B]oth of these references independently accomplish similar functions . . . Because each device independently operates effectively, a [POSITA], who was merely seeking to create a better device . . . would have no reason to combine the features of both devices into a single device”

In re Fulton,
391 F.3d 1195, 1200 (Fed. Cir. 2004)

“the prior art as a whole must ‘suggest the desirability’ of the combination”

A3UM does not
disclose the claimed
“slideshow”

‘020 Patent, claim 1

'020: The Reply mischaracterizes the Petition

The Reply

Response, 78; § II.A. First, it asserts that "...choosing File->Play Slideshow or pressing Shift-S is not an input that is indicative of a selection of the first digital file 'in the first person view'..." Response, 79; also EX2025, ¶221. That misstates the Petition, which explained that a user *first selects images* in the Browser and *then* starts a slideshow. Petition, 40. And as Dr. Surati admitted, element 1[d] does not require the image's *selection* to start the slideshow. EX1001, 67; EX1089, 372:22-373:1, 355:1-7, 356:16-20, 363:10-12.

[020]Reply, 29

The Petition

A3UM also discloses that a user can select multiple images in the Browser (comprising photos of a specific person), including the image currently displayed in the Viewer, and then start a "slideshow" by choosing File->Play Slideshow, or by pressing Shift-S ("*an input that is indicative of a selection of the first digital file in the first person view*"). EX1003, ¶146; EX1005, 36, 828. That prompts the Play Slideshow dialog, which allows the user to "specify how you want images displayed by choosing a slideshow preset":

[020]Petition, 40

'020: The "input" must be "in the first person view"

The Reply

Next, Patentee contends the claim requires the "input" (File->Play Slideshow and/or Shift-S) to be in the "first person view." Response, 79. But all the *claim* requires is for *the digital file* to be located in that view, and the '020 Patent itself describes a user starting the slideshow from a distinct view (the Slideshow View). EX1001, 21:58-60; EX1089, 371:3-24. Dr. Surati's now discredited declaration testimony also cannot justify adding this non-existent claim requirement. Response, 79.

[020]Reply, 31

Claim 1

responsive to an input that is indicative of a selection associated with the first person, causing a first person view to be displayed on the interface, the first person view including:
a first digital file associated with the first person, the first name associated with the first person, and a first map image;

responsive to an **input** that is indicative of a selection of the first digital file **in the first person view**, causing a slideshow to be displayed on the interface, the slideshow including a plurality of images associated with the first person.

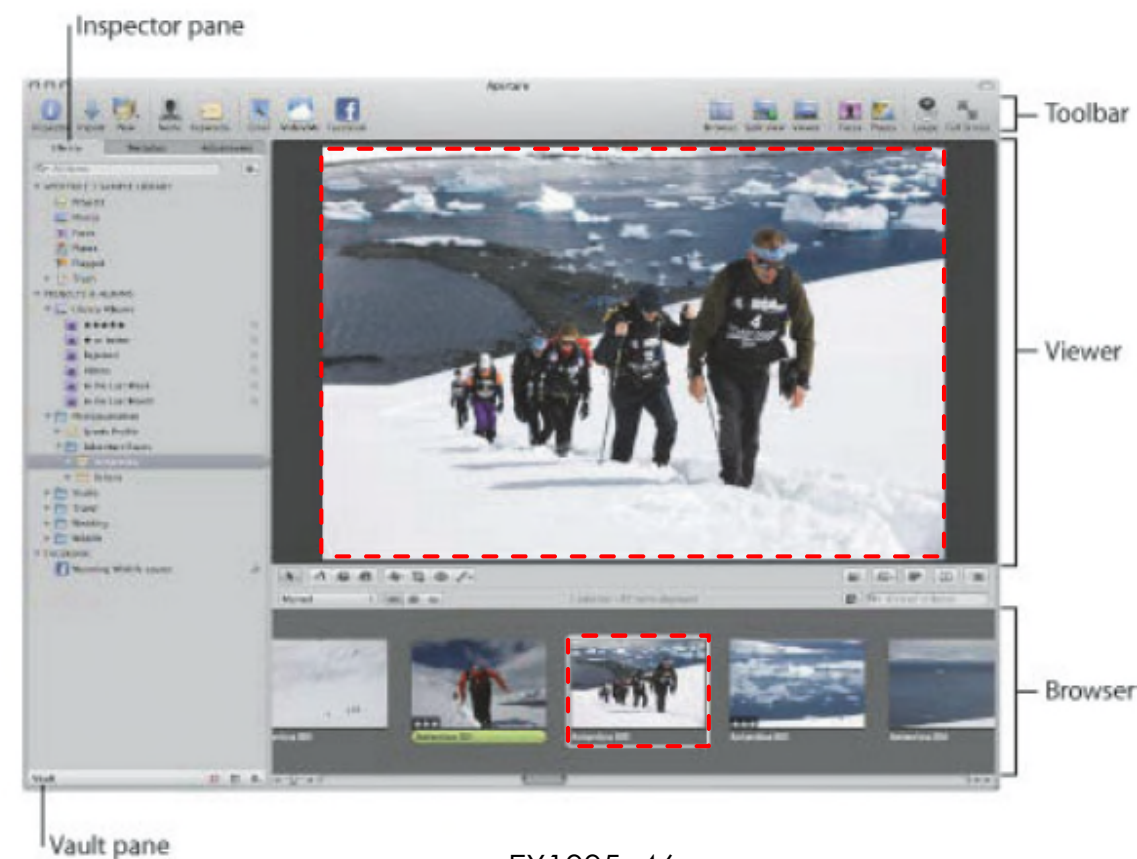
[020]EX1001, claim 1

'020: Selecting an image in the Browser does not start a slideshow in A3UM

The Reply

Response, 78; § II.A. First, it asserts that "...choosing File->Play Slideshow or pressing Shift-S is not an input that is indicative of a selection of the first digital file 'in the first person view'..." Response, 79; also EX2025, ¶221. That misstates the Petition, which explained that a user *first selects images* in the Browser and *then* starts a slideshow. Petition, 40. And as Dr. Surati admitted, element 1[d] does not require the image's *selection* to start the slideshow. EX1001, 67; EX1089, 372:22-373:1, 355:1-7, 356:16-20, 363:10-12.

[020]Reply, 29

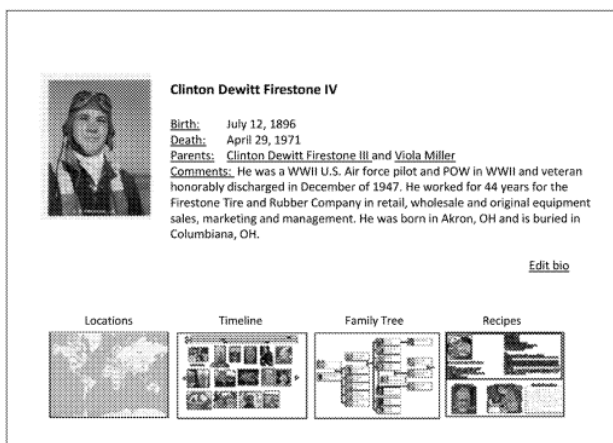


EX1005, 46

'020: A3UM does not disclose the claimed "slideshow"

For any of the views, the user can click on the digital file to start a slideshow feature that will allow them to scroll through an enlarged view of the digital file as illustrated in FIG. 17.

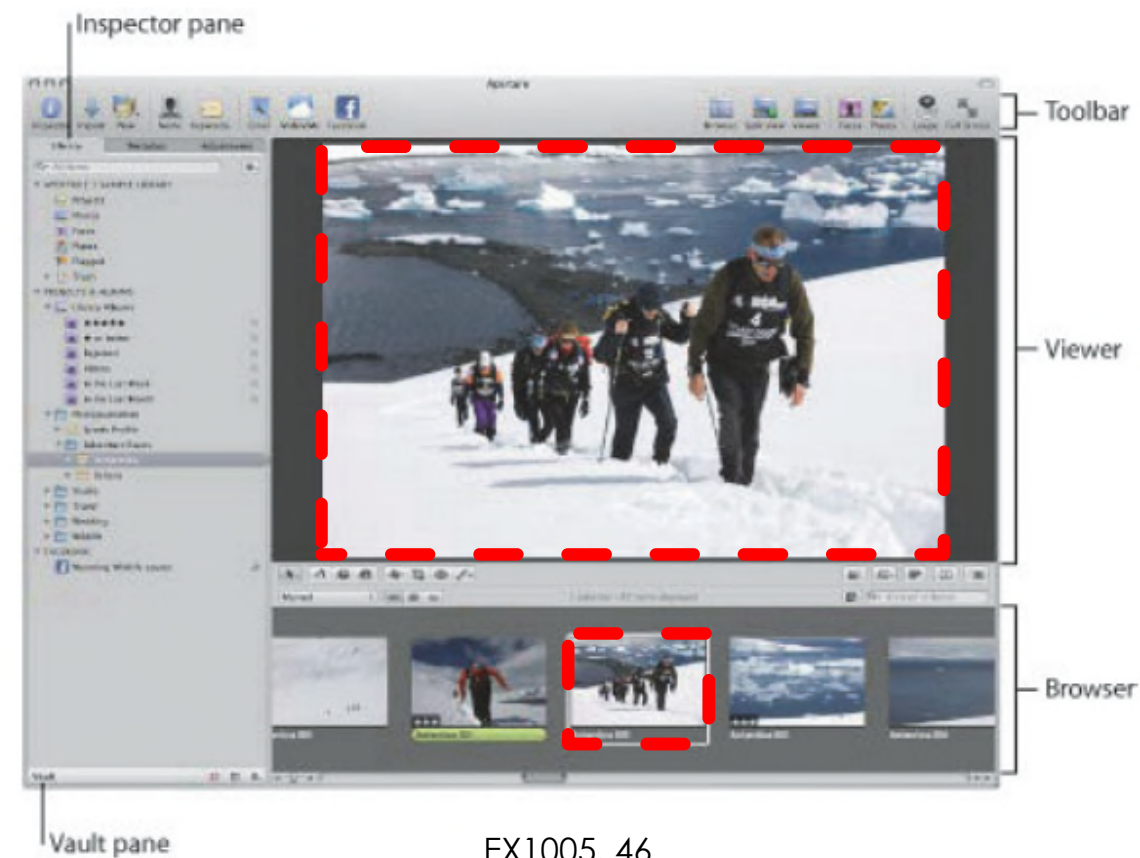
[020]EX1001, 7:15-18



[020]EX1001, FIG. 7



[020]EX1001, FIG. 17



EX1005, 46

A3UM does not disclose different “first” and “second” map images

‘020 patent, claims 13-16 and 45-48

'020: The “first” and “second” map images are different

Claims 13, 45: “causing a second person view to be displayed on the interface, the second person view including: . . . a second map image”

Claims 14, 46: “responsive to an input that is indicative of a selection of the second map image in the second person view, causing a second location view to be displayed on the interface”

Claim Term	Patent Owner's Construction	Petitioner's Construction
second map image (claims 13, 45)	second map image that is <u>different than</u> the first map image [020]POR, 12-14	the map image in the [second] person view [020]Reply, 5
selection of the second map image (claims 14, 46)	second map image that is <u>selectable</u> <u>and different than</u> the first map image [020]POR, 12-14	

'020: The "first" and "second" map images are different

The first and second person, name, thumbnail image, and digital file are different

Dr. Terveen's deposition

Q. Thank you. So the first person necessarily has to be different than the second person, right?

A. That's my understanding.

Q. And the first name of the first person is -- has to be different from the second name of the second person, right?

A. Generally speaking, sure.

EX2024, 287:20-288:2

Q. And the first thumbnail image is different from the second thumbnail image, right?

A. Yes.

Q. And the first digital file is different from the second digital file, right?

A. Let's see. I'm looking for the second digital file. Let's see. Let's see. Yeah.

EX2024, 288:3-9

'020: The “first” and “second” map images are different

Claims 14 and 46 reinforce that the “first” and “second” map images are different

13. The method of claim 3, further comprising . . . causing a second person view to be displayed on the interface . . . including the second digital file associated with the second person, the second name associated with the second person, and **a second map image**.

14. The method of claim 13, further comprising: . . . causing a second location view to be displayed . . . including: **the interactive geographic map**, a third indication positioned at a third location on the interactive geographic map, and a fourth indication positioned at a fourth location on the interactive geographic map.

141. Claims 14 and 46 further illustrate why a POSITA would understand that the “first map image” and “second map image” are different. As discussed below, claims 14 and 46 recite a “second location view,” which includes “the interactive geographic map.” There is not a “first” or “second” modifier for the “interactive geographic map.” Based on antecedent basis, “the interactive geographic map” refers to the interactive geographic map recited in claims 1 and 31 that is part of the “first person view.” This illustrates that if the patentee wanted to claim the same exact map image in both the “first person view” and the “second person view,” it could have simply used the term “map image” with no “first” or “second” modifier.

[020]EX2025, ¶141

'020: The “first” and “second” map images are different

Petitioner ignores authority holding that “first” and “second” distinguish different claim elements

***Gillette Co. v. Energizer Holdings, Inc.*
405 F.3d 1367, 1373 (Fed. Cir. 2005)**

“The terms ‘first, second, and third’ are terms to distinguish different elements of the claim”

***Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*
405 F.3d 1367, 1373 (Fed. Cir. 2005)**

“Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct component[s] of the patented invention”

'020: The "first" and "second" map images are different

Dr. Terveen agreed that the first and second map images are different

Dr. Terveen's deposition

You'll agree with me that the ordinary meaning of "first map image" would be different than the ordinary meaning of "second map image," correct?

A. I think, yes, I would agree with that.

EX2024, 291:16-19

Dr. Terveen's declaration

54. Due to the parallelism between many of the '020 patent's claim limitations and the claims' overall length, I have analyzed certain parallel claim limitations by quoting them in bracketed form, *e.g.*, "[*first/second*] location view." In each such case, and unless stated otherwise, my analysis provides my understanding of how the functionality provided by the prior art satisfies both such "*first*" and "*second*" claim elements through its disclosure of multiple such elements.

[020]EX1003, ¶154

'020: A3UM does not disclose a "second map image" different than the alleged "first map image"

Dr. Terveen's deposition

Q. And you have not rendered any opinion in your report under a construction that is the second map image must be different from the first map image, correct?

A. As I sit here today, not that I recall, no.

EX2024, 291:7-12

Q. If the construction of the term "second map image" is such that it cannot be the same thing as the first map image, would that change your opinion regarding the obviousness of claims 13 and 45 based on what you've set forth here?

A. If the construction was that the first map image and the second map image would have to visually look different, then I would revisit my opinion regarding claims 13 and 45 and revise if necessary.

