Petitioner's Demonstratives

Apple Inc. v. MemoryWeb, LLC

IPR2022-00031 (US 10,621,228)

IPR2022-00032 (US 9,552,376)

IPR2022-00033 (US 10,423,658)

PGR2022-00006 (US 11,017,020)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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Grounds in the Proceedings

- **IPR2022-00031 (**10,621,**228)**

    - Claims 1 to 19 over A3UM and Belitz

- **IPR2022-00031 (**9,552,**376)**

    - Claims 1 to 12 over A3UM, Belitz and Rasmussen

- **IPR2022-00032 (**10,423,**658)**

    - G1: Claims 1-2, 5-15 over A3UM and Belitz

    - G2: Claims 3-4 over A3UM, Belitz and Rasmussen

- **PGR2022-00006 (**11,017,**020)**

    - G1: Claims 1 to 59 obvious over A3UM

    - G2: Claims 6-7, 38-39 lack written description

- ***Excerpts are from IPR2022-00031 unless noted***

Prior Art Used in the Grounds

- **EX1005 – Aperture 3 User Manual (A3UM)**

- **EX1006 – Belitz, US2010/0058212A1**

- **EX1025 – Rasmussen, US 7,620,496**

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EX1020 – Mr. Birdsell

12. As I explain below, starting in February of 2010 and continuing to at least June of 2010, Apple disseminated the Aperture 3 User Manual HTML file set to members of the public in the following ways.

a. The Aperture 3 User Manual HTML file set could be retrieved from the Aperture 3 installation DVD and viewed with a web browser (¶¶12–14, 16).

b. After Aperture 3 was installed on a user's computer, the user could display and view a locally-stored copy of the Aperture 3 User Manual HTML file set using the built-in Apple Help Viewer or using a web browser (¶¶12–15).

c. Any interested member of the public could locate and view the contents of the Aperture 3 User Manual HTML file set by retrieving it from Apple's publicly accessible documentation site: http://documentation.apple.com/en/aperture/usermanual/ (¶¶17–20). E.g., EX1021, 6.

EX1020, ¶12; Petition, 14; Reply, 2-3, 13;   Pet. Opp. Mot. to Exclude, 1-2, 4

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EX1003 – Dr. Terveen

103. I have also reviewed a declaration from Matthew Birdsell (EX1020), who I understand has personal knowledge of A3UM's early 2010 publication and dissemination. Mr. Birdsell's description of the production and distribution of the Aperture 3 User Manual in its HTML format is consistent with the evidence I have reviewed and what I have found in my investigations. For example, Mr. Birdsell explained that the same HTML file set that makes up A3UM (EX1005) is accessible from the Aperture 3.0 installation DVD and from a computer onto which Aperture 3.0 has been installed. That is what I also have found in my investigations. Also, Mr. Birdsell's explanation that the Aperture 3.0 product was distributed starting in February of 2010 via the Aperture 3 software product and on Apple's website is consistent with materials I have reviewed, including the archived web pages and other evidence I discuss above.

EX1003, ¶103; Reply, 1, 16

EX1005 – A3UM; EX1003 – Dr. Terveen
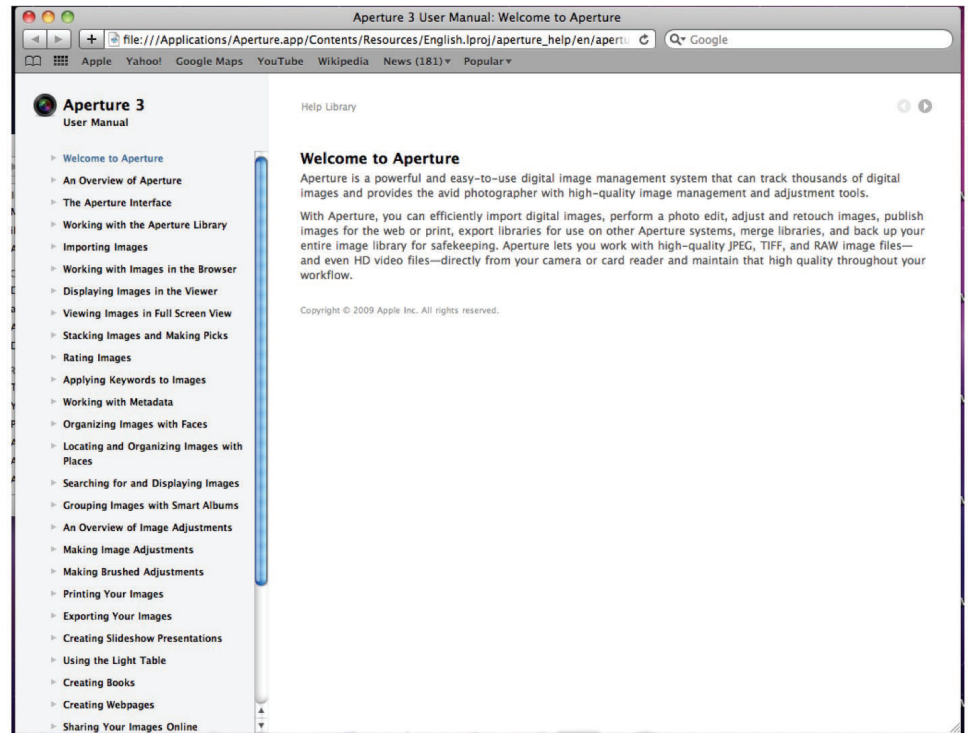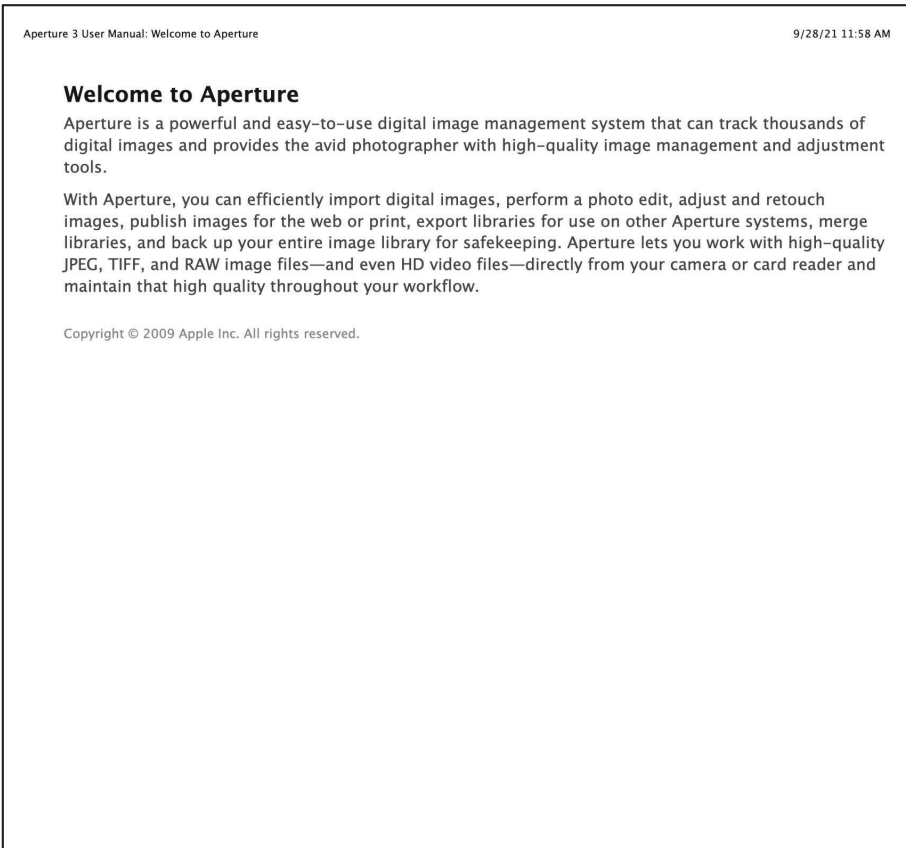
EX1003, ¶94; Petition, 15-16; Reply, 1-2, 8, 13-14; Pet. Opp. Mot. to Exclude, 2
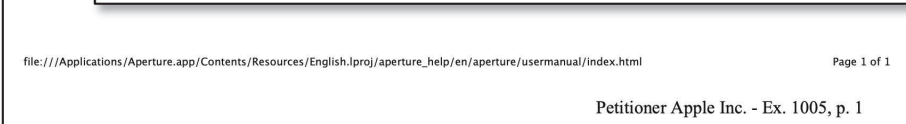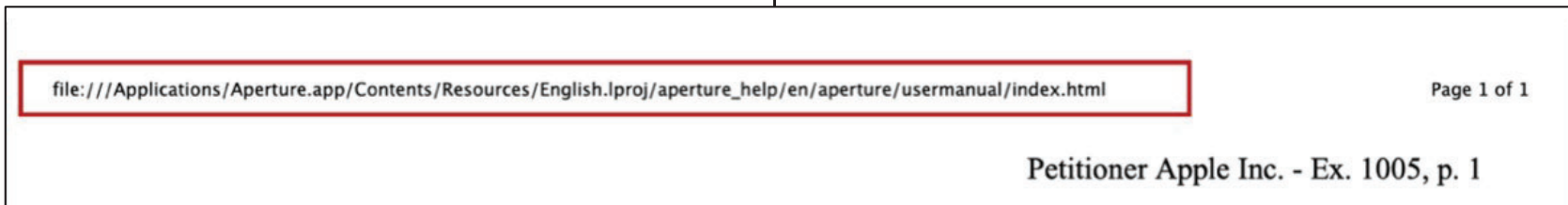
EX1005, 1; Petition, 25; Reply, 14-15; Pet. Opp. Mot. to Exclude, 8-10

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EX1020, EX2026 – Mr. Birdsell

> 13. The Aperture 3 User Manual HTML file set produced as I described in paragraphs 8-11 above was included on the Aperture 3 installer DVDs distributed starting in February 2010. Specifically, the Aperture 3 User Manual HTML file set is stored in the Aperture 3 application file bundle on the Aperture 3 installer DVD. The Aperture 3 file bundle is located in a compressed file on the Aperture installer DVD. Decompressing the compressed file yields a folder containing several subfolders and many different files including the Aperture application file bundle. Within one of the subfolders in the Aperture application file bundle is the Aperture 3 User Manual HTML file set I described in paragraphs 8-10.

EX1020, ¶13; Petition, 14; Reply, 2, 16

```
Q·  ·Do you know which folder or subfolder contained the Aperture 3 user manual file set?
A·  ·It would have been in an English LPROJ folder.  So it would be like resources
English LPROJ.· And then there would have been a user manual folder which contained the
indexed HTML file, which is the homepage for the entire user manual.
Q·  ·When you prepared your declaration, did you go through each of the steps to locate
where the user manual was on the DVD?
A·  ·I did.
Q·  ·And did you consult anyone while you did that?
A·  ·I did not.
```

EX2026, 29:3-15; Pet. Opp. Mot. to Exclude, 2, 4, 8

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EX1003 – Dr. Terveen

74. The following pictures are of the top and side of the retail box of Aperture 3 that I received from Apple, as well as of the installation DVD contained within the retail box. I examined the box and the installation DVD and each appeared to be a genuine Apple software product. Additionally, as I discuss below, the software that the installation DVD installed identified itself as Aperture 3, consistent with the retail box and installation DVD. Based on all of the physical evidence I have reviewed and discuss in this report, the copy of Aperture 3 provided to me by Apple appears to be a genuine copy of Aperture 3.

EX1003, ¶74; Petition, 15; Reply, 1; Pet. Opp. Mot. to Exclude, 1-2, 6

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EX1051; Petitioner's Reply

Finding Your Way Around Aperture | **1**

Welcome to Aperture. If you're new to the Aperture digital image workflow, this guide is for you. Here you'll open a sample library and learn by doing.

This book assumes that you've installed Aperture on your computer and that you have the Aperture installation disc in your computer's DVD drive.

- *If you haven't installed Aperture yet:* See the *Installing Your Software* booklet.
- *If you haven't inserted the Aperture installation disc in your DVD drive:* Locate the Aperture installation disc in your Aperture box and insert it in your DVD drive now.
- *If you prefer to start by reading in-depth explanations of concepts and procedures used with Aperture:* Open Aperture, then choose Help > Aperture Help. Then click the link to the user manual.

EX1051, 7; Petition, 15; Reply, 2-3

Printed documentation in the Aperture 3 retail box explains the Aperture 3 user manual is on the computer after installation. EX1003, ¶98; EX1051, 7, 135, 159.

Reply, 3; Petition, 15

Aperture 3
Exploring Aperture

50mm 1:1.4

Petitioner Apple Inc. - Ex. 1051, p. Cover

Getting Answers | **11**

Now that you've been introduced to the basics of Aperture, you probably have further questions about how to use Aperture in your work.

Use Aperture Help to find the answers you need.

Try This
Open the Aperture User Manual
- In Aperture, choose Help > Aperture Help, then click the link to the user manual. Browse topics that interest you.

Search for a specific topic that interests you
- With the user manual open, enter the topic of your choice in the search field at the top of the Help Viewer window. Select topics from the search results list that you want to know more about.

EX1051, 159; Reply, 2-3; Petition, 15

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EX1003 – Dr. Terveen

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 (below), and then I displayed the contents of the Aperture.pkg file using the "Show Package Contents" option.
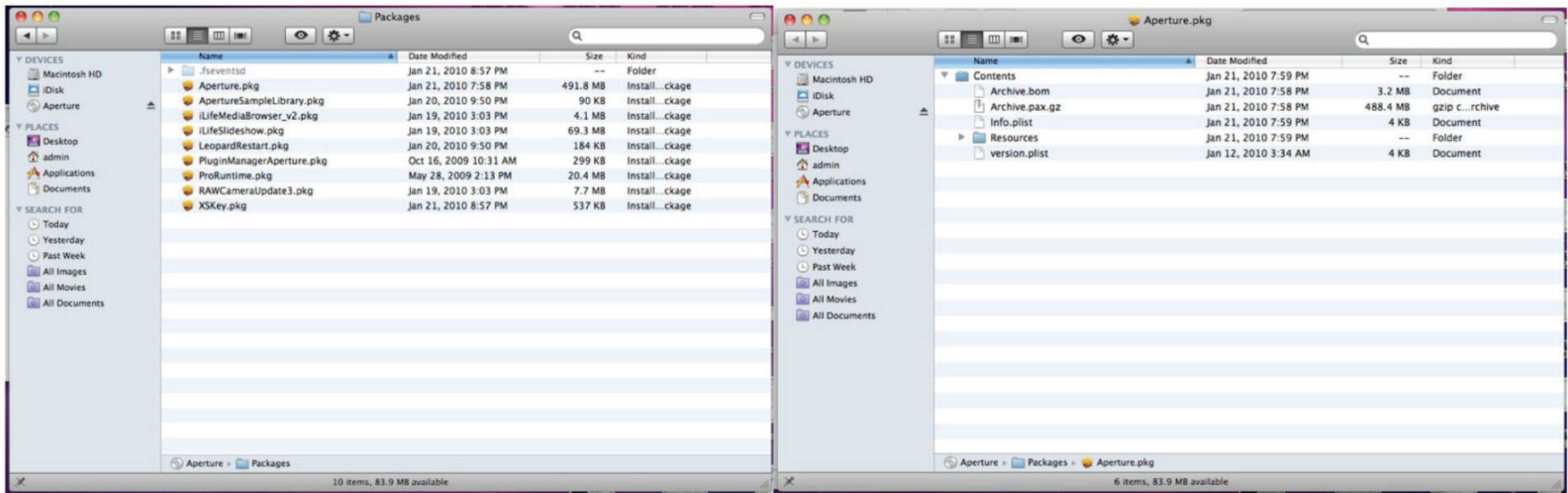
EX1003, ¶79; Petition, 16; Reply, 1-2, 12;   Pet. Opp. Mot. to Exclude, 1-2

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EX1003 – Dr. Terveen

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.
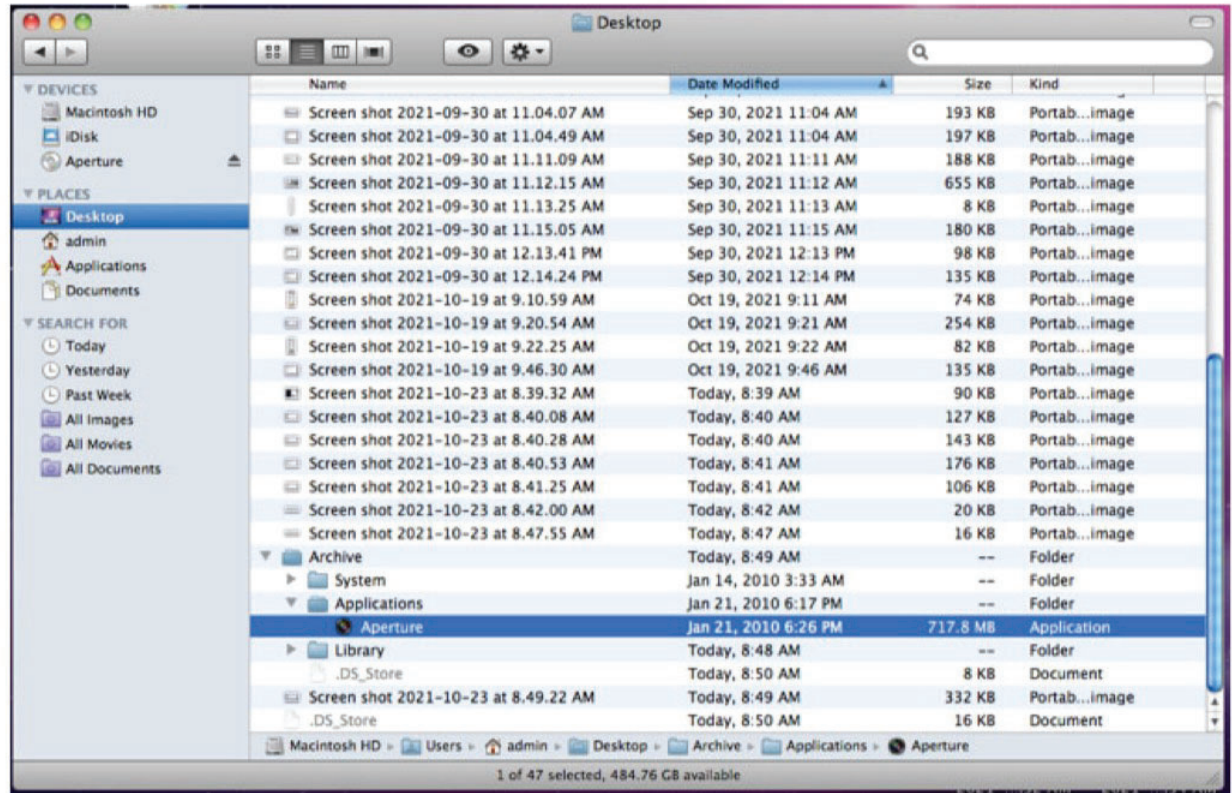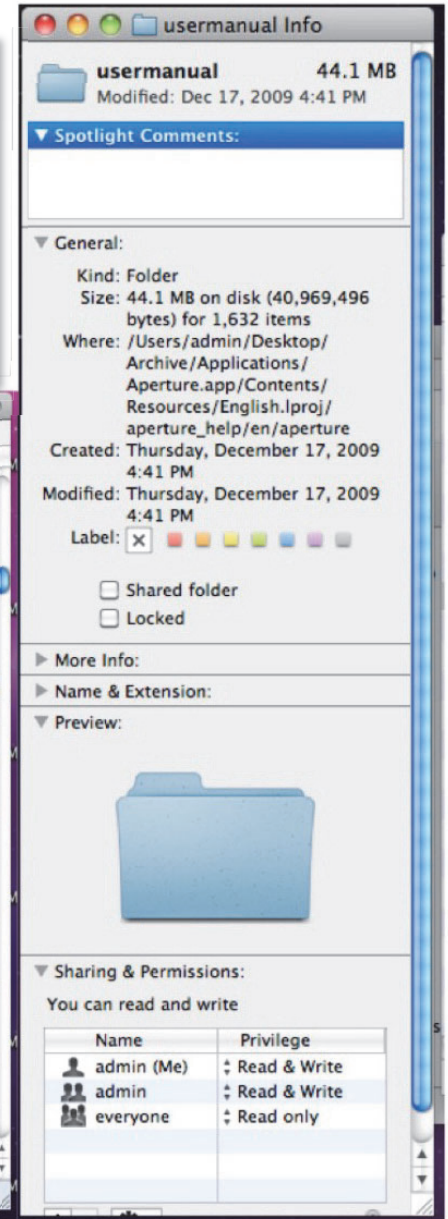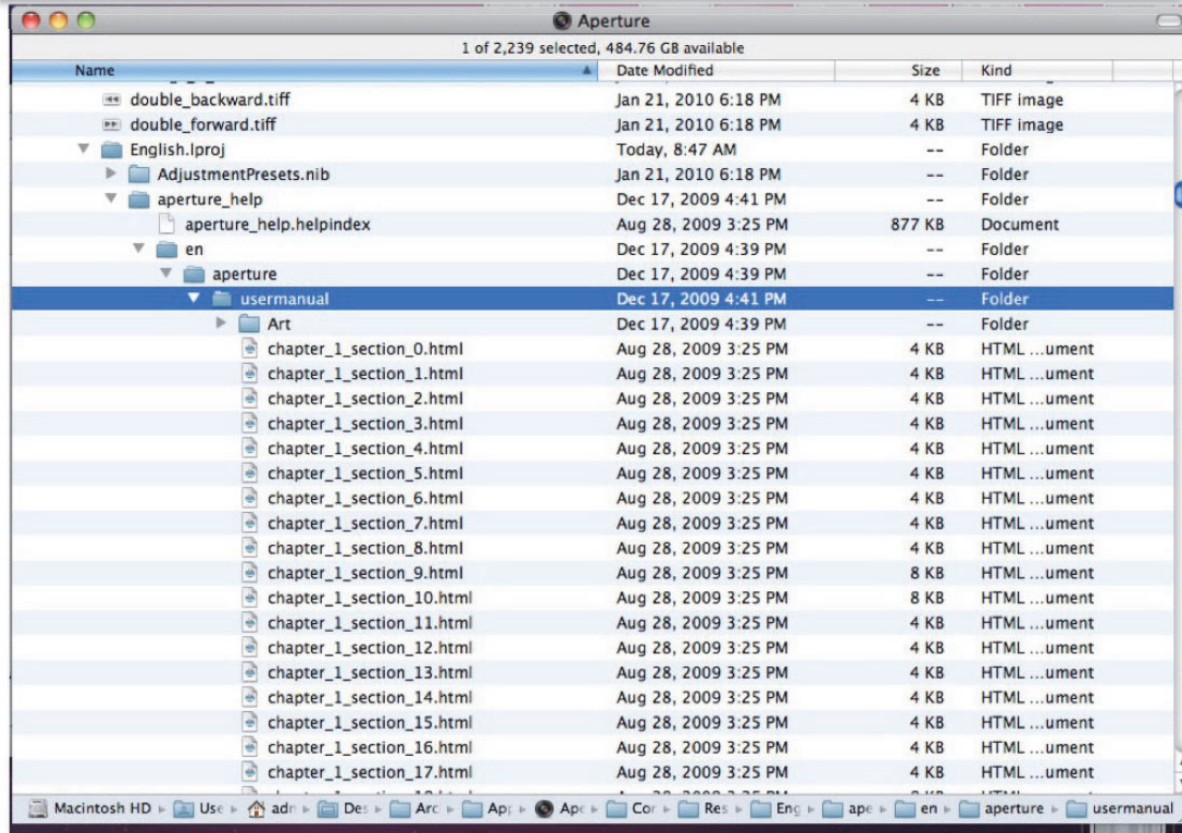

