

### Exhibit 815-07 - Invalidity of U.S. Patent No. 11,017,815 in view of Bryant '418

This chart pertains to U.S. Patent No. 11,017,815 (the “’815 patent”). This chart is subject to all reservations, objections, and disclaimers in Samsung’s Invalidity Contentions and any amendment, supplement, or modification thereof, which are incorporated herein by reference in their entirety. This chart refers to the following prior art references:

US7443418B2 (“Bryant ’418”) was filed on April 11, 2003 and issued October 28, 2008 and therefore qualifies as prior art to the ’815 patent under at least pre-AIA 35 U.S.C. § 102(e).

Discovery is ongoing and Samsung will update this chart pursuant to Federal Rule of Civil Procedure 26(e), the Local Rules, and the Orders of record in this matter subject to further investigation and discovery regarding the reference, the Court’s construction of the claims at issue, and discovery generally, including third-party discovery.

Bryant ’418 anticipates the Asserted Claims of the ’815 Patent (claims [1-4, 6, and 9-121-25 and 27](#), as set forth in Maxell’s infringement contentions, served on January 11, 2024), [and renders obvious, in combination with other prior art identified in the cover pleading or herein, and/or in combination with the general knowledge of a person having ordinary skill in the art, the Asserted Claims of the ’815 Patent \(claims 5, 7-10, 13-25, and 27, as set forth in Maxell’s infringement contentions, served on January 11, 2024\)](#). To the extent it is found Bryant ’418 does not expressly disclose certain limitations in the Asserted Claims, Bryant ’418 renders obvious the Asserted Claims, either alone or in combination with other prior art identified in the cover pleading or herein, and/or in combination with the general knowledge of a person having ordinary skill in the art. In these contentions, Samsung has relied in part on Maxell’s infringement contentions. In those contentions, Maxell appears to pursue overly broad claim constructions in an effort to assert infringement where none exists and to accuse products that do not infringe the claims. Samsung’s assertion that a particular limitation is disclosed by a prior art reference and/or is disclosed in a particular manner may be based in part on Maxell’s apparent claim interpretations. Samsung does not admit that Maxell’s apparent claim interpretations are supportable or proper or that the claim limitations in question are definite or otherwise amenable to construction.

Samsung has endeavored to cite to the most relevant portions of the identified prior art, but other portions of the identified prior art may additionally disclose, either expressly or inherently, and/or render obvious one or more limitations of the asserted claims. The inclusion of specific details in some areas is not a concession that such details are required or that the omission of similar details in other areas is a defect. These citations to portions of any reference in this chart are exemplary only. Thus, Samsung reserves the right to rely on: (1) uncited portions of the identified prior art; (2) other prior art not identified herein; (3) references that show the state of the art (irrespective of whether such references themselves qualify as prior art to the asserted patents); (4) factual testimony from the inventors or authors of the prior art references, or purveyors of prior art devices; and/or (5) expert testimony, to provide context to or aid in understanding the prior art and the state of the art at the time of the alleged inventions.

| <b>’815 Patent Claim Limitation</b>                       | <b>Bryant ’418 Exemplary Disclosure</b>                                                                             |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| [1pre] 1. An information processing apparatus comprising: | To the extent the preamble is limiting, Bryant ’418 discloses “[a]n information processing apparatus.” For example: |

Bryant '418 at FIG. 1

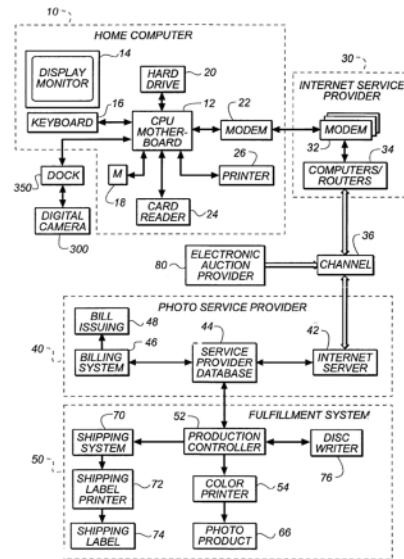


FIG. 1

Bryant '418 at 4:47-57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.

Bryant '418 at 4:58-5:12

The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                              | <p>distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:30–37</p> <p>The CPU motherboard 12 also communicates with a card reader 24, which can read and write data on a removable flash memory card 330 (shown in FIG. 2) used in the digital camera 300, which is an alternative way of transferring images and control files from the digital camera 300 to the home computer 10. The home computer 10 also includes a printer 26, which communicates with the CPU motherboard 12 over a suitable interface, such as the USB interface.</p> <p>Bryant '418 at 5:38–40</p> <p>In alternative embodiments, other devices, such as a television set-top box or Internet appliance, could be used in place of the home computer 10.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [1a] a network interface;    | Bryant '418 discloses “a network interface.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

Bryant '418 at FIG. 1

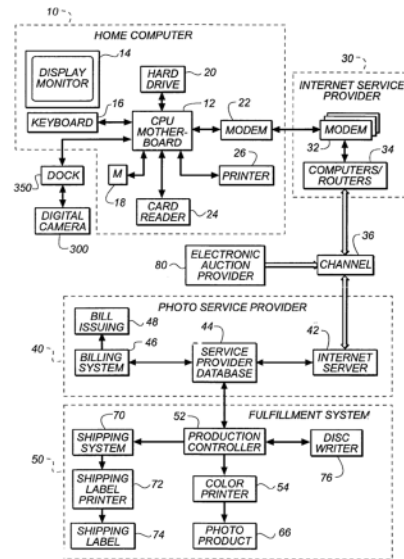


FIG. 1

Bryant '418 at 4:47-57

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Bryant '418 at 4:58-5:12

The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|                              | <p>distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:43–50</p> <p>The ISP 30, for example, Earthlink Network, Inc. of Pasadena, Calif., includes banks of modems 32, one of which is connected to communicate with the modem 22 of the home computer 10. The modem 32 in turn communicates with computers/routers 34 in order to provide a connection to the channel 36, which is preferably the Internet, using equipment and techniques well-known to those skilled in the art. The ISP 30 provides e-mail services using the channel 36.</p> <p>Bryant '418 at 8:29–46</p> <p>As shown in FIG. 2, an interface 342 can be used to connect between the host interface 322 in the digital camera 300 and the dock 350, which connects to the home computer 10. The interface 342 may conform to, for example, the well-known USB interface specification. Alternatively, the interface between the digital camera 300 and the home computer 10 can be a wireless interface, such as the well-known Bluetooth wireless interface or the well-known 802.11b wireless interface. The interface 342 can be used to download images from removable memory card 330 to the home computer 10, instead of using card reader 24 (FIG. 1). The interface 342 can also be used to transfer data from the home computer 10 to the firmware memory 328 in the digital camera 300. In particular, it can be used to transfer a user name and e-mail addresses from the home computer 10 to the firmware memory 328, as described in commonly-assigned U.S. patent application Ser. No. 08/977,382, filed Oct. 18, 2002, the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                   | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <p>[1b] a recording medium on which is stored a plurality of video information including first video information received wirelessly by the network interface over a network from another information processing apparatus, wherein at least some of the plurality of video information is associated with a user profile;</p> | <p>Bryant '418 discloses “a recording medium on which is stored a plurality of video information including first video information received wirelessly by the network interface over a network from another information processing apparatus, wherein at least some of the plurality of video information is associated with a user profile.” For example:</p> <p>Bryant '418 at FIG. 1</p> <p><b>FIG. 1</b></p> <p>Bryant '418 at 3:28–31</p> <p>A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.</p> <p>Bryant '418 at 3:31–35</p> <p>In one embodiment of the present invention, the grouping and classification data is stored in a database on a host computer, and can later be used in retrieving digital images and in producing hardcopy output, such as album pages.</p> |

Bryant '418 at 3:42–47

In a third embodiment, the digital camera includes a wireless modem which transmits some of the captured images to a service provider, and the grouping and classification information is used to simplify the process of selecting and organizing the images stored by a local host computer and by the service provider.

Bryant '418 at 4:5–24

Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.

Bryant '418 at 4:47–57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.