EX2024, 290:12-21

A3UM does not disclose “first” and “second” person-location selectable elements

‘658 Patent,
claims 8 and 11

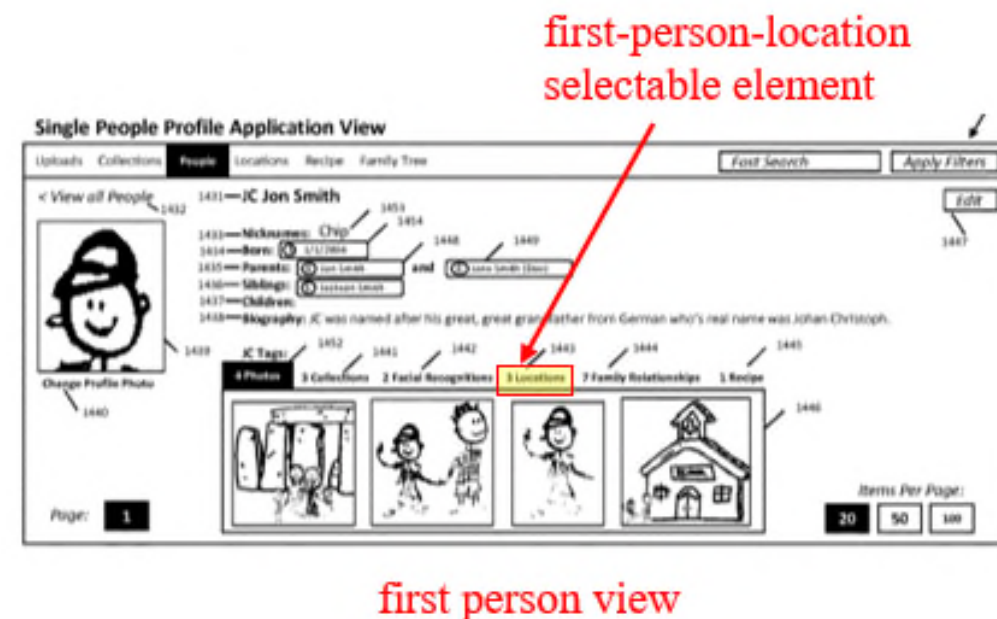
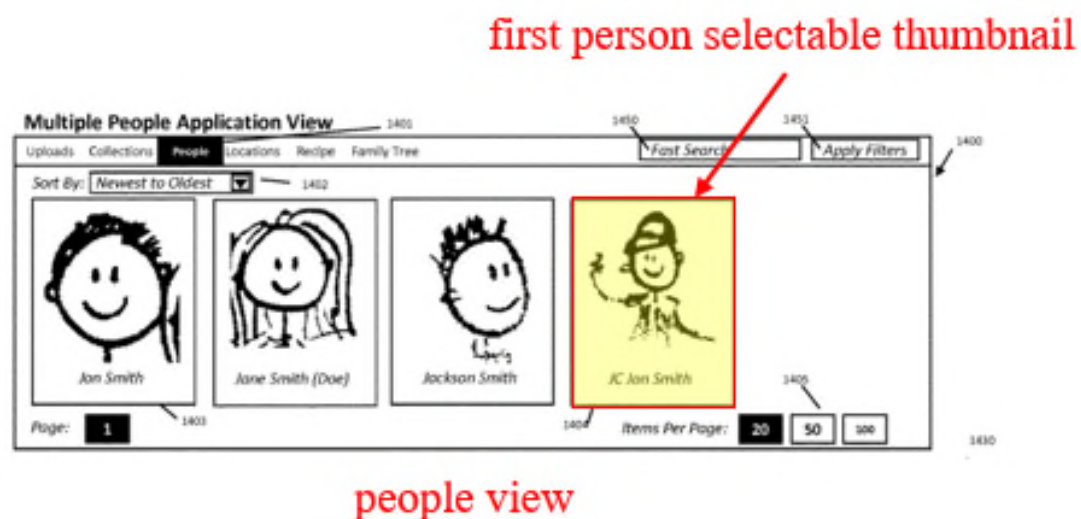
'658: "responsive to" requires a cause-effect relationship

Claim Term	Patent Owner's Construction	Petitioner's Construction
<p>"<u>responsive to</u> a click or tap of the [first/second] person selectable thumbnail image, displaying a [first/second] person view" (claims 7, 10)</p>	<p>requiring a cause-effect relationship between (i) a click or tap of the [first/second] person selectable thumbnail image and (ii) displaying a [first/second] person view</p>	<p>encompasses methods that include intervening actions by a user to enable or that are associated with the displaying action</p>
	<p>[658]POR, 19-24; [658]POSR, 9-11</p>	<p>[658]Reply, 4</p>

'658: "responsive to" requires a cause-effect relationship

Claims 7, 10: "**responsive to** a click or tap of the [first/second] person selectable thumbnail image, displaying a [first/second] person view"

Claims 8, 11: "the displaying the first person view further includes displaying a [first/second]-person-location selectable element"



[658]EX1001, FIG. 32, 22:43-55, 22:63-23:10, 23:18-20;
[658]EX2025, ¶¶140-142

'658: "responsive to" requires a cause-effect relationship

Dr. Surati's testimony is un rebutted

137. A POSITA would understand based on the plain meaning of the claim language (in particular, the phrase "responsive to") that there is a cause-effect relationship between (1) a click or tap of a first one of the displayed scaled replicas in the [first/second] location view and (2) displaying a [first/second] digital photograph and a [first/second] map image. In other words, the claims require a causal connection between clicking or tapping first one of the displayed scaled replicas in the [first/second] location view and displaying a [first/second] digital photograph and a [first/second] map image.

[658]EX2025, ¶137

138. Similarly, with respect to claims 7 and 10, A POSITA would understand based on the plain meaning of the claim language (in particular, the phrase "responsive to") that there is a cause-effect relationship between (1) the click or tap of the [first/second] person selectable thumbnail image in the people view (the cause) and (2) displaying the [first/second] -person-location selectable element (the effect). In other words, the claims require a causal connection between clicking or tapping the [first/second] person selectable thumbnail image and displaying the [first/second]-person-location selectable element.

[658]EX2025, ¶138

'658: Petitioner agrees the “person-location selectable element” is displayed in the person view

The Reply

Initially, the Patent describes first/second “person-location-selectable” elements only being displayed *within* a view (not independently), so when a “first” or “second” view is displayed, that displays the first/second element it includes. EX1001, 36:63-65, 37:12-15 ; Petition, 62; EX1089, 355:13-356:20 . That matches what claims 5 and 7 require, which is that the first/second *person view* be displayed in response to “a click or tap of the first person selectable thumbnail image.” Then, claims 8 and 11 add that *the person view further includes displaying the specified element*—it does not require independently displaying those elements.

[658]Reply, 29-30

Dr. Surati

254. As discussed above, the phrase “responsive to” requires a causal connection between the “click or tap of the [first/second] person selectable thumbnail image” and “displaying a [first/second] person view.” *Supra* §VII.F.2. Claims 8 and 11 further specify that “the displaying the [first/second] person view further includes displaying a [first/second]-person-location selectable element,” so the claims also require a causal connection between the “click or tap of the [first/second] person selectable thumbnail image” and displaying the [first/second]-person-location selectable element. *Supra* §VII.F.3.

[658]EX2025, ¶1254

'658: A3UM does not disclose the claimed first and second "person-location selectable element"

A3UM does not disclose displaying the "person-location selectable element" "responsive to" a click or tap of a "person selectable thumbnail image"

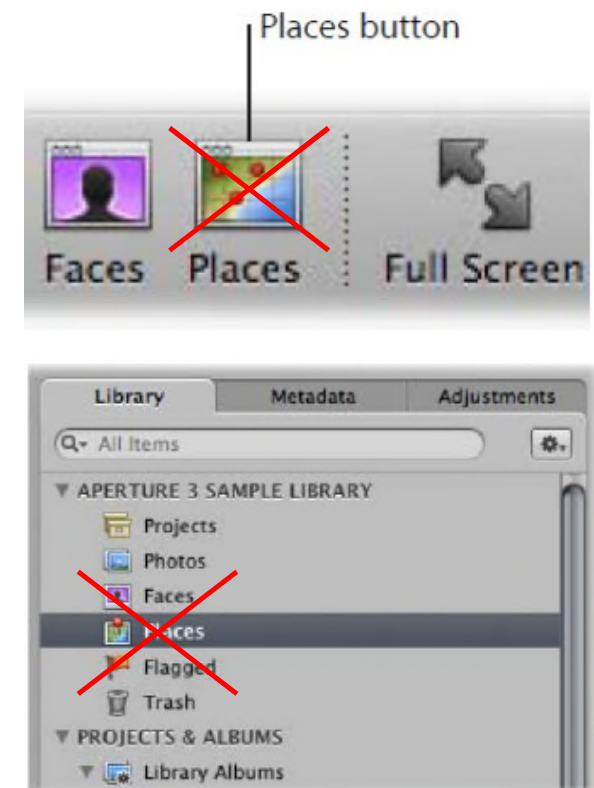
Dr. Surati

255. In A3UM, whether the Places link (the alleged [first/second]-person-location selectable element) is displayed on the interface has no causal connection whatsoever to double-clicking one of the snapshots in the Faces view. A3UM states that the Library inspector, which includes the Places link, is displayed as soon as Aperture 3 is first opened. Ex. 1005, p. 6. A3UM also states that "[t]he inspector pane is shown by default." Ex. 1005, p. 46. Double-clicking one of the snapshots in the Faces view has no impact whatsoever on the display of anything within the inspector pane. This is shown by a comparison between the alleged people view and

[658]EX2025, ¶255

257. The same is true regarding the Places toolbar button. The display of the Places button in the toolbar (the alleged [first/second]-person-location selectable element) has no causal connection to double-clicking one of the snapshots in the alleged people view (the alleged click or tap responsive to which the [first/second] person view is displayed). As with the inspector pane, the toolbar is shown by default in Aperture 3 as soon as it is launched. Ex. 1005, p. 6. A3UM states that the "[t]he toolbar is shown by default." Ex. 1005, p. 64. A3UM further states that the Places button is one of the default buttons on the right side of the toolbar. Ex. 1005, pp. 64-65. Double-clicking one of the snapshots in the alleged people view (the alleged click or tap responsive to which the [first/second] person view is displayed) has no impact whatsoever on the display of anything within the toolbar, including the Places button (the alleged [first/second]-person-location selectable element).

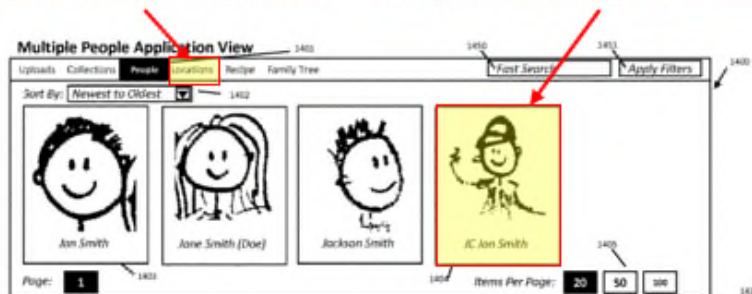
[658]EX2025, ¶257



[658]POR, 72-74; [658]POSR, 22

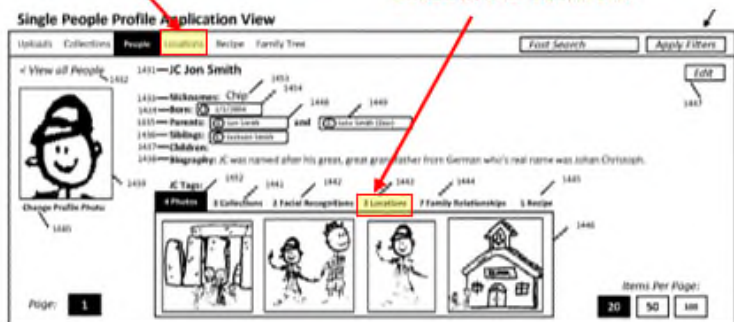
'658: This difference between the challenged claims and A3UM is significant in the field of user interface design

location selectable element first person selectable thumbnail



people view

location selectable element first-person-location selectable element



first person view

Dr. Surati

263. Displaying the person-location selectable element in the person view responsive to a selection of the corresponding thumbnail in the people view facilitates a clear and intuitive interface. In the people view, the user chooses a specific person. When the person view appears responsive to that input, the user will clearly associate the resulting display as being related to the person they selected. In particular, the user can clearly understand that the newly-displayed person-location selectable element is tied to the specific person, such that selecting that element will lead to a result that is tied to the specific person. If the first-person-location selectable element were persistently displayed and unaffected by the selection of JC Jon Smith in the people view, such an interface would not provide the user the necessary context to intuitively understand in their own mental model that selecting that element leads to a result that is tied to JC Jon Smith

[658]EX2025, ¶1263

'658: The “first” and “second” person-location selectable elements are distinct

Claim 8: “wherein the displaying the first person view further includes displaying a first-person-location selectable element”

Claim 11: “wherein the displaying the second person view further includes displaying a second-person-location selectable element”

Claim Term	Patent Owner's Construction	Petitioner's Construction
[first/second] location selectable element	first/second-person-location selectable element in the first/second person view that <u>is distinct from</u> the location selectable element and the second/first-person-location selectable element in the second/first person view	a location selectable element in the [first/second] person view

[658]POR, 24-27; [658]POSR, 11-13

[658]Reply, 6

'658: The “first” and “second” person-location selectable elements are distinct

82

Dr. Terveen agreed that the “first” and “second” elements in the claims must be distinct

Q. Thank you. So the first person necessarily has to be different than the second person, right?

A. That's my understanding.

Q. And the first name of the first person is -- has to be different from the second name of the second person, right?

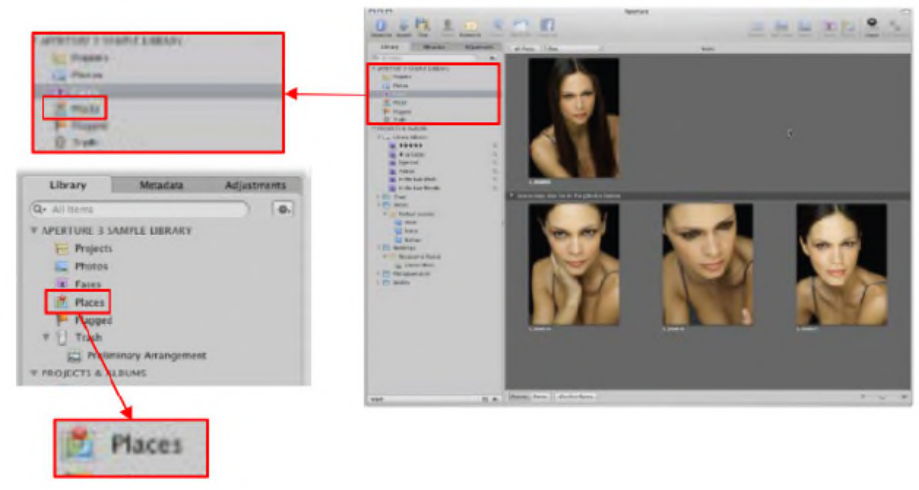
A. Generally speaking, sure.

EX2024, 287:20-288:2

'658: A3UM does not disclose distinct first and second person-location selectable elements

Dr. Terveen's declaration

251. From that view, A3UM displays a "[first/second]-person-location selectable element" in the form of the Places link in the Library inspector:



[658]EX1003, ¶251

Dr. Terveen's deposition

Q. Correct. And you are referring to that Places link in the Inspector pane as both the first location selectable element and the second person location selectable element?

A. The first person location selectable element and the second person location selectable element, correct? That's what you meant to ask?

Q. Yes.

A. Yeah. Yes. That's -- that's the -- that's what I'm saying in paragraph 251.

EX2024, 334:1-10

Q. And as we've discussed before, if you agree -- strike that -- if the claim is required -- the claim is construed such as the first person location selectable element is different from the second person location selectable element, then you would agree that your opinion does not render claims 8 and 11 of the '658 obvious, correct?

MR. SMITH: Objection. Form.

THE WITNESS: My opinion was based on the function of being able to select both a first person location and a second person location, that's what my opinion was based on. If there is some requirement that they have to be discrete, visible elements on the screen, then I would have to revise my opinion and -- or I would have to revisit my opinion and see if I had to revise it.

EX2024, 334:11-335:1

'658: A3UM does not disclose distinct first and second person-location selectable elements

Dr. Terveen's alternative obviousness theory

252. Alternatively, to the extent one could argue that A3UM's Places link in the Library inspector is not a “[*first/second*]-*person-location selectable element*” because it displays all pictures in the system and not just images containing the “[*first/second*]-*person*,” it would have been obvious to modify A3UM so that the Places toolbar button (a “[*first/second*]-*person-location selectable element*” and also part of the “[*first/second*] *person view*”) could be selected to display the photos of the selected person in the Places view.