EX1003, ¶80; Petition, 16; Reply, 1-2, 12, 15;   Pet. Opp. Mot. to Exclude, 1-2

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EX1003 – Dr. Terveen

81. I inspected the contents of the Aperture.app file using the Show Package Contents command. The Aperture.app file is actually an application bundle that contains, among other things, resources used by the Aperture 3 application. As shown by the following windows, there is a folder called "usermanual" at the path "/Archive/Applications/Aperture.app/Contents/Resources/English.lproj/aperture_help/en/aperture/".
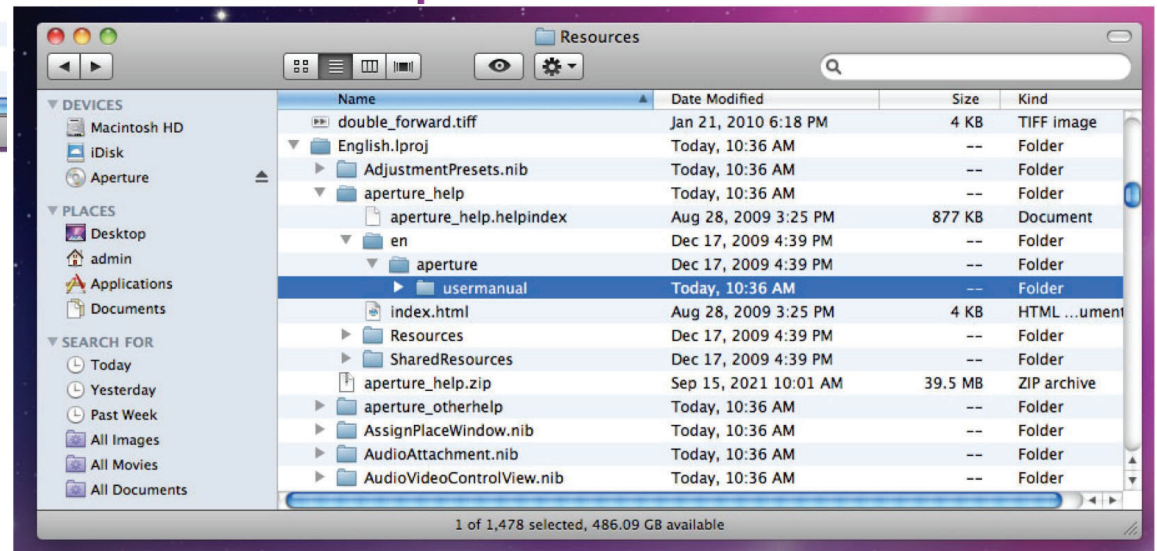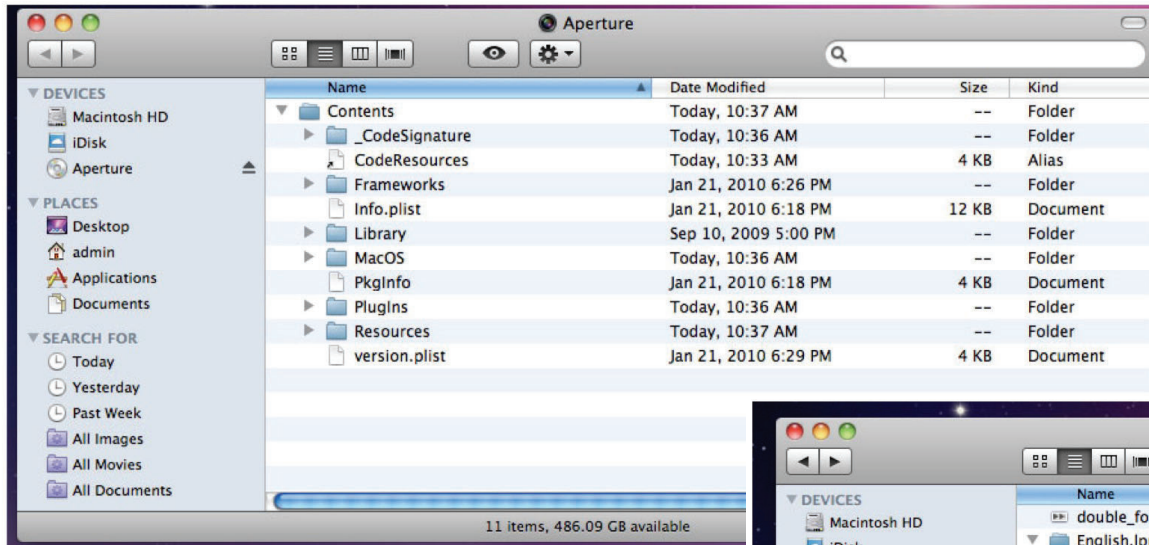
EX1005; EX1003 – Dr. Terveen

file:///Applications/Aperture.app/Contents/Resources/English.lproj/aperture_help/en/aperture/usermanual/index.html   Page 1 of 1

Petitioner Apple Inc. - Ex. 1005, p. 1

EX1005, 1; Petition, 24-25; Reply, 14-15;
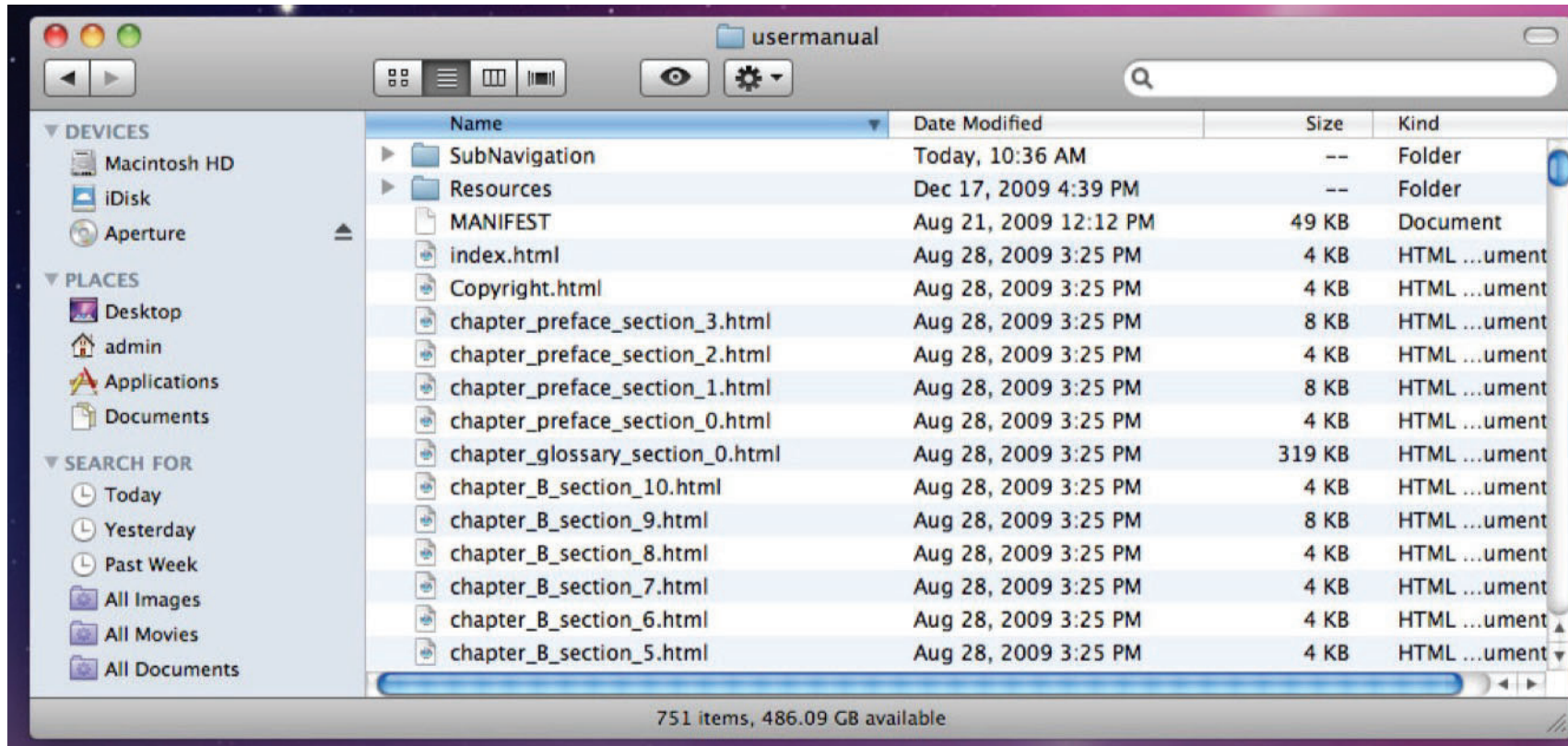Pet. Opp. Mot. to Exclude, 8-10

EX1003, ¶¶90-91; Petition, 15-16; Reply, 1-2, 12-13;
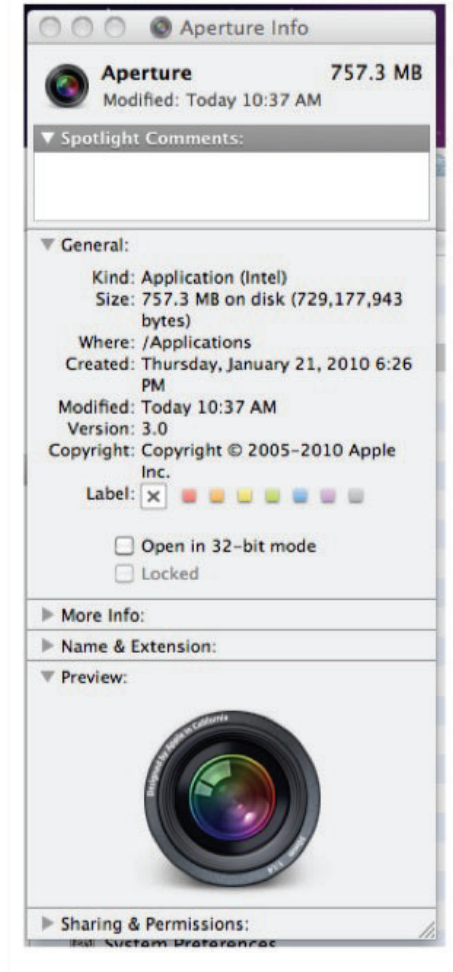Pet. Opp. Mot. to Exclude, 1-2, 6-7

EX1003 – Dr. Terveen

EX1003, ¶91; Petition, 15-16; Reply, 1-2, 13; Pet. Opp. Mot. to Exclude, 2, 6-7, 9

EX1003 – Dr. Terveen

EX1003, ¶82; Petition, 15-16; Reply, 1-2, 12;   Pet. Opp. Mot. to Exclude, 2, 6, 9

EX1003, ¶83; Petition, 15-16; Reply, 1-2, 12-13;   Pet. Opp. Mot. to Exclude, 2, 6, 9

EX1003, ¶84; Petition, 15-16; Reply, 1-2, 13;   Pet. Opp. Mot. to Exclude, 2, 6, 9
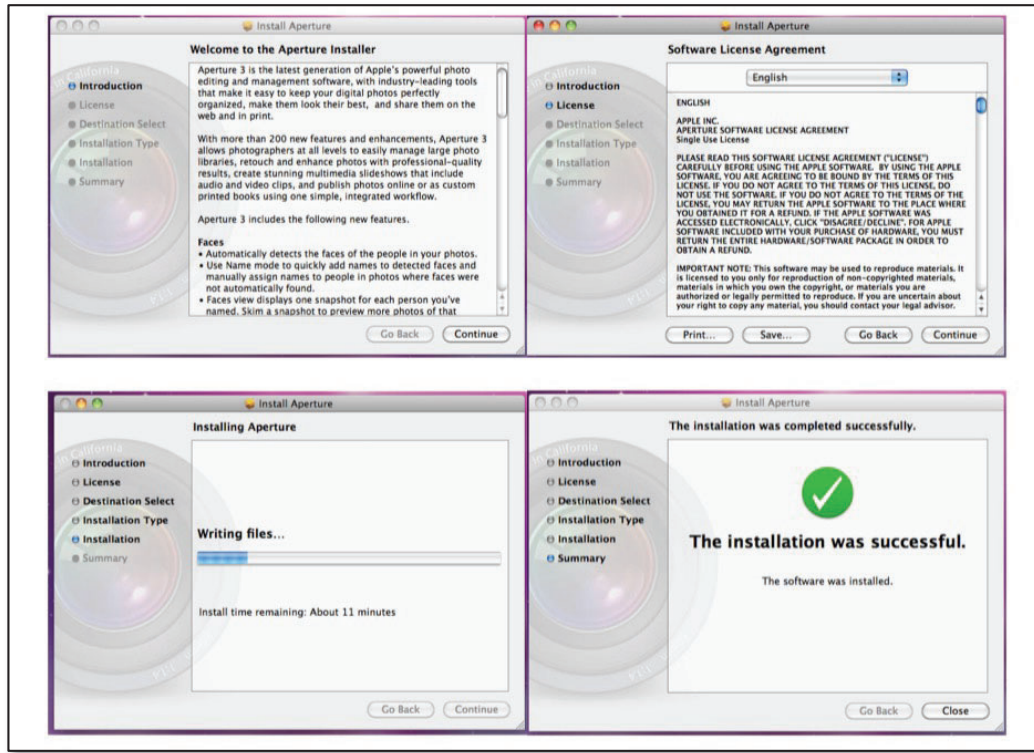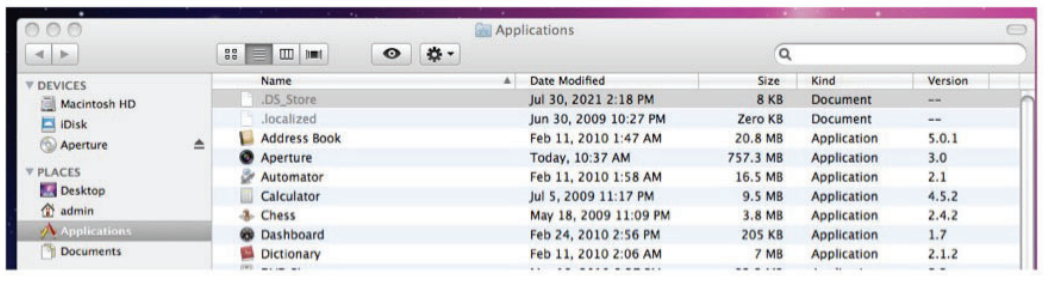
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EX1003 – Dr. Terveen

92. I used the "Get Info" command on the "usermanual" folder at the path "/Aperture.app/Contents/Resources/English.lproj/aperture_help/en/aperture/". It reports the usermanual folder has a size of 44.1 megabytes (40,969,496 bytes) and contains 1,633 items. It also shows "Created" and "Modified" dates of December 17, 2009. This matches the size, number and created/modified dates of the "usermanual" folder at the same location within the Aperture.app application bundle on the Aperture 3 installer DVD that I reported in ¶ 81 above.

EX1003 (-00031), ¶ 92;
Petition (-00031), 15-16

EX2025, EX1089 – Dr. Surati

103. Below are photographs of the Aperture 3 product that I purchased. Based on my review of the packaging, the installation DVD, and the software, and the discussion in Dr. Terveen's declaration, the copy I purchased appears to be a genuine copy of Aperture 3.

EX2025, ¶103; Reply, 9;   Pet. Opp. Mot. to Exclude, 2

Q. You replicated the steps that Dr. Terveen performed to reveal the hidden files on the Aperture 3 installer disk and then the steps he took to copy the relevant files over to the desktop and then see what was in them, is that correct?
A. I think that's correct.

EX1089, 139:20-140:1; Reply, 2, 15;   Pet. Opp. Mot. to Exclude, 2

EX1089 – Dr. Surati; EX1073

Q. When was that created?· When · was –
A. It says it was created on · January 21st, 2010 at 8:44 p.m.
Q. And then the "modified" would be a modified date of this volume.· What's · the date of that?
A. Same date. 9:02 p.m.
Q. For a DVD medium, that's a read-only medium, right?
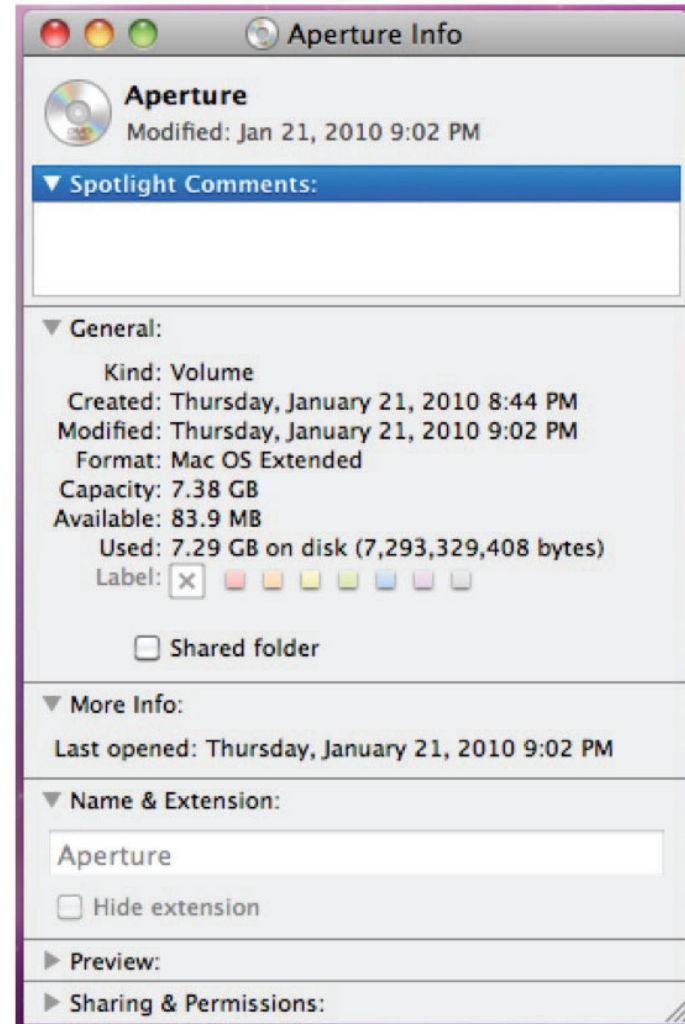A. For DVDs, I believe that's correct.
Q. So once files have been written onto the DVD, it is not possible to modify them after the DVD's been created, right?
A. The only way to modify them would be to destroy the -- to do something bad to the disk. But yes.
Q. So if I have a DVD and it has a last modified date of January 21, 2010, the files on that DVD had to exist on or before January 21, 2010, right?
A. I think that's right.

EX1089, 125:3-25; Reply, 2, 15;   Pet. Opp. Mot. to Exclude, 2

EX1073, 1; Reply, 2, 15;   Pet. Opp. Mot. to Exclude, 2

EX1073; EX1089 – Dr. Surati

EX1073, 5; Reply, 11-12

A. You're asking whether -- it seems like one of those would include the executable for Aperture.· Based on the size? I mean, it's -- it could maybe be iLife slideshow and Aperture.PKG. But I guess the presumption would be that because it says Aperture, that would be the one.

Q. And you could figure that out by just showing -- revealing the contents of these different package files to identify which one contains the contents - contains the Aperture 3 installer, right?

A. Essentially, yes.

EX1089, 142:8-20; Reply, 11

Q. When you repeated the steps that Dr. Terveen described taking to identify the Aperture 3 application bundle, how long overall did that take you?

A. I'm guessing under ten minutes, except that I might have taken a little longer because I also did some things to unzip directories and stuff. I think.

EX1089, 143:9-16; Reply, 2, 11

EX1020, EX2026 – Mr. Birdsell

> 3. My professional responsibilities between January and June of 2010 included involvement with the team responsible for producing and distributing Aperture 3 documentation, including the Aperture 3 User Manual. I have personal knowledge of how the Aperture 3 User Manual was prepared and distributed by Apple during this time frame.
>
> 4. I am personally familiar with the Aperture 3 User Manual that was distributed with the Aperture 3 product. 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, ¶4; Petition, 13; Reply, 1, 15;   Pet. Opp. Mot. to Exclude, 4, 6

```
Q·  · Were you -- were you personally involved in publishing Apple's
content in that time frame?
A·  · I was, yes.
Q·  · And what specifically was your role?
A·  · Again, as head -- as the lead writer, I was the person
responsible, the directly responsible individual.
```

EX2026, 35:16-21;   Pet. Opp. Mot. to Exclude, 2, 4, 14

```
Q  And Exhibit 1005 is a copy of the Aperture 3 user manual.
Correct?
A  It is a copy of the HTML files of the Aperture 3 user manual.
```

EX2026, 38:25-39:3;   Pet. Opp. Mot. to Exclude, 12-13

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EX2026 – Mr. Birdsell

> 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; Pet. Opp. Mot. to Exclude, 2, 4-5, 10, 14

> Q· · Were you responsible for adding the copyright dates to the user
> manual or HTML file set?
> A. Yes, I was.
> Q   And why was 2009 added as the copyright date for this user
> manual?
> A   It's funny that you should ask because I asked myself the same
> thing.· Reviewed the files.· And they're all from 2009 from April -- or
> sorry -- from, like, 23 August -- late August, 2009. I believe our
> original plan was to ship for the Christmas season. I don't know why we
> didn't ship for the Christmas season.· But it evoked a very powerful
> memory in me because my first son was born on 3 August 30th, 2009, and I
> was scrambling to get these files complete before my son was born. And so
> we completed these files a couple of days before he was born.· And we
> submitted them.

EX2026, 39:13-40:6;   Pet. Opp. Mot. to Exclude, 5

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EX1003, EX2024 – Dr. Terveen

73. . . . <u>A3UM</u> (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.

EX1003, ¶73; Petition, 15; Reply, 1, 15;   Pet. Opp. Mot. to Exclude, 2, 6-7, 14

```
     Q.  So first of all, the -- the user manual that is at Exhibit
1005 in your reports is a printout of an HTML version of the user
manual for Aperture 3; is that correct?
     A.  Yes, that's correct. It's -- it's a - a PDF constructed
from the HTML files that comprise the Aperture 3 User Manual.
```