Bryant '418 at 4:58–5:12

The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:30–37</p> <p>The CPU motherboard 12 also communicates with a card reader 24, which can read and write data on a removable flash memory card 330 (shown in FIG. 2) used in the digital camera 300, which is an alternative way of transferring images and control files from the digital camera 300 to the home computer 10. The home computer 10 also includes a printer 26, which communicates with the CPU motherboard 12 over a suitable interface, such as the USB interface.</p> <p>Bryant '418 at 6:27–30</p> <p>These album feature options can be demonstrated via software programs, for example, JAVA applets, MPEG or QuickTime movies, or Shockwave files, which depict the functionality of features that the customer can choose.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>Bryant '418 at 7:23–33</p> <p>The processed digital image file is provided to a memory card interface 324, which stores the digital image file on the removable memory card 330. Removable memory cards 330 are one type of removable</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                              | <p>digital image storage medium, and are available in several different physical formats. For example, the removable memory card 330 can include memory cards adapted to the well-known PC card, Compact Flash, SmartMedia, MemoryStick, MMC or SD memory card formats. Other types of removable digital image storage media, such as magnetic hard drives, magnetic tape, or optical disks, can alternatively be used to store the digital images.</p> <p>Bryant '418 at 12:45–61</p> <p>The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [1c] a display; and          | Bryant '418 discloses “a display.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

Bryant '418 at FIG. 1

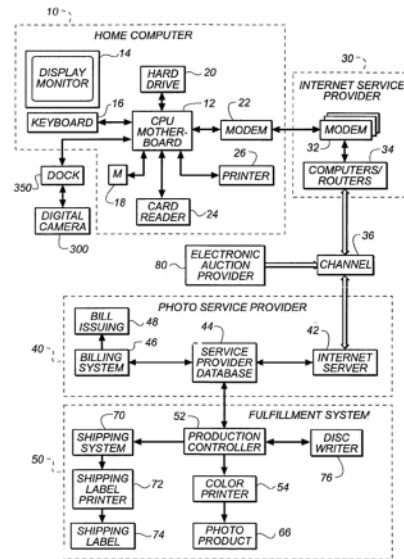


FIG. 1

Bryant '418 at FIG. 9A

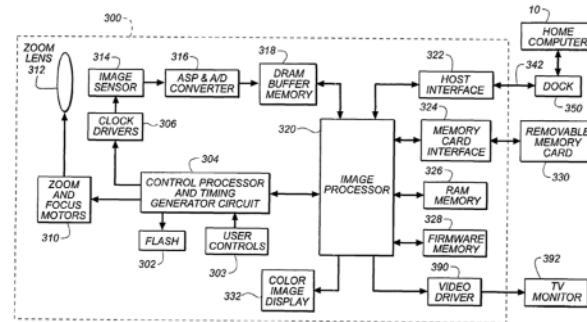


FIG. 2

Bryant '418 at 4:47-57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance

| '815 Patent Claim Limitation                             | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                          | <p>with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.</p> <p>Bryant '418 at 4:58–5:12</p> <p>The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 13:51–59</p> <p>The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [1d] a processor for controlling the display to display: | Bryant '418 discloses “a processor for controlling the display to display.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Bryant '418 at FIG. 1

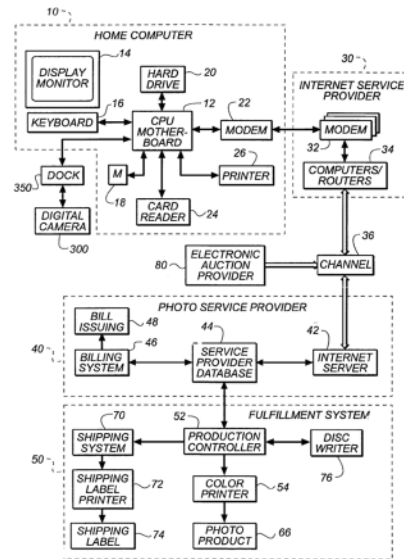


FIG. 1

Bryant '418 at 4:47-57

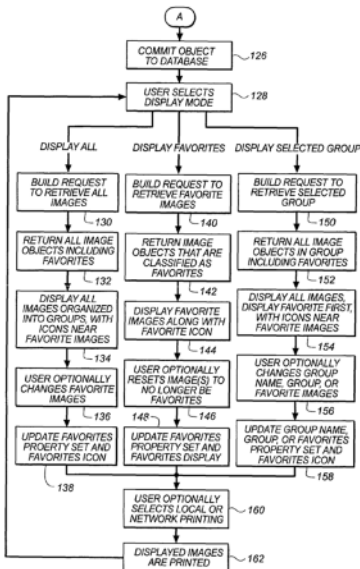
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|                              | <p>distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:13–24</p> <p>The CPU motherboard 12 is coupled to a display monitor 14 and a keyboard 16. A mouse 18 permits the user to readily communicate with the CPU motherboard 12. The home computer 10 also includes a dial-up modem 22 for communicating with an Internet Service Provider (ISP) 30 in order to connect to a channel 36, such as the Internet, in order to email images to others, or to provide images to a service provider for storage and/or printing. The CPU motherboard 12 can communicate with the digital camera 300 when the digital camera 300 is placed in a dock 350. The communication uses a suitable wired or wireless interface, such as the well-known Universal Serial Bus (USB) interface.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>Bryant '418 at 7:34–8:5</p> <p>The processor 320 performs color interpolation followed by color and tone correction, in order to produce rendered sRGB image data. The processor 320 can also provide various image sizes selected by the user, for example, 3.1 megapixel (MP) “best quality” images, 2.2 MP “better quality” images, 0.8 MP “e-mail quality” images, and 0.4 MP “web quality” images. The rendered sRGB image data is then JPEG compressed and stored as a JPEG image file on the removable memory card 330. The JPEG file uses the so-called “Exif” image format defined in “Digital Still Camera Image File Format (Exif)” version 2.1, July 1998 by the Japan Electronics Industries Development Association (JEIDA), Tokyo, Japan. This</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                  | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>format includes an Exif application segment that stores particular image metadata, for example, the date and time the picture was captured, the lens f/number and other camera settings, and image captions or comments that can be selected or entered by the camera user. In some embodiments of the present invention, this metadata can include metadata identifying favorite images and groups of images. In other embodiments, the favorites and grouping metadata is provided in a separate control file. The control processor and timing generator 304 also provide a real-time clock value to the image processor 320, which can stored this value as date/time metadata in each image file.</p> <p>The processor 320 also creates a low-resolution “thumbnail” size image, which can be created as described in commonly-assigned U.S. Pat. No. 5,164,831, entitled “Electronic Still Camera Providing Multi-Format Storage Of Full And Reduced Resolution Images” to Kuchta, et al., the disclosure of which is herein incorporated by reference. In a preferred embodiment, this thumbnail image has 160×120 pixels, to conform to the DCF rules described later, and is stored in RAM memory 326 and supplied to a color LCD image display 332. After images are captured, they can be quickly reviewed on the color LCD image display 332 by using the thumbnail image data. The digital camera 300 can also include a video output driver 390 for displaying the captured images and the graphical user interface on a separate TV monitor 392.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[1e] a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification, the first group of video information being configured to allow a user to edit, wherein the first group of video information and the second</p> | <p>Bryant '418 discloses “a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification, the first group of video information being configured to allow a user to edit, wherein the first group of video information and the second group of video information are part of the plurality of stored video information.” For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| '815 Patent Claim Limitation                                                                 | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>group of video information are part of the plurality of stored video information, and</p> | <p>Bryant '418 at FIG. 3B</p>  <pre> graph TD     A((A)) --&gt; 126[COMMIT OBJECT TO DATABASE]     126 --&gt; 128[USER SELECTS DISPLAY MODE]     128 --&gt; 129[DISPLAY ALL]     128 --&gt; 130[DISPLAY FAVORITES]     128 --&gt; 131[DISPLAY SELECTED GROUP]     129 --&gt; 132[BUILD REQUEST TO RETRIEVE ALL IMAGES]     132 --&gt; 134[RETURN ALL IMAGE OBJECTS INCLUDING FAVORITES]     134 --&gt; 136[DISPLAY ALL IMAGES ORGANIZED INTO GROUPS, WITH ICONS NEAR FAVORITE IMAGES]     136 --&gt; 138[USER OPTIONALLY CHANGES FAVORITE IMAGES]     138 --&gt; 140[UPDATE FAVORITES PROPERTY SET AND FAVORITES ICON]     140 --&gt; 142[USER OPTIONALLY SELECTS LOCAL OR NETWORK PRINTING]     142 --&gt; 144[DISPLAYED IMAGES ARE PRINTED]     130 --&gt; 133[BUILD REQUEST TO RETRIEVE FAVORITE IMAGES]     133 --&gt; 135[RETURN IMAGE OBJECTS THAT ARE CLASSIFIED AS FAVORITES]     135 --&gt; 137[DISPLAY FAVORITE IMAGES ALONG WITH FAVORITE ICON]     137 --&gt; 139[USER OPTIONALLY RESETS IMAGES TO NO LONGER BE FAVORITES]     139 --&gt; 141[UPDATE FAVORITES PROPERTY SET AND FAVORITES DISPLAY]     141 --&gt; 143[USER OPTIONALLY SELECTS LOCAL OR NETWORK PRINTING]     143 --&gt; 145[DISPLAYED IMAGES ARE PRINTED]     131 --&gt; 132[BUILD REQUEST TO RETRIEVE SELECTED GROUP]     132 --&gt; 134[RETURN ALL IMAGE OBJECTS IN GROUP INCLUDING FAVORITES]     134 --&gt; 136[DISPLAY ALL IMAGES, DISPLAY FAVORITE FIRST, WITH ICONS NEAR FAVORITE IMAGES]     136 --&gt; 138[USER OPTIONALLY CHANGES GROUP NAME, GROUP OR FAVORITE IMAGES]     138 --&gt; 140[UPDATE GROUP NAME, GROUP OR FAVORITES PROPERTY SET AND FAVORITES ICON]     140 --&gt; 142[USER OPTIONALLY SELECTS LOCAL OR NETWORK PRINTING]     142 --&gt; 144[DISPLAYED IMAGES ARE PRINTED]   </pre> <p><b>FIG. 3B</b></p> |