[658]EX1003, ¶252

Dr. Surati

251. Dr. Terveen asserts as an alternative that “it would have been obvious to modify A3UM so that the Places toolbar button . . . could be selected to display the photos of the selected person in the Places view.” Ex. 1003, ¶ 252. As discussed below, I disagree with his assertion that a POSITA would make such a modification. But in any event, modifying the Places toolbar button to perform the function of the first-person-location selectable element (claim 8) and second-person-location selectable element **would still result in the exact same element on the interface being mapped to both claim limitations.** I further note that Dr. Terveen relies on the Places toolbar button as an example of the location selectable element in the application view.

[658]EX2025, ¶251

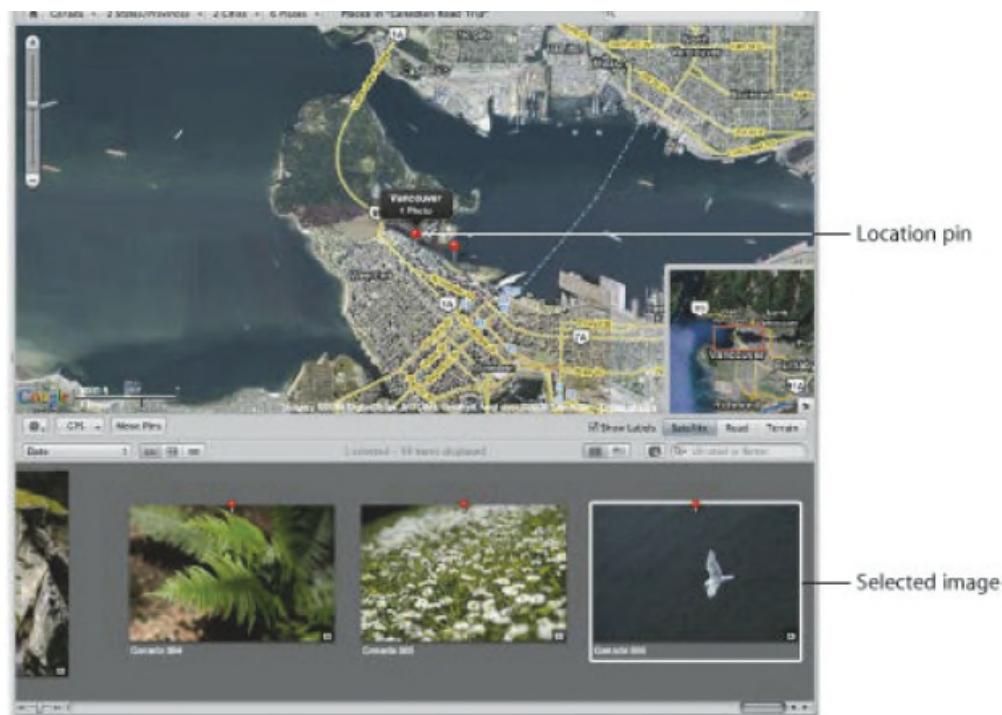
Petitioner's
arguments
regarding the
A3UM Places View
are incorrect

'228 Patent, claim 15
'658 Patent, claims 3-4
'376 Patent, claim 1

'228, '658, '376: Clicking an image in the Browser does not replace the Places map with a digital file in A3UM

In the Browser, select an image.

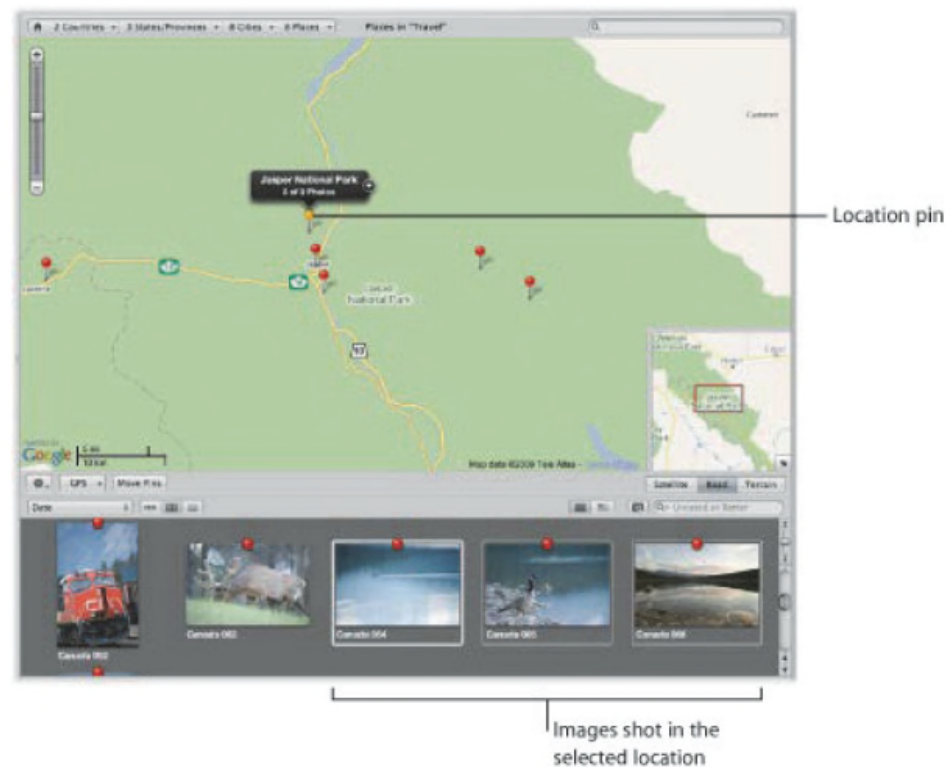
A location label appears above a pin in Places view, indicating the location where the image was shot. The location label indicates the name of the location and the number of images that were captured there.



EX1005, 435-436

Select a red pin.

The selected pin turns orange, and the image or images associated with the location marked by the orange pin are selected in the Browser.



EX1005, 436-437

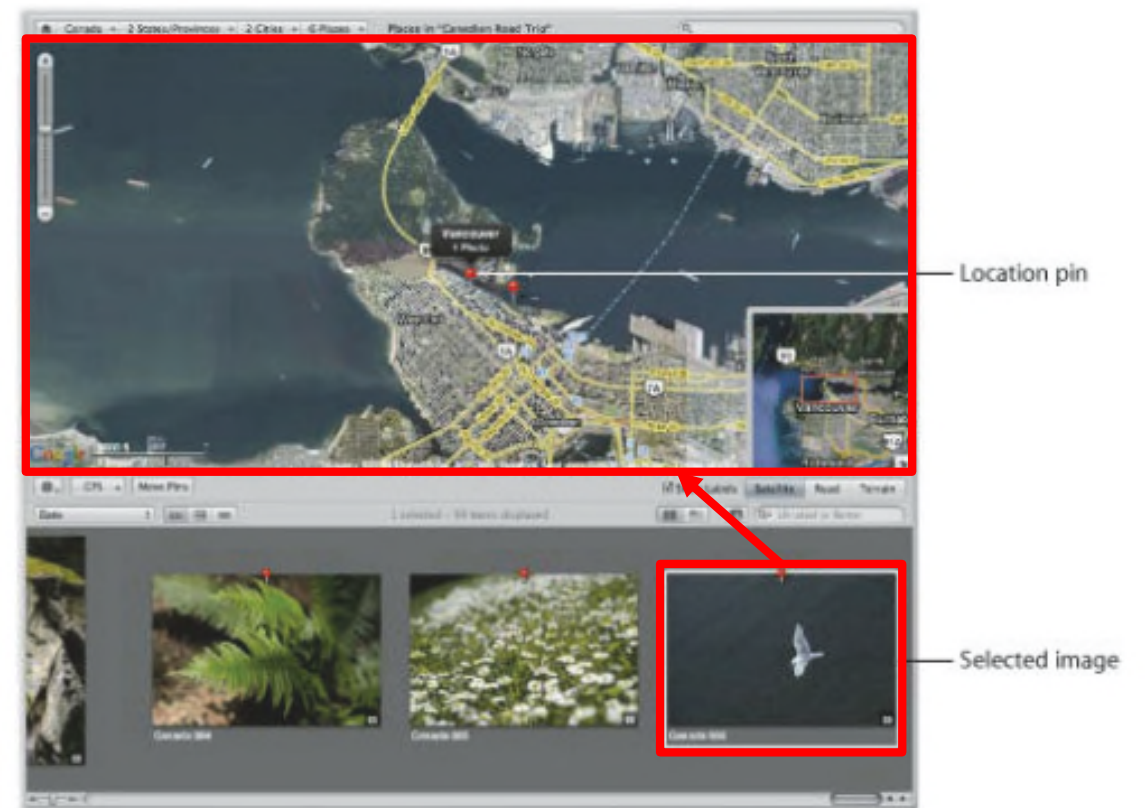
'228, '658, '376: Clicking an image in the Browser does not replace the Places map with a digital file in A3UM

Dr. Terveen's Declaration

Selecting a thumbnail in the Browser

then prompts the display of the original digital image in the Viewer, which replaces the Places map view. EX1005, 251 ("When you select images in the Browser, the Viewer immediately displays a detailed view of your selection."). This display in the Viewer will be of the digital image (e.g., a full-size photo) represented by the thumbnail in the browser.

[228]EX1003, ¶1241; [658]EX1003, ¶1194; [376]EX1003, ¶1186



EX1005, 435-436 (annotated)

'228, '658, '376: Clicking an image in the Browser does not replace the Places map with a digital file in A3UM

Dr. Terveen's Deposition Testimony

Q. Okay. And so when you select an image in the Browser, it doesn't actually replace in the Viewer the map with a full-size image of the -- of the picture selected, correct?

MR. SMITH: Objection. Form. Foundation.

THE WITNESS: Well, not in this case it doesn't.

BY MR. SCHWARTZ:

Q. Are you aware of anywhere in A3UM that it does?

A. I can't recall right offhand if that is the case.

EX2023, 154:7-19

Q. Okay. So with all of that and having looked at 435, 436, you agree with me that if you select an image in the Places view as shown in the bottom Browser, it does not appear in the Viewer, correct?

A. I think I see -- yeah, I wanted to just find that text. I think you're referring to item 2 on page 435 where it says:

In the Browser, select an image. A location label appears above a pin in Places view, indicating the location where the image is shot.

So that is what it says there.

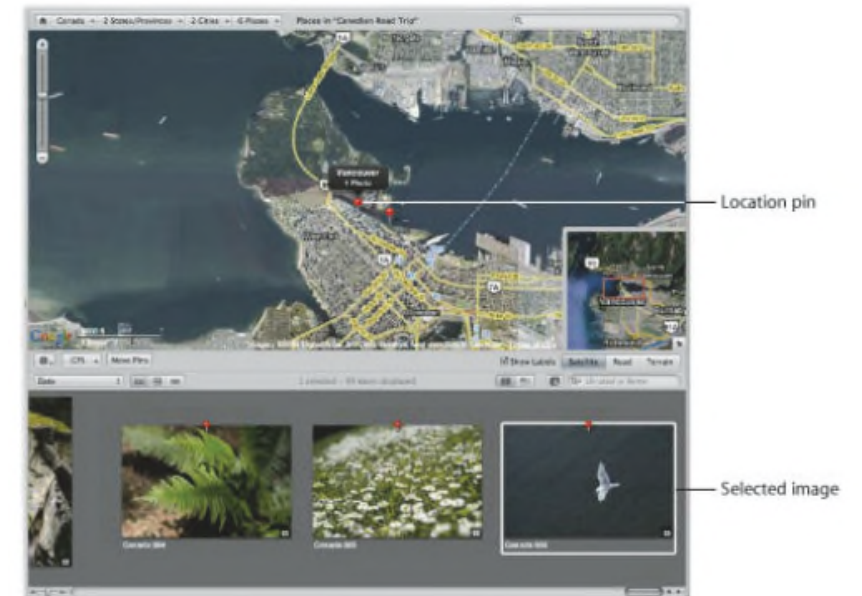
Q. Right. It doesn't say that it replaces the -- the map image with the image from the Browser, right? It doesn't say that?

A. It does not say that.

EX2023, 323:24-324:16

In the Browser, select an image.

A location label appears above a pin in Places view, indicating the location where the image was shot. The location label indicates the name of the location and the number of images that were captured there.

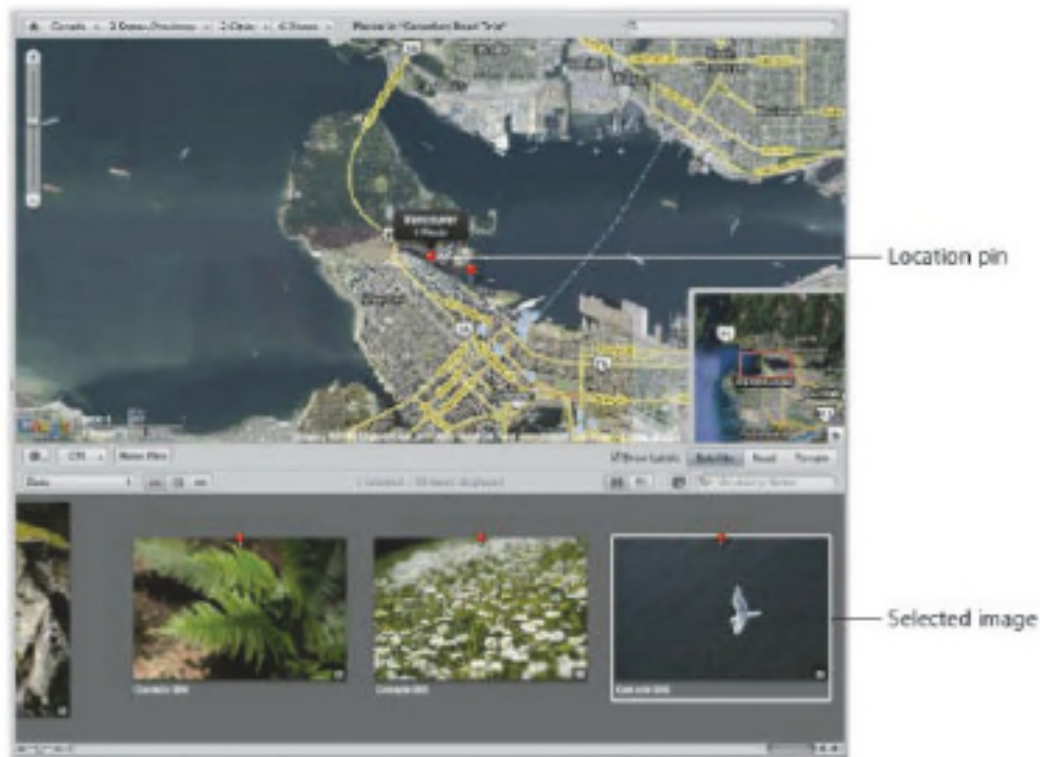


EX1005, 435-36

'228, '658, '376: Clicking an image in the Browser does not replace the Places map with a digital file in A3UM

In the Browser, select an image.

A location label appears above a pin in Places view, indicating the location where the image was shot. The location label indicates the name of the location and the number of images that were captured there.



EX1005, 435-436

193. Dr. Terveen cites pages 251 and 51 of A3UM in support of his assertion that selecting an image in the Browser within the Places view prompts the display of the original digital image in the Viewer. Ex. 1003, ¶ 241. These pages of A3UM do state that selecting an image in the Browser causes a larger version of the image to be shown in in the Viewer. However, these statements are not included in the description of the Places view, which as shown above, exhibits a different behavior for the Browser and Viewer than other views or features in A3UM.