EX2023, 57:10-16; Pet. Opp. Mot. to Exclude, 12-13

```
     A. I took Exhibit 1005 and I looked through a whole lot of pages, one by
one, and compared them to the corresponding pages in the user manual
available on the computer. My recollection is I looked at maybe the first 100
or so pages, each one, and then I looked at -- I think after that, I looked
at the first page or two of each section and then a handful of pages in each
section, and in every case, the pages I looked at were identical.
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EX2024, 380:20-381:3 (emphases added);   Pet. Opp. Mot. to Exclude, 7, 9, 13-14

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EX1003 – Dr. Terveen

94. Returning to the usermanual folder within the Resources folder of the Aperture 3 application bundle as installed on the computer, I selected the "index.html" file which launched the Safari web browser and displayed the first page of the Aperture 3 user manual, as illustrated below. A pane appeared on the left side of the screen, listing the contents of the user manual.

EX1003, ¶94; Petition, 15-16; Reply, 1-2, 8, 13-14;   Pet. Opp. Mot. to Exclude, 2

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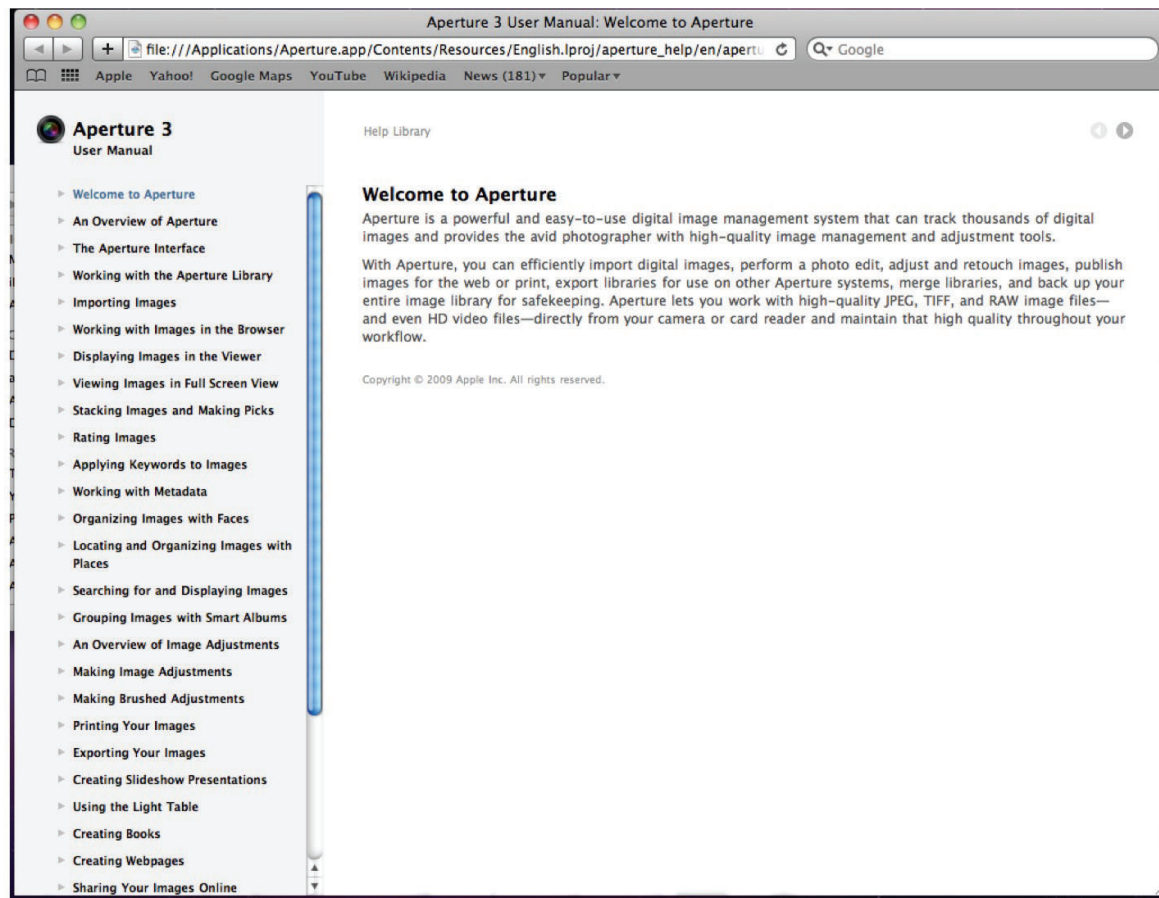
EX2025, EX1089 – Dr. Surati; EX2021 – Apple HIG

> 98. In my view, a POSITA designing a human interface, and especially if a POSITA were modifying the Aperture 3 interface which runs on Mac OS X, would have considered and followed these Human Interface Guidelines absent a compelling reason to deviate from them.

EX2025, ¶98; Reply, 7

> Q. And again, just to confirm, your position is that the information and guidance in the Human Interface Guidelines would be something a person of ordinary skill in the art would have been familiar with in 2010.
> A.   So I would say that in 2010 a POSITA would be familiar with the kind of information that's in this document, not necessarily its particulars related to Mac OS X.

EX1089, 42:23-43:8; Reply, 7-9

> Q.· · They might look for another Apple technical document that addresses that other topic; is that what you're saying?
> A.· · Yeah.· There might be a different Apple document that -- or a book about the operating system particular to the operating system that they might have to look at. If that's what they're trying to do. If they're trying to do something on Mac OS X and this thing is particular to the Mac OS X, then that would be one thing they could do.·

EX1089, 44:2-14; Reply, 7, 9

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EX2021 – Apple Human Interface Guidelines (HIG)

- Bundle your application. Application bundles are the preferred mechanism for software distribution. They simplify installation and are easy to move around in the Finder. See *Bundle Programming Guide* for guidelines on how to support bundles.

EX2021, 33; Reply, 7-8

Deliver the Features Users Expect

- Support application bundles and drag-and-drop installation.

Application bundles simplify the user's interaction with your software and enable drag-and-drop installation, which is the preferred method of application installation in Mac OS X. Macintosh users expect a quick, painless application installation experience; be sure to supply it by making your application available in a bundle and supporting drag-and-drop installation. For more information on bundles and application installation, see "Packaging" (page 85) and "Installation" (page 86).

EX2021, 55; Reply, 7-8

Packaging

Bundle Your Software

If you are creating a new application, make sure it is contained in an application bundle. Application bundles provide a structure for your executables, resources, and configuration files. Application bundles also simplify the user's interaction with your application and make it harder for the user to delete critical resources accidentally. Even applications that must support both Mac OS X and earlier versions of the Mac OS can use the bundle format. For more information on application bundles, see *Bundle Programming Guide*.

EX2021, 85; Reply, 7-8

EX2021 – Apple Human Interface Guidelines (HIG)

Installation

Use Internet-Enabled Disk Images

If you provide users with a downloadable version of your application on the Internet, you can simplify the installation process by packaging your software in an Internet-enabled disk image. Disk images eliminate the need to compress your files, because the disk image itself can compress the enclosed data. After the disk image is downloaded, Mac OS X automatically opens it and mounts it on the user's desktop. All the user has to do is copy over the desired files or run the installer.

For information on how to create an Internet-enabled disk image, see *Software Delivery Guide*.

Drag-and-Drop Installation

Bundles make it possible to provide drag-and-drop installation for applications (for more information on application bundles, see *Bundle Programming Guide*). Using bundles is the preferred way to install an application for the following reasons:

- It is easy for users to install and uninstall the application.

- It takes less time to install (only the time needed to copy the bundle).

- You don't have to spend time developing an installer.

EX2021, 86; Reply, 8

EX1070 – Bundle Programming Guide; EX1089 – Dr. Surati

Note: Even though packages are treated as opaque files by default, it is still possible for users to view and modify their contents. On the contextual menu for package directories is a Show Package Contents command. Selecting this command displays a new Finder window set to the top level of the package directory. The user can use this window to navigate the package's directory structure and make changes as if it were a regular directory hierarchy.

EX1070, 3; Reply 7-8

    Q. But as far as the user interface, an installation package is
presented in the interface as a single file, but it's actually foldered
with subdirectories in it, is that right?
    A. Yes. I think that's a fair characterization of -- a package is
represented as a single entity in the Finder. Though inside of it, it
may have more stuff like a hierarchal file system of stuff.

EX1089, 80:5-15; Reply 9

    Q. So basically, if you wanted to see what was inside of an
installation package, you would right click or control click the
package icon and choose "show the contents," right?
    MR. SCHWARTZ:· Objection to · · · · form and scope.
    A. You could presumably do that.

EX1089, 86:16-23; Reply 9, 12

EX1070 – Bundle Programming Guide

The Structure of a Mac OS X Application Bundle

The basic structure of a Mac OS X application bundle is very simple. At the top-level of the bundle is a directory named `Contents`. This directory contains everything, including the resources, executable code, private frameworks, private plug-ins, and support files needed by the application. While the `Contents` directory might seem superfluous, it identifies the bundle as a modern-style bundle and separates it from document and legacy bundle types found in earlier versions of Mac OS.

EX1070, 15; Reply, 7, 12

Table 2-5 Subdirectories of the `Contents` directory

Directory	Description
MacOS	(Required) Contains the application's standalone executable code. Typically, this directory contains only one binary file with your application's main entry point and statically linked code. However, you may put other standalone executables (such as command-line tools) in this directory as well.
Resources	Contains all of the application's resource files. This contents of this directory are further organized to distinguish between localized and nonlocalized resources. For more information about the structure of this directory, see "The Resources Directory"

EX1070, 16; Reply, 7, 12

For information about finding resource files in your application bundle, see "Accessing a Bundle's Contents." For information about how to load resource files and use them in your program, see *Resource Programming Guide*.

EX1070, 20; Reply, 7

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EX1071 – Resource Programming Guide

Other Resource Files

In addition to the resource types listed in the preceding sections, Table 1-1 lists some additional resource file types you might find in an application bundle.

Table 1-1 Other resource types

Resource Type	Description
Help files	In Mac OS X, help content typically consists of a set of HTML files created using a standard text-editing program and registered with the Help Viewer application. (For information on how to register with Help Viewer, see *Apple Help Programming Guide*.) It is also possible to embed PDF files, RTF files, HTML files or other custom documents in your bundle and open them using an external application, such as Preview or Safari. For information on how to open files, see *Launch Services Programming Guide*.

EX1071, 5-6; Reply, 7-8, 12, 14

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EX1089 – Dr. Surati

> Q.   So another type of resource file that can be found in the Mac OS application bundle resources folder are help files, right?
> A.   Yes.

> Q.   Sure. Do you see that in the Resource Programming Guide table 1.1, that it explains you can open the HTML files in the resource file folder -- I'm sorry, in the resource folder of the application bundle using Safari?
> A.   It says that, yes.

> Q.   So before 2011, a person of ordinary skill would know that they could navigate to the resources subdirectory in the application bundle of a Mac OS application and view the HTML files in the resources folder with the Safari · application.
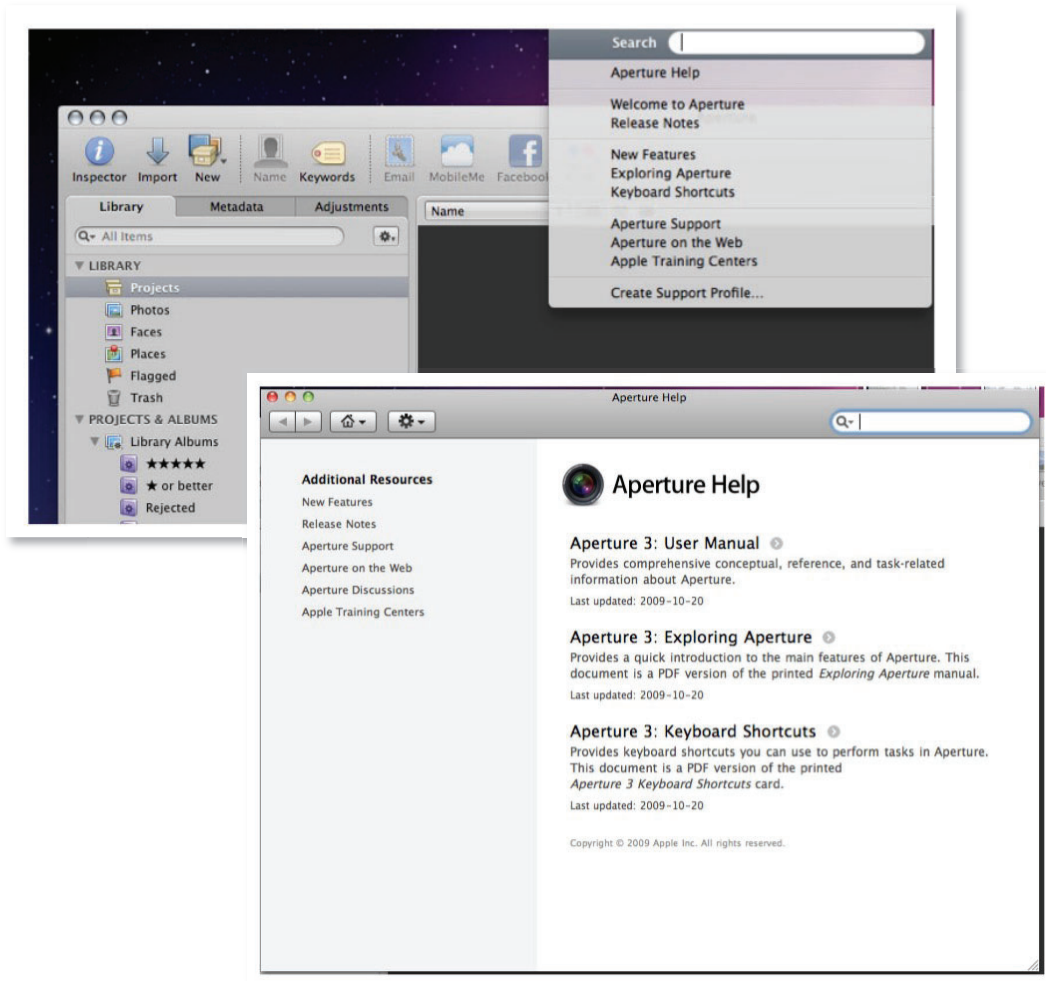> MR. SCHWARTZ:· Objection to form and scope.
> Q.   Correct?
> A.   I think people of ordinary skill in the art, not all POSITAs, would be able to do that. Some might if they understood the Macintosh.

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EX1003 – Dr. Terveen; EX1051

EX1003, ¶¶86-87; Petition, 15; Reply, 1-3

EX1051, 7; Petition, 15; Reply, 3

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EX1089 – Dr. Surati; EX1066 – Learn Mac OS X Snow Leopard

> Q. So the commands, you could either do this as a script or you could type these commands directly into terminal to show or hide hidden files in Mac OS X, right?
>
> A. I think so.

EX1089, 135:16-21; Reply, 11

```
 1:  #!/bin/sh
 2:
 3:  # togglevis
 4:  # A shell script to toggle the visibility of hidden files in the Finder
 5:
 6:  set `ps acx | grep Finder`
 7:
 8:  show=`defaults read com.apple.finder AppleShowAllFiles`
 9:
10:  if [ $show -eq 1 ]; then
11:      defaults write com.apple.finder AppleShowAllFiles 0
12:      kill $1
13:  else
14:      defaults write com.apple.finder AppleShowAllFiles 1
15:      kill $1
16:  fi
```

This handy script will toggle the visibility of hidden items in the Mac OS X Finder, which is done by setting the hidden Finder preference AppleShowAllFiles to 1 (to show all files) or 0 (to hide hidden files) and then restarting the Finder to immediately enact the change.

Note Truth be told, this script doesn't restart the Finder. The script instead just kills the Finder, and since OS X depends on the Finder, it will automatically restart it.

EX1066, 400; Reply, 11

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EX1089 – Dr. Surati; EX1073

> Q. If I wanted to see all files in a volume of a Macintosh operating system volume, I would do LS –A –L?
>
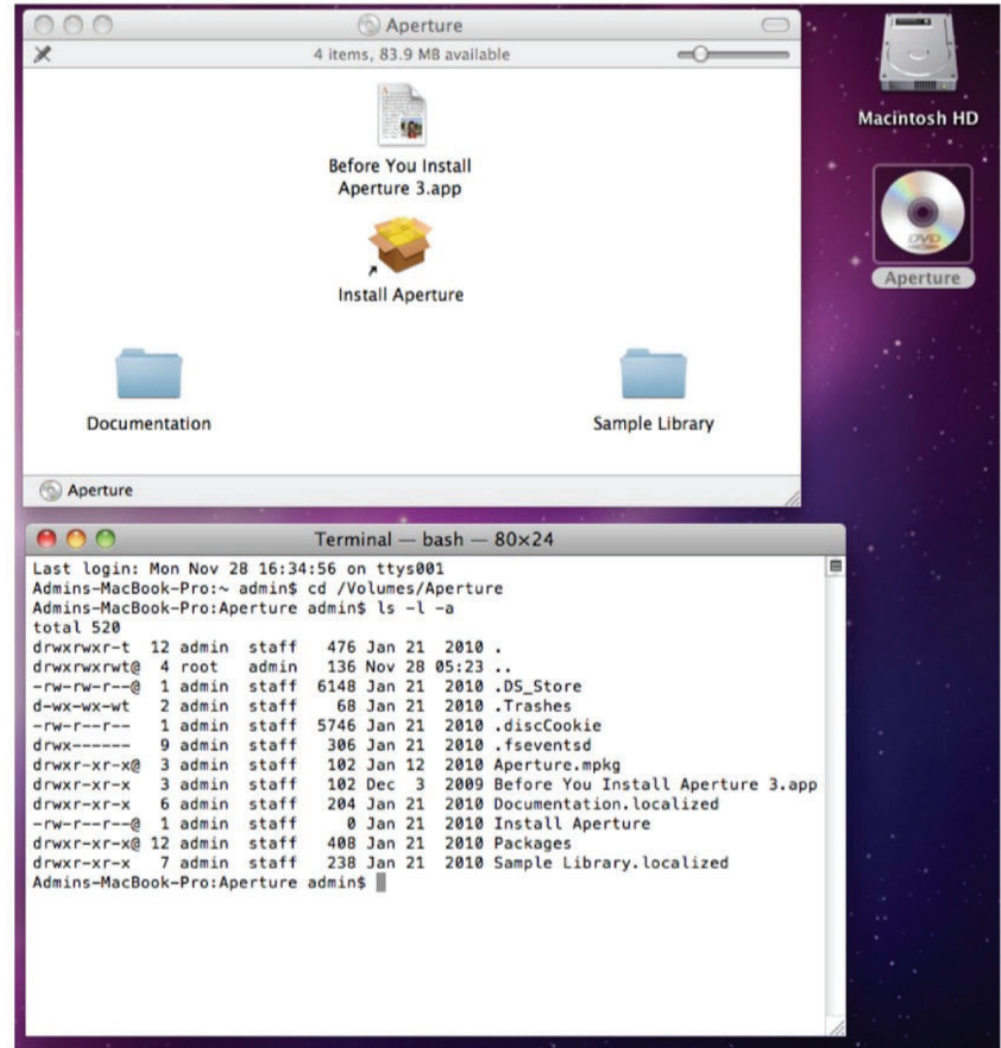> A. Yes. I think that would work. Although I usually do it the other way.

EX1089, 72:21-25; Reply, 10

> Q. What is the dash A parameter of the LS command?
>
> A. It's supposed to give you all files.

EX1089, 108:18-21; Reply, 10

EX1073, 6; Reply, 10

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EX1020 – Mr. Birdsell

18. … The Aperture 3 support page on the apple.com website contained an embedded URL pointing to the Aperture 3 User Manual HTML file set (*i.e.*, http://documentation.apple.com/en/aperture/usermanual/). The location of the URL is shown with a red arrow on an Internet Archive capture of this page dated February 17, 2010 (below):
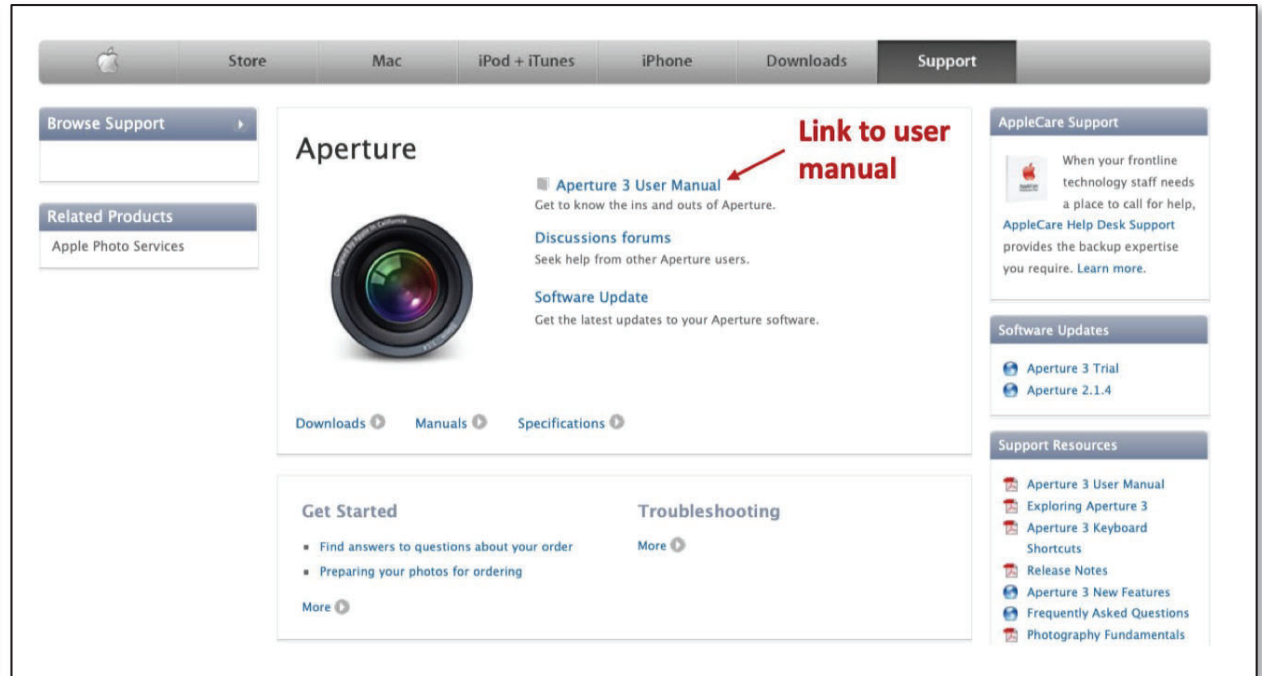
EX1020, ¶18; Petition, 14, 16-17; Reply, 5-6

19(e).　　Select "Aperture 3 User Manual": http://documentation.apple.com/en/aperture/usermanual/;[5] and . . .

[5] *See, e.g.*, https://web.archive.org/web/20100217035925/http://documentation.apple.com/en/aperture/usermanual/.

EX1020, ¶19; Petition, 14, 16-17

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EX1020 – Mr. Birdsell

3. My professional responsibilities between January and June of 2010 included involvement with the team responsible for producing and distributing Aperture 3 documentation, including the Aperture 3 User Manual. I have personal knowledge of how the Aperture 3 User Manual was prepared and distributed by Apple during this time frame.

EX1020, ¶3; Petition, 13; Reply, 1;   Pet. Opp. Mot. to Exclude, 4, 14

10. Based on my recollections of the Apple publishing process used in the February-March 2010 time frame, the Aperture 3 User Manual HTML file set was initially pushed to Apple staging servers. Then, once final approval for the Aperture 3 product release was provided, the Aperture 3 User Manual HTML file set was moved from the staging servers to publicly accessible Apple servers (i.e., documentation.apple.com), where it could be retrieved and viewed by any member of the public.

EX1020, ¶10; Petition, 16; Reply, 2;   Pet. Opp. Mot. to Exclude, 1, 14

13. The Aperture 3 User Manual HTML file set produced as I described in paragraphs 8-11 above was included on the Aperture 3 installer DVDs distributed starting in February 2010. Specifically, the Aperture 3 User Manual HTML file set is stored in the Aperture 3 application file bundle on the Aperture 3 installer DVD. The Aperture 3 file bundle is located in a compressed file on the Aperture installer DVD. …

EX1020, ¶13; Petition, 14; Reply, 2, 16;   Pet. Opp. Mot. to Exclude, 1-2, 4, 8

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EX2026 – Mr. Birdsell

> A. [...] Again, as head -- as the lead writer, I was the person responsible, the directly responsible individual. My responsibility would be upon having a customer ship date, we would work back from that. Once we had the localized versions and the English version to go, then we would test them.· So I would physically test the files, make sure all the links work, make sure all the files are both accessible on device on -- in the app, on the disk, and then online.· So we would use a staging server so customers couldn't see it, but myself and our QA team could see it. So we had -- also had a QA team that would go through it as well and review and make sure that there were no errors, no links broken.
>
> And then upon publication, within two or three hours, we would verify that the files were live and accessible to customers and that all the links worked.
>
> I would have personally verified that they all worked as well as the QA team.

EX2026, 35:20-36:12; Reply, 2;   Pet. Opp. Mot. to Exclude, 2, 4, 14

EX2026 – Mr. Birdsell

    Q   Do you -- do you recall the date when the HTML file set
was moved from the staging servers to the publicly accessible
Apple servers?
    A· · It would have been the night before.
    Q· · The night before the Aperture 3 product release?
    A· · Correct.· So we would have copied it over, and then
when it was released, then we would get a -- a go-live
instruction from product marketing and with an okay to public.
And then the build engineer -- I'm not the - in that role --
would flip a bit.· And then it would become live to new
customers.· That's how it works at a very, very high level.· I
can't speak to it at a technical level below that.
    Q· · And I believe you testified that once it was live, you
would have done a verification to make sure it was online and
accessible.· Is that right?
    A· · That is correct.

EX2026, 36:21-37:14; Reply, 2;   Pet. Opp. Mot. to Exclude, 2, 4

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EX1020, EX2026 – Mr. Birdsell; EX1048 – Aperture 3 Press Release

5. Apple began selling Aperture 3 to members of the public in February of 2010. E.g., EX1048 ("February 9, 2010—Apple® today introduced Aperture TM 3, the next major release of its powerful photo editing and management software, with over 200 new features including Faces, Places and Brushes."); EX1021, 2 (a February 17, 2010 Archive.org capture of www.apple.com/aperture, showing a "Buy Now" link for Aperture 3). Apple advertised the release of Aperture 3 on its website and it was widely covered in the technical and software press. E.g., 1021, 1 (a February 19, 2010 Archive.org capture of www.apple.com, showing an advertisement "Introducing Aperture 3"). Starting in early February 2010, Apple sold the Aperture 3 product in its retail stores, on the Apple web store, and distributed it in retail channels in the United States. During 2010, the Mac

EX1020, ¶5; Reply, 3, 16