Bryant '418 at FIG. 9A

**First area**

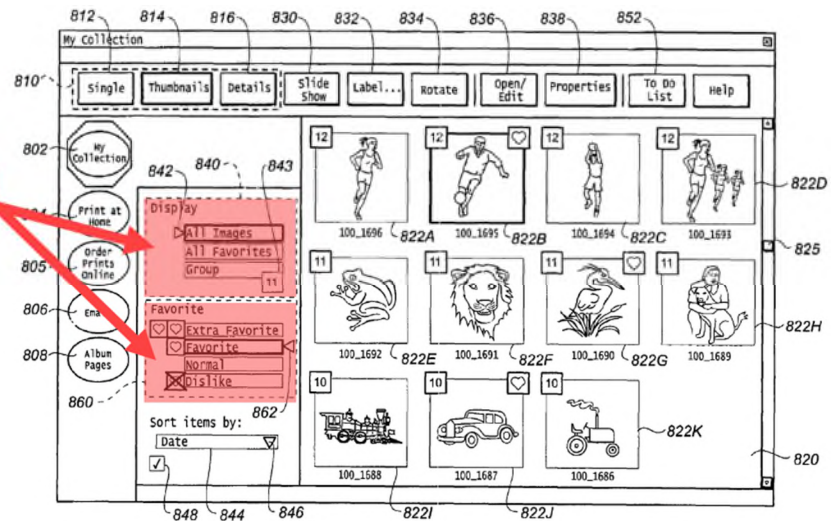


**FIG. 9A**

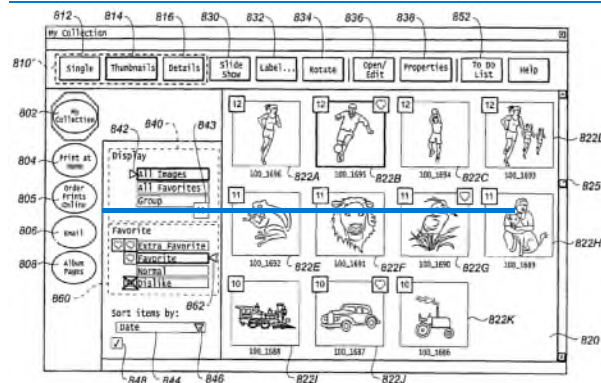


**FIG. 9A**

Bryant '418 at FIG. 9B

'815 Patent Claim Limitation

Bryant '418 Exemplary Disclosure

First area

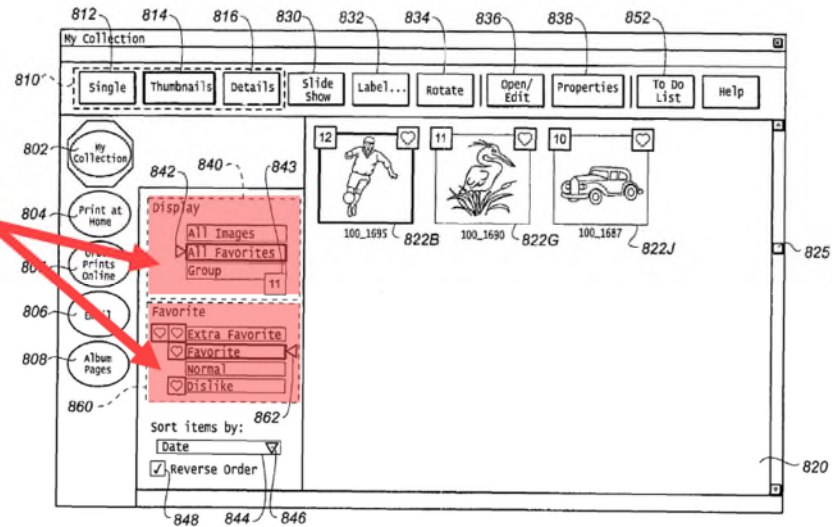


FIG. 9B

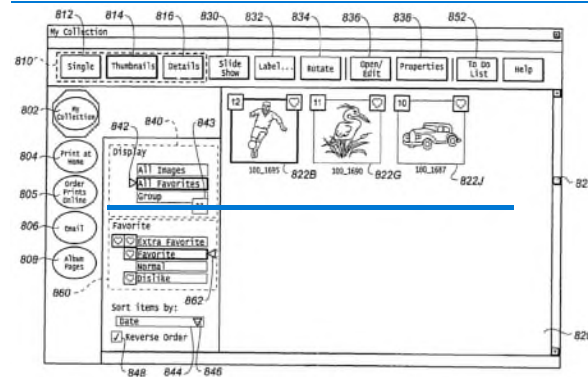


FIG. 9B

Bryant '418 at FIG. 9C

**First area**

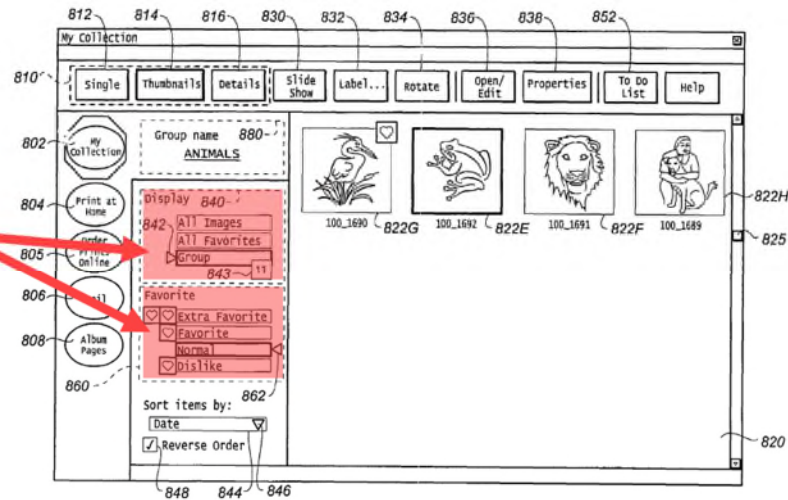


**FIG. 9C**

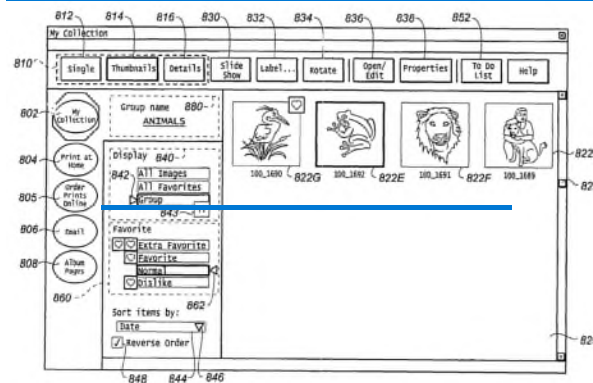


**FIG. 9C**

Bryant '418 at 3:50-59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a "favorite". For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.</p> <p>Bryant '418 at 3:60–4:4</p> <p>Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images can be classified between a range of –10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and –10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 4:33–39</p> <p>The affective information, such as whether an image is classified as a “favorite”, can be associated with a digital image by storing the classification data within the image file, for example, using a TIFF IFD within an Exif image file. Alternatively, the classification data can be stored in a separate file, such as a “Favorites” file, that provides a list of all of the stored images that are classified as favorites.</p> <p>Bryant '418 at 4:40–46</p> <p>Affective information can be manually entered by a user, for example, using pushbuttons, a touch screen, or voice recognition, or can be collected automatically, as described in commonly assigned U.S. patent application Ser. No. 10/304,037 entitled “Imaging Method and System for Health Monitoring and Personal Security” by Elena Fedorovskaya et al. the disclosure of which is incorporated herein by reference.</p> <p>Bryant '418 at 11:63–12:12</p> <p>In block 114 of FIG. 3A, the user identifies one or more images as “favorite” images. The user accomplishes this by pressing the “favorite” button 364 (see FIG. 4) while the favorite image is displayed. In block 115, after the user presses the “favorite” button 364, the image processor 320 in the digital camera 300 updates the GUI screen displayed on the color LCD display 332 to be as shown in FIG. 7B. The GUI screen 500B in FIG. 7B includes a “favorite” indicator 506B, for example, the heart shaped icon shown in FIG. 7B. In block 116, the image processor 320 in the digital camera 300 updates the FAVGROUP.MRK control file shown in FIG. 6 to indicate that the image has been identified as a favorite image. For example, lines 17-20 are appended to the file to indicate that image file 434 in FIG. 5</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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|                              | <p>named 100_1687.JPG is a favorite image. The user can identify additional favorite images in blocks 112-116 of FIG. 3A, such as image files 442 and 450, which are identified in lines 21 through 28 in FIG. 6.</p> <p>Bryant '418 at 13:60–14:4</p> <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnlail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagenamne” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |

## '815 Patent Claim Limitation

[1f] a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information,

## Bryant '418 Exemplary Disclosure

Bryant '418 discloses or renders obvious “a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information.” For example:

Bryant '418 at FIG. 3B

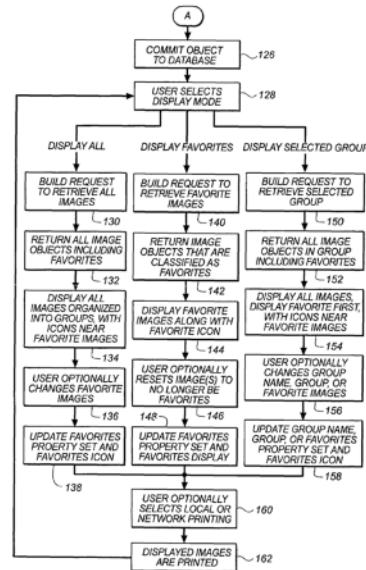


FIG. 3B

Bryant '418 at FIG. 9A

**Second  
area**

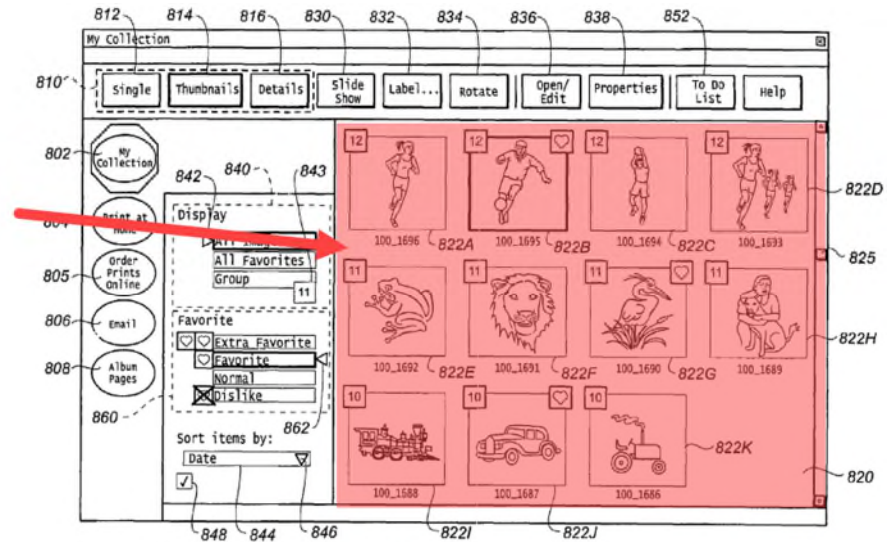


**FIG. 9A**

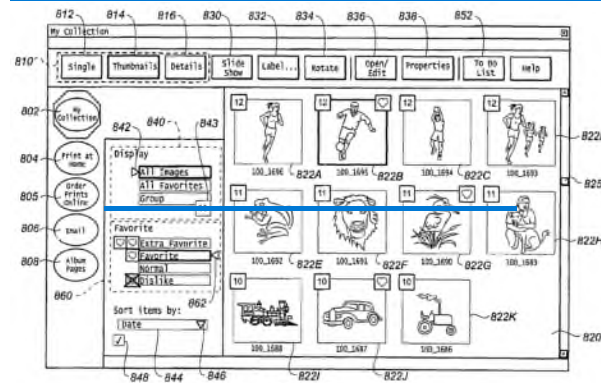


**FIG. 9A**

Bryant '418 at FIG. 9B

'815 Patent Claim Limitation

Bryant '418 Exemplary Disclosure

**Second  
area**

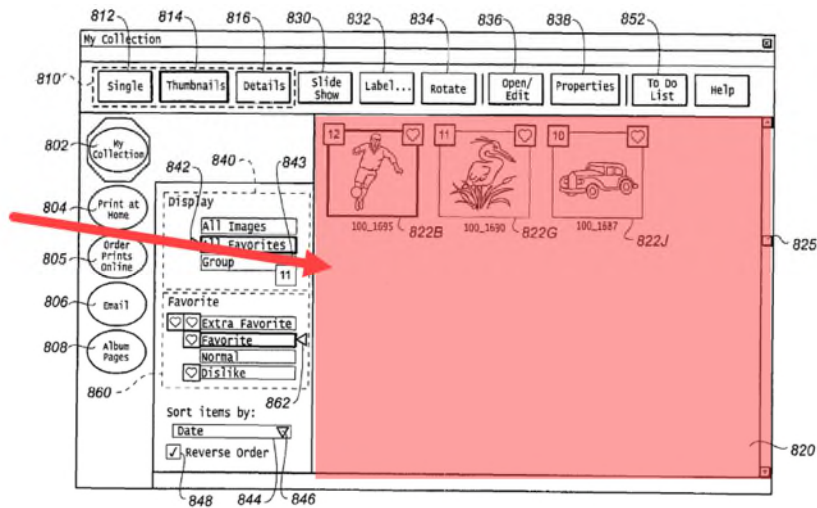


**FIG. 9B**

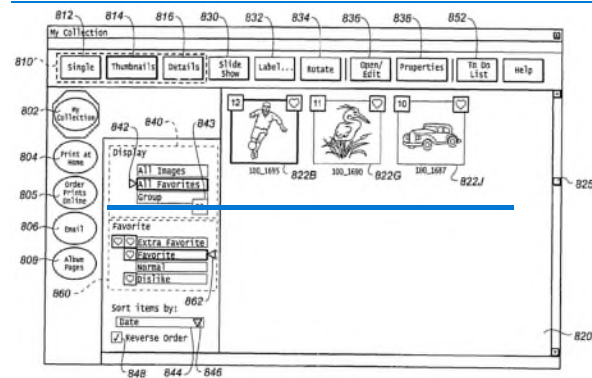


**FIG. 9B**

Bryant '418 at FIG. 9C

**Second  
area**

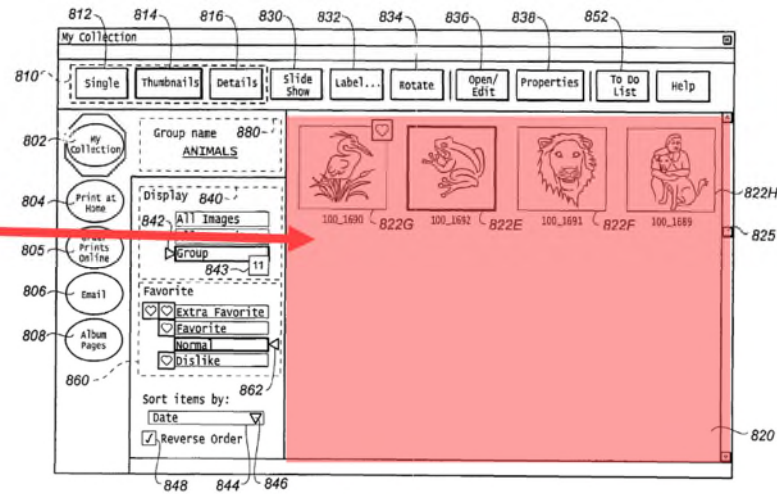


**FIG. 9C**

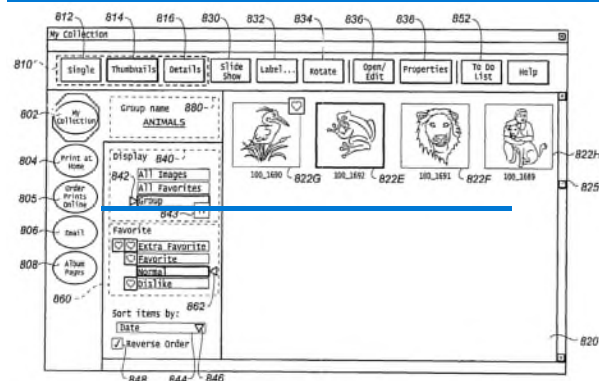


**FIG. 9C**

Bryant '418 at 3:50-59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a “favorite”. For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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|                              | <p>these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.</p> <p>Bryant '418 at 3:60–4:4</p> <p>Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images can be classified between a range of –10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and –10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 10:20–24</p> <p>FIG. 3A and 3B, taken together, depict a flow diagram showing a first embodiment of a method in accordance with the present invention for grouping images, identifying favorite images, and organizing the images, implemented using the system described earlier in relation to FIG. 1 and FIG. 2.</p> <p>Bryant '418 at 13:51–59</p> <p>The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).</p> <p>Bryant '418 at 13:60–14:4</p> <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> |