[228]EX2025, ¶193; [658]EX2025, ¶201; [376]EX2025, ¶159

[228]POR, 60-64; [228]POSR, 22; [376]POR, 53-55; [376]POSR, 14-15; [658]POR, 80-82; [658]POSR, 25-26

A3UM does not disclose causing a digital file to be displayed responsive to a selection in the location view

'228 Patent, claim 15

'228: A3UM does not disclose displaying a digital file responsive to an input in the location view

Claim 15: “responsive to an input that is indicative of a selection, in the [first/second] location view, of the representation of the at least a portion of the one digital file in the [first/second] set of digital files, **causing a [first/second] digital file to be displayed on the interface.**”

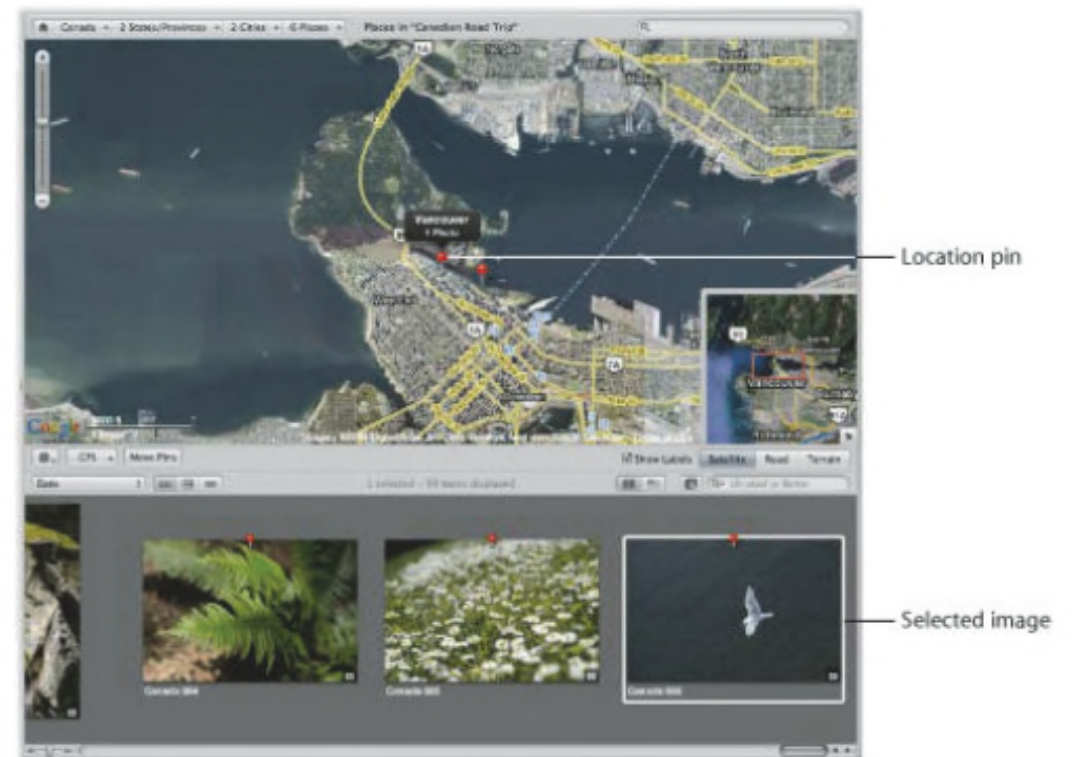
Dr. Terveen's Declaration

Selecting a thumbnail in the Browser

then prompts the display of the original digital image in the Viewer, which replaces the Places map view. EX1005, 251 (“When you select images in the Browser, the Viewer immediately displays a detailed view of your selection.”). This display in the Viewer will be of the digital image (e.g., a full-size photo) represented by the thumbnail in the browser.

[228]EX1003, ¶241

alleged first/second location view



EX1005, 435-36

[228]POR, 60-64; [228]POSR, 22-23

'228: The Reply mischaracterizes the Petition

The Reply

By citing those passages together, the Petition contended it would have been obvious to cause the Browser to display a full-size image *in the Viewer* when a thumbnail is clicked after a set of thumbnails is presented following selection of a location on the *Places* map. There is no dispute that A3UM describes displaying a

[228]Reply, 27

The Petition

A3UM shows that selecting a pin on the interactive map causes the display of a thumbnail representation of all the photos matching the location represented by the pin in the Browser. EX1005, 436-437. Selecting a thumbnail in the Browser then prompts the display of the original digital image in the Viewer. EX1005, 251 (“When you select images in the Browser, the Viewer immediately displays a detailed view of your selection.”). This display in the Viewer will be of the digital image (e.g., a full-size photo) represented by the thumbnail in the browser. EX1005, 51 (“When you select one or more thumbnail images in the Browser, those images are displayed in the Viewer. You can use the Viewer to examine an image at its full size or compare multiple images side by side.”); EX1003, ¶241. A skilled person would not modify this latter functionality in the suggested combination with Belitz—the thumbnails would replace the pin, but the A3UM technique of selecting the thumbnail in the Browser to prompt display of the full image would be retained. EX1003, ¶242.

[228]Petition, 72-73

[228]POSR, 22-23

'228: Displaying a digital file responsive to an input in the location view is not obvious

Dr. Surati's testimony that a POSITA would not modify A3UM as proposed in the Reply is unrebutted

196. In A3UM, there an interplay between the map and the Browser below the map. Selecting one of the pins on the map turns the pin orange and the highlights the corresponding images in the Browser. Ex. 1005, p. 436.

197. Conversely, selecting one of the images in the Browser causes a location label to appear above the corresponding pin in the map above the Browser. Ex. 1005, p. 435.

198. Modifying A3UM so that the Places map is replaced by an image when selecting an image in the browser would destroy the interplay between selections in the Browser and selections on the map. For instance, once a user selected an image in the Browser, they would no longer be able to select a different pin on the map to investigate images at that location because the map has been replaced by the Browser.

[228]EX2025, ¶¶196-198

A3UM does not disclose displaying a digital photograph responsive to a click or tap of a scaled replica in the location view

'658 Patent, claims 3-4

'658: A3UM does not disclose displaying a digital photograph responsive to a click or tap of a scaled replica

Claims 3 and 4

3. The computer-implemented method of claim 1, 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.

4. The computer-implemented method of claim 3, 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.

[658]EX1001, claims 3-4

alleged [first/second] location view in A3UM



EX1005, 436-438; [658]Petition, 48-49

[658]POR, 80-82; [658]POSR, 25-26

'658: The Reply mischaracterizes the Petition

The Reply

The alternative basis in the *Petition* was based on a *modified* A3UM behavior where a map in the main window would be replaced with a photo in response to a single click, but a small map in the bottom corner showing the location of the selected photo would be retained (illustrated below). *Petition* 78-80.



[658]Reply, 34

IPR2022-00033 U.S. Patent No. 10,423,658

keyboard, after which the Map Pane can be displayed by selecting the Map Pane button. EX1005, 58-60; EX1003, ¶197.

1. "Displaying" the "Map Images"

A3UM's disclosure encompasses a scenario where a user had previously selected the Metadata inspector, displayed the Map Pane, and then used the Places view. EX1003, ¶198; EX1005, 51, 58-60, 251, 458-459. In such a scenario, selecting one of the photos in the Browser would, with a single click, display (i) the photo in the Viewer and (ii) the photo's information (and the Metadata inspector. EX1003, ¶198; EX1005, 51, 58-60, 251, 458-459.

Alternatively, it would have been obvious to modify A3UM such that selecting a photo in the Browser, in addition to displaying that photo in the Viewer, would display A3UM's Map Pane at the bottom of the Inspector pane. EX1003, ¶199-204. A skilled artisan would have appreciated the value of including maps as ancillary UI elements in photo organizers, such as A3UM's Map Pane EX1005, 458-459, and optionally-displayed Overview Map Pane on the Places view:

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PETITION FOR INTER PARTES REVIEW

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PETITION FOR INTER PARTES REVIEW

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PETITION FOR INTER PARTES REVIEW

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U.S. Patent No. 10,423,658

U.S. Patent No. 10,423,658

Search field

Map pane

Overview Map Pane button

8, 3:42-45, and A3UM's different map user. EX1005, 82, 439-440. Enabling selecting an image to display in the information and would remind the 202.

well within a skilled artisan's abilities automatically displaying certain UI 5, 74 (toolbar), 259 (stacked image animating tasks). This disclosure suggests the Metadata inspector and Map Pane from A3UM's Browser to modifying A3UM as stated would arrange on to yield no more than one would locally displaying A3UM's Map Pane in information) is selected in the Browser

ake this modification

EX1003, ¶202. For

example, automatically displaying a map pane along with a photo viewer could

phic Coordinates"

of the [first/second] geotag" refer to

altitude values typically captured with a

5 (use of standard EXIF GPS values);

[658]Petition, 78-80

'658: Dr. Surati's testimony that a POSITA would not modify A3UM is unrebutted

216. Modifying A3UM so that the Places map is replaced by an image when selecting an image in the browser would destroy the interplay between selections in the Browser and selections on the map. For instance, once a user selected an image in the Browser, they would no longer be able to select a different pin on the map to investigate images at that location because the map has been replaced by the Browser.

[658]EX2025, ¶216

A3UM does not disclose displaying a location view comprising a majority portion of a screenshot that does not include the interactive map

'376 Patent, claim 1

'376: A3UM does not disclose the "first location view"

Claim 1

responsive to a click or tap of the first user selectable thumbnail image, displaying a first location view on the video display device, **the first location view comprising a majority portion of a screenshot** of the video display device, the displaying the first location view including displaying (i) a first location name corresponding to the first geotag, (ii) a scaled replica of each of the digital photographs or images or videos in the first set of digital files, and (iii) a first map image indicating the geographic coordinates of the first geotag, the displayed scaled replicas of each of the digital photographs or images or videos in the first set of digital files not being overlaid on the first map image and **the second screenshot of the video display device not including the interactive map;** and

[376]EX1001, claim 1

The Petition

EX1005, 436-437. **Selecting a thumbnail in the Browser then prompts display of the original digital image in the Viewer.** EX1005, 251. This display will be the digital image (*e.g.*, a full-size photo) represented by the thumbnail in the Browser (*"not including the interactive map"*). EX1005, 51; EX1003, ¶186. A skilled

[376]Petition, 50

'376: A3UM does not disclose displaying a photo responsive to a click or tap of a scaled replica

Dr. Terveen's Declaration

Selecting a thumbnail in the Browser

then prompts the display of the original digital image in the Viewer, which replaces the Places map view (*"the [second/third] screenshot of the video display device not including the interactive map"*). EX1005, 251 (*"When you select images in the Browser, the Viewer immediately displays a detailed view of your selection."*). This display in the Viewer will be of the digital image (*e.g., a full-size photo*) represented by the thumbnail in the browser. EX1005, 51

[376]EX1003, ¶186

Dr. Terveen's Deposition

Q. Okay. And so when you select an image in the Browser, it doesn't actually replace in the Viewer the map with a full-size image of the -- of the picture selected, correct?

MR. SMITH: Objection. Form. Foundation.

THE WITNESS: Well, not in this case it doesn't.

EX2023, 154:7-19

'376: The Reply mischaracterizes the Petition

Petitioner raises an improper new obviousness argument in the Reply

The Reply

The Petition thus made clear that its obviousness challenge was based on *a combination* of teachings in *different* sections of A3UM describing *different* behaviors of the Browser in *different* views of the A3UM interface. Petition, 50-52. After citing those passages *together*, the Petition explained it would have been obvious to modify A3UM to cause it to display the Viewer/Browser in the place of the Places map when a user selects a location on the Places map. Petition, 53.

[376]Reply, 23

The Petition

First, it would have been obvious to display, in A3UM's Viewer, one of the images shot in the selected location in response to selecting the map location. EX1003, ¶¶194-197. A3UM discloses that selecting a map marker in Places view will display "[i]mages shot in the selected location" in the Browser, but the Places map will remain in the Viewer until a user selects an image to display in a larger fashion in the viewer. EX1005, 436-438. By early 2010, it would have been obvious to modify A3UM to combine these two steps in view of Belitz's disclosure of displaying, in response to selecting a map marker, a "popup window" showing "at least some of the visual representations 411 of the graphical object 410c," as well as an image "shown in a larger size than the others which are shown in a list":

[376]Petition, 53-54

[376]POSR, 15-16

'376: A3UM does not render obvious the "first location view"

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Petitioner did not propose modifying A3UM's to replace the map with a full-size image

The Petition

A3UM discloses selecting a pin on the interactive map to display a thumbnail representation of all photos matching that location in the Browser. EX1005, 436-437. Selecting a thumbnail in the Browser then prompts display of the original digital image in the Viewer. EX1005, 251. This display will be the digital image (e.g., a full-size photo) represented by the thumbnail in the Browser ("not including the interactive map"). EX1005, 51; EX1003, ¶186. A skilled person would retain this functionality in A3UM-Belitz-Rasmussen combination— thumbnails would replace the pin, but selecting the thumbnail would prompt display of the full image. EX1003, ¶187. The images displayed in the Browser

[376]Petition, 50-51

Dr. Terveen

187. This functionality would be maintained by the suggested combination of A3UM with Belitz. Belitz's thumbnail functionality would replace A3UM's pin, but the A3UM technique of selecting the thumbnail in the Browser to prompt display of the full image would be retained. This is of course analogous to the

[376]EX1003, ¶187

'376: Dr. Surati's testimony that a POSITA would not modify A3UM is unrebutted

Dr. Surati

165. I further disagree that a POSITA would modify A3UM such that selecting a pin on the map would replace the map with an image corresponding to the selected pin. In A3UM, there is an interplay between the Places map and the Browser below the map. Selecting one of the pins on the map turns the pin orange and then highlights the corresponding images in the Browser. Ex. 1005, p. 436.

166. Conversely, selecting one of the images in the Browser causes a location label to appear above the corresponding pin in the map above the Browser. Ex. 1005, p. 435.

167. Modifying A3UM so that the Places map is replaced by an image when selecting a pin/marker would destroy the interplay between selections in the Browser and selections on the map. For instance, once a user selects a pin on the map, they would no longer be able to select a different pin on the map to investigate images at that new location because the map has been replaced by the Browser, without needing to take additional step(s).

[376]EX2025, ¶¶165-167

A3UM does not disclose or render obvious including videos within the Faces feature

'228 Patent, Claim 1

'658 Patent, Claim 5

'020 Patent, Claim 24

The '228, '658, and '020 patents claim “videos”

'228 patent, claim 1: “a [first/second] person selectable thumbnail image including a representation of a face of a [first/second] person, the [first/second] person being associated with a [third/fourth] **set of digital files including digital photographs and videos**;

'658 patent, claim 5: “a [third/fourth] **set of digital photographs and videos** including digital photographs and videos associated with the [first/second] person;

'020 patent, claim 24: “wherein the first set of digital files includes a photo, **a video**, and an audio file;

'228, '658, '020: In A3UM, "image" does not mean "video"

106

image An artifact that reproduces the likeness of some subject, usually a physical object or person, also known as a *picture*. See also image selection, photograph, picture, subject.

EX1005, 1111

Dr. Surati

154. Dr. Terveen asserts that A3UM uses the term "image" or "images" to refer to all three of photos, audio clips, and videos. Ex. 1003, ¶¶ 143-45, 225. I disagree. A POSITA reading A3UM would not understand that every instance of the word "image" in A3UM includes both photos and videos.

155. A3UM defines an "image" as "[a]n artifact that reproduces the likeness of some subject, usually a physical object or person, also known as a picture." Ex. 1005, p. 1111. **This definition does not reference videos.**

[228]EX2025, ¶¶154-155; [658]EX2025, ¶221; [020]EX2025, ¶284

Dr. Terveen

I'm going to take a look at the glossary with you from A3UM. Will you go to page 1111?