```
    Q·  · Do you recall the precise release date of Aperture 3?
    A·  · I believe it was February 9th, 2010.
    Q·  · You mentioned the retail stores. Would every Apple retail store
have a copy of Aperture 3 available for sale?
    A·  · On the morning of February 9th, 2010, yes, every store would have
copies of Aperture for sale. Aperture 3.
```

EX2026, 59:6-14; Reply, 2-3, 16

EX2010 – Feb. 17, 2010 Apple.com Archive

EX2010, 1;   Pet. Opp. Mot. to Exclude, 5

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EX2010 – 2/17/2010 Archive; EX2026 – Mr. Birdsell

https://web.archive.org/web/20100217035925/http://documentation.apple.com/en/aperture/usermanual/

INTERNET ARCHIVE WayBackMachine
http://documentation.apple.com/en/aperture/usermanual/   [Go]
97 captures
13 Feb 2010 - 26 Jul 2018

JAN **FEB** JUL
◄ **17** ►
2009 **2010** 2011 ▼ About this capture

User Manual

- Welcome to Aperture
- An Overview of Aperture
- The Aperture Interface
- Working with the Aperture Library
- Importing Images
- Working with Images in the Browser
- Displaying Images in the Viewer
- Viewing Images in Full Screen View
- Stacking Images and Making Picks
- Rating Images
- Applying Keywords to Images
- Working with Metadata
- Organizing Images with Faces
- Locating and Organizing Images with Places
- Searching for and Displaying Images
- Grouping Images with Smart Albums
- An Overview of Image Adjustments
- Making Image Adjustments
- 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
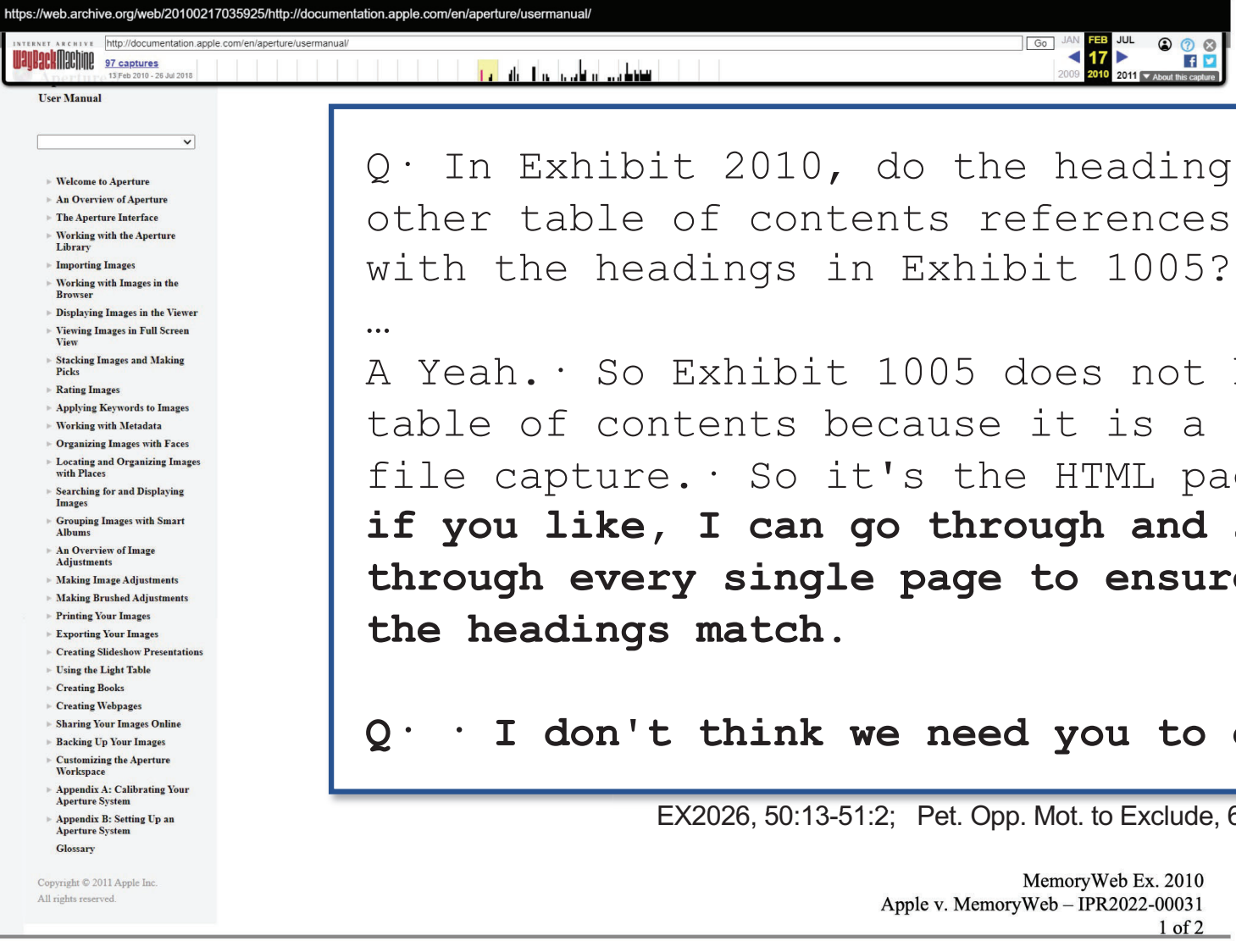- Glossary

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> Q· In Exhibit 2010, do the headings and other table of contents references match with the headings in Exhibit 1005?
> …
> A Yeah.· So Exhibit 1005 does not have the table of contents because it is a file-for-file capture.· So it's the HTML pages.· **So if you like, I can go through and scroll through every single page to ensure that the headings match.**
>
> Q· · I don't think we need you to do that.

EX2026, 50:13-51:2;   Pet. Opp. Mot. to Exclude, 6, 10 (emphases added)

MemoryWeb Ex. 2010
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EX2010, 1;   Pet. Opp. Mot. to Exclude, 5

EX2010 – 2/17/2010 Archive; EX1003 – Dr. Terveen

https://web.archive.org/web/20100217035925/http://documentation.apple.com/en/aperture/usermanual/

INTERNET ARCHIVE WayBackMachine
http://documentation.apple.com/en/aperture/usermanual/   Go   JAN **FEB** JUL ◀ **17** ▶
97 captures
13 Feb 2010 - 26 Jul 2018   2009 **2010** 2011 ▾ About this capture

User Manual

- ▶ Welcome to Aperture
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- ▶ Working with Metadata
- ▶ Organizing Images with Faces
- ▶ Locating and Organizing Images with Places
- ▶ Searching for and Displaying Images
- ▶ Grouping Images with Smart Albums
- ▶ An Overview of Image Adjustments
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- ▶ 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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> 102. The Wayback Machine has 2010 captures of each URL indicated above, including the table of contents. The 2010 capture of the table of contents includes each of the sections in A3UM (EX1005), such as "Organizing Images with Faces" and "Locating and Organizing Images with Places." 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 were not captured by Wayback Machine's web crawler. In fact, right-clicking on the table of contents pane in the archive.org webpage corresponding to http://documentation.apple.com/en/aperture/usermanual/ (https://web.archive.org/web/20100217035925/http://documentation.apple.com/en/aperture/usermanual/) and selecting "view page source" displays the source code for the page, including links to each of the individual sections. EX1055. As a whole, this evidence further suggests to me that A3UM was made publicly accessible starting in early 2010 as a compilation of webpages on www.apple.com.

EX1003, ¶102; Pet. Opp. Mot. to Exclude, 8-9

MemoryWeb Ex. 2010
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EX2010, 1; Pet. Opp. Mot. to Exclude, 5

EX2026 – Mr. Birdsell

> 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.
>
> 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.

EX2026, 54:6-22; Reply, 2

> Q. Is it possible that your memory of the number of page visits could include people who visited outside of the time frame of February to June 2010?
>
> THE WITNESS: Well, in -- to be honest, six weeks after the fact, I would have been rolling up those numbers to my superiors. So I would have been actively looking at those numbers and -- and looking for anomalies.
>
> And, you know, we're part of the product, we're wanting the product to be sold and to be used. And so seeing higher numbers was always a reassuring thing, and as subsequent versions of the app were released, we would see higher engagement.
>
> So -- so, no, I don't believe that my memory would be faulty, because that was a -- one of, you know, the main duties that I had.

EX2026, 55:20-56:11; Reply, 2

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EX1020 – Mr. Birdsell

5. Apple began selling Aperture 3 to members of the public in February of 2010. E.g., EX1048 ("February 9, 2010—Apple® today introduced Aperture TM 3, the next major release of its powerful photo editing and management software, with over 200 new features including Faces, Places and Brushes."); EX1021, 2 (a February 17, 2010 Archive.org capture of www.apple.com/aperture, showing a "Buy Now" link for Aperture 3). Apple advertised the release of Aperture 3 on its website and it was widely covered in the technical and software press. E.g., 1021, 1 (a February 19, 2010 Archive.org capture of www.apple.com, showing an advertisement "Introducing Aperture 3"). Starting in early February 2010, Apple sold the Aperture 3 product in its retail stores, on the Apple web store, and distributed it in retail channels in the United States. 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; Reply, 3, 16

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; Petition, 14-15; Reply, 2-3, 16

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EX2026 – Mr. Birdsell

> Q. Would every Apple retail store have a copy of Aperture 3 available for sale?
> A On the morning of February 9th, 2010, yes, every store would have copies of Aperture for sale Aperture 3.
> Q· · You seem pretty confident in that statement. So I -- I'm going to assume you didn't personally verify it was available in all of the Apple stores at the time. Can you explain what that basis is for that statement. …
> THE WITNESS:· I'll just say I've worked with operations for 20 years, and they're very committed to -- specifically before the app store was available, they're very committed to ensuring that when we would do a worldwide release, that product was on shelves and available for sale on that day in every location.

> Q   You mentioned that you visited Apple stores. When you visited Apple stores, was it in the February to June 2010 time frame?
> A Given that this was a major integer of that Aperture, this is the third major version, 3.0, I would have attended multiple stores in that immediate time frame after it was released.
> Q· · Did you personally observe copies of Aperture 3 available for sale at those Apple stores?
> A Yes.· Absolutely.
> Q Would Aperture 3 have been on display so that any person who walked into the Apple store would see Aperture 3 was available for sale, or would a customer have to know to ask for it in order to be able to purchase it? …
> THE WITNESS:· I distinctly remember seeing copies available like in a row on a shelf for purchase.

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Patent Owner Response (emphases added)

The issue is not whether a POSITA interested in *Apple software* would have visited Apple.com and A3UM—that pre-supposes a POSITA would have known of Apple.com and/or Aperture 3's relevance. Instead, here, ***Petitioner was required to establish a POSITA would have known to navigate to Apple.com and then look for the Aperture 3 user manual page in search of A3UM***. *Acceleration Bay*, 908 F.3d at 772

Even if an unspecified group of consumers knew of Aperture 3 during the relevant timeframe, there is no evidence those consumers were POSITAs or that an interested POSITA would have known of Aperture 3 or had any motivation to look for it. The "Aperture" product name ***is not descriptive of photo management technology*** and Petitioner has not offered evidence that a POSITA would have identified Aperture 3 by ***querying common terms, such as "photo," using an Internet search engine.***[2]

POR, 18-19

Even if a POSITA navigated to Apple.com, Petitioner has nevertheless failed to establish that a ***POSITA exercising reasonable diligence would have actually found the Aperture 3 user manual page***. According to Petitioner and its witnesses, the Aperture 3 user manual page could be found only after executing several steps such as knowing to search for 'Aperture' or 'Aperture 3' in the search box or by navigating through a number of links on Apple.com.

POR, 19-20

As discussed above, 'Aperture' or 'Aperture 3' would not be common search terms to a POSITA, and there is ***no evidence on the record that searching Apple.com for other terms that would be common, like "photo," for example, would have yielded any Aperture-related results.***

POR, 20

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EX1048 – Aperture 3 Press Release

Apple Releases Aperture 3

New Features Include Faces, Places & Brushes

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. Building on the innovative Faces and Places features introduced in iPhoto® '09, Aperture 3 makes it even easier and faster to organize large photo libraries. Aperture 3 introduces new tools to refine your photos including Brushes for painting image adjustments onto parts of your photo, and Adjustment Presets for applying professional photo effects with just one click. Stunning new slideshows let you share your work by weaving together photos, audio, text and HD video.

Aperture 3 allows you to organize large photo libraries with even more flexibility using Projects and the new Faces and Places. Faces uses face detection and recognition to find and organize your photos by the people in them. You can view faces across your entire photo library or view just the faces that appear in selected projects. In a new view that speeds up the organization process, Aperture 3 displays faces that have been detected but haven't yet been named. Places lets you explore your photos based on where they were taken, and like in iPhoto, Places automatically reverse geocodes GPS data into user-friendly locations. In Aperture 3, you can assign locations by dragging-and-dropping photos onto a map or by using location information from GPS enabled cameras, tracking devices or your iPhone® photos.

Pricing & Availability
Aperture 3 is available through the Apple Store® (www.apple.com), Apple's retail stores and Apple Authorized Resellers for a suggested retail price of $199 (US) and existing Aperture users can upgrade for a suggested retail price of $99 (US). A downloadable 30-day trial version is available at www.apple.com/aperture/trial. Aperture 3 runs as a 64-bit application on Mac OS® X Snow Leopard® on Macs with Intel Core 2 Duo processors. Full system requirements, online tutorials and more information on Aperture 3 can be found at www.apple.com/aperture.

EX1048, 1-2; Petition, 14; Reply, 3, 5

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1021 – Apple.com

EX1021, 6-7; Petition, 17

https://web.archive.org/web/20100217041531/http://www.apple.com/aperture[9/12/2021 5:23:18 PM]

Petitioner's Reply (EX1074)

Reply, 5-6 (citing EX1074)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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Petition

C. Photo Organizer Applications and Websites

Numerous photo organizer applications and websites existing before 2010 allowed users to manage large collections of digital photographs, and easily retrieve digital images, including photos and videos. *E.g.*, EX1031, 1; EX1003, ¶59. One example was Google Picasa, which included both a People view, which allowed a user to easily select digital photos containing a given person, and a Places view, which allowed a user to view photos taken at or tagged with a particular location […]. EX1032, 1-2; EX1003, ¶59. Other applications with both people-oriented and map-oriented display capabilities included Apple's iPhoto and Aperture products. EX1031, 4; EX1039, 1-3; EX1003, ¶60.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1003 – Dr. Terveen

59. By 2010, a wide variety of photo organizer applications had been developed and released to allow users to manage the large number of digital photographs they were accumulating. Photo organizers are application software focused on organizing digital images. E.g., EX1031, 1. Several photo organizer software products were known that had the ability to provide multiple views within the same photo organizer application. For example, by 2009, Google's Picasa application …

60. Versions of Apple's iPhoto product released after 2009 also provided a similar capability to view pictures having a person in them or pictures linked to a location (e.g., where the photos were taken or using user-entered location data) on an interactive map. EX1039, 1-3.

100. Apple was an exceptionally well-known technology company in 2010. A skilled artisan interested in learning about Apple software would have known to either directly visit www.apple.com or search for specific Apple software via well-known search engines such as Google and the search functionality provided on Apple's own websites.

EX1031; EX1039

Image organizer - Wikipedia, the free encyclopedia

EX1031, 1, 4; Petition, 6; EX1003, ¶60

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| article | discussion | edit this page | history |

Image organizer

From Wikipedia, the free encyclopedia

📖❓ This article **needs additional citations for verification**.
Please help improve this article by adding reliable references. Unsourced material

| iPhoto | Mac OS X | commercial | Yes | Yes | Yes | Yes |

https://web.archive.org/web/20100427092553/https://en.wikipedia.org/wiki/Image_organizer[8/22/2021 6:57:54 AM]

Petitioner Apple Inc. - Ex. 1031, p. 4

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iPhoto '09 Review

EX1039,1, 3; Petition, 6; EX1003, ¶60

Fri, May 22, 2009

Web Design

iPhoto '09 Review

Part of Apple's "iLife" package, and bundled with every Mac, iPhoto is more photo-management than photo editing. iPhoto's been around for some years now, but it's not usually regarded as a powerful editing tool although Apple has improved its editing capabilities in this release. Definitely a winner for those of you who are looking to organize tons of photos (with most formats supported, including RAW) and create albums, it's not for photo pros that need hardcore editing. The editing tools included (red eye remover, and so on) aren't that good either, so you may need another editing program (think Adobe Elements or similar) if you want to make your pictures as nice as can be!

The Bottom Line:

It's free if you have a Mac so why not use it? And if you don't have a Mac you can't use it anyways. Great for managing and organizing your photos but you'll likely need a better editor even for simple things (I like to banish red eye and whiten people's teeth in my photos…iPhoto's not too good with that!)

https://web.archive.org/web/20090526212034/http://www.killersites.com:80/magazine/2009/iphoto-09-review/

Petitioner Apple Inc. - Ex. 1039, p. 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1045; EX1044 & EX2014

Using Aperture 3: Part 1

Tue, Mar 30th, 2010 | Equipment, Technique, Featured 4 Comments

As I mentioned at the end of my previous post, I used Aperture 3 to manage and edit the images, video and audio from my recent trip to Indonesia. I also put together my Lembeh Night Safari trip video using Aperture 3.

In this post and one to follow later, I'll do my best to set out the key points from my experience…both the good and the not so good. In case you have no idea what Aperture 3 is and are wondering why anyone would care… it's the most recent version of Apple's media-management software, released not too long ago.

https://web.archive.org/web/20100402224207/http://www.tonywublog.com/20100330/first-good-impressions-using-aperture-3.html

EX1045, 2; Petition, 14-15; Reply, 3-4

CrunchGear

Review: Aperture 3
by **Devin Coldewey** on March 19, 2010

If you're a photographer and use a Mac, chances are you're using Lightroom or Aperture. Probably Lightroom, since Aperture is less popular among pros — and the latest version seems to be an acknowledgment of that. The features added in version 3 are clearly intended to draw casual shooters using iPhoto to the paid image editing honey pot. Since so many of these amazing new features are direct side–loads from iPhoto, it smooths the process and makes the program as a whole more approachable, though whether existing Aperture users will find them helpful is questionable. Brushes, on the other hand, are a welcome addition to any photographer's toolset, and depending on how dedicated you are, may be worth the price of admission.

Invasion of the iPhoto features

As long as I've been using Aperture, I've considered it a *processing* application. Its photo management was troublesome here and there, and iPhoto had the best ways of showing off your shots, but I dealt with it since maintaining two separate libraries of the same photos would be disk space suicide. I've only used Lightroom a little bit (and a version or two back) but all my friends say that it just has a better workflow for serious photo work — importing a couple hundred shots, scrubbing through them, doing the necessary adjustments, and outputting to the necessary format. Not that I have trouble doing that in Aperture, but apparently it's faster and better in Lightroom.

Confronted with such a fearsome opponent, Apple decided that it would be better to flank than to risk a frontal assault. Hence the expansion of Aperture's incorporation of iPhoto features Faces and Places. I question their relevance in a photo processing application, but given Apple's tendency

EX1044, 1; Petition, 14-15; Reply, 3-5

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
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EX1077 – Macworld

https://web.archive.org/web/20100211033049/http://www.macworld.com/article/146231/2010/02/aperture3.html

Macworld

- Feb 9, 2010 8:40 am
- 0 Comments
- 0 Recommendations
-
- ◁ ShareThis

Apple releases Aperture 3

Updated interface, Faces, Places highlight new features

by Jason Snell, Macworld.com

Apple may not be at Macworld 2010 this week, but the company still managed to announce a new product just in time for the trade show. On Tuesday Apple announced Aperture 3, the latest version of the company's $199 pro-level photo-editing and management software.

Faces and Places

When iPhoto '09 was released, Paulsen said, "the Aperture discussion boards lit up, asking when they could see" Faces and Places within Aperture. With Aperture 3, those features have been added—but they've also been "extended and enhanced for prosumer photographers—and pros, for that matter," according to Paulsen.

Under the hood, Aperture 3 uses the same face-recognition technology as iPhoto '09. But Paulsen said that in Aperture the user has more control, such as being able to constrain face-scanning to individual projects—for example, a wedding photographer can limit face scanning to a single event, so that Aperture doesn't attempt to match the faces in one wedding to the faces in every other photo in his or her library.

EX1077, 1; Reply, 3-5

EX1089 – Dr. Surati

> Q. So in 2010 there were a number of
> articles that we've just worked through which
> had links to the Apple.com web page that
> described the Aperture 3 product, right?·
> There's at least three. I counted CrunchGear,
> Using Aperture and the MacWorld article, right?
>   MR. SCHWARTZ:· Objection to form, scope.
>   A. I mean, it seems like it.

EX1089, 206:23-207:7; Reply, 5

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1089 – Dr. Surati

Q. So after May 20th of 2010, let's just pick a date like August of 2010, if I did a Google search on the phrase "photo editing and management software," would you expect to see this as one of the hits?

A. I don't know. I mean, eventually somewhere. I don't know whether it would be on the first page.

Q. What if you put -· · · ·

A. It would probably be in the index.

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

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, 203:22-204:24; Reply, 4

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IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1021 – Apple.com; EX1089 – Dr. Surati

Petitioner Apple Inc. - Ex. 1021, p. 1

https://web.archive.org/web/20100217144307/http://www.apple.com/[9/10/2021 1:51:48 PM]

EX1021, 1; Petition, 17

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     Q.   Isn't Apple.com one of the most visited websites on the planet?
     A.   I don't know in 2010.
     Q.   This was after the iPhone had been on the market for a while,
right?
     A.   Yes. But it doesn't mean that it was the most visited site. But
probably.
```

EX1089, 188:9-16; Reply, 6-7

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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'020 Patent – Claim 1 Excerpt; Parties' Constructions

1. A method comprising: …

   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.

EX1001 (-00006), 35:17-45 (emphases added); Petition (-00006), 38

Patent Owner

requiring a cause-effect relationship

Sur-Reply (-00006), 8

Petitioner

The Board should confirm the phrase "responsive to an input indicative of a selection [input]… causing [action]" 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.

Reply (-00006), 4

EX2025 – Dr. Surati; EX1001 ('020 Patent)

Ex. 1001, FIGS. 6-7 (annotated)

EX2025, ¶55; POR (-00006), 3

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

58
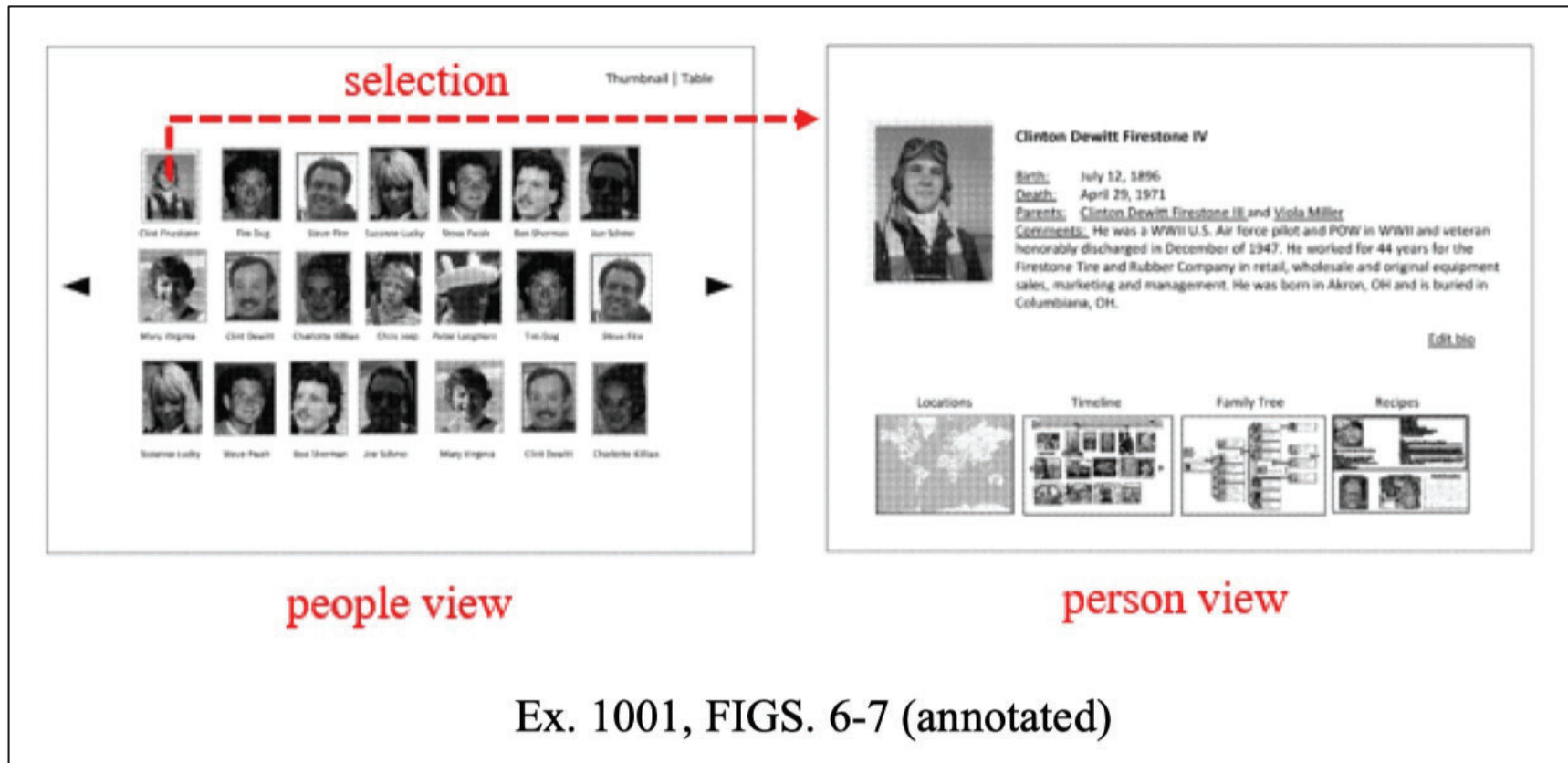
EX2025 – Dr. Surati; EX1001 ('020 Patent)
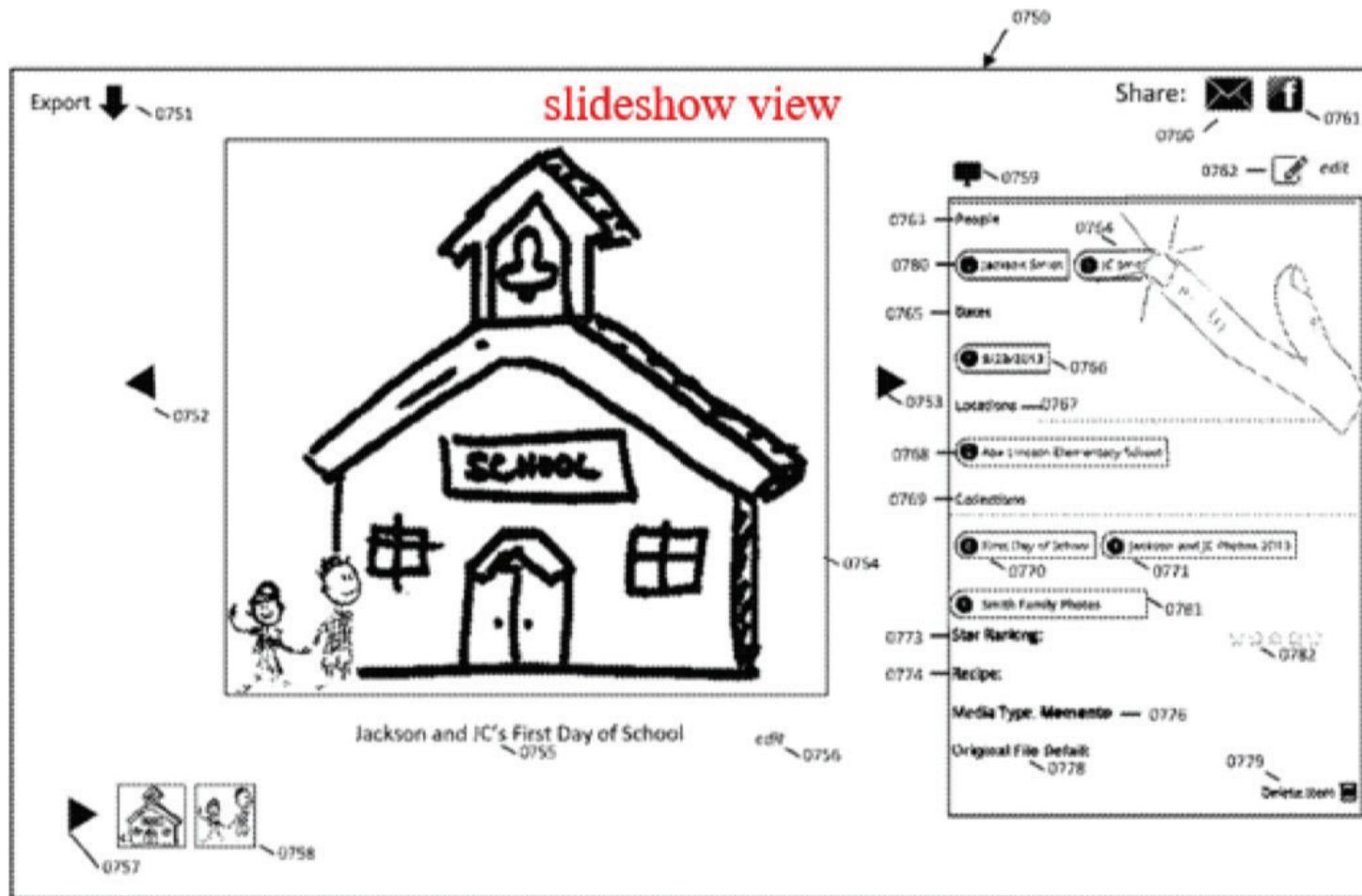
EX2025, ¶59 (citing EX1001, Fig. 31 (above));
POR (-00006), 5

EX1089 – Dr. Surati; EX1001 ('020 Patent)

Q. We're going to put the parts of the passages that I'm speaking of up on the screen here in a minute. What I want you to do is tell me if the two actions that are described in these passages in the patent at columns 21 and 22, if performed, will meet the requirements of the final clause of claim 1 of the '020 patent, okay?