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                                                                                                                           | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                        | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[1g] wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area,</p> | <p>Bryant '418 discloses “wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area.” For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Bryant '418 at FIG. 3B

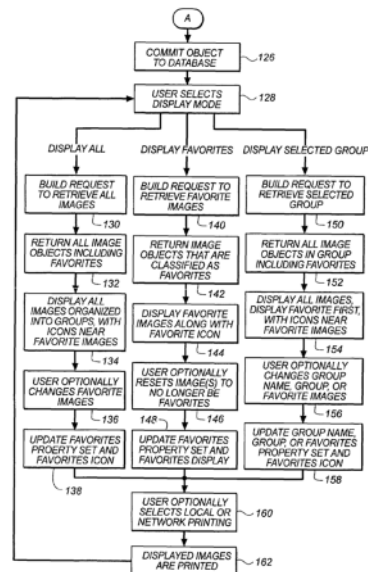


FIG. 3B

Bryant '418 at FIG. 9A

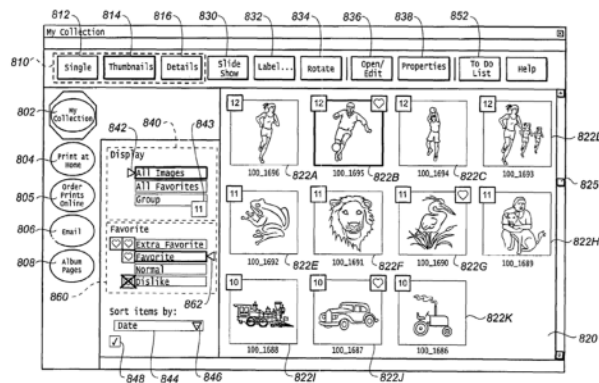


FIG. 9A

Bryant '418 at FIG. 9B

## '815 Patent Claim Limitation

## Bryant '418 Exemplary Disclosure

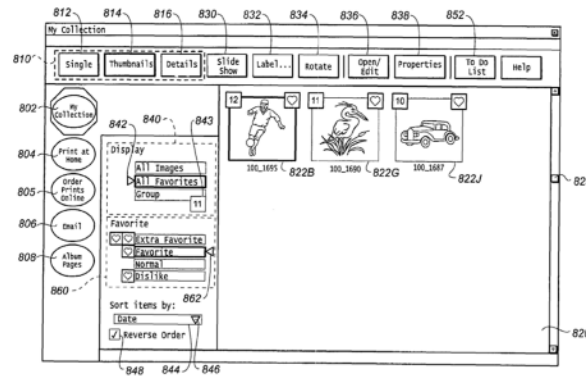


FIG. 9B

### Bryant '418 at FIG. 9C

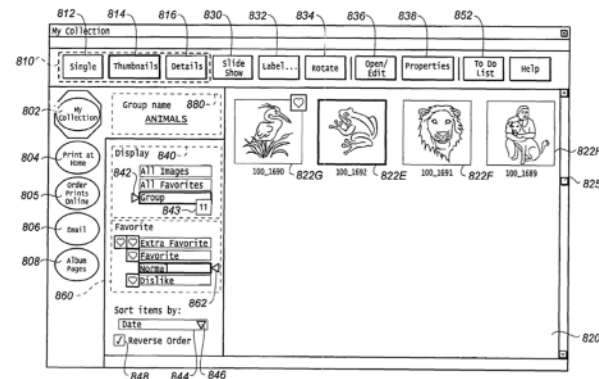


FIG. 9C

### Bryant '418 at 13:51-59

The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnlail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and -7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> |

| '815 Patent Claim Limitation                                                                                                 | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                              | <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., "ANIMALS ") in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the "Print at Home" icon 804 or the "Order Prints Online" icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled "Effective Transfer Of Images From A User To A Service Provider" to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the "Album Pages" icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [1h] wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the | Bryant '418 discloses "wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area." For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## '815 Patent Claim Limitation