A. Yes, I'm there.

Q. And there's a definition of the word "image." Do you see that?

A. I do.

* * *

Q. And that doesn't include videos, does it?

A. **This particular definition does not.**

EX2024, 356:17-357:10

'228, '658, '020: In A3UM, "image" does not mean "video"

Dr. Surati

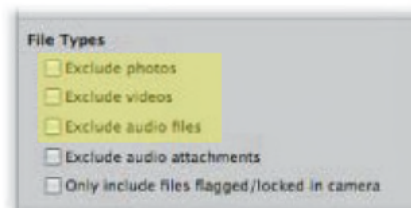
156. There are numerous examples where A3UM specifically differentiates between an "image" and a "video." See, e.g., Ex. 1005 at p. 2 ("You can have Aperture store image, audio, and video files in the library"), p. 13 ("In addition to importing digital image files, Aperture can also import . . . an audio or video file"), p. 84 (" . . . slideshows that include video and audio clips as well as images"), p. 157 ("You can import images . . . You can also import audio and video files"), p. 159 ("Aperture supports most image, audio, and video file formats"), p. 166 (" . . . importing the files as reference images, audio clips, and video clips"), p. 169 (referring to "image files, audio files, or video files"), p. 180 ("To exclude image files, leaving only audio and video files . . . "). A3UM's consistent differentiation between an "image" and a "video" would lead a POSITA to understand that when A3UM discusses "images" in connection with the Faces feature, this excludes videos.

[228]EX2025, ¶156; [658]EX2025, ¶222; [020]EX2025, ¶283

Examples in A3UM

Flexible image management: An open library structure lets you store photos, audio clips, and video clips anywhere you want. You can have Aperture store image, audio, and video files in the library or simply link to the files in their current locations. You can also have Aperture link to your iPhoto library

EX1005, 2



Do any of the following:

- To exclude image files, leaving only audio and video files available for import: Select the "Exclude photos" checkbox.

EX1005, 180

'228, '658, '020: The Replies ignore the Petitions

The Replies

Every aspect of Patentee's response to claim 24 rests on its false premise that claim 24 requires associating "videos" to a person using "video recognition." But neither claim 24 nor any of its parent claims require that. EX1089, 291:5-9, 295:1-10.

[020]Reply, 36

Patentee responds to the showing that claim 1 was obvious by arguing A3UM does not teach the use of facial recognition for videos. Response, 45. But claim 1 does not require associating digital files (including videos) with people by *facial recognition*. EX1089, 291:5-9; 295:1-10.

[228]Reply, 18; [658]Reply, 28;

The Petitions

A3UM shows detecting faces in videos. EX1003, ¶277.

[020]Petition, 81

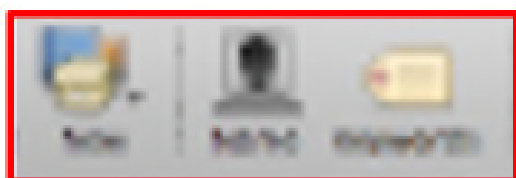
A3UM shows detecting faces in videos. EX1003, ¶226.

[658]Petition, 55

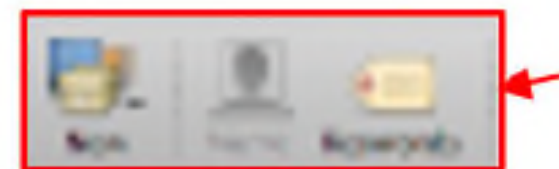
A skilled artisan would understand this to mean that the media file can be associated with a **detected face** (e.g., the woman in the video frame) which will be correlated to a person's name, **enabling it to be viewed in the Faces view for that person**. EX1003, ¶180; EX1005, 23, 64.

[228]Petition, 51

'228, '658, '020: Dr. Terveen's facial recognition theory for videos is wrong



"Name" button ACTIVE when video of person selected



"Name" button INACTIVE when picture of airplanes selected

A skilled artisan would understand that the "Name" button being active and not greyed out means that A3UM's system has detected a face in the selected media file, and

[228]EX1003, ¶1156; [658]EX1003, ¶1228; [020]EX1003, ¶1279

As shown above, the user has selected a photograph that does not have any person's face (at least not visible through the airplane window) and A3UM does not disclose the "Name" button being active. That the "Name" button is greyed out would convey to a skilled artisan that no faces were detected.

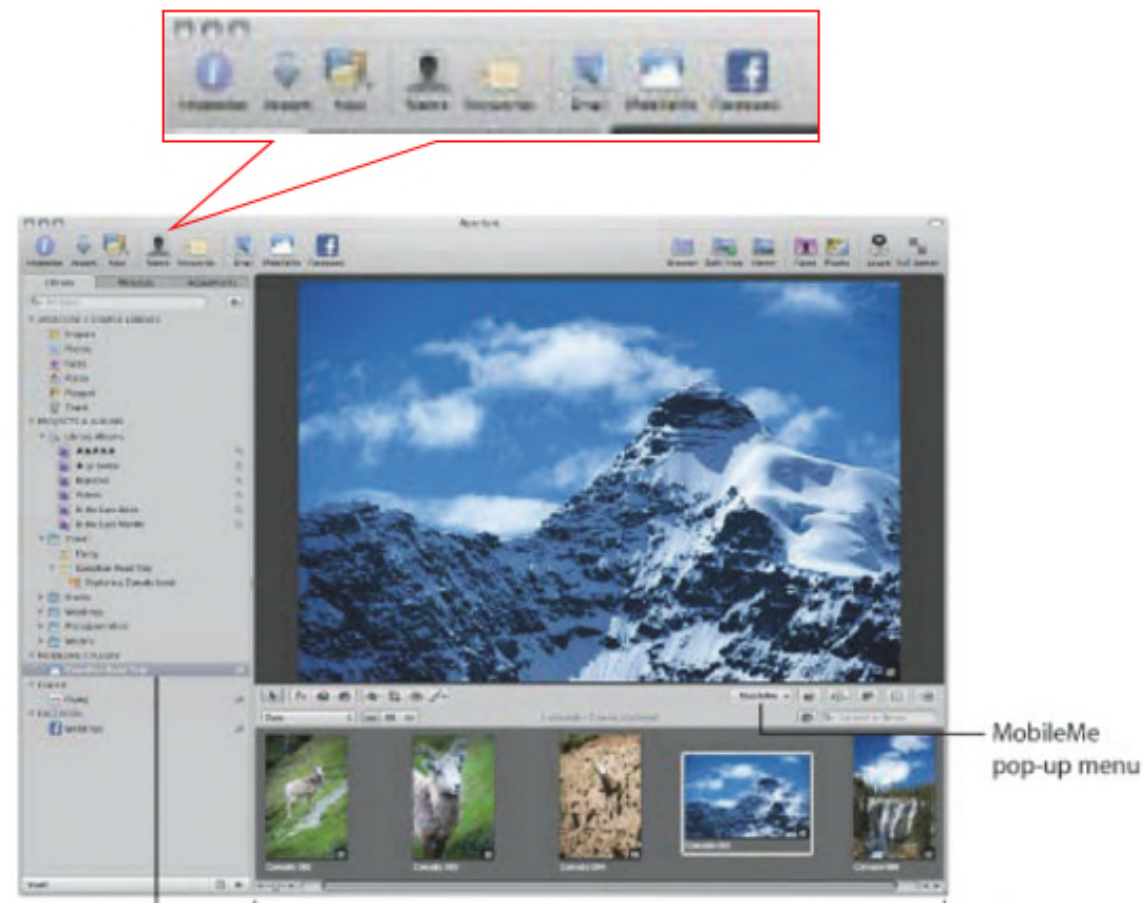
[228]EX1003, ¶1157; [658]EX1003, ¶1229; [020]EX1003, ¶1280

'228, '658, '020: Dr. Terveen's facial recognition theory for videos is wrong

Dr. Surati

160. Reviewing A3UM in its entirety, it is clear that whether the Name button is "active" or "inactive" does not correlate to whether there is a face in the selected image. I located several examples where the Name button is "active" even though there is no face in the selected image. Ex. 1005, p. 7, p. 15 (showing image of boat with "active" Name button), p. 21, p. 24, pp. 472-73 (showing images of bear with "active" Name button), p. 40 (showing image of horses with "active" Name button), p. 510 (showing images of penguins with "active" Name button), p. 1024 (showing image of mountain with "active" Name button).

[228]EX2025, ¶160; [658]EX2025, ¶226; [020]EX2025, ¶287



EX1005, 1024

'228, '658, '020: Dr. Terveen's facial recognition theory for videos is wrong

Dr. Terveen's Declaration

180. A3UM depicts the "Name" button being active and not greyed out when the Viewer displays a video clip, which a skilled artisan would understand to mean that it can be selected to associate a detected face (e.g., the face of the woman shown in the video frame) with a person's name, such that it can be viewed via the described functionality for A3UM's Faces view. EX1005, 23. A skilled artisan would understand that the "Name" button being active and not greyed out means that A3UM's system has detected a face in the selected media file, and A3UM's functionality for that "Name" button is available to associate the media file with a given person. EX1005, 64.

[228]EX1003, ¶1180; [658]EX1003, ¶1229; [020]EX1003, ¶1279

Dr. Terveen's Deposition

Q. So the -- I've given you three instances from A3UM which are contrary and inconsistent with your analysis concerning how the Name feature works in A3UM. Does your opinion regarding that part of your analysis change in light of what you've now seen in A3UM?

A. I think the one thing I would revisit is the -- is the Name button being active if and only a face has been detected. I think you've given counter examples, so I would revise my opinion concerning that.

EX2024, 375:11-21

'228, '658, '020: A POSITA would not extend A3UM's facial recognition feature to videos

Dr. Surati

172. Detecting faces in a video using keyframes would require at least two steps. First, the system would have to decode the video to obtain the keyframes. Second, the system would have to analyze each keyframe to attempt to identify faces. For example, if a sixty-minute video contained one keyframe every ten seconds, the system would need to attempt to detect faces in three-hundred and sixty keyframes for the one video.

[228]EX2025, ¶172; [658]EX2025, ¶237; [020]EX2025, ¶172

173. Thus, detecting faces in videos using keyframes as Dr. Terveen suggests would require significantly more computational resources than detecting faces in still images. This additional requirement would further suggest to a POSITA that they should not reasonably expect to be successful in extending the facial recognition features in A3UM from still images to videos, especially in view of the documented problems with the unmodified version of A3UM. The techniques Dr. Terveen points to for detecting faces in videos would not address the documented problems with still images. In other words, a POSITA would reasonably expect that the documented problems with still images would be at least as bad for videos.

[228]EX2025, ¶173; [658]EX2025, ¶238; [020]EX2025, ¶173

'228, '658, '020: A POSITA would not extend A3UM's facial recognition feature to videos

Dr. Surati

175. As an illustration, assume that a given user has a number of videos that are collectively 60 minutes long and that the videos were shot at 24 frames per second (fps), which was a typical setting at the time of the invention. In this example, there would be over 86,000 video frames, which would add several days to the processing time. Even if those video frames were reduced by 95% using only keyframes for facial recognition, this would still take several hours to analyze. A POSITA would recognize that it is undesirable to occupy computation resources on the Mac computer running Aperture 3 for extended periods of time (e.g., hours or days) because this would worsen the user experience and degrade the performance of other programs.

[228]EX2025, ¶175; [658]EX2025, ¶240; [020]EX2025, ¶302

176. Performance is an important consideration in human interface design. A POSITA would not design an interface that has poor performance (e.g., is slow and efficient) and behaves unreliably. As discussed above, evidence shows that A3UM's facial recognition software for still images was unreliable. And as also discussed above, a POSITA would understand that applying facial recognition to videos would lead to poor performance and would be even more unreliable.

[228]EX2025, ¶176; [658]EX2025, ¶241; [020]EX2025, ¶302

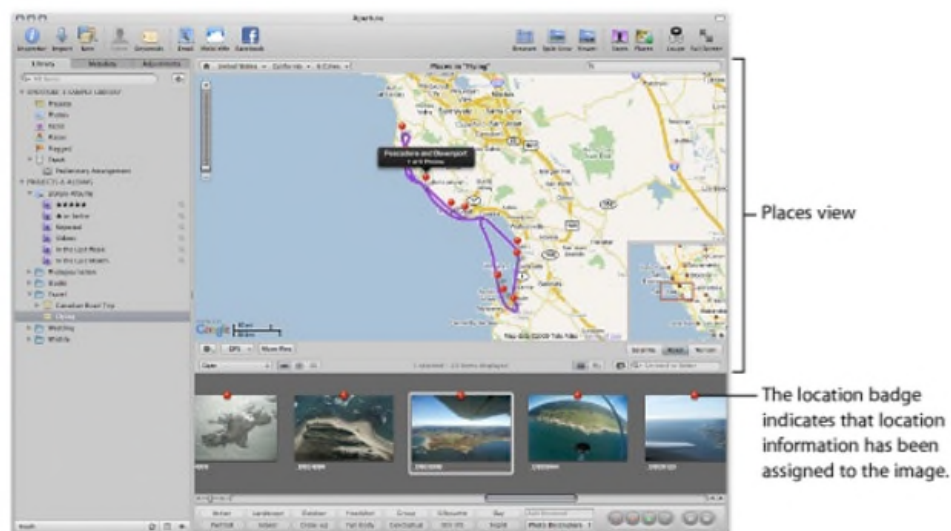
A3UM does not disclose an interactive map “comprising a majority portion of a first screenshot”

‘376 Patent, claim 1

'376: A3UM does not disclose an interactive map comprising a majority portion of a screenshot

Dr. Terveen's Declaration

158. A3UM further discloses that, as shown below, the Places map takes up a "majority portion" of the application window ("a first screenshot of the video display device"):



[376]Petition, 40

Dr. Terveen's Deposition

Q. Next item, what did you do to confirm that the map as shown on page 30 of A3UM is actually a majority portion of that screenshot? Because I will tell you that in my own view, it very well may not be a majority portion.

MR. SMITH: Objection. Form.

MR. SCHWARTZ: Fair.

THE WITNESS: You know, I -- my recollection is I eyeballed it and it looked like it was, and because I knew you could resize it and make it arbitrarily bigger, I was confident you absolutely without any doubt could make it big enough. So I was happy with that situation.

BY MR. SCHWARTZ:

Q. So if I understand your testimony, it's not that specifically you've done anything to confirm the image in your report taken from A3UM is in fact a majority portion of the screenshot, correct?

A. I didn't take measurements or anything like that, no.

EX2024, 345:2-22

'376: A3UM does not disclose an interactive map comprising a majority portion of a screenshot

Dr. Surati's measurements show A3UM's Places map does not comprise a majority portion

136. First, I printed out a copy of page 30 of A3UM (Ex. 1005) on regular 8.5" by 11" printer paper and measured the area of the entire screenshot and the area of the map. The entire screenshot had a width of 4.125 inches and a height of 3 inches, for a total area of approximately 12.375 square inches. The area of the map had a width of 3 inches and a height of 1.6875 inches, for a total area of approximately 5.062 square inches. Comparing those areas ($5.062/12.375$), the interactive map comprises approximately 40% of the screenshot, which is less than a majority.

[376]EX2025, ¶136

137. Second, I took a screenshot of the image from paragraph 158 of Dr. Terveen's deposition and copied into a blank slide in Microsoft PowerPoint. I then drew a first box around the entire application window and a second box around the map.

140. Comparing the respective areas of the entire application window and the map, I determined that the map comprises approximately 39% of the screenshot, which is less than a majority. This measurement in PowerPoint is consistent with my measurement of a printed copy of page 30 of A3UM.