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; Reply (-00006), 1

21

If within any of the Application Views the user selects a Digital File (0715), the Digital File is then displayed in a Slideshow View (0716) where the user can again select an 60 Application Dot-Tag (0701) and start the continuous link of Application Dot-Tag functionality over again. Also within an Application View, if the user selects another Application Dot-Tag (0717), the entire continuous link of Application Dot-Tag functionality begins again and sends the request 65 back to ask if the newly selected Application Dot-Tag is a person (0702).

22

In FIG. 31, the Slideshow view of a Digital File, Application Dot-Tags, and comments are illustrated (0750). When viewing a Digital File or group of Digital Files within the Slideshow Application View (0750), the selected Digital 5 File is displayed in the center of the screen (0754). If the user wants to export this photo with all the associated Memory-Web Tags, they can select export (0751) which will initiate the Application Export System as illustrated in FIG. 49. If the user wants to see the Digital File that is one file before 10 the selected Digital File, they select the left arrow (0752) or they can select the right arrow (0753) to display the next photo in the sequence. Below the Digital File, the comments (0755) that are specific to that Digital file are depicted. If the user wants to edit the comments, they select edit (0756). If 15 the user would like to see a moving slideshow of all the photos that are part of the group of Digital Files, they can select on the play sign (0757) or simply click the specific thumbnail of a Digital File (0758) to be displayed. The user can also have the slideshow in a full screen slideshow by 20 selecting the full screen icon (0759). If the user wants to

EX1001 (-00006), 21:58-67, 22:1-20; Reply (-00006), 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
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EX1089 – Dr. Surati, EX1001 ('020 Patent)

...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.
    Q. So first, I want you to be comfortable because I was just focussing on this part of the claim. So other parts I'm not asking you to address at this point. If I understood your answer, you're indicating that the description of the steps that I've shown on the screen here at line 57 of column 21 through line 62 followed by the step in column 22, line 14 to 18 would fall in and meet the requirements of that last clause in claim 1, is that right?
    A. I said -- what I'm trying to say was -- sorry. With all the caveats that I gave, I think what you're saying is -- I'm comporting with your answer, what you asked, which is that I think what's described in the patent would lead to claim limitation that -- particular claim limitation that you described.

EX1089, 381:8-382:23; Reply (-00006), 1

EX1001 ('020 Patent)

EX1001, Claim 1, final clause

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 slide-show including a plurality of images associated with the first person.

If within any of the Application Views the user selects a Digital File (0715), the Digital File is then displayed in a Slideshow View (0716) where the user can again select an Application Dot-Tag (0701) and start the continuous link of Application Dot-Tag functionality over again. Also within

EX1001, 21:58-62

If within any of the Application Views the user selects a Digital File (0715), the Digital File is then displayed in a Slideshow View (0716) where the user can again select an Application Dot-Tag (0701) and start the continuous link of Application Dot-Tag functionality over again. Also within
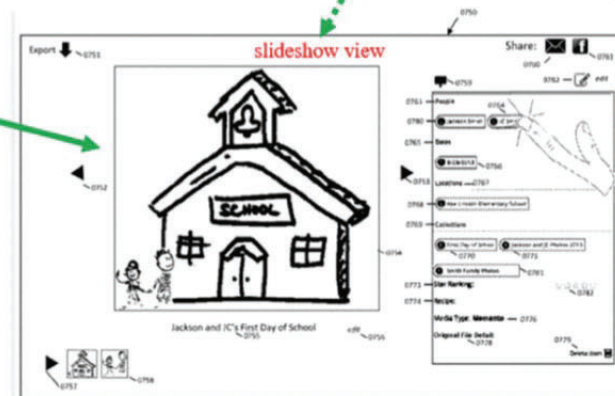
EX1001, 21:58-62

person view

slideshow view

EX2025, 23

Reply (-00006), 2

IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1001 ('020 Patent)

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.

In FIG. **31**, the Slideshow view of a Digital File, Application Dot-Tags, and comments are illustrated (**0750**). When viewing a Digital File or group of Digital Files within the Slideshow Application View (**0750**), the selected Digital
5 File is displayed in the center of the screen (**0754**). If the user

EX1001, 22:1-5

user wants to edit the comments, they select edit (**0756**). If
15 the user would like to see a moving slideshow of all the photos that are part of the group of Digital Files, they can select on the play sign (**0757**) or simply click the specific thumbnail of a Digital File (**0758**) to be displayed. The user can also have the slideshow in a full screen slideshow by
20 selecting the full screen icon (**0759**). If the user wants to

EX1001, 22:14-20

slideshow view

Jackson and JC's First Day of School

0757
0758
Jacks
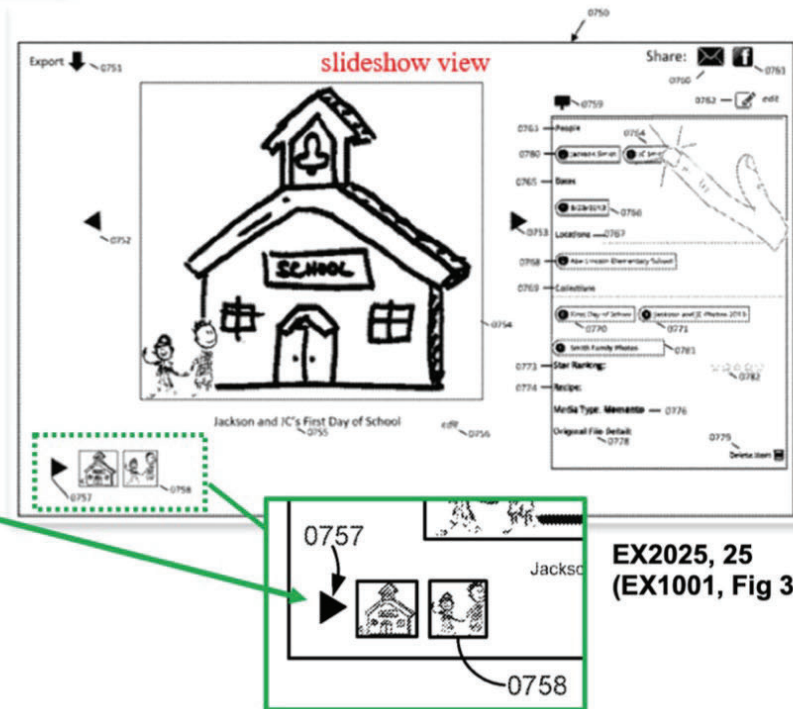
**EX2025, 25
(EX1001, Fig 31)**

Reply (-00006), 3

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EX1089 – Dr. Surati; EX1001 ('020 Patent)

58. 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, 21:57-61, FIG. 17.

EX2025, ¶58; Reply (-00006), 3

FIG. 17

EX1001 (-00006), Fig. 17; Reply (-00006), 3

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EX1005 – A3UM

Viewing and Working with Images

To work with your images, you select a project in the Library inspector and Aperture displays that project's images in the Browser. You use the Browser to review, organize, and select images. You can display the Browser only or display the Browser and a Viewer that shows images in detail.

When you select a thumbnail image in the Browser, the image appears in the Viewer.

The Viewer displays the selected image.

Select images here.
A selected image appears with a white outline.

The Browser can display your images as thumbnails arranged as a row in a filmstrip or as a grid of thumbnails appearing in rows and columns. You can click an individual image to select it, and a white border appears around the image. To quickly move to and select other images, press the arrow keys. You can drag images to rearrange them in the Browser, or drag them into different projects or albums. You can also display your images as a list of files.

EX1005, 15;
Petition (-00006), 31-33, 39, 55, 74, 85-86

IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

65

EX1005 – A3UM
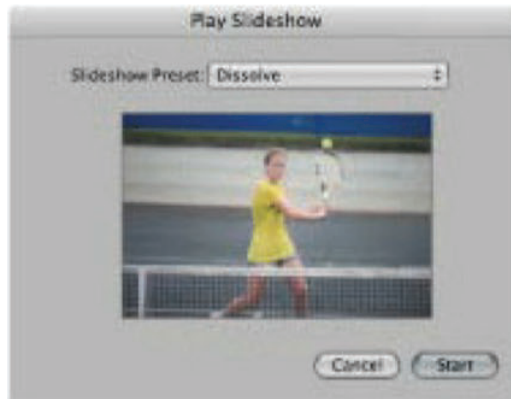
EX1005, 828; Petition (-00006), 38-40; Reply (-00006), 29-30

EX1005 – A3UM; EX1001 ('020 Patent)

A3UM, 828

EX2025, ¶ 59, citing EX1001, Fig. 31

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

67
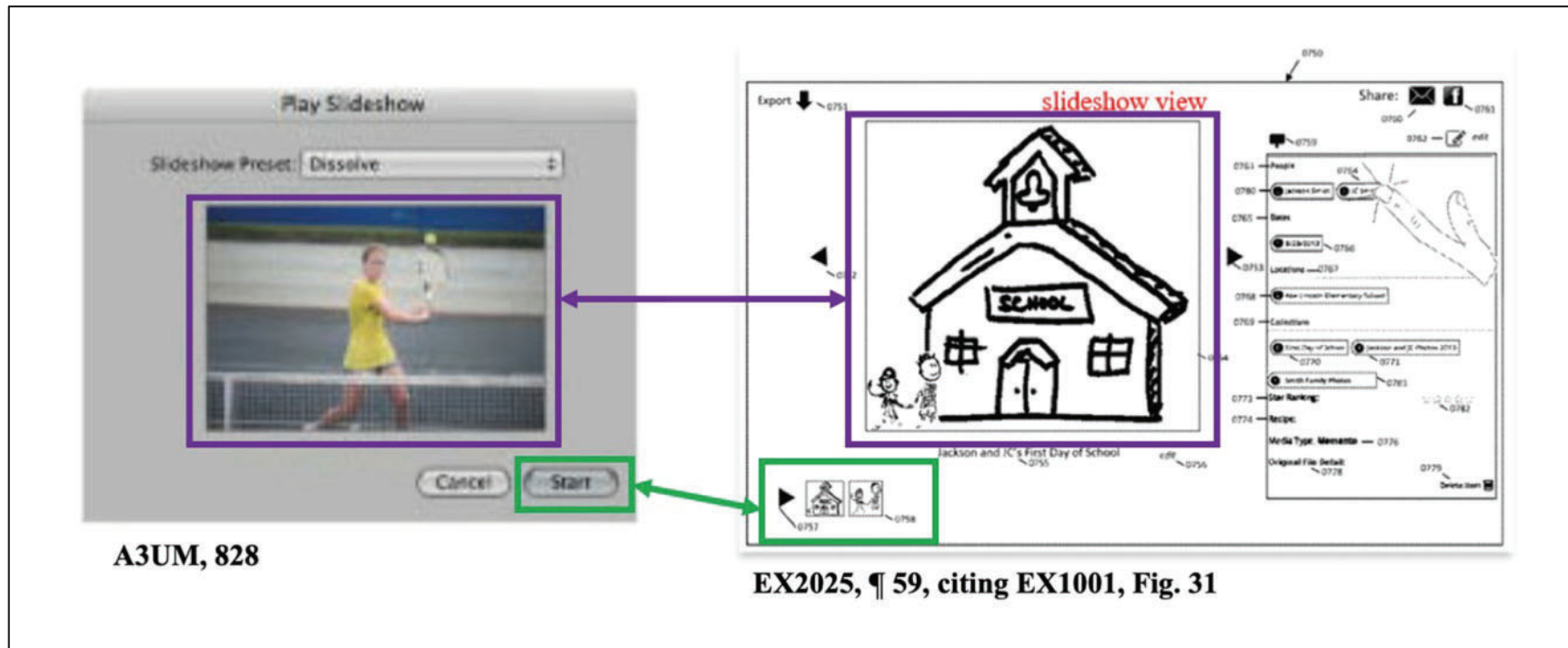
'020 Patent – Claim 1

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

  …

'020 Patent – Claim 31

31. 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;

        …

EX1001 (-00006), 37:56-38:12 (emphases added); Petition (-00006), 28, 36

IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1005 – A3UM

People to whom you've assigned names are represented by snapshots in Faces view, which is accessed by selecting Faces in the Library inspector or selecting an item in the Library inspector and then clicking the Faces button in the toolbar. Selecting Faces in the Library inspector displays the faces of all the people in images in the library who have been assigned names. Selecting an item in the Library inspector and then clicking the Faces button in the toolbar displays the faces of all the people in the images in that selected item.
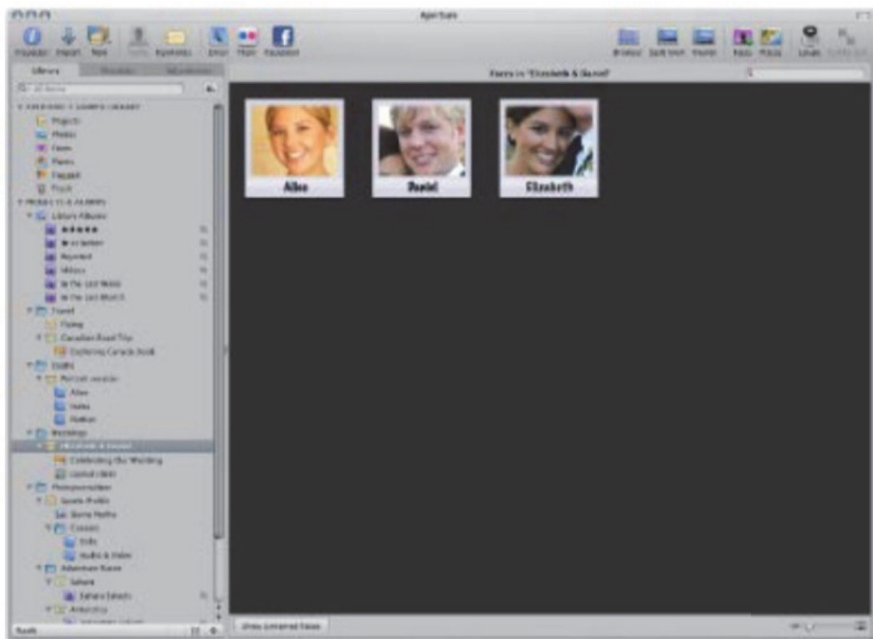
— Faces view

EX1005, 28-29; Petition (-00006), 21, 25-26, 51-53, 84
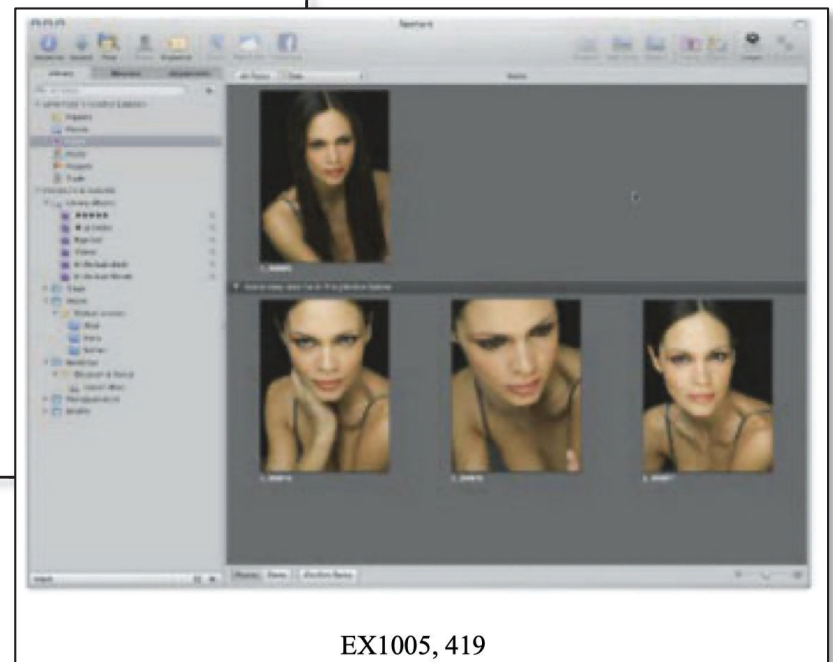
EX1005, 419

EX1005, 419; Petition (-00006), 27, 29, 33, 35, 51-53, 60

Petition (-00006)

It would have been obvious to a skilled artisan by early 2010 to modify A3UM to display at least one of the images containing the selected person's face at its full-size when displaying the Faces browser. EX1003, ¶¶126-134. One of the basic components of A3UM's scheme is the Viewer, which is used to "to examine an image at its full size" (i.e., displaying a *first digital file*"). EX1005, 51. Image thumbnails are displayed via the Browser, which lists a collection of images that can be selected to display at "full size" in the Viewer:

EX1005, 15, 51, 250; EX1003, ¶127. The Browser and Viewer are used to view sets of images, such as "images contained in a folder, project, or album." EX1005, 47.

Petition (-00006)

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. A skilled artisan would have recognized the parallel operation of A3UM's Faces browser and Viewer/Browser, EX1005, 15, 51, 79-80, 419, and the utility of Viewer's functionality to the Faces browser. EX1003, ¶129. A3UM's Viewer and Browser already are used to view sets of "images contained in a folder, project, or album," EX1005, 47, 51, and it would have been a straightforward extension of this existing functionality to display another set of images maintained by A3UM's system: images containing faces of a selected person. EX1003, ¶129. A3UM's Viewer and Browser interfaces also both use a gallery design, where a row of items is displayed above a larger viewer interface displaying one item in greater detail. EX1003, ¶129.

A skilled artisan would recognize the interchangeability of the Faces browser and the Viewer/Browser interfaces. EX1003, ¶¶130-131. A3UM discloses three views for the Browser: Filmstrip, Grid, and List View. EX1005, 214-220. The Browser's Grid view is analogous to A3UM's Faces browser because both display a grid of thumbnail images:
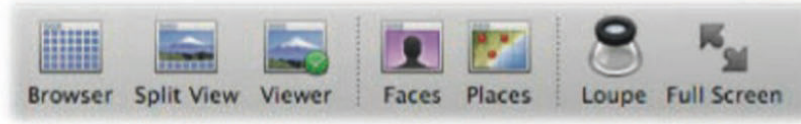
EX1005 - A3UM

Browser   Split View   Viewer   Faces   Places   Loupe   Full Screen

- *Places button:* Click this button to switch to Places view for the item selected in the Library inspector. Images with location information are represented by red pins on the map. For more information about controls in Places view, see "Places View."

EX1005, 65;
Petition (-00006), 20, 38;
Reply (-00006), 25-26,
33-34

◉ To view the location information for an image or group of images

1. Do one of the following:

   - *To view the image locations for images throughout the library:* In the Library inspector, select Places.

   - *To view the image locations for images in an item selected in the Library inspector:* Select an item in the Library inspector containing images that already have location information assigned to them, then click the Places button in the toolbar.

Places button

Faces   Places   Full Screen

   The Aperture main window switches to Places view. Red location pins mark the locations where images or groups of images were shot.

2. 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;
Petition (-00006), 23, 30-31,
36-37, 49, 75, 88;
Reply (-00006), 23-24

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A3UM's interface includes two selectable links with miniature map icons ("*first map image[s]*"), the Places link in the Library inspector and the Places button in the toolbar, that can be selected to display the Places view:

EX1005, 81, 435. Each of these icons represent maps and a skilled artisan would consider them to be "*map image[s].*" A3UM also explains that these icons can be selected as part of the Places link and Places button. EX1005, 81, 435; EX1003, ¶123.

A3UM describes a Places view comprising an embedded Google Map ("*interactive geographic map*") that is displayed when a user clicks or taps ("*responsive to an input that is indicative of a selection of the first map image in the first person view*") on either (1) the "Places" item in the Library Inspector ("first map image") or (2) the Places button in the toolbar (another "*first map image*"). EX1003, ¶¶138-140; EX1005, 81, 435.

EX1005, 81, 435.

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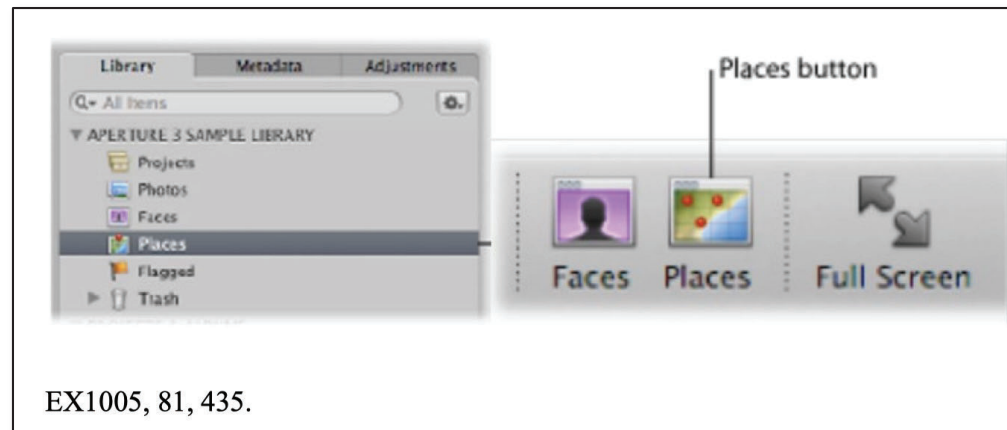
EX2021 – Apple Human Interface Guidelines (HIG)

A toolbar can also contain icons that represent recognizable interface elements from elsewhere in the system (such as the Colors window icon or the iDisk icon) when they make sense in the context of the application. If you choose to include an icon such as the Colors window icon, be sure to preserve its meaning. Users expect such icons to mean the same thing in every context, so you should not repurpose them when you use them in a toolbar. For example, the Numbers toolbar (the top image in Figure 11-23) contains the Colors window and Fonts window icons, which are standard icons used throughout Mac OS X. In Numbers, clicking these toolbar icons displays the Colors window and the Fonts window, respectively, just as users expect.

Figure 11-23 Three ways to represent toolbar items
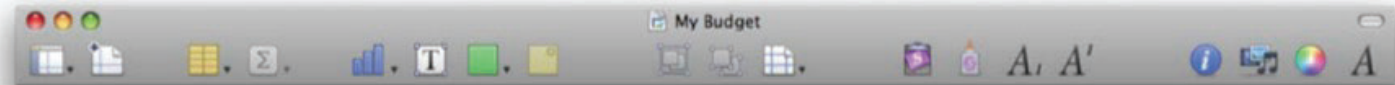
Custom icons and standard toolbar icons

Standard MacOS X icons

EX2021, 152-153

EX2021, 152-53; Reply, 34

'020 Patent – Claim 11; Petition (-00006)

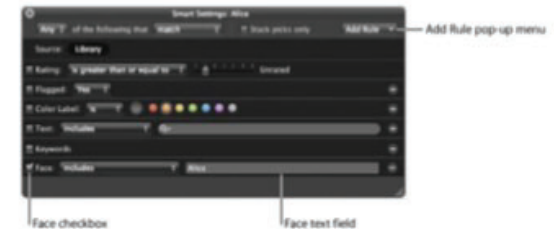11. The method of claim 1, wherein the first person view includes *a first group image*, and responsive to an input that is indicative of *a selection of the first group image*, *causing a first group view to be displayed* on the interface, the *first group view* including one or more digital files *associated with another person that is associated with the first person*.