second group of video information  
in the second area,

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 3B

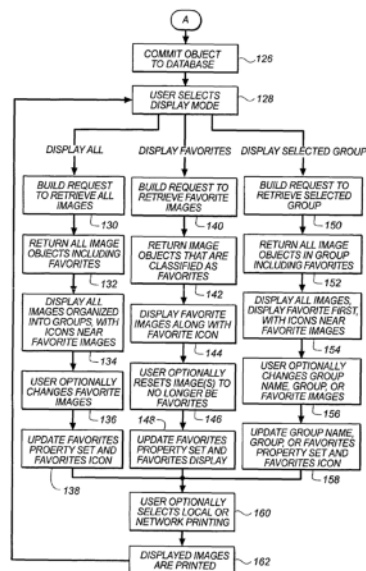


FIG. 3B

Bryant '418 at FIG. 9A

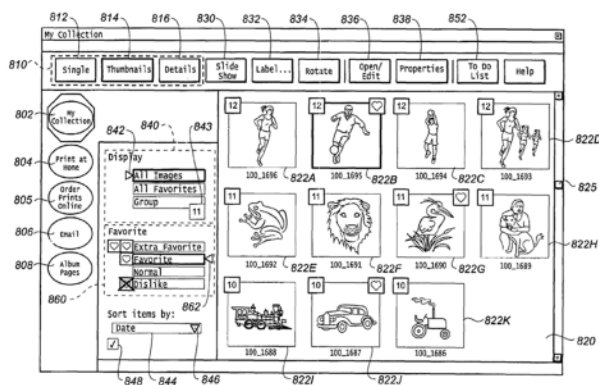


FIG. 9A

Bryant '418 at FIG. 9B

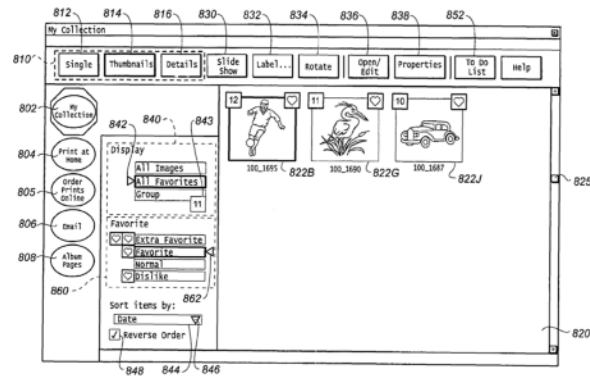


FIG. 9B

Bryant '418 at FIG. 9C

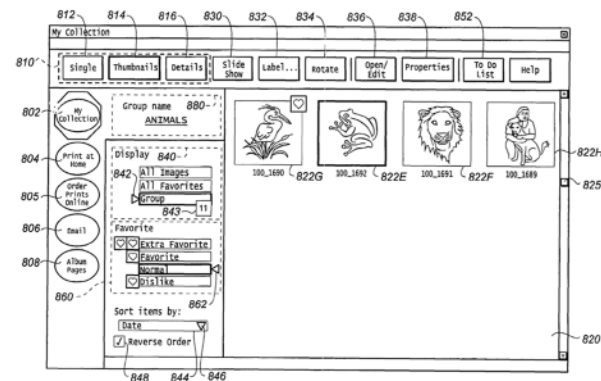


FIG. 9C

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[1i] wherein, upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information and the processor controls the display to display a thumbnail corresponding to the one video information as</p> | <p>Bryant '418 discloses “wherein, upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information and the processor controls the display to display a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.” For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## '815 Patent Claim Limitation

one of the second group of thumbnails when the second character is selected.

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 9A

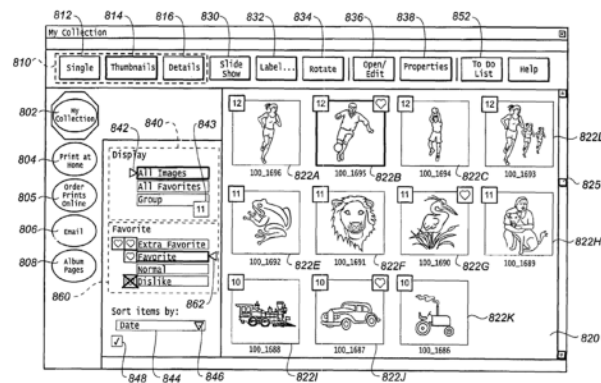


FIG. 9A

Bryant '418 at FIG. 9B

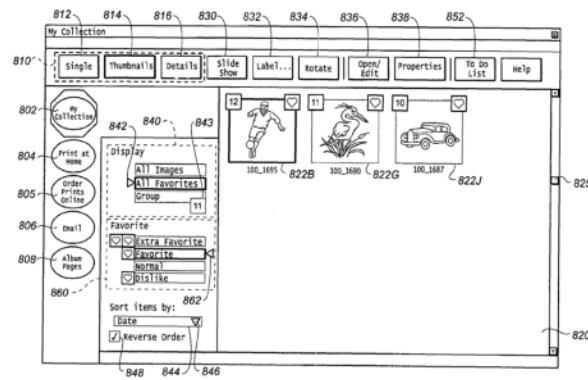


FIG. 9B

Bryant '418 at FIG. 9C

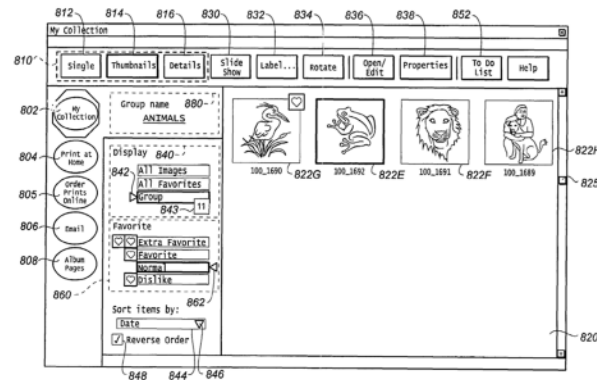


FIG. 9C

Bryant '418 at 3:21–28

The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.

Bryant '418 at 3:50–59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a “favorite”. For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.

Bryant '418 at 3:60–4:4

Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>can be classified between a range of -10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and -10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnlail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagenamne” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a "Slide Show" icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a "Label" icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a "Rotate" icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an "Open/Edit" icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a "Properties" icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the "My Collection" (current) GUI screen, tab 804 selects a "Print at Home" GUI screen, tab 805 selects the "Order Prints Online" GUI screen, tab 806 selects the "Email" GUI screen, and tab 801 selects the "Album Pages" GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either "Normal" or "Favorite". Using the selector 862, the user can change the level of the selected image to be an "Extra Favorite", a "Favorite", a "Normal" image, or a "Dislike" image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an "Extra Favorite", +7 if the image has been set to be a "Favorite", 0 if the image has been set to "Normal", and -7 if the image has been set to be "Dislike". The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an "Extra Favorite" level has been selected, a double heart icon is displayed, if a "Favorite" level has been selected, a single heart icon is displayed, if a "Normal" level has been selected, no icon is displayed, and if a "Dislike" icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the "Display Favorites" option, for example, by selecting the "All Favorites" option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> |

| '815 Patent Claim Limitation                                                                                                                                | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                             | <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [2pre] 2. The information processing apparatus of claim 1, further comprising:                                                                              | Bryant '418 discloses “[t]he information processing apparatus of claim 1.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [2a] wherein the processor generates a group of video information based on user preferences determined by the user selections of the video information, and | Bryant '418 discloses “wherein the processor generates a group of video information based on user preferences determined by the user selections of the video information.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Bryant '418 at FIG. 3B