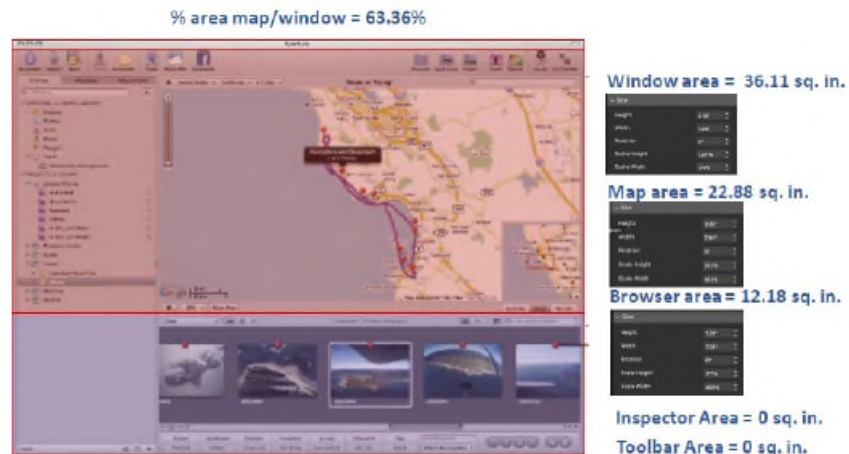
[376]EX2025, ¶¶137, 140

'376: The Reply mischaracterizes Dr. Surati's deposition testimony

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The Reply

Dr. Surati, in his declaration, based his calculations on a single A3UM image, concluding the map's share of the area was 39%. EX2025, ¶¶132-140. But after being walked through A3UM's disclosure showing that the Inspector pane and toolbar can be hidden (EX1005, 46, 64), he admitted A3UM teaches that the map can be resized to occupy over 60% of the window:



[376]Reply, 20

Dr. Surati's Testimony

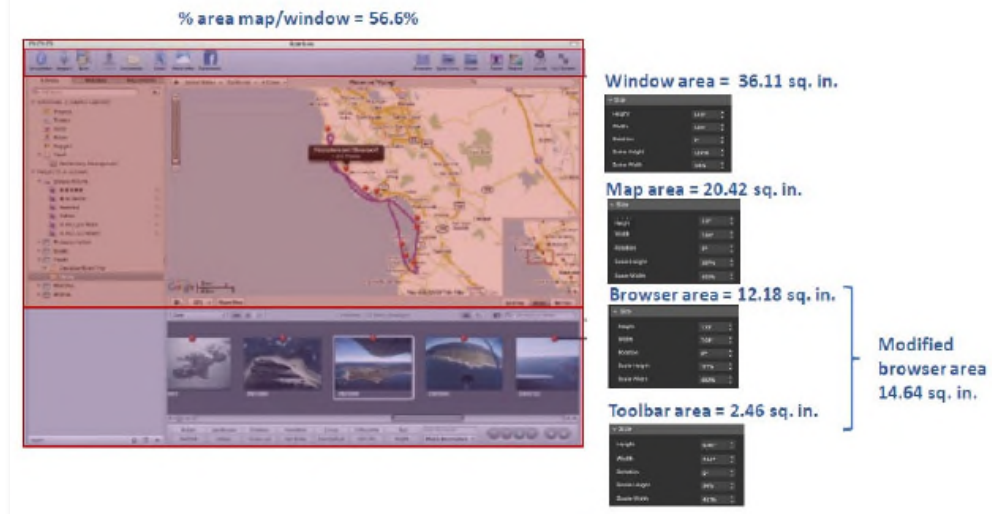
A. So as depicted here, the percentage area of the window that's taken up by the area map as you've assumed that it would take up, because I don't know that I would have taken up, is 63.36. And when I say that I assumed, even if you've hid the toolbar and you hid the inspector, the challenge I have is, there was no disclosure in A3UM that would say what would happen if those things are hidden in terms of what the windows would look like.

EX1089, 347:9-348:1

'376: The Reply mischaracterizes Dr. Surati's deposition testimony

The Reply

He also confirmed in a second configuration where the original toolbar area was allocated to the Browser that the map accounts for more than half (56.6%) of the window:



[376]Reply, 20

Dr. Surati's Testimony

A. Based on taking the measurements from the constructed diagram and tool measurement, based on the assumptions that you made about how hiding it would look, that number is 56.6 percent. And again, like I said, I don't know if this is a correct depiction of what would happen because it wasn't disclosed in A3UM.

EX1089, 349:20-350:12

'376: A3UM does not disclose an interactive map comprising a majority portion of a screenshot

A3UM's map would not necessarily take up previously occupied by other not screen elements if they were hidden

145. A3UM also states that one can hide the toolbar, but there is no express indication as to how or if the relative size of other areas in the A3UM interface would be resized if the toolbar were hidden. Even if hiding the toolbar caused the map to be enlarged so that it occupied space previously occupied by the toolbar, the map would still comprise less than a majority of the screenshot (e.g., approximately 44%).

[376]EX2025, ¶145

Q. The two windows, for example, could -- the window could shrink as one scenario to just then be the width of the original map and the original browser, is that what you're saying?

A. That's one potential possibility. Another possibility is that the window would be the same size and that it would have two -- it would just depict a map with the same aspect ratio with gray stuff on the sides.

EX1089, 348:2-12

Q. Have you ever -- would that be an unusual -- sorry, just on that question, would that be somewhat of an unusual behavior for hiding the toolbar and hiding the inspector pane in a window?

MR. SCHWARTZ: Objection to form.

A. It's not impossible. And there are examples of applications that do that. And aspect ratios are important for photos.

EX1089, 348:13-22

Belitz does not disclose modifying the indication feature responsive to zooming in or out

'228 Patent, claims 8-9

Belitz does not disclose modifying the indication feature

Claims 8-9: “. . . responsive to an input that is indicative of zooming [in/out] on the interactive map, modifying the first indication feature.”

Belitz

[0055] FIG. 4b is another screenshot of a display 403 of a device or a user interface according to the teachings herein. In this screenshot the map 408 has been zoomed in showing the area in greater detail. When displaying the zoomed in map

EX1006, ¶[0055]

[0054] In this embodiment the 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. In this embodiment 13 graphical objects are stacked into one graphical object 410. The graphical objects stacked in the displayed graphical object or graphical group object 410 need not be associated with the same location, but can be associated with other locations that are in close proximity to the marked location 408. These locations

EX1006, ¶[0054]

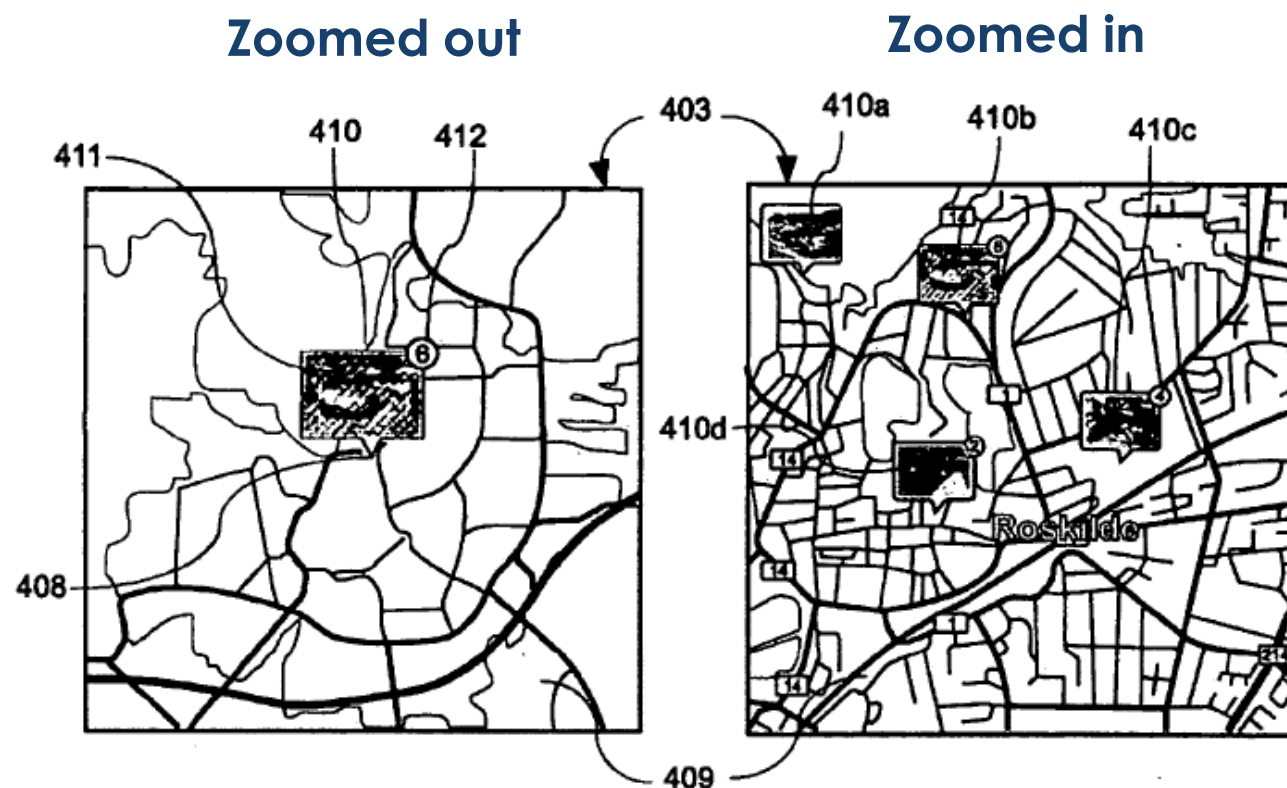


Fig. 4a

EX1006, Figs. 4a-4b

Fig. 4b

Belitz does not disclose modifying the indication feature

Claims 8-9: “. . . responsive to an input that is indicative of zooming [in/out] on the interactive map, modifying the first indication feature.”

Dr. Terveen

Q. The images in Belitz that show a different zoom do not show any change in count value though, correct?

A. I think -- well, if we -- if we look at Belitz, when you're -- when you're referring to the images don't show any -- any change in count value, you're talking figure 4a and 4b, there's one image with six in both cases; is that correct?

Q. Correct.

A. Yeah. It still shows six. It also shows this number 14 above that item, so I -- I'm not quite sure what's going on there. But again, as I said, I think the text of Belitz makes it clear that what's happening or what the intention of Belitz is, is that you're always indicating how many objects are associated with each of these thumbnails. But I think you're right. We still see six for this image in both cases in both 4a and 4b.

Dr. Surati

185. Notably, the number “6” does not change between Fig. 4a and Fig. 4b when zooming out on the map. And while Belitz does describe a process where graphical objects are split up when zooming in, it does not expressly describe modifying the number attached to the graphical object between Fig. 4a and 4b. Ex. 1006, ¶ 55. As shown above, the figures also do not show that the number (alleged first/second indication feature) is modified when zooming in or zooming out.

[228]EX2025, ¶185

Belitz does not disclose modifying the indication feature

Claims 8-9: “. . . responsive to an input that is indicative of zooming [in/out] on the interactive map, modifying the first indication feature.”

Number indicator 412 = number of graphical objects associated with the location and stacked together

[0054] In this embodiment the 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. In this embodiment 13 graphical objects are stacked into one graphical object 410. The graphical objects stacked in the displayed graphical object or graphical group object 410 need not be associated with the same location, but can be associated with other locations that are in close proximity to the marked location 408. These locations

EX1006, ¶[0054]

are stacked into one graphical object 410.” Ex. 1006, ¶ 54 (emphasis added). In other words, what is counted in the number indicator 412 is how many graphical objects are both in the stack *and* associated with that location. Belitz indicates that the stack can include graphical objects that are associated with a different location than where the graphical object 410 is located. Ex. 1006, ¶ 54. Based on the way the number indicator 412 is defined in Belitz’s text, graphical objects in the stack that are *not* associated with the location of the graphical object 410 would not be included in the number indicator 412.

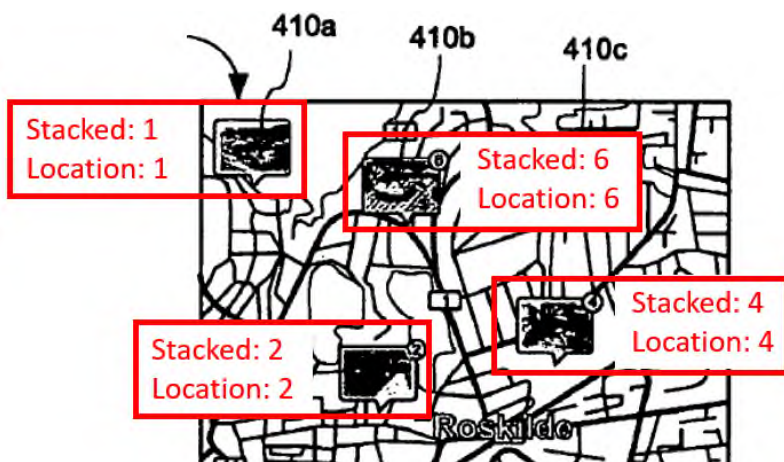
[228]EX2025, ¶187

Belitz does not disclose modifying the indication feature

Claims 8-9: “. . . responsive to an input that is indicative of zooming [in/out] on the interactive map, modifying the first indication feature.”

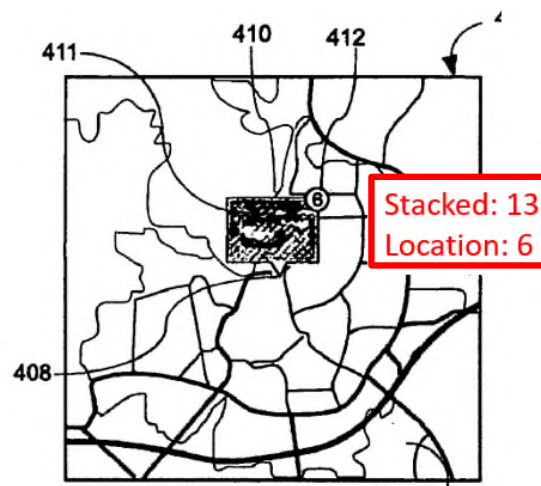
Number indicator 412 = number of graphical objects associated with the location and stacked together

Zoomed in



EX1006, Fig. 4b

Zoomed out



EX1006, Fig. 4a

While the graphical object 410 in Fig. 4a has 13 graphical objects in the stack according to Belitz's text, only 6 of those are associated with that location, as evidenced by Fig. 4b where 7 of them are broken out separately. This is why the number indicator 412 in Fig. 4a has a 6 instead of a 13. Thus, I believe a POSITA would read Belitz's text as consistent with the numbers in the drawings, rather than reading the drawings as including an error in Fig. 4a. That being the case, the number indicator 412 in Belitz is not modified responsive to zooming in or zooming out.