Users can "create a Smart Album and specify a specific person or group of people as search criteria," such as "a Smart Album that is set to collect photos of your family members." EX1005, 428. After creating an empty Smart Album and giving it a name, the user uses "the Smart Album's Smart Settings HUD" to "choose Face from the Add Rule pop-up menu," select "the Face checkbox, choose 'includes' from the Face pop-up menu, then enter the name of the person you want to include in the Smart Album in the text field to the right of the pop-up menu." EX1005, 428; EX1003, ¶207. These elements are illustrated as follows on the Smart Settings HUD […] EX1005, 428. Users can repeatedly add "additional person[s]" to the definition of the Smart Album. EX1005, 428. A3UM thus discloses creating a Smart Album defined as including at least two people. EX1003, ¶208.

Once a Smart Album has been created, a user can select the Smart Album from the Library inspector ("*responsive to an input that is indicative of a selection of the first group image*") to display the associated images in the Browser and Viewer ("*causing a first group view to be displayed on the interface*"). EX1005, 31, 506-507; EX1003, ¶209.

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EX1001 ('020 Patent); EX1005 – A3UM

FIG. 8
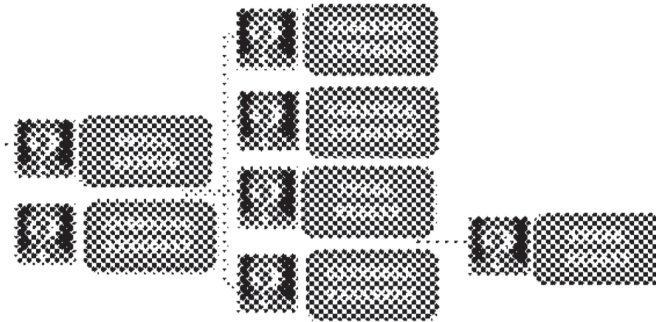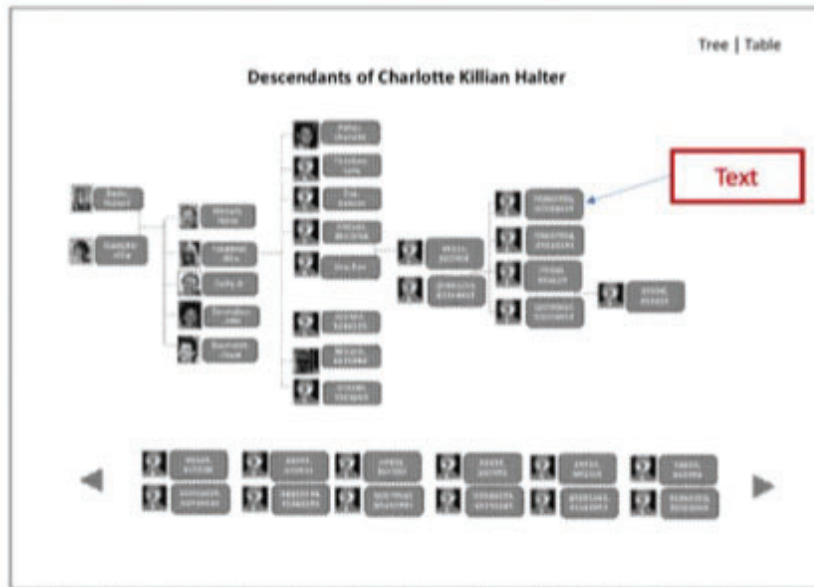
EX1001, Fig. 8; Reply (-00006), 5-6

EX1005, 508; Petition (-00006), 41-42,
59-60, 88-91; Reply (-00006), 35-36

'228 Patent – Claim 1; PO's Sur-Reply (-00031)

1.   A method comprising: …

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.

EX1001 (-00031), 35:32-36:11 (emphases added); Petition (-00031), 46-53

… Petitioner argues that "the claims do not require facial recognition." Reply, 18. Patent Owner agrees.

PO Sur-Reply (-00031), 9

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EX1005 – A3UM; Petition (-00031)

EX1005, 347
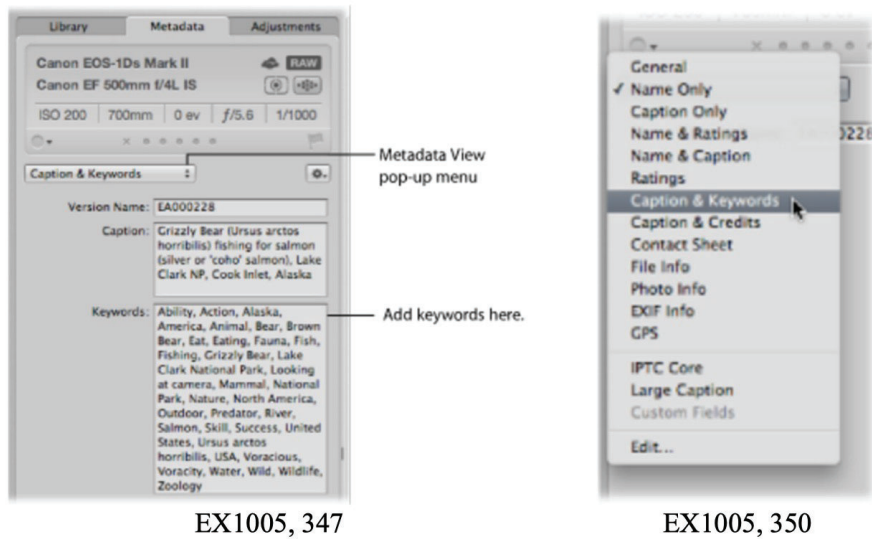
EX1005, 350

A3UM explains that users can add or modify metadata related to digital files. EX1003, ¶109; EX1005, 345 (keywords "are descriptive words assigned to image versions and saved as metadata."), 421-422 (users can add names to computer-recognized faces); 443-446 (users can add location information by dropping photos on a map or by typing location names in search box and assigning found locations to digital files). A3UM explains that the Places and Faces interfaces use metadata to select and display digital files. *E.g.*, EX1005, 78-81, 344, 347-349, 435; EX1003, ¶109.

Petition (-00031), 21

EX1005 – A3UM

To assign names to faces in your images

1. In the Browser, select an image with people in it.
2. Click the Name button in the toolbar.

    Face labels appear below the faces of the people in the image in the Viewer.

3. Click the face label below a person's face and enter the person's name in the text field.

    As you enter the person's name, names that have already been assigned to faces, as well as names in your Address Book, are suggested in the face label.

    Note: If you want to limit the suggestions to faces you've already named in the project, select the "Limit suggestions to project" checkbox.

4. When you are satisfied with the person's name in the face label, press Return.

    The person's name appears in the face label.

5. Enter a name in the face label for each person in the image, then click Done.

    Aperture presents the images in the library that are suggested matches for the people you just named. For more information about reviewing suggested images of a person, see "Viewing Images in Faces View."

    If there are faces in an image that Aperture doesn't detect, you can still add face labels to the faces and assign them names.

To add missing faces

1. If necessary, click the Name button in the toolbar.
2. In the Name Faces HUD, click the Add Missing Face button.
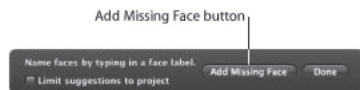
    A positioning box appears with a face label below it.

3. Drag the positioning box over the face you want to name, and resize the box so that it contains just the face.
4. Enter a name in the face label and press Return.
5. Repeat steps 2 through 4 until all faces lacking face labels in the image have been named.
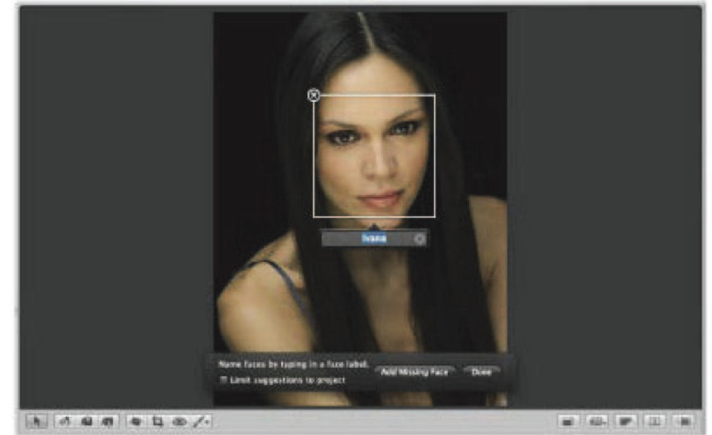
EX1005, 421-422; Petition (-00031), 21, 50, 54, 74-75; Reply (-00031), 19

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EX1005 – A3UM; Petition (-00031)

Working with Inspectors

Aperture provides a Library inspector for organizing your photos, audio clips, and video clips; an Adjustments inspector for applying adjustments; and a Metadata inspector that allows you to review metadata and assign it to your images. You can show or hide each inspector by clicking the appropriate tab at the top of the Inspector pane or pressing the W key. Showing the inspectors is as easy as pressing the I key.

EX1005, 21; Petition (-00031), 49

These "*set[s] of digital files*" include "*digital photographs and videos*." EX1003, ¶174. A3UM discloses that its Library i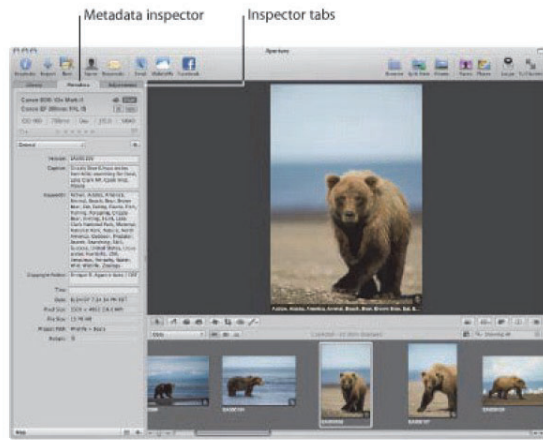nspector allows "***organizing your photos, audio clips, and video clips*," and then uses the term "images" to refer to these three categories. EX1005, 21**. Users ordinarily will have a library containing both photos and videos, as <u>A3UM</u> itself illustrates in its examples, with the thumbnails on the right representing videos and the thumbnails on the left representing still images (without the video clip icon): EX1005, 271.

Petition (-00031), 49 (emphasis added)
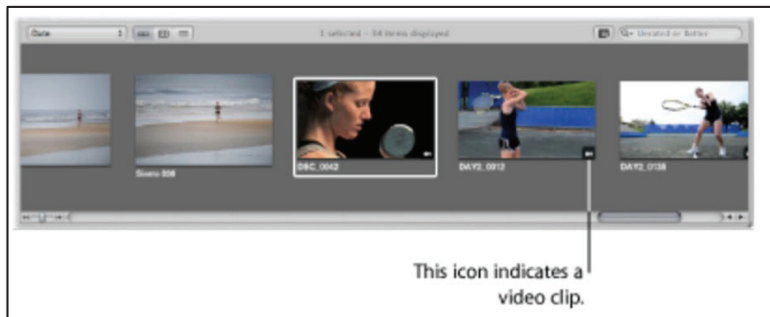
EX1005, 271; Petition (-00031), 49-52

A skilled artisan also would understand from A3UM's disclosure that its repeated references to "images" or "digital images" refers to both photos and videos. EX1003, ¶¶175-176; [citations in original]

Petition (-00031), 49 (emphasis added)

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Petition (-00031); EX1005 – A3UM

> A3UM also describes a user associating a video file with a person *in the same manner as is done for digital photographs*. EX1003, ¶¶177-178; EX1005, 23, 421 … In the figure below, A3UM describes an operation applied to a video file containing a selected person. EX1003, ¶179. Notably, it shows the Filter HUD being set to "show[s] video files" and DSC_0042 is the only item selected. EX1005, 23 (showing, e.g., video file badge overlay and "1 selected"). A3UM explains that DSC_0042 is a video file because it has a badge overlay of a motion picture camera icon, EX1005, 23, which A3UM explains means "[t]he thumbnail image represents a video clip," EX1005, 271 ("This icon indicates a video clip."), 413.

Petition (-00031), 50-51
(emphasis added)

EX1005, 23; Petition (-00031), 50-51

The Filter HUD is set to show video files.

Click the Filter HUD button to open the Filter HUD.

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Petition (-00031)

> *To the extent <u>A3UM</u> does not expressly disclose that the "set[s] of digital files" accessible through its Faces view include "digital photographs and videos," it would have been obvious to a skilled artisan by 2010 to modify <u>A3UM</u> to allow videos to be associated with faces in the same way as photos*. EX1003, ¶¶183-184. As shown above, <u>A3UM</u> already discloses extensive support for videos and displays them in-line with photos in the Browser, EX1005, 157, 166, 185, 250, 413, 793, and allows users to interact with them as if they were images (until the user presses play), EX1005, 51, 251, 271; EX1003, ¶183. *Allowing support for videos in Faces view would involve at most detecting faces in the representative image of the video, such as the woman's face shown above.* EX1003, ¶184; EX1005, 23. It was also well known by 2010 to detect faces in videos, with known methods including extracting keyframes and then identifying faces. EX1003, ¶184; *e.g.*, EX1049, ¶¶14-19, 51-53, Fig. 3; EX1050, 1:6-15, 2:17-27, Fig. 1A. A user would have been motivated to detect faces in either the video still frame or the video itself and associate them with people in Faces view to expand the set of media made easily accessible through Faces view, which would have been an predictable arrangement of old techniques. EX1003, ¶184; EX1005, 28-29.

Petition (-00031), 52-53 (emphases added)

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EX1089 – Dr. Surati

Q. By the way, have you ever - did you test the facial recognition features of the Aperture 3 product in · operation?

A. I did not.

Q. You have no personal experience with faces or facial recognition not functioning in the Aperture 3 environment?

A. I personally don't.

Q. Did you run any tests?· Did you cause somebody else to run tests of the facial recognition properties of Aperture 3?

A. I did not.

Q. Were there any reports that you reviewed of control testing of the Aperture 3 product to measure its accuracy for facial recognition?

A. So I didn't run any control tests, but I didn't feel a need to.

EX1089, 165:9-166:3; Reply, 19

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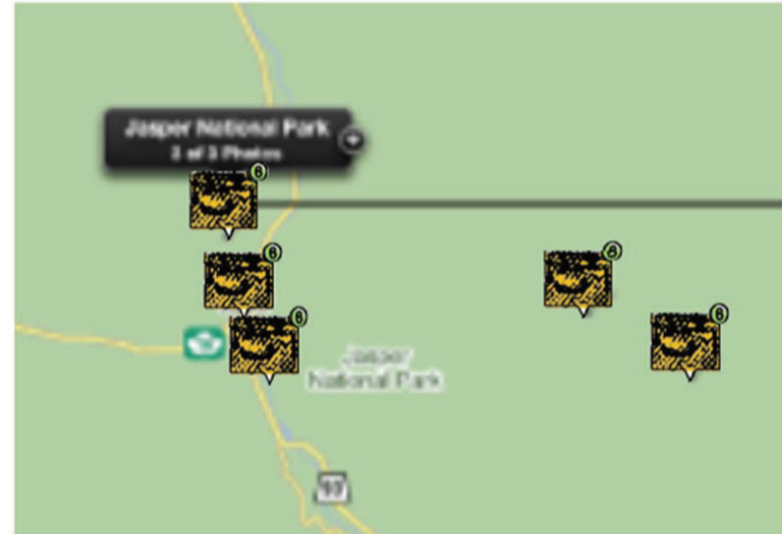
A3UM   A3UM-Belitz
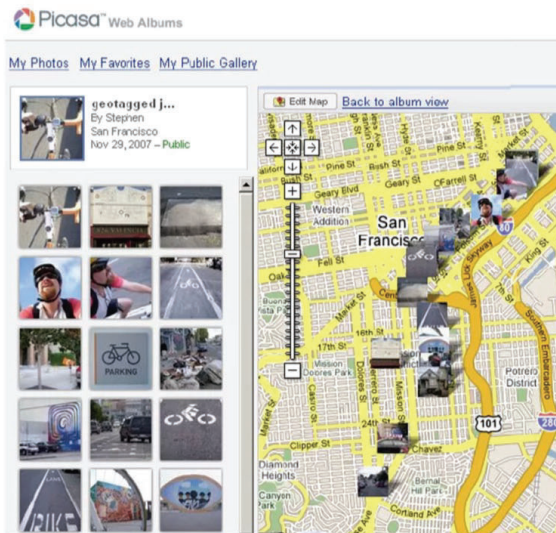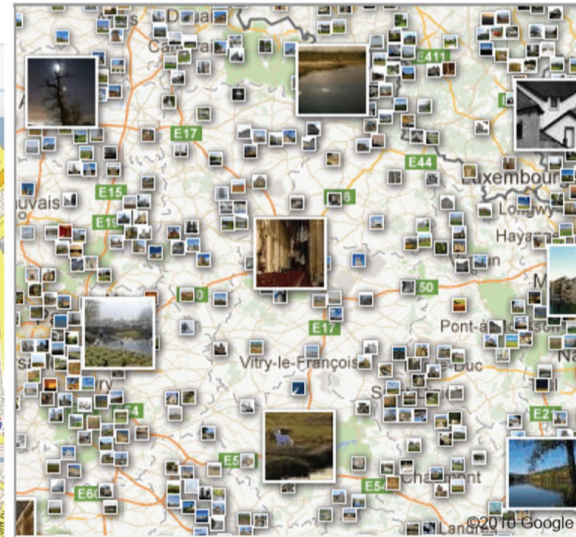
EX1003, ¶126; EX1005, 437 (annotated).

Petition (-00031), 27; Reply (-00031) 21-22

Petition (-00031)

EX1035, 239, 243. For example, Picasa Web Albums (2009) and Panoramio (2010) both described use of user-selectable small images on Google interactive maps to denote the locations of photos:

Picasa (2009)   Panoramio (2010)

EX1033, 2; EX1034, 1; *see also* §§IV.C-D.

Petition (-00031)

A skilled artisan would have recognized that ***Belitz's thumbnail map markers are a functional equivalent of, and could be used as an alternative to the pins used in the A3UM*** interactive map. EX1003, ¶123. For example, both A3UM and Belitz describe enabling a user to zoom in and out of regions on their respective interactive maps. EX1005, 82, 437-438; EX1006, ¶¶ 55-58, 62. ***Both also teach dynamically grouping markers into fewer markers when the map is zoomed out to reduce visual clutter on the map***. EX1003, ¶124; EX1005, 437-438 ("Depending on the zoom setting in Places view, Aperture might use a single pin to represent a group of images shot in close proximity."); EX1006, ¶¶54-58, 62 (describing techniques for selecting and placing a new graphical object in a location to represent a set of overlapping thumbnails when the map is zoomed out and techniques for selecting which of the thumbnail images of the set is to be used for the new thumbnail using the concept of stacking of the original thumbnails).

Petition (-00031), 25-26 (emphases added)

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A skilled artisan would have had a reasonable expectation of success in making this modification. EX1003, ¶130. For example, ***Belitz's thumbnail-plus-picture-count location marker would serve the same functional purpose as the user-selectable pins in the <u>A3UM</u> interface***—both identify the quantity and location of photos to the user and enable retrieval of photos at those locations. EX1003, ¶130; see EX1006, ¶¶54, 59-60, 62. ***<u>Belitz</u> also teaches techniques for adjusting the number of thumbnail images based on the zoom level of the interactive map that are analogous to the <u>A3UM</u> functionality***. See EX1006, ¶¶54-56.

Petition (-00031), 28-29 (emphases added)

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Belitz* and *A3UM* handle zooming interaction with the grouping of markers in the same manner**. EX1003, ¶207. Belitz explains that Figure 4a discloses a single graphical object 410, but when a user zooms in on the map, the graphical object 410 is instead split up into 4 graphical objects 410a, 410b, 410c, and 410d, each representing their own number of graphical objects. EX1006, ¶¶51, 55; EX1003, ¶207. Should the user zoom out, the graphical objects are again combined. EX1006, ¶56; EX1003, ¶207. EX1006, Figs. 4a, 4b. Thus, ***zooming in or out will change the number of photographs represented by the marker in the manner taught by both *A3UM* and *Belitz and would thus change the counts displayed for the displayed marker(s) ("*modifying the first indication feature*"). EX1003, ¶208; EX1005, 438-439; EX1006, ¶¶51, 55-56, Figs. 4a-4b.
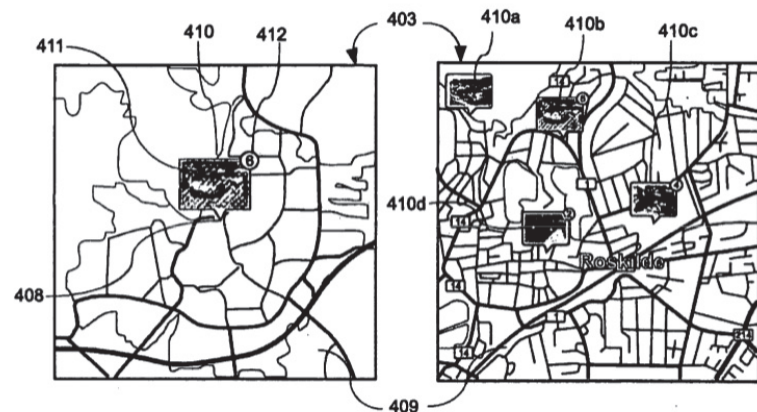

Fig. 4a   Fig. 4b

Petition (-00031), 61-62 (emphases added)

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A skilled artisan *would have been motivated to make this modification*. EX1003, ¶128. For example, Belitz expressly teaches that "it would be useful to be able *to present a user with an overview of associated images to special locations which enables to user to clearly see the associations*," EX1006, ¶¶4, 15, and *A3UM suggests the desirability of displaying such information in its Places interface* (e.g., showing thumbnails in the Browser linked to pins displayed in the map), EX1005, 81-83, 435. A skilled artisan would also have considered *Belitz's thumbnail technique to be a known and predictable alternative to the A3UM pins*, and that using thumbnails *could appeal to certain users, thereby potentially improving usability for such users*. EX1003, ¶128. For example, skilled artisans knew before 2010 that *certain users preferred interactive maps that used thumbnails instead of pins* to identify the locations of photos. EX1003, ¶129; *e.g.*, EX1033, 4 ("Where Picasa has the edge over Flickr and SmugMug is in showing thumbnails of each image on the map, not just a dot or pushpin, which I like better ….").

Petition (-00031), 28 (emphases added)

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Petition (-00031); EX1005 – A3UM

Thus, zooming in or out will change the number of photographs represented by the marker in the manner taught by both A3UM and Belitz and would thus change the counts displayed for the displayed marker(s) ("*modifying the first indication feature*"). EX1003, ¶208; EX1005, 438-439; EX1006, ¶¶51, 55-56, Figs. 4a-4b.

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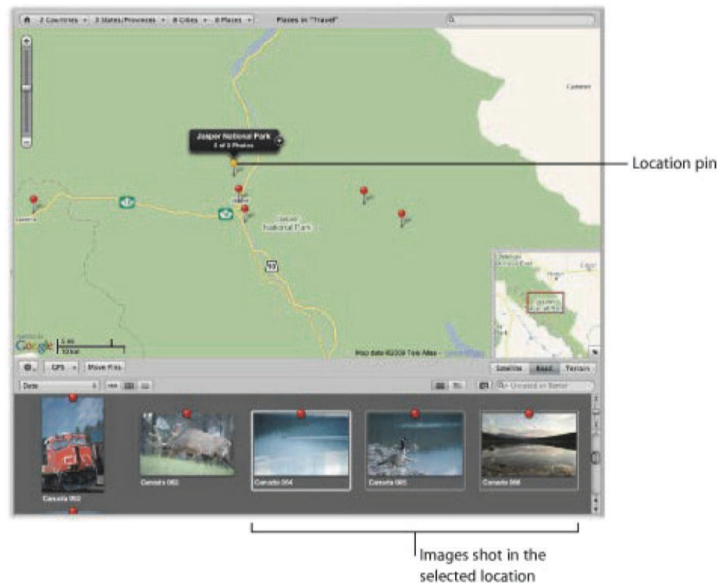# Petition (-00031); EX1005 – A3UM

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.

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Petition (-00031); EX1005 – A3UM

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.