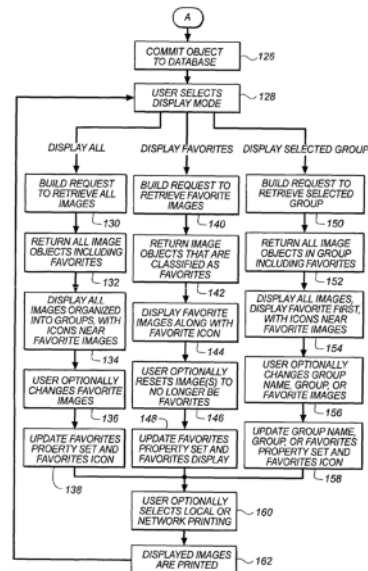


FIG. 3B

Bryant '418 at FIG. 9A

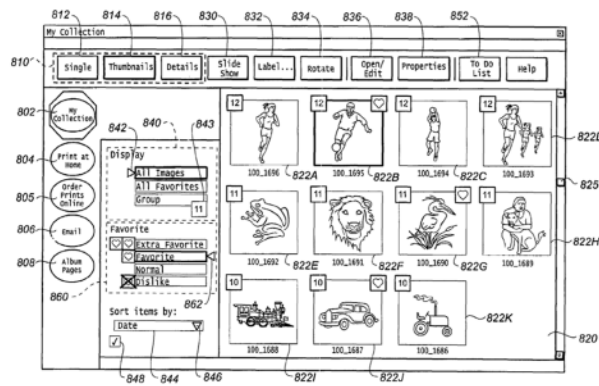


FIG. 9A

Bryant '418 at FIG. 9B

## '815 Patent Claim Limitation

## Bryant '418 Exemplary Disclosure

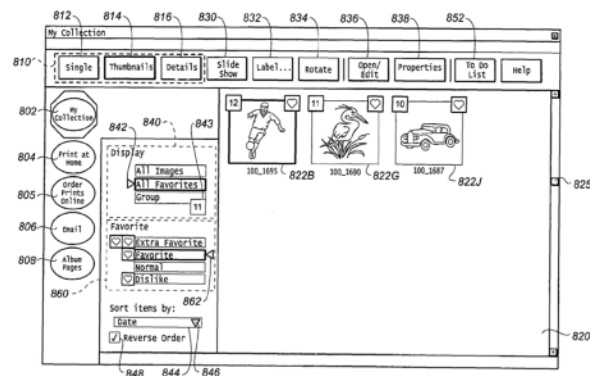


FIG. 9B

### Bryant '418 at FIG. 9C

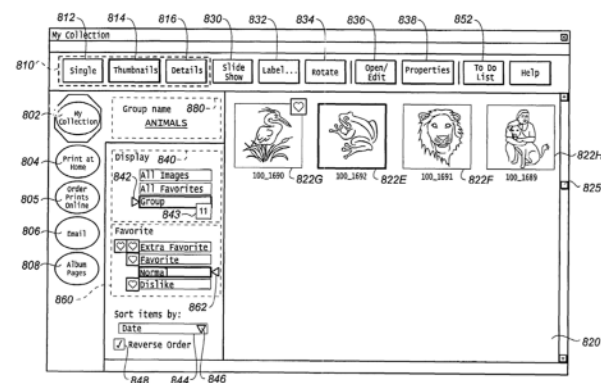


FIG. 9C

### Bryant '418 at 3:19–21

The present invention defines methods for grouping and classifying digital still images and digital motion images captured using a handheld digital camera

### Bryant '418 at 3:21–28

The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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|                              | <p>a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.</p> <p>Bryant '418 at 4:33–39</p> <p>The affective information, such as whether an image is classified as a “favorite”, can be associated with a digital image by storing the classification data within the image file, for example, using a TIFF IFD within an Exif image file. Alternatively, the classification data can be stored in a separate file, such as a “Favorites” file, that provides a list of all of the stored images that are classified as favorites.</p> <p>Bryant '418 at 4:40–46</p> <p>Affective information can be manually entered by a user, for example, using pushbuttons, a touch screen, or voice recognition, or can be collected automatically, as described in commonly assigned U.S. patent application Ser. No. 10/304,037 entitled “Imaging Method and System for Health Monitoring and Personal Security” by Elena Fedorovskaya et al. the disclosure of which is incorporated herein by reference.</p> <p>Bryant '418 at 11:20–31</p> <p>In block 108, the image processor 320 in the digital camera 300 updates the initial FAVGROUP.MRK control file (416 in FIG. 5) to identify a second group of images. This is done after the user presses the shutter button 309 (see FIG. 4) to capture and store the next digital image (e.g., image file 438 in FIG. 5), by appending a second group job indicating that this image is the first image of a second group of image files. In this example, this is done by writing lines 9 through 12 of the FAVGROUP.MRK file shown in FIG. 6. In block 110, the user continues to capture additional images in the second group, corresponding to image files 440 through 444 in FIG. 6.</p> <p>Bryant '418 at 11:63–12:12</p> <p>In block 114 of FIG. 3A, the user identifies one or more images as “favorite” images. The user accomplishes this by pressing the “favorite” button 364 (see FIG. 4) while the favorite image is displayed. In block 115, after the user presses the “favorite” button 364, the image processor 320 in the digital camera 300 updates the GUI screen displayed on the color LCD display 332 to be as shown in FIG. 7B. The GUI screen 500B in FIG. 7B includes a “favorite” indicator 506B, for example, the heart shaped icon shown in FIG. 7B. In block 116, the image processor 320 in the digital camera 300 updates the FAVGROUP.MRK control file shown in FIG. 6 to indicate that the image has been identified as a favorite image. For example, lines 17-20 are appended to the file to indicate that image file 434 in FIG. 5</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                              | <p>named 100_1687.JPG is a favorite image. The user can identify additional favorite images in blocks 112-116 of FIG. 3A, such as image files 442 and 450, which are identified in lines 21 through 28 in FIG. 6.</p> <p>Bryant '418 at 12:13–22</p> <p>In an alternative embodiment, the digital camera 300 includes a user interface which enables the user to identify images as being an “Extra Favorite” image, a “Favorite” image, a “Normal” image, or a “Dislike” image, and to change the classification of a previously classified image. In this case, an appropriate icon is used to indicate the image classification. In another alternative embodiment, the digital camera 300 includes a slide show mode which automatically cycles to sequentially display only images classified as “favorite” or “extra favorite”.</p> <p>Bryant '418 at 12:45–61</p> <p>The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.</p> <p>Bryant '418 at 13:14–29</p> <p>The “capdate” metadata in row 660 provides the date/time that the image was captured using the digital camera 300. The “image caption” metadata in row 662 provides user entered caption. This metadata is null until the caption is optionally entered by the user using the keyboard 16 (see FIG. 1). The “clgdate” metadata in row 664 provides the date/time that the image was cataloged, in other words, the date/time that the object was committed to the database in block 126 of FIG. 3B. The “favlevel” metadata in row 666 indicates whether or not the image was selected as a favorite in block 114 of FIG. 3A. As described earlier, images are classified using a scale ranging between –10 and +10. If the image was not selected as a favorite in block 114, it is given a value of 0, and if it was selected as a favorite, it is given a value of +7. The other values can be used to enable images to later be reclassified as “more favorite” or “less favorite”.</p> |

Bryant '418 at 13:32–38

The “group number” metadata in row 672 gives the number of the group of images (e.g. 1, 2, 3, etc.) that this particular image is part of. The group job information in the FAVGROUP.MRK file 416 is used to determine the group number. The “group name” metadata in row 672 gives an optional name for the group, as will be discussed later with reference to block 156.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnlail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                              | <p>a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                              | <p>home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                       | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                                                                                                                                                                                                                                    | <p>general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[2b] wherein, upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with video information of other users.</p> | <p>Bryant '418 discloses “wherein, upon user selection of the group, the processor controls the display to display thumbnails that correspond to the video information and no other thumbnails associated with video information of other users.” For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