[228]EX2025, ¶187

Petitioner did not
identify a distinct
“application view”
in A3UM

‘658 Patent, claim 1

'658: The "application view" is a distinct view

Claim Term	Patent Owner's Construction	Petitioner's Construction
application view	application view that is distinct from the map view, the first location view, and the second location view	a type of application view

[658]POR, 15-19; [658]POSR, 8-9

[658]Reply, 2

'658: The "application view" is a distinct view

Claim 1

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;
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:

Claim 5

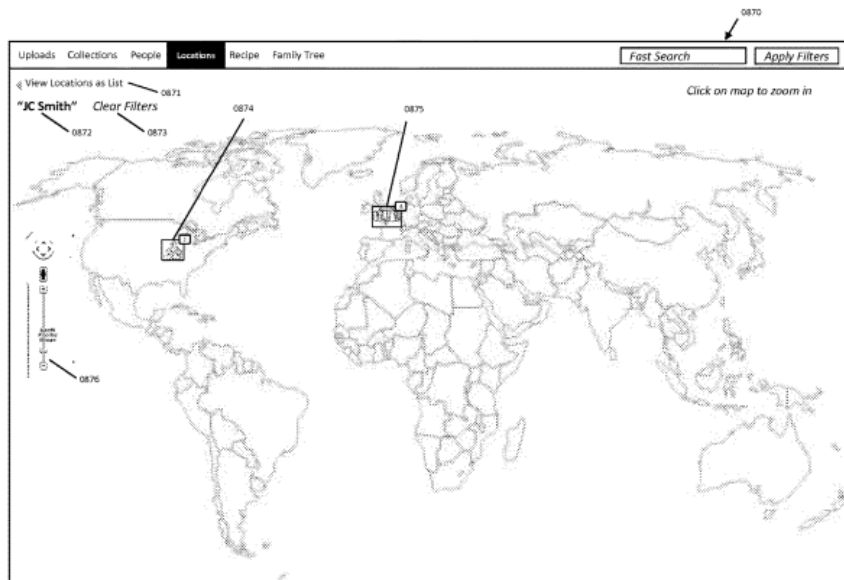
5. The computer-implemented method of claim 1, wherein the plurality of selectable elements further includes a people selectable element, the method further comprising responsive to a click or tap of the people selectable element, displaying a people view, the displaying the people view

Claim 13

13. The computer-implemented 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

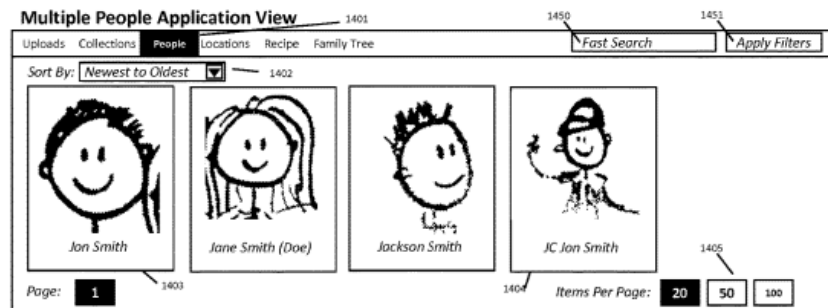
'658: The "application view" is a distinct view

Uploads Collections People **Locations** Recipe



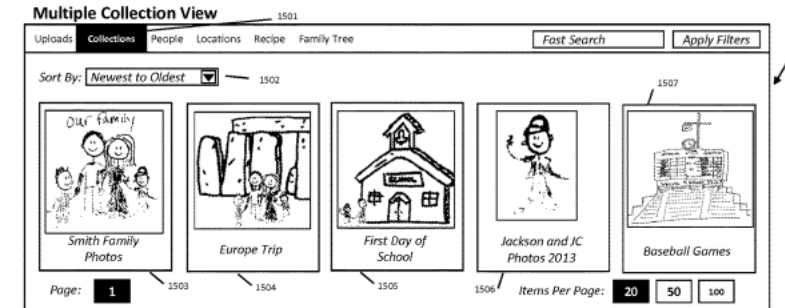
map view

Uploads Collections **People** Locations



people view

Uploads **Collections** People Locations



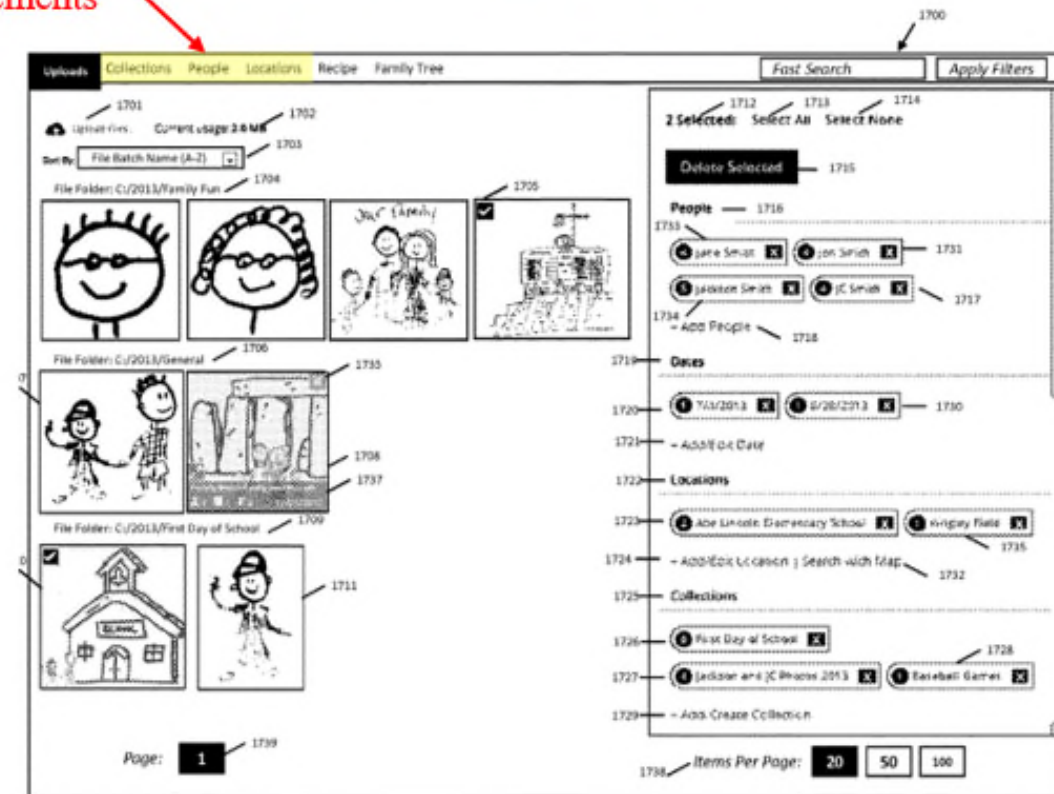
album view

'658: The "application view" is a distinct view

132. FIG. 35 of the '658 patent shows an "Uploads Application View" that is an example of an application view including a plurality of selectable elements (e.g., the "Locations" selectable element) that is distinct from the other views described above. Ex. 1001, 3:61, 24:40-46.

[658]EX2025, ¶132

plurality of selectable elements Uploads Application View



[658]EX1001, FIG. 32

'658: Petitioner did not identify a distinct "application view" in A3UM

Dr. Terveen's Declaration

154. A3UM discloses displaying an Aperture user interface ("*application view*") that can be used to display various views, such as Faces and Places views, and is itself displayed on the display of a conventional computer ("*video display device*") when it is executing. EX1005, 65, 81-82, 158, 1081 (describing "a basic Aperture system" consisting of "[a] computer and display").

[658]EX1003, ¶[0154]

Dr. Terveen's Deposition

You have -- you have your application. And in an application you typically have multiple things that you can display in it, multiple different windows, multiple different views. And I would say that any of the views within the Aperture user interface are application views. And what I said there:

* * *

It just basically -- what that means is any of the views within Aperture would be application views. They are part of the Aperture user interface.

EX2024, 298:2-20

A POSITA would
not combine
A3UM and Belitz

'228 Patent, claim 1

'658 Patent, claim 1

'376 Patent, claim 1

A POSITA would not combine A3UM and Belitz

Petitioner's proposed combination results in the display of redundant information

Dr. Terveen



[228]Petition, 27; [658]Petition, 26; [376]Petition, 29
(excerpted and modified)

Q. With respect to the proposed modification, you would keep the pin marker that appears above the pin that has the location name and number of images in your proposed modification, correct? In this instance it says, "Jasper National Park, 1 of 3 photos."

A. Yeah, I left that in. I mean, obviously the image that I exerted from A3UM was showing the state of the interactive map when you had selected an image. So, you know, the way -- that would only be visible, that pop-up would only be visible when you selected an image. But yeah, I mean, **in my combination I just left that there. I didn't say you should -- you should get rid of it.**

EX2024, 304:19-305:7

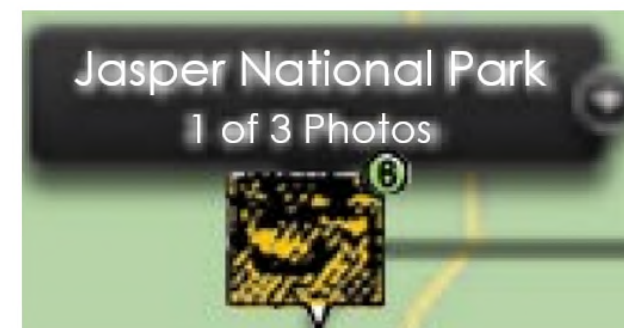
A POSITA would not combine A3UM and Belitz

Petitioner's proposed combination results in the display of redundant information

Dr. Surati

123. In my view, a POSITA would not modify A3UM with Belitz in the manner Petitioner and Dr. Terveen propose. In particular, a POSITA would not substitute A3UM's pins for Belitz's thumbnails while also maintain the A3UM label that appears above a pin when it is selected. The numbering information in the location label is redundant and unnecessary given that the same number would presumably already be shown on the thumbnail in Petitioner's proposed combination. Additionally, assuming Petitioner is correct that the location name is shown in the Browser below the map in A3UM, having the location name in the location label above a selected thumbnail would also be redundant and unnecessary. A POSITA would not design an interface with duplicative information because it increases clutter, obscures a portion of the interface that could be otherwise used to convey information (e.g., part of the map on which the thumbnails would be located), and may distract or confuse a user.

[228]EX2025, ¶1123; [658]EX2025, ¶1167; [376]EX2025, ¶1178



[228]Petition, 27; [658]Petition, 26; [376]Petition, 29
(excerpted and modified)

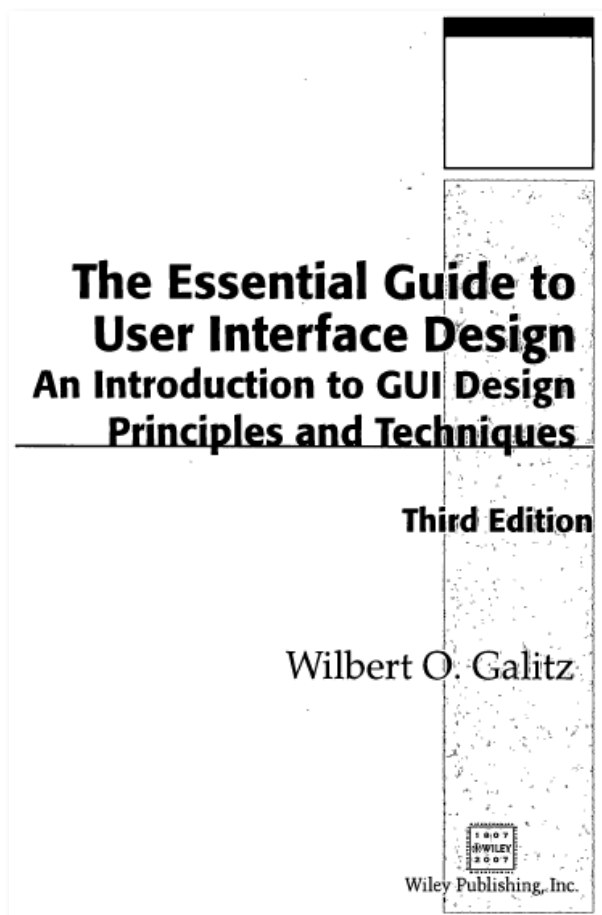
125. Absent a particular reason for employing redundancy, a POSITA would avoid or eliminate redundancy in designing an interface. Petitioner and Dr. Terveen do not identify any benefit to maintaining redundant numbering in the label above a thumbnail image on the map in their proposed combination of A3UM and Belitz, and no such reason is apparent. This is one reason why a POSITA would not combine A3UM and Belitz in the manner proposed in the Petition.

[228]EX2025, ¶1125; [658]EX2025, ¶1169; [376]EX2025, ¶1180

[228]POR, 53-54; [228]POSR, 12-13; [658]POR, 58-60; [658]POSR, 14-15; [376]POR, 64-65; [376]POSR, 18-19

A POSITA would not combine A3UM and Belitz

Petitioner's proposed combination results in the display of redundant information



Redundant data. Information that depicts the same value over and over should also be minimized or eliminated. Redundancy, on occasion, can be useful, however. It may aid in providing context and order, facilitating comparisons, and creating an aesthetic balance. Use redundancy only if necessary.

EX2022, 288; [228]EX2025, ¶1124; [658]EX2025, ¶1168; [376]EX2025, ¶1179

Eliminate unnecessary elements. Eliminate screen clutter through “subtractive design.” Unnecessary elements are distracting and consume a portion of a person’s cognitive capabilities. If something does not contribute to effective system use, remove it.

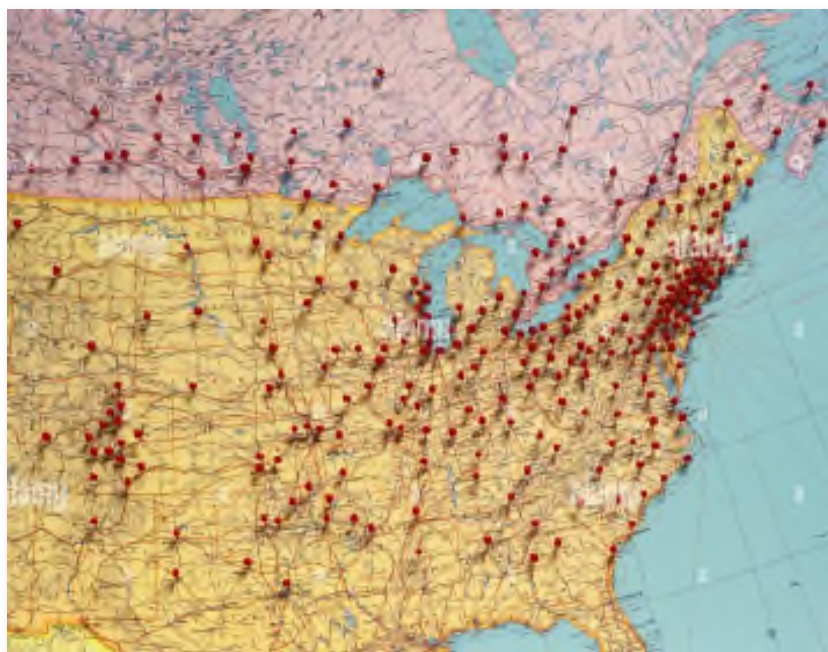
EX2022, 82; [228]EX2025, ¶1126; [658]EX2025, ¶1170; [376]EX2025, ¶181

[228]POR, 54; [228]POSR, 13; [658]POR, 59-60; [658]POSR, 15; [376]POR, 64-65; [376]POSR, 18-19

A POSITA would not combine A3UM and Belitz

Petitioner's proposed combination obstructs the underlying map

Dr. Surati



131. In the physical example, each push pin has a very thin portion that sticks into the map and a spherical portion on top. This allows one to position many push pins together in a very small area on the map to mark locations that are relatively close together. Further, being very thin, the push pins do not obscure the underlying map, so one can still see the geography and location names printed on the map, even with many push pins. Using push pins is a very precise way of conveying all locations of interest at the same time, even if those locations are close together on the map, while minimizing any interference with the ability to see the underlying map. In other words, the shape of the push pin is intentional to avoid obscuring the map.

[228]EX1003, ¶131; [658]EX2025, ¶175; [376]EX2025, ¶186

[228]POR, 54-55; [228]POR, 13-14; [658]POR, 60-61; [658]POSR, 15-18; [376]POR, 66-68; [376]POSR, 19-21

A POSITA would not combine A3UM and Belitz

Petitioner's proposed combination obstructs the underlying map

Dr. Terveen

pin



thumbnail



Q. You would also agree with me that the modification to include thumbnail images obscures a greater amount of the underlying map than the pins used in A3UM, correct?

A. Sure. The thumbnail images are larger than the pins.

EX2024, 306:4-9

Dr. Surati

134. Turning to Belitz, the thumbnails are inherently much larger than the thin, almost two-dimensional push pins in A3UM and would obscure far more of an underlying map than using a push pin.