Petition (-00031), 72 (emphases added)
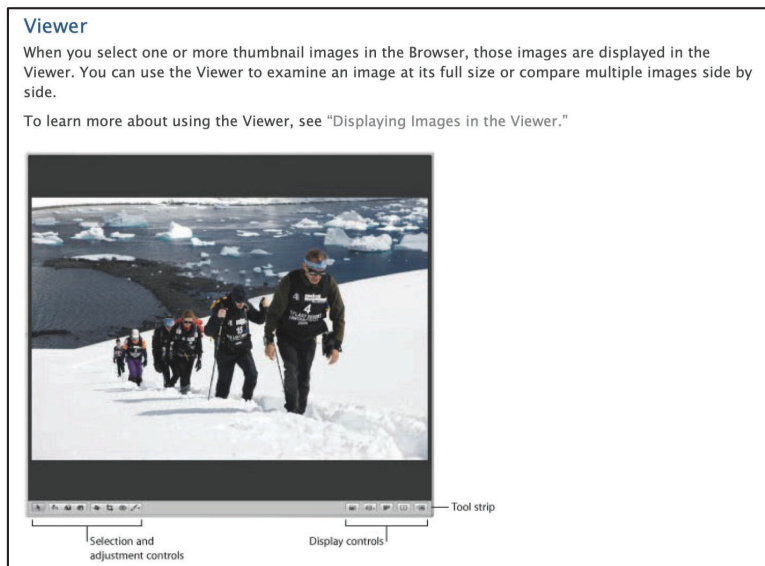
EX1005, 51; Petition (-00031), 50, 52, 72;
Reply (-00031), 26

EX1005, 251; Petition (-00031), 50, 52, 72;
Reply (-00031), 26

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Petition (-00031); EX1003 – Dr. Terveen

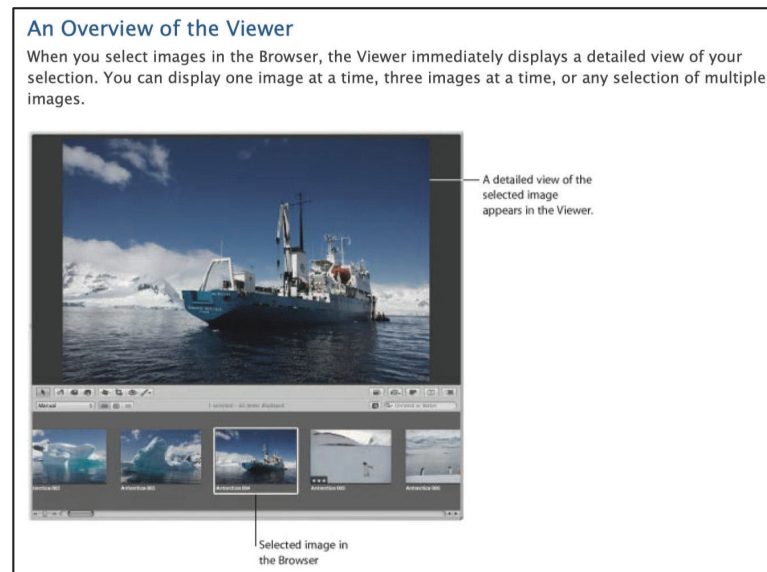Selecting a thumbnail in the Browser then prompts the display of the original digital image in the Viewer. EX1005, 251 ("When you select images in the Browser, the Viewer immediately displays a detailed view of your selection."). This display in the Viewer will be of the digital image (e.g., a full-size 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**.

241. … 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. EX1005, 51 …

EX1005 – A3UM

The following are the default buttons and controls on the right side of the toolbar.
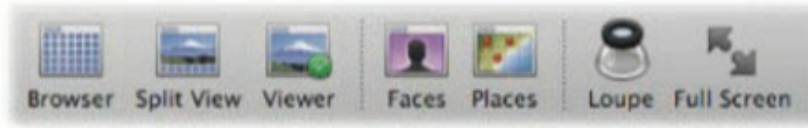
- *Browser button:* Click this button to show the Browser only.
- *Split View button:* Click this button to show the Browser and Viewer at the same time.
- *Viewer button:* Click this button to show the Viewer only.
- *Faces button:* Click this button to switch to Faces view, which displays snapshots of the people whose names you have confirmed using the Faces feature, for the item selected in the Library inspector. You can skim a snapshot to see other confirmed images of that person.
- *Places button:* Click this button to switch to Places view for the item selected in the Library inspector. Images with location information are represented by red pins on the map. For more information about controls in Places view, see "Places View."

EX1005, 65; Petition (-00031), 17-18, 34, 77; Reply (-00031), 27

Patent Owner Response (-00031)

Modifying A3UM so that the Places map is replaced when selecting an image in the Browser would destroy the interplay between them. Ex. 2025, ¶198. 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. *Id.* Even if it included the inspector, a Map Pane only includes an indication for a single location. Ex. 1005, 459; Ex. 2025, ¶198. The user would not be able to see whether there are other pins corresponds to other images at locations near the image selected in the Browser. *Id.*

POR (-00031), 69

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Petition (-00031); Patent Owner Response & Sur-Reply (-00031)

A skilled person would not modify *this latter functionality* in the suggested combination with <u>Belitz</u>—*the thumbnails would replace the pin, but the <u>A3UM</u> technique of selecting the thumbnail in the Browser to prompt display of the full image would be retained*. EX1003, ¶242.

<div align="right">Petition (-00031), 72-73 (emphases added)</div>

In fact, Petitioner argued that "[a] skilled person would *not modify*" *A3UM's functionality in the Places view. Id.*, 72.

<div align="right">POR (-00031), 67 (emphasis added)</div>

In describing what "A3UM discloses" (i.e., not what was allegedly obvious), Dr. Terveen stated that *"[s]electing a thumbnail in the Browser then prompts the display of the original digital image in the Viewer, which replaces the Places map view*." EX1003, ¶241. Dr. Terveen indicated *this functionality "would be maintained* by the suggested combination of A3UM with Belitz." *Id.*, ¶242. Likewise, the Petition stated that a POSITA "*would not modify this … functionality* in the suggested combination with Belitz." Petition, 72-73. Given Petitioner and Dr. Terveen's explicit indications *that A3UM would not be modified*, Petitioner's suggestion that it presented an obviousness argument in the Petition does not square with the facts. Reply, 26-27.

<div align="right">Sur-Reply (-00031), 23 (emphases added)</div>

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'376 Patent – Claim 1

1. A computer-implemented method of displaying digital files, comprising: …

   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;

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EX1005 - A3UM

Note: The Inspector pane is shown by default. You can show or hide the Inspector pane by pressing I.

Arranging the Interface

Aperture provides many ways to view your images. You can arrange the Aperture main window in the Browser, Split View, and Viewer layouts. The areas in the Aperture interface are resizable, and you can customize these layouts to suit your workflow. You can also view images by the people in them using Faces view, and by the locations where they were captured using Places view. In addition, you can view your images in Full Screen view, which displays images against a solid background with only a few interface elements.

To see the main window layout shown above, click the Split View button in the toolbar.

For more information about changing the main window layout, see "Changing Main Window Layouts."

The Aperture Main Window

The Aperture main window contains the following areas:
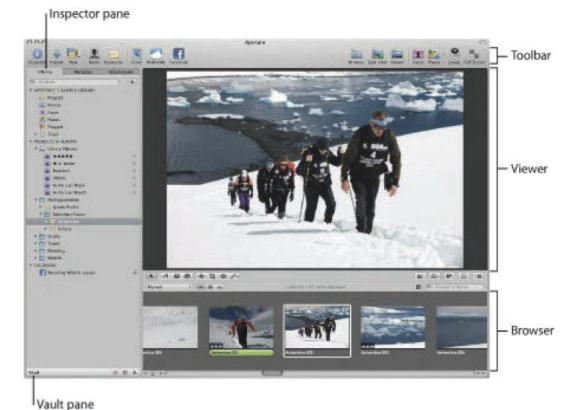
EX1005, 46; Petition (-00032), 18-19, 40; Reply (-00032), 19

Hiding and Showing the Toolbar

The toolbar is shown by default, but you can choose to hide it.

◉ **To hide the toolbar**

▪ Choose View > Hide Toolbar (or press Shift-T).

◉ **To show a toolbar that has been hidden**

▪ Choose View > Show Toolbar (or press Shift-T).

Tip: You can also quickly hide or show the toolbar by clicking the Toolbar button (a gray, oblong button in the top-right corner of the Aperture main window).

EX1005, 1067;
Petition (-00032), 40

The following are the default buttons and controls on the right side of the toolbar.
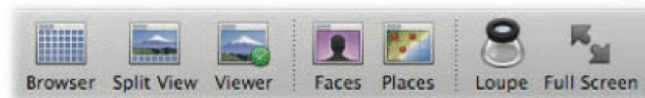
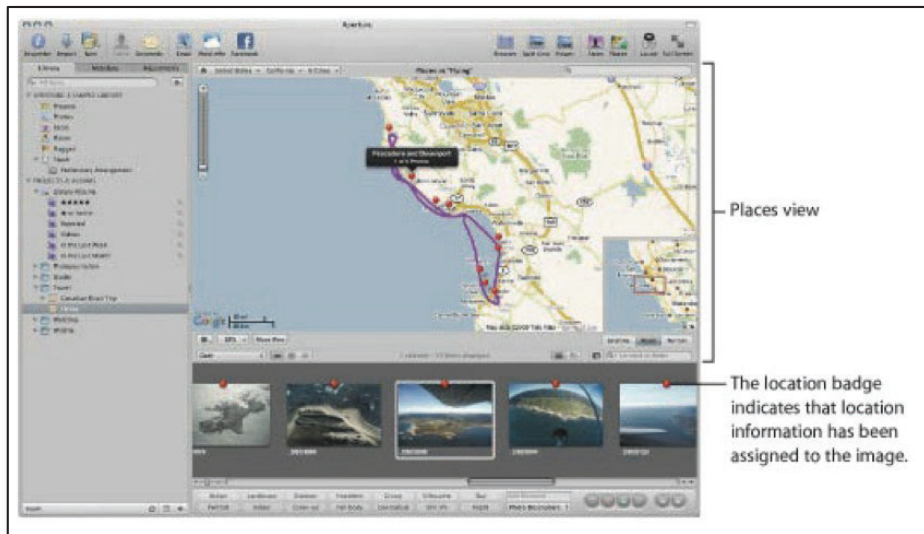• *Places button:* Click this button to switch to Places view for the item selected in the Library inspector. Images with location information are represented by red pins on the map. For more information about controls in Places view, see "Places View."

EX1005, 65;
Petition (-00032), 18, 39-40

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Petition (-00032); EX1005 – A3UM

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*") … EX1005, 30. A3UM discloses that one can increase the size of the interactive map to take up a larger portion of the screen by, *e.g.*, resizing the inspector or browser, or by hiding the toolbar. EX1005, 46, 1067; EX1003, ¶158.

EX1003 – Dr. Terveen

158. . . . <u>A3UM</u> also discloses that one can further increase the size of the interactive map to take up a larger portion of the screen by, *e.g.*, resizing the various areas such as resizing the inspector or browser, or by hiding the toolbar. EX1005, 46, 1067. These options are configurable and a skilled artisan would have understood <u>A3UM</u> to disclose the full scope of this configurability within the normal use of the disclosed system, such as allowing the Places map to be displayed in a way that takes up an even greater majority of the screen. For example, a skilled artisan would also understand that, depending on the size of a user's monitor, the portion of the display necessary to display the toolbar, browser, and inspector could be proportionally lower on a large monitor than a small monitor, and <u>A3UM</u> suggests the use of "large displays." EX1005, 831.

- Places view
- The location badge indicates that location information has been assigned to the image.
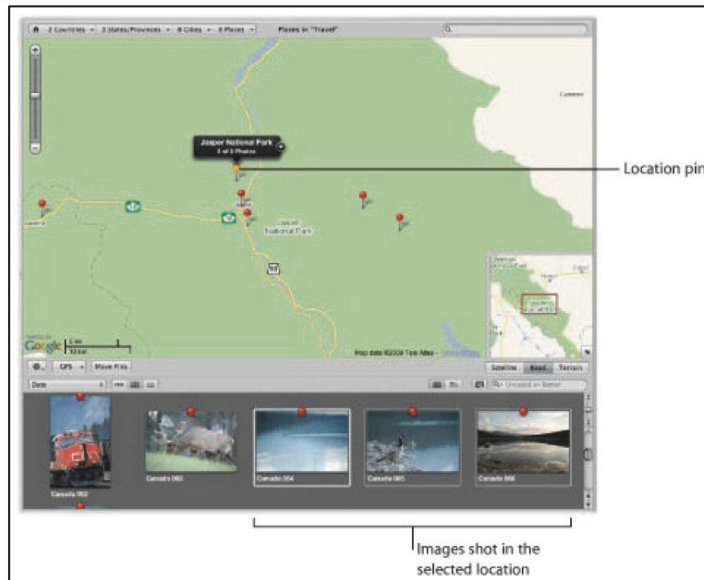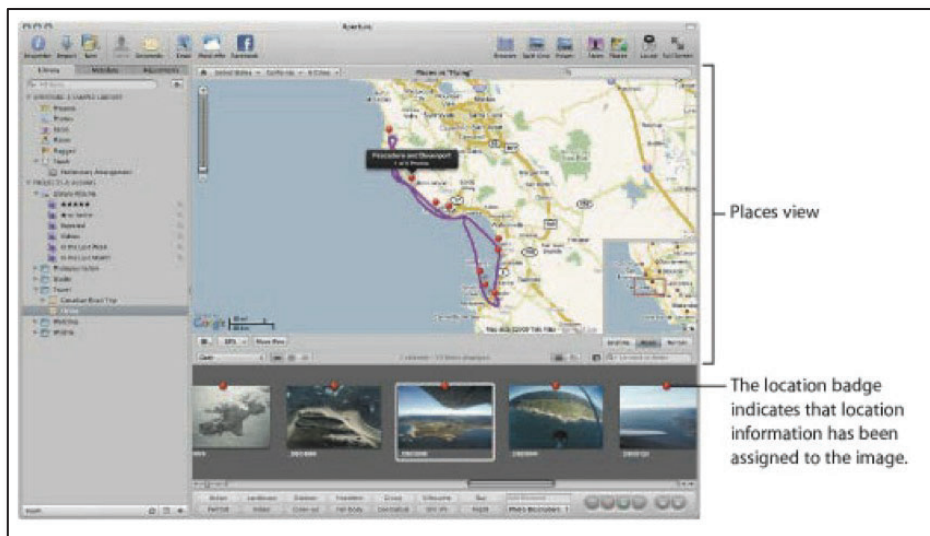
EX1005, 30; Petition (-00032), 40, 48

- Location pin
- Images shot in the selected location

EX1005, 436-437;
Petition (-00032),19-20, 28, 39, 42, 44-50, 53-54, 58-59

EX1005, EX1089 – Dr. Surati

> Q.· · And A3UM explains that a user can show or hide the inspector pane by pressing the letter I, correct?
>
> A.· · The inspector pain is shown by default, you can show or hide the inspector pane by pressing I.

> Q.· · So that's telling the user they can adjust the proportions of the different sub views in the viewer -- I'm sorry, in the window of the Aperture interface based on what they want it to look like, is that fair?
>
> A.· · Okay.

> Q.· · So in the Aperture interface you can make the toolbar disappear by just hiding the toolbar with this shift T or menu command, right?
>
> A.· · Okay.
>
> Q.· · That's right?
>
> A.· · That's what it says.

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EX1087, EX1089 – Dr. Surati

> Q.· · Sure, if I take the Aperture main window as pictured on page 146 and I execute the commands to hide the toolbar and to hide the inspector pane, then the window will contain just the viewer and the browser, right?
>
> A.· · It would appear to.· It doesn't say it, but that would be the implication?

EX1089, 317:7-14; Reply (-00032), 19-20
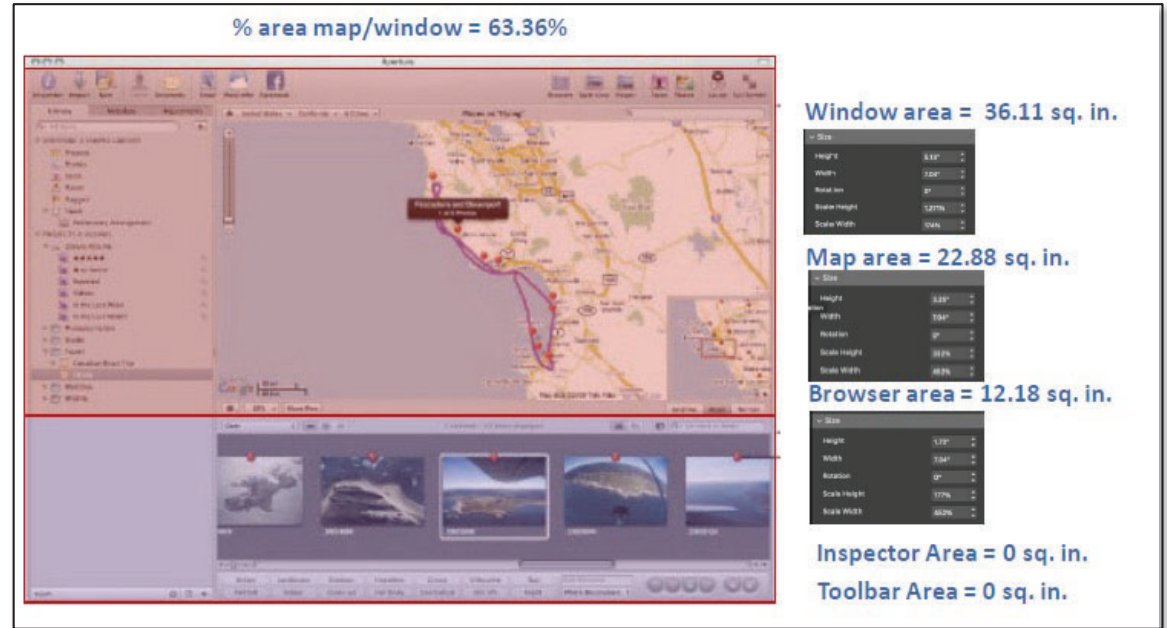
EX1087, 4; Reply (-00032), 19-20

> Q.· · My question was, what is the percentage of the window that the map area makes up when you have hidden the inspector pane and the toolbar pane and allocated to the toolbar area to the map area?
>
> MR. SCHWARTZ:· Object to form and scope.
>
> 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.**

EX1089, 347:9-20 (emphasis added); Reply (-00032), 19-20

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EX1087, EX1089 – Dr. Surati
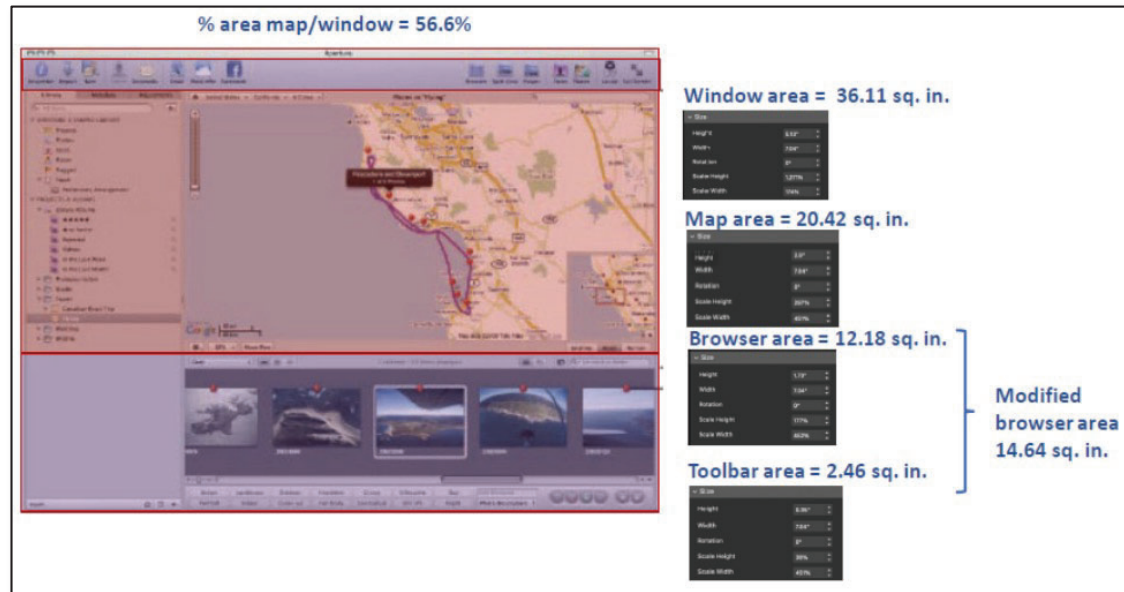
> Q.· · Now we're on 5.· So for this one the question I have is, if you assume that the inspector and toolbar are hidden and the space that was previously occupied by the toolbar is allocated to the browser window, what would be the percentage of the window size that's taken up by the map area?
>
> MR. SCHWARTZ:· Objection to form and scope.
>
> 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.**

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
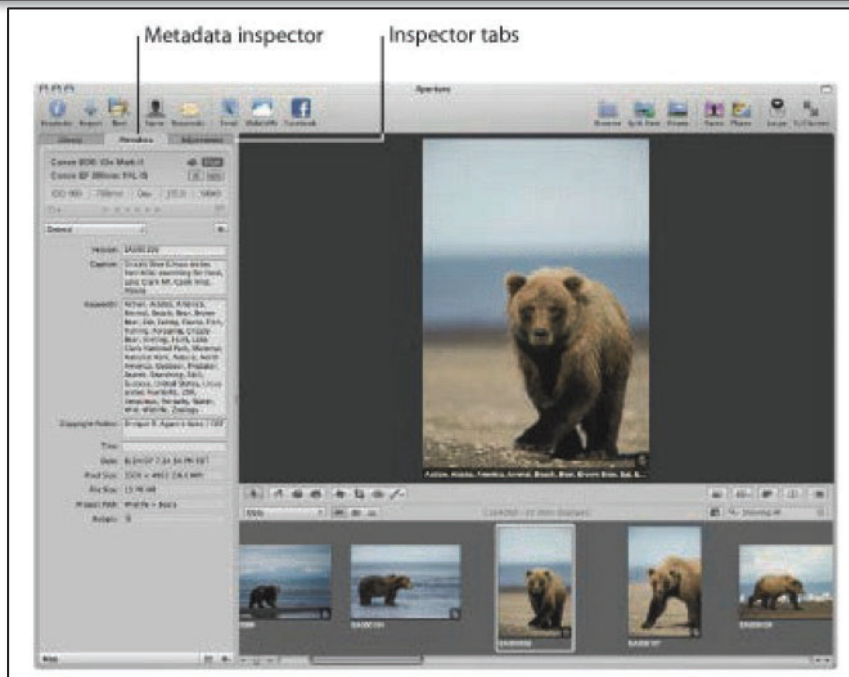IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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Petition (-00032)

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. … The images displayed in the Browser … are displayed on the bottom right of the A3UM application interface and the Map pane is displayed on the bottom left (so are not "*overlaid on the [first/second] map image*"). EX1005, 30, 437, 458-459; EX1003, ¶188. A3UM discloses its interface comprising a "Metadata Inspector":
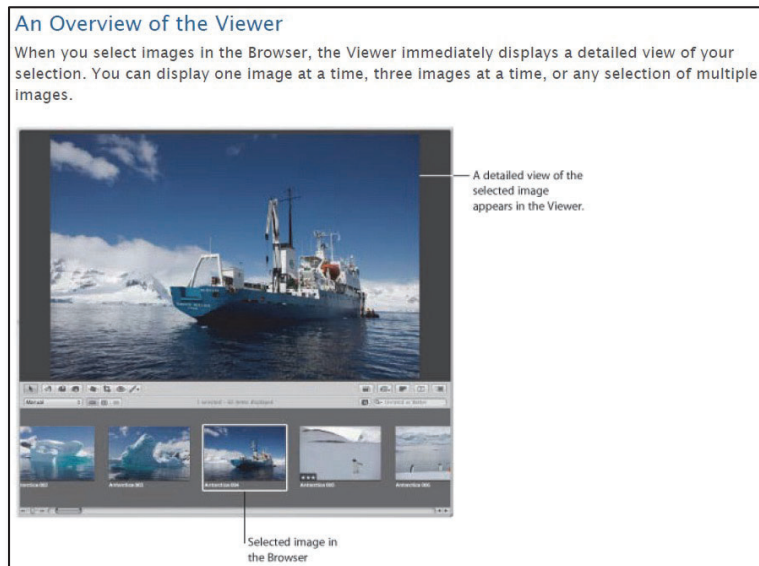
Petition (-00032), 50-51 (emphasis added)

EX1005, 21;
Petition (-00032), 51

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EX1003 – Dr. Terveen

186. <u>A3UM</u> discloses that selecting a pin on the Places 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 ("The selected pin turns orange, and the image or images associated with the location marked by the orange pin are selected in the Browser.") 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 […].

An Overview of the Viewer
When you select images in the Browser, the Viewer immediately displays a detailed view of your selection. You can display one image at a time, three images at a time, or any selection of multiple images.

A detailed view of the selected image appears in the Viewer.

Selected image in the Browser

EX1003, ¶ 186 (emphasis added); Petition (-00032), 50-51

EX1005, 251; Petition (-00032), 50; Reply (-00032), 21

Patent Owner Response (-00032)

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 Places map above it. Ex. 2025, ¶¶167-69. For instance, when 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 without needing to take additional steps. *Id.*, ¶167.

 Petitioner asserts that a POSITA would substantially redesign the A3UM Places view to replace the map when selecting a pin "to improve the user experience." Petition, 55. The only "improvement" identified by Petitioner is "reducing the number of steps between selecting a map location and seeing an image with that location." *Id.*; Ex. 1003, ¶197. To the contrary, Petitioner's modification requires additional steps to investigate locations on the Places map: if a user clicked a map pin, the map disappears, which not only removes information but requires the user to take additional steps to navigate back to the map. Ex. 2025, ¶170. Thus, Petitioner's proposed modification actually adds steps and clicks for a user to enjoy the benefits of the interplay between images in the Browser and pins on the map. *Id.* This is yet another reason why a POSITA would ***not*** modify A3UM this way.