[228]EX2025, ¶1134; [658]EX2025, ¶1178; [376]EX2025, ¶1189

A POSITA would not combine A3UM and Belitz

Petitioner's Reply responds with a new argument about resizing the thumbnails

The Reply

Patentee also claims “replacing the pins with Belitz’s thumbnails would obscure more of the underlying map.” Response, 54-55. But this supposed problem is both illusory and not solved by Patentee’s claimed methods—which permit using **thumbnails of any size on a map**, and raise the identical “problem.” The

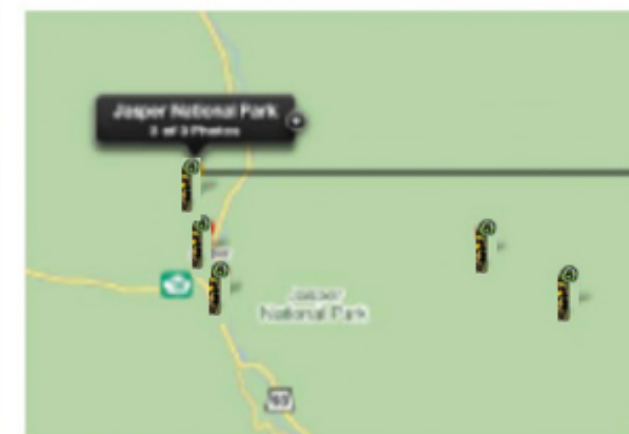
[228]Reply, 22; [658]Reply, 26; [376]Reply, 29

pins



A3UM

pin-sized thumbnails



A3UM-Belitz

[228]Petition, 27; [658]Petition, 26; [376]Petition, 29

A POSITA would not combine A3UM and Belitz

Petitioner's Reply responds with a new argument about grouping thumbnails

The Reply

More directly, Patentee ignores that the Petition identified features of A3UM and Belitz that resolve theoretical “cluttering” concerns. It explained that A3UM and Belitz both teach “dynamically grouping map markers into fewer markers when the map is zoomed out to reduce visual clutter on the map.” Petition, 26.

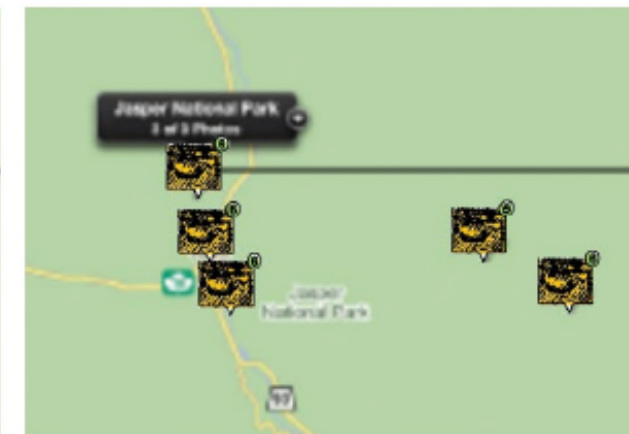
Patentee has no response.

[228]Reply, 21; [658]Reply, 24-25; [376]Reply, 28

The Petition



A3UM



A3UM-Belitz

[228]Petition, 27; [658]Petition, 26; [376]Petition, 29

A POSITA would not combine A3UM and Belitz

Petitioner's Reply responds with a new argument about grouping thumbnails

Dr. Terveen

Q. You don't express an opinion on what the increased amount of visual real estate does to the ability to group geographically similar sets of images, do you?

MR. SMITH: Objection. Form.

THE WITNESS: I don't -- I mean, I don't talk about the grouping algorithm you would use. It would be -- the -- the issues would be similar that when your map indicators, whether they be thumbnails -- or excuse me -- yeah, whether they be thumbnails or pins, get too close together.

And your -- your -- you would know that you can have a way to tell if two things would be too close together, you then decide what counts as too close together, and then you do a grouping. So the issues would be the same. But, no, I didn't address the details of -- of -- yeah, I did not address details of that in my opinion.



Dr. Surati

139. Using these figures as an example, suppose a user has photos in five different countries throughout Europe. Push pins would be able to show with precision which countries the photos were taken in. If the push pins were substituted for thumbnail images, the map would get too cluttered. Even if those thumbnails were consolidated into one because of space constraints on the map, then 80% of the location information that would have been available in the push pin implementation is lost.

[228]EX2025, ¶1139; [658]EX2025, ¶1183; [376]EX2025, ¶1194

A POSITA would not combine A3UM and Belitz

According to Dr. Terveen, pins and thumbnails convey the same information

The Reply

Dr. Terveen

also explains that adapting the display of A3UM to include a number overlaid on a thumbnail as disclosed by Belitz, rather than via a tab as taught by A3UM, presents useful information to a user and would be trivial to implement. EX1003, ¶196.

[228]Reply, 23; [658]Reply, 27; [376]Reply, 31

Dr. Terveen

Both A3UM and Belitz report digital image counts at marked locations on an interactive map, differing only in style and manner of presenting that information. Therefore, adapting the display of location-linked counts to take the form in Belitz (a number overlaid on a thumbnail) rather than in A3UM (a tab with text disclosing the number) would be a trivial change that could be readily and predictably implemented by a skilled artisan. As adapted, the A3UM interface would include a thumbnail marked with an “*indication feature being based on a number of digital files in the [first/second] set of digital files.*”

[228]EX1003, ¶196; [658]EX1003, ¶179; [376]EX1003, ¶175

Ex. 1035 and 1040 are not prior art and cannot be relied upon to show a reasonable expectation of success



EX1035; EX1040

Yeda Research & Dev. Co. v. Mylan Pharm. Inc.,
906 F.3d 1031, 1041-42 (Fed. Cir. 2018)

“In this regard, Dr. Green's reliance on [non-prior art] is permissible, as it supports and explains his position that a POSITA would have thought less frequent dosing worthy of investigation as of the priority date.

...

In one instance, the Board relied on [the non-prior art] for a different purpose, namely, in deciding whether a POSITA would have had a reasonable expectation of success of a thrice-weekly regimen.”

[228]POR, 43-45; [228]POSR, 17-18; [658]POR, 55-56; [658]POSR, 19-20; [376]POR, 46-48; [376]POSR, 22-24

A3UM does not disclose a “group image”

‘020 Patent, claims 11 and 43

'020: Petitioner did not identify a "group image"

Claim 11: "wherein the first person view includes a first group image, and responsive to an input that is indicative of a selection of the first group image, causing a first group view to be displayed on the interface"

Claim Term	Patent Owner's Construction	Petitioner's Construction
group image	an image including content associated with a group of people	an interface element associated with a group of images

[020]POR, 16-18;
[020]POSR, 12-13

[020]Reply, 6



EX1005, 508 (annotated)

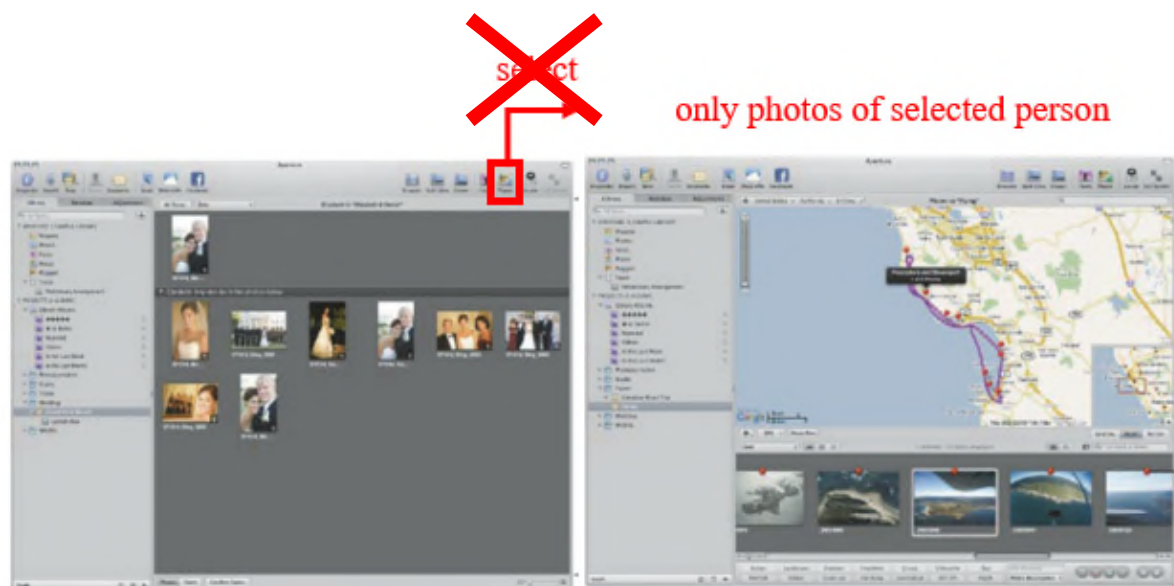
'020 Patent,
claims 3 and 35

A POSITA would not
have modified the
function of the A3UM
Places toolbar
button

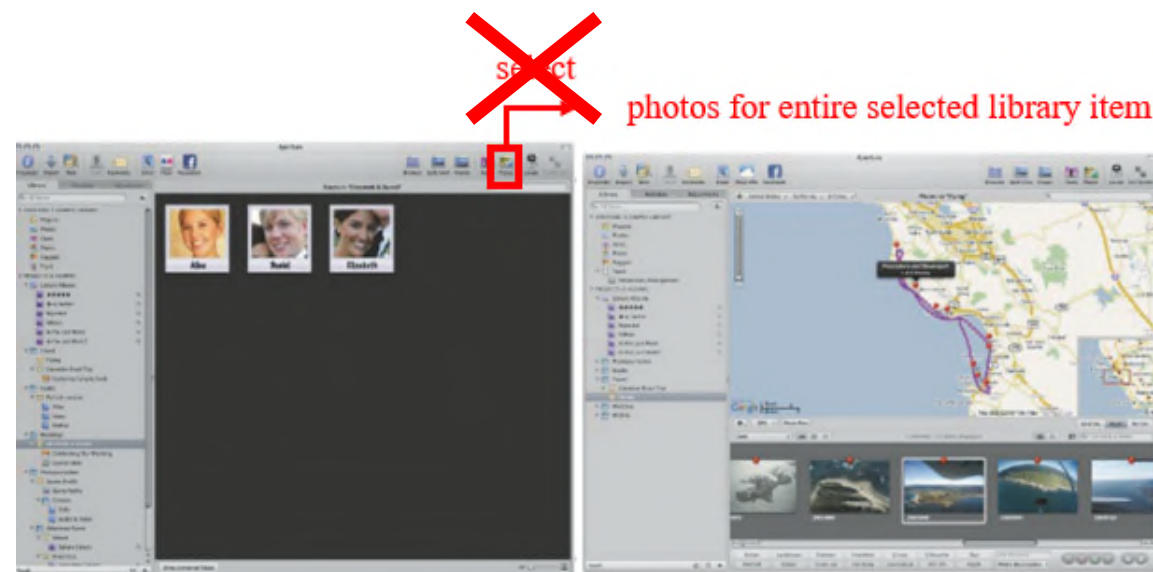
'020: A POSITA would not modify the function of the Places toolbar button

Claims 2 and 34: “wherein the first indication is associated with a first set of digital files and the first location, and the second indication is associated with a second set of digital files and the second

Claims 3 and 35: “wherein the first set of digital files and the second set of digital files are associated with the first person”



EX1005, 29-30 (annotated)



EX1005, 28, 30 (annotated)

'020 Patent,
claims 7 and 39

A POSITA would not
have modified the
position of the A3UM
Places toolbar
button

'020: A POSITA would not move the Places button in the toolbar below the first digital file

Claims 7 and 39: "in the first person view, the first map image is positioned below the first digital file"

Petitioner's design guidelines teach that the position of toolbar buttons is not arbitrary or merely aesthetic

Avoid placing controls or critical information at the bottom of a window. People often move windows so that the bottom edge is below the bottom of the screen.

EX2031, 5

Designing a Bottom Bar

Because of its subordinate position at the bottom edge of the window, a bottom bar should not contain controls for the most frequently used commands. After all, users don't typically look at the bottom area of a window more often than they look at the top area, so **placing the most important controls at the bottom makes them harder to find.** However, although items in a bottom bar are less frequently used than items in

EX2021, 213

Petitioner failed to show that claim 5 of the '376 patent is obvious over A3UM

'376 Patent, claim 5

'376: claim 5 is not obvious over A3UM

displaying, on a video display device associated with a client device, the digital photograph or image or video of a first of the digital files and overlaying thereon:

- (i) a first user selectable element, all of the digital files associated with a person tag being members of a first set of digital files, the first user selectable element having a first boundary with alphanumeric text therein indicating (i) a name of a person corresponding to the person tag and (ii) the number of digital files in the first set of digital files, and
- (ii) a second user selectable element, all of the digital files associated with a geotag being members of a second set of digital files, the second user selectable element having a second boundary with alphanumeric text therein indicating (i) a location name corresponding to the geotag and (ii) the number of digital files in the second set of digital files;



Click the location arrow to view the precise locations of images represented by this pin.

EX1005, 430, 438, 443



Show Faces View button

EX1005, 424

'376: claim 5 is not obvious over A3UM

Dr. Surafi

216. I agree that Dr. Terveen that the “Location Arrow” button provides additional information and functionality but Dr. Terveen does not explain why that functionality would be added as he proposes. First, as discussed above, the “Show Faces View button” only appears in the context of the “Names” functionality of the “Faces” view. Dr. Terveen offers no rationale as to why location information would be useful with the “Names” functionality of the “Faces” view. There is no reason to add it to this context. In fact, it would be confusing to add the “Location arrow” button in this context.

[376]EX2025, ¶216

220. In my opinion, it would not be obvious to modify A3UM such that both of the claimed user selectable elements are overlaid on the image. Overlaying both the first and second user selectable elements would increase clutter and obscure at least a portion of or even the entire image. In a chapter of Essential Guide to User Interface Design titled “Characteristics of Graphical and Web User Interfaces,” it states the following:

Eliminate unnecessary elements. Eliminate screen clutter through “subtractive design.” Unnecessary elements are distracting and consume a portion of a person’s cognitive capabilities. If something does not contribute to effective system use, remove it.

Ex. 2022, p. 82

This guidance is consistent with principles of human interface design that a POSITA would have followed at the time of the invention. Because a POSITA would not want to clutter the display, it would not be obvious to also overlay the second user selectable element.

[376]EX2025, ¶220

'020 Patent: Written Description

Claims 6-7 and 38-39
are not unpatentable
under 35 U.S.C. § 112

'020: Claims 6-7 and 38-39 are not unpatentable

Preliminary Amendment

U.S. Patent Appln. No. Not Yet Assigned
Preliminary Amendment

Attorney Docket No. 069366-000002USC4

35. (New) The method of claim 33, wherein, in the people view, the first name is displayed adjacent to the first digital file associated with the first thumbnail image and the second name is displayed adjacent to the second thumbnail image.

Claims renumbered in the same order as presented by applicant

CLAIMS									
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		13		25	8	37	19	49
	2		14		26	9	38	20	50
	3		15		27	10	39	21	51
	4		16		28	11	40	22	52
	5		17		29	12	41	23	53
	6		18	1	30	13	42	24	54
	7		19	2	31	14	43	25	55
	8		20	3	32	15	44	26	56
	9		21	4	33	16	45	27	57
	10		22	5	34		46	28	58
	11		23	6	35	17	47	29	59
	12		24	7	36	18	48	30	60

[020]EX1002, 4, 473

37 C.F.R. § 1.115(a)(1)

“A preliminary amendment that is present on the filing date of an application is part of the original disclosure of the application”

Mentor Graphics Corp. v. EVE-USA, Inc.,
851 F.3d 1275, 1297 (Fed. Cir. 2017)

“Original claims are part of the original specification and in many cases will satisfy the written description requirement”

Arkema Inc. & Akrema France v. Honeywell Int’l Inc.,
PGR2016-00011, Paper 62 at 52-53 (PTAB Aug. 25, 2022)

Lack of written description support in priority applications only affected the claims’ priority date

'020: Claims 6-7 and 38-39 are not unpatentable

Claims 6 and 38	POSITA's Understanding
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[020]EX2025, ¶¶306-307, 309

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Patent Owner's Demonstrative Exhibit was served on March 9, 2023, upon the following parties via electronic service:

Jeffrey P. Kushan
Thomas A. Broughan, III
Scott M. Border
Sidley Austin LLP
1501 K Street, N.W.
Washington, D.C. 20005
jkushan@sidley.com
tbroughan@sidley.com
sborder@sidley.com
SidleyAppleMemoryWebIPRs@sidley.com

Counsel for Petitioner, Apple Inc.

By: /s/ Jennifer Hayes

Lead Counsel for Patent Owner