POR (-00032), 59-60 (emphasis added)

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182. A3UM as modified by Belitz would thus use an interface that displays, in response to clicking or tapping on one of Belitz's thumbnails on the map (*"a click or tap of the [first/second] user selectable thumbnail image"*), a modified Places interface view (comprising viewer, browser, inspector, and toolbar) that is focused on the selected location (*"displaying a [first/second] location view on the video display device"*) such that it displays location names on the tool tip location name, location names in the image file names, and within and above the Map Pane (*"(i) a [first/second] location name corresponding to the [first/second] geotag"*), as well as representations of the digital images with that location displayed in the browser (*"(ii) a scaled replica of each of the digital photographs or images or videos in the [first/second] set of digital files"*). EX1005, 436-438.

EX1003, ¶ 182; Petition (-00032) (emphases added), 49; Reply (-00032), 33

Location pin

Images shot in the selected location
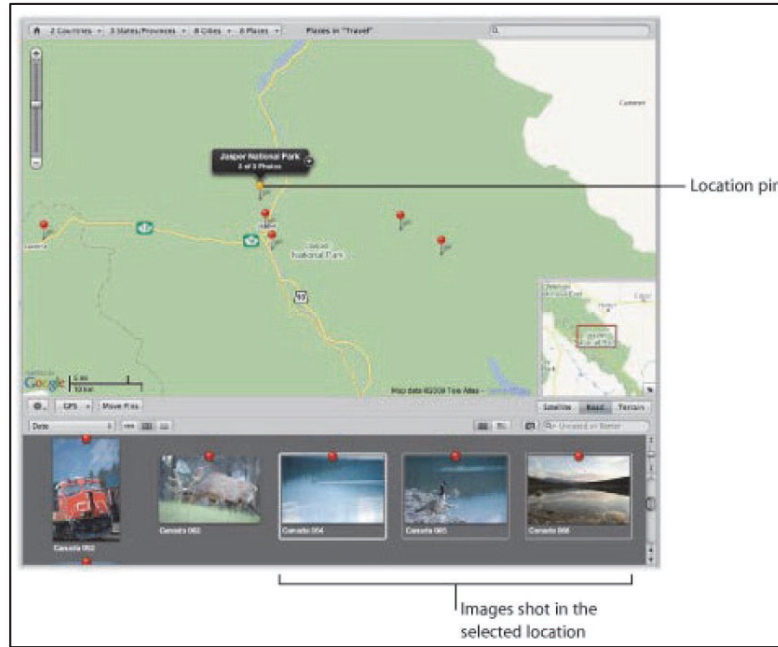
EX1005, 437; Petition (-00032), 50; Reply (-00032), 21-22, 29

To view the images associated with a location
1. Do one of the following:
   - In the Library inspector, select Places.
   - Select an item in the Library inspector containing images that already have location information assigned to them, then click the Places button in the toolbar.

Places button

Faces Places Full Screen

The Aperture main window switches to Places view. Red location pins mark the locations where images or groups of images were shot.
2. 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; Petition (-00032), 47-50; Reply (-00032), 21

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EX1003 – Dr. Terveen; EX1005 – A3UM

189. . . . From the Places view, a user can select the "Map pane of the Metadata inspector" to display a Map Pane ("*a [first/second] map image*") "with a red pin in the center of the map indicating where the image was shot". . .

EX1003, ¶ 189; Petition (-00032), 52; Reply (-00032), 25
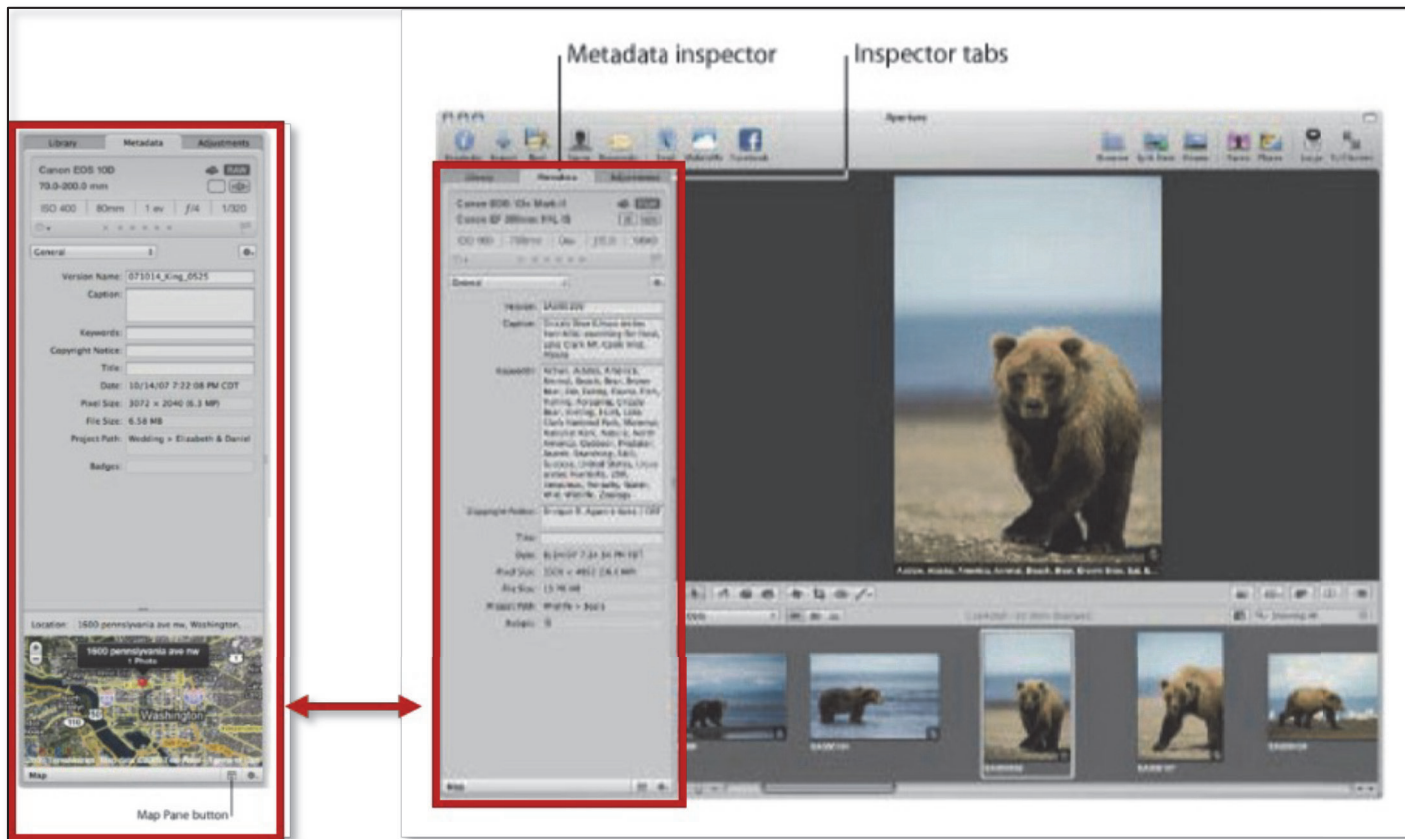
EX1005, 21, 459; Petition (-00032), 51-52; Reply (-00032), 22-23

EX1003 – Dr. Terveen; EX1005 – A3UM

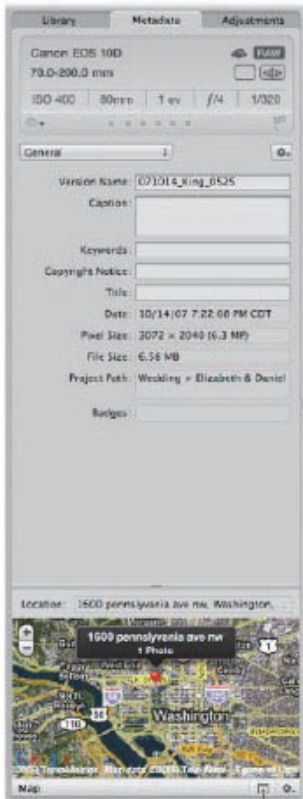**Viewing Location Information Using the Metadata Inspector**

You can view location information assigned to an image using the controls in the Map pane of the Metadata inspector.

▼ **To view an image's location information using the Map pane of the Metadata inspector**

1. In the Browser, select an image whose location information you want to view.
2. In the Metadata inspector, click the Map Pane button.

The Map pane appears, with a red pin in the center of the map indicating where the image was shot.

Map Pane button

189. A3UM further discloses displaying location information assigned to selected images.
EX1005, 58-60, 458-459.

EX1003, ¶ 189; Petition (-00032), 52;
Reply (-00032), 25

Working with Location Information in the Metadata Inspector

In addition to working with location information in Places view and Projects view, you can also work with location information in the Map pane of the Metadata inspector. The Map pane of the Metadata inspector provides a convenient means of modifying an image's location information without having to switch to Places view. For more information about using the controls in the Map pane of the Metadata inspector, see the following sections:

- "Viewing Location Information Using the Metadata Inspector"
- "Changing the Map View in the Metadata Inspector"
- "Assigning Location Information Using the Metadata Inspector"
- "Modifying Location Information Using the Metadata Inspector"
- "Removing Location Information Using the Metadata Inspector"

EX1005, 458; Petition (-00032), 52-53;
Reply (-00032), 21-22, 25

EX1005, 459; Petition (-00032), 52-53;
Reply (-00032), 21-22, 25

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'658 Patent – Claim 1

1. A computer-implemented method ... 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;

EX1001 (-00033), 35:13-34 (emphases added); Petition (-00033), 36-44

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'658 Patent – Claim 1; Patent Owner Response & Sur-Reply (-00033); Petition (-00033)

1. A computer-implemented method ... 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:

EX1001 (-00033), 35:13-27 (emphases added); Petition (-00033), 36-40

Patent Owner

application view that is distinct from the map view, the first location view, and the second location view

POR (-00033), 15

application view that is distinct from the map view

PO Sur-Reply (-00033), 8

Petitioner

"ordinary and customary meaning"

Petition (-00033), 12

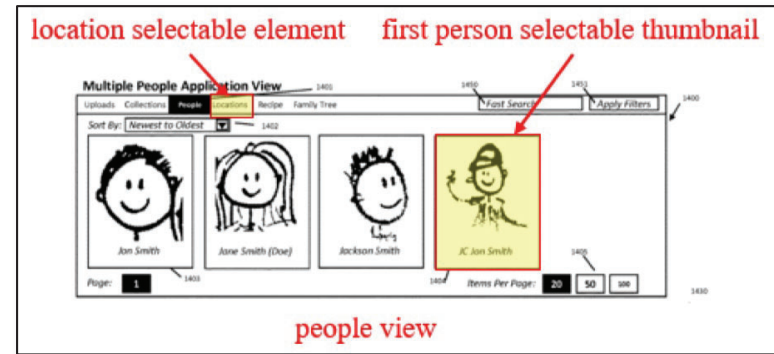a type of application view

Reply (-00033), 2

Patent Owner Response (-00033); EX1001(-00033) – '658 Patent

> FIG. 35, which illustrates an "Uploads Application View," 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; Ex. 2025, ¶132; *see also* Ex. 1001, 3:62 (describing "Recipe Application View"); Ex. 2025, ¶133.
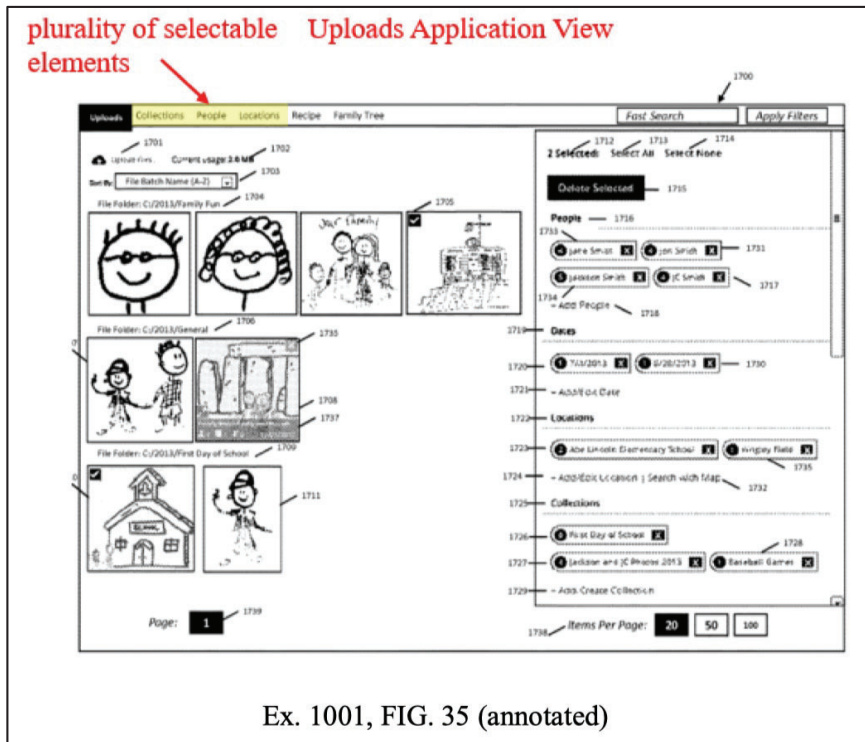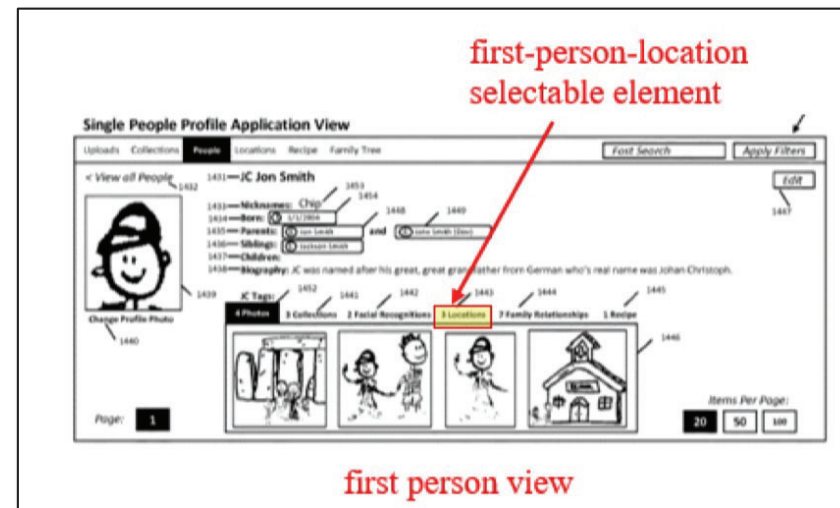
Ex. 1001, FIG. 35 (annotated)

EX1001 (-00033) – '658 Patent

Application Views—The Application Views utilizes the Application's ability to associate Digital Tags to Digital Files and display them in customized views such as Uploads, Collections, Slideshow, Location, Timeline, Family Tree, People Profile, and Recipes. 20

EX1001 (-00033), 9:18-22; Reply (-00033), 1

Similarly, at EX1001, 3:58-62:

FIG. 32 is a screenshot of People Application Views.
FIG. 33 is a screenshot of Collection Application Views.
FIG. 34 is a screenshot of Location Application Views.
FIG. 35 is screenshot of Uploads Application View.
FIG. 36 is a screenshot of Recipe Application View.

EX1001, 3:58-62

Reply, 1 (citing EX1001 (-00033), 3:58-62)

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EX1001 (-00033) – '658 Patent

Application (**1600**). This view can be seen by selecting
5 "Locations" (**1605**) from any of the Application Views
within the Application. The locations can be listed in various

If within any of the Application Views the user selects a 50
Digital File (**0715**), the Digital File is then displayed in a
Slideshow View (**0716**) where the user can again select an
Application Dot-Tag (**0701**) and start the continuous link of
Application Dot-Tag functionality over again. Also within

In FIG. **33**, both of the Collection Application Views are 35
illustrated. The first Collection Application View is used to
display all the collections that were created within the user's
Application (**1500**). This view can be seen by selecting
"Collections" (**1501**) from any of the Application Views
within the Application. The collections can be listed in 40

EX1001 (-00033), 24:4-6, 21:50-54, 23:35-40; Reply (-00033), 2

EX1001 (-00033) – '658 Patent

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 including displaying: … (i) a first person selectable thumbnail image . . .

7.   The computer-implemented method of claim 5, further comprising responsive to a click or tap of the first person selectable thumbnail image, *displaying a first person view*, the displaying *the first person view including* displaying (i) the name associated with the first person and (ii) a scaled replica of each of the digital photographs and videos in the third set of digital photographs.

EX1001 (-00033), 36:28-34, 36:56-62 (emphases added); Petition (-00033), 51-54, 61-62

8.   The computer-implemented method of claim 7, wherein the *displaying the first person view* further includes displaying *a first-person-location selectable element*.

11.   The computer-implemented method of claim 10, wherein the *displaying the second person view* further includes displaying *a second-person-location selectable element*.

EX1001 (-00033), 36:63-65, 37:12-15 (emphases added); Petition (-00033), 62-65

Patent Owner

first/second-person-location selectable element in the first/second person view that is distinct from the location selectable element and the second/first-person-location selectable element in the second/first person view

POR (-00033), 11

Petitioner

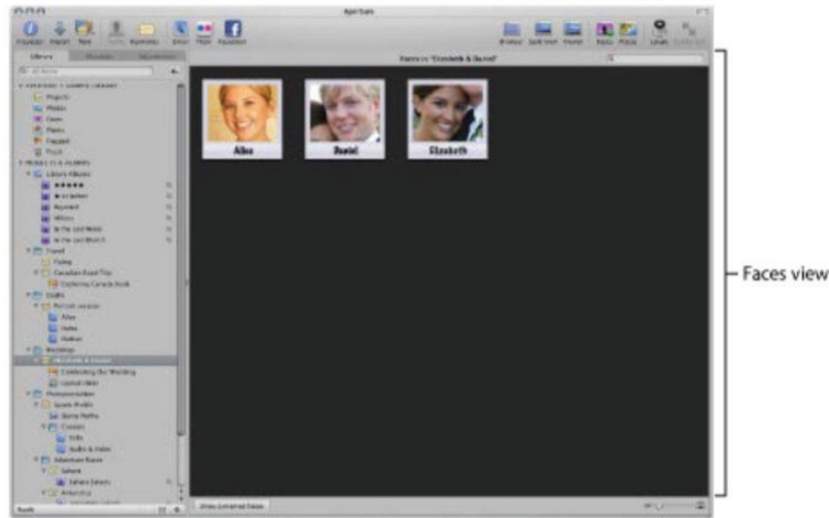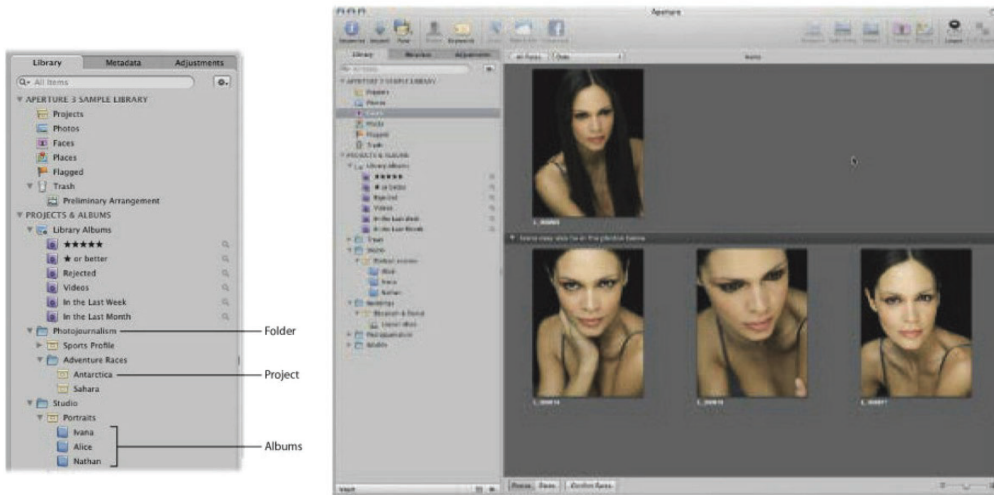a location selectable element in the [first/second] person view

Reply (-00033), 4-6

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE
IPR2022-00031 (US 10,621,228) / IPR2022-00032 (US 9,552,376) IPR2022-00033 (US 10,423,658) /PGR2022-00006 (US 11,017,020)

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EX1005 – A3UM; Patent Owner Response (-00033)

Faces view

EX1005, 29; Petition (-00033), 18, 51-53, 58

location selectable element   first person selectable thumbnail

people view

POR (-00033), 74 (citing EX1001, Fig. 32)

Folder

Project

Albums

EX1005, 9, 419; Petition (-00033), 62-63
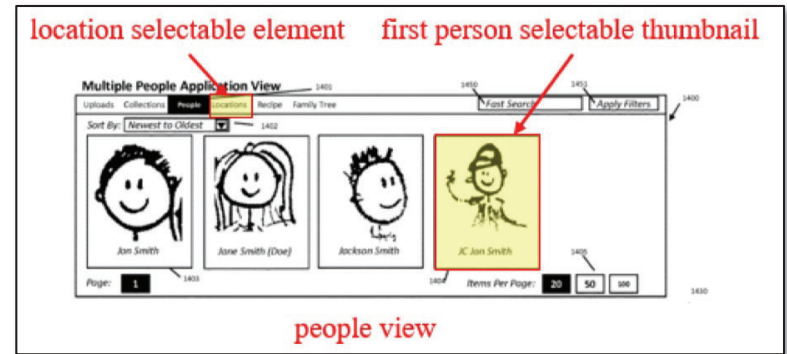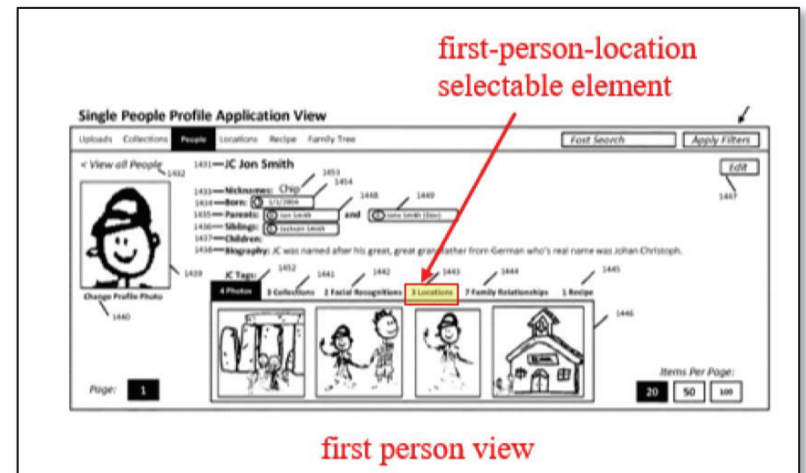
first-person-location selectable element

first person view

POR (-00033), 74 (citing EX1001, Fig. 32)

Arguments Across Proceedings

	Issue #1 (claim or page numbers)				
Proceeding	Claims	Petition	Patent Owner Response	Petitioner Reply	Patent Owner Sur-Reply
IPR2022-00031 ('228)	1	49-53	45-51	18-20	9-12
IPR2022-00032 ('376)	-	-	-	-	-
IPR2022-00033 ('658)	5	55-58	65-71	28-29	20-22
PGR2022-00006 ('020)	24	77-84	95-100	36-37	26-28

Arguments Across Proceedings

Proceeding	Claims	Petition	Patent Owner Response	Petitioner Reply	Patent Owner Sur-Reply
Issue #2 **(claim or page numbers)**					
IPR2022-00031 ('228)	15	72-73	64-69	25-28	22-24
IPR2022-00032 ('376)	1, 12	50-53, 76-77	52-61, 78-79	21-24, 33	14-18, 25
IPR2022-00033 ('658)	3, 4	75-78	79-82	34	25-27
PGR2022-00006 ('020)	1, 31	31-35	68-78	26-29	19

Arguments Across Proceedings

	Issue #3 (claim or page numbers)				
Proceeding	Claims	Petition	Patent Owner Response	Petitioner Reply	Patent Owner Sur-Reply
IPR2022-00031 ('228)	-	-	-	-	-
IPR2022-00032 ('376)	-	-	-	-	-
IPR2022-00033 ('658)	8-12	61-65	71-79	29-31	22-24
PGR2022-00006 ('020)	1, 31	55-57	60-63	24-26	13-15

Arguments Across Proceedings

Issue #4 (claim or page numbers)					
Proceeding	Claims	Petition	Patent Owner Response	Petitioner Reply	Patent Owner Sur-Reply
IPR2022-00031 ('228)	1	24-31	52-60	20-24	12-15
IPR2022-00032 ('376)	1	27-30, 42-49	63-69	27-29	18-22
IPR2022-00033 ('658)	1	24-28, 39-44	57-65	23-28	14-19
PGR2022-00006 ('020)	-	-	-	-	-

Arguments Across Proceedings

			Issue #5 (claim or page numbers)		
Proceeding	**Claims**	**Petition**	**Patent Owner Response**	**Petitioner Reply**	**Patent Owner Sur-Reply**
IPR2022-00031 ('228)	-	28-30	43-45	16-17	17-18
IPR2022-00032 ('376)	-	31-36	46-47; 69-71	17, 31	22-24
IPR2022-00033 ('658)	-	28-30, 81-84	55-56	6, 28	19-20
PGR2022-00006 ('020)	-	-	-	-	-