Bryant '418 at FIG. 1

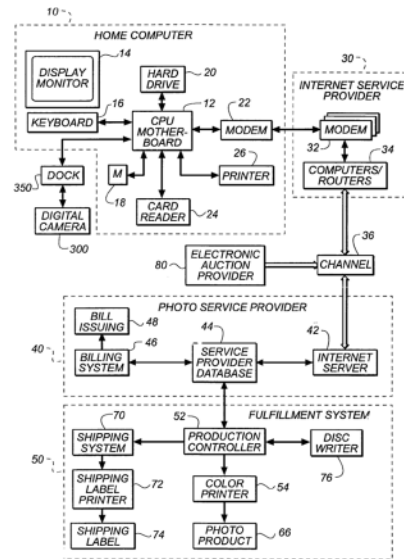


FIG. 1

Bryant '418 at FIG. 3B

# '815 Patent Claim Limitation

# Bryant '418 Exemplary Disclosure

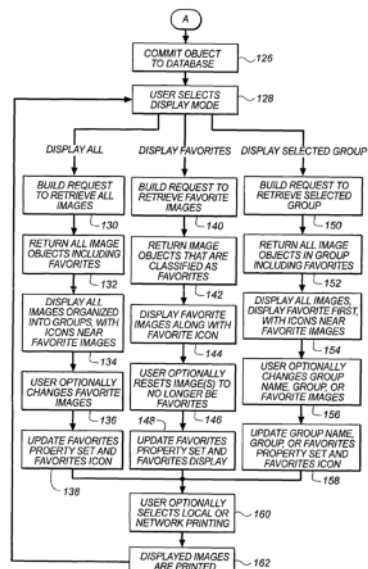


FIG. 3B

## Bryant '418 at FIG. 9A

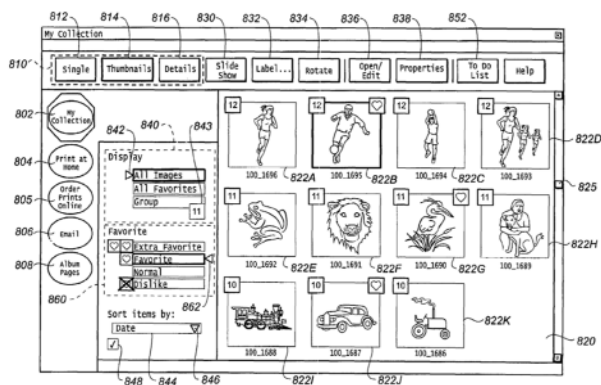


FIG. 9A

Bryant '418 at FIG. 9B

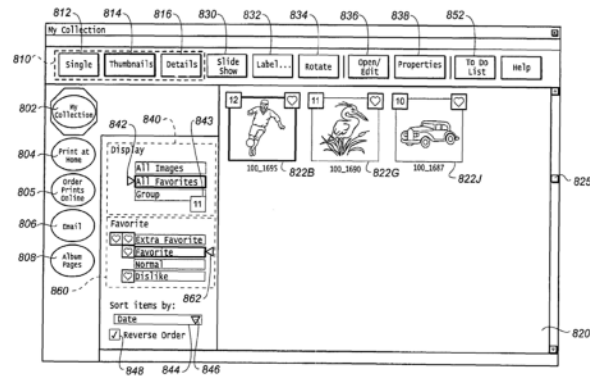


FIG. 9B

Bryant '418 at FIG. 9C

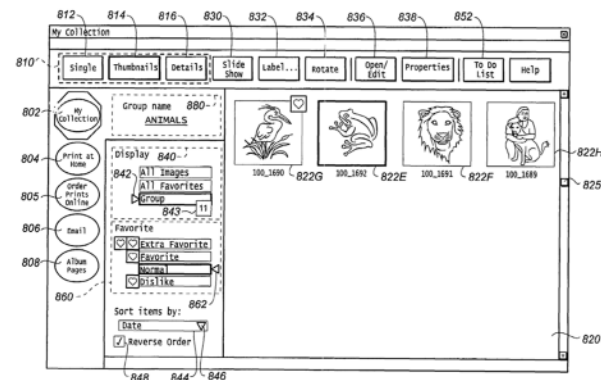


FIG. 9C

Bryant '418 at 4:47-57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.

Bryant '418 at 4:58–5:12

The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.

Bryant '418 at 5:13–24

The CPU motherboard 12 is coupled to a display monitor 14 and a keyboard 16. A mouse 18 permits the user to readily communicate with the CPU motherboard 12. The home computer 10 also includes a dial-up modem 22 for communicating with an Internet Service Provider (ISP) 30 in order to connect to a channel 36, such as the Internet, in order to email images to others, or to provide images to a service provider for storage and/or printing. The CPU motherboard 12 can communicate with the digital camera 300 when the digital camera 300 is placed in a dock 350. The communication uses a suitable wired or wireless interface, such as the well-known Universal Serial Bus (USB) interface.

Bryant '418 at 6:56–66

The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).

Bryant '418 at 7:34–8:5

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                              | <p>The processor 320 performs color interpolation followed by color and tone correction, in order to produce rendered sRGB image data. The processor 320 can also provide various image sizes selected by the user, for example, 3.1 megapixel (MP) “best quality” images, 2.2 MP “better quality” images, 0.8 MP “e-mail quality” images, and 0.4 MP “web quality” images. The rendered sRGB image data is then JPEG compressed and stored as a JPEG image file on the removable memory card 330. The JPEG file uses the so-called “Exif” image format defined in “Digital Still Camera Image File Format (Exif)” version 2.1, July 1998 by the Japan Electronics Industries Development Association (JEIDA), Tokyo, Japan. This format includes an Exif application segment that stores particular image metadata, for example, the date and time the picture was captured, the lens f/number and other camera settings, and image captions or comments that can be selected or entered by the camera user. In some embodiments of the present invention, this metadata can include metadata identifying favorite images and groups of images. In other embodiments, the favorites and grouping metadata is provided in a separate control file. The control processor and timing generator 304 also provide a real-time clock value to the image processor 320, which can stored this value as date/time metadata in each image file.</p> <p>The processor 320 also creates a low-resolution “thumbnail” size image, which can be created as described in commonly-assigned U.S. Pat. No. 5,164,831, entitled “Electronic Still Camera Providing Multi-Format Storage Of Full And Reduced Resolution Images” to Kuchta, et al., the disclosure of which is herein incorporated by reference. In a preferred embodiment, this thumbnail image has 160×120 pixels, to conform to the DCF rules described later, and is stored in RAM memory 326 and supplied to a color LCD image display 332. After images are captured, they can be quickly reviewed on the color LCD image display 332 by using the thumbnail image data. The digital camera 300 can also include a video output driver 390 for displaying the captured images and the graphical user interface on a separate TV monitor 392.</p> <p>Bryant '418 at 13:60–14:4</p> <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> |

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

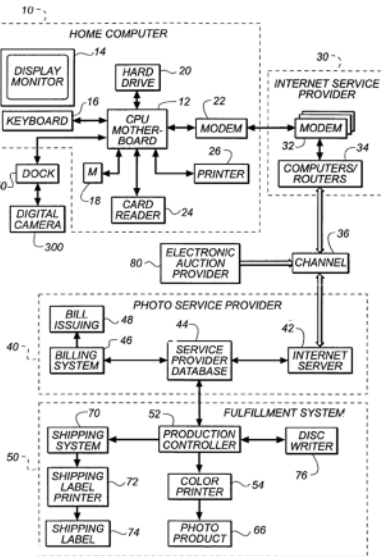
Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                                                          | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                       | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [3pre] 3. The information processing apparatus of claim 1, further comprising:                                        | Bryant '418 discloses “[t]he information processing apparatus of claim 1.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [3a] an antenna for wirelessly receiving the first video information from the other information processing apparatus. | <p>Bryant '418 discloses “an antenna for wirelessly receiving the first video information from the other information processing apparatus.” For example:</p> <p>Bryant '418 at 3:42–47</p> <p>In a third embodiment, the digital camera includes a wireless modem which transmits some of the captured images to a service provider, and the grouping and classification information is used to simplify the process of selecting and organizing the images stored by a local host computer and by the service provider.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| '815 Patent Claim Limitation                                                                                                                                                                     | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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|                                                                                                                                                                                                  | knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [4pre] 4. The information processing apparatus of claim 1,                                                                                                                                       | Bryant '418 discloses "[t]he information processing apparatus of claim 1." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [4a] wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information, | <p>Bryant '418 discloses "wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information." For example:</p> <p>Bryant '418 at FIG. 1</p>  <p><b>FIG. 1</b></p> <p>Bryant '418 at 3:28–31</p> <p>A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.</p> |

Bryant '418 at 3:31–35

In one embodiment of the present invention, the grouping and classification data is stored in a database on a host computer, and can later be used in retrieving digital images and in producing hardcopy output, such as album pages.

Bryant '418 at 3:42–47

In a third embodiment, the digital camera includes a wireless modem which transmits some of the captured images to a service provider, and the grouping and classification information is used to simplify the process of selecting and organizing the images stored by a local host computer and by the service provider.

Bryant '418 at 4:5–24

Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.

Bryant '418 at 4:47–57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.

Bryant '418 at 4:58–5:12

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:30–37</p> <p>The CPU motherboard 12 also communicates with a card reader 24, which can read and write data on a removable flash memory card 330 (shown in FIG. 2) used in the digital camera 300, which is an alternative way of transferring images and control files from the digital camera 300 to the home computer 10. The home computer 10 also includes a printer 26, which communicates with the CPU motherboard 12 over a suitable interface, such as the USB interface.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>Bryant '418 at 7:23–33</p> <p>The processed digital image file is provided to a memory card interface 324, which stores the digital image file on the removable memory card 330. Removable memory cards 330 are one type of removable digital image storage medium, and are available in several different physical formats. For example, the</p> |

| '815 Patent Claim Limitation                                                                                                                  | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                               | <p>removable memory card 330 can include memory cards adapted to the well-known PC card, Compact Flash, SmartMedia, MemoryStick, MMC or SD memory card formats. Other types of removable digital image storage media, such as magnetic hard drives, magnetic tape, or optical disks, can alternatively be used to store the digital images.</p> <p>Bryant '418 at 12:45–61</p> <p>The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [4b] wherein the display displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information. | Bryant '418 discloses “wherein the display displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Bryant '418 at FIG. 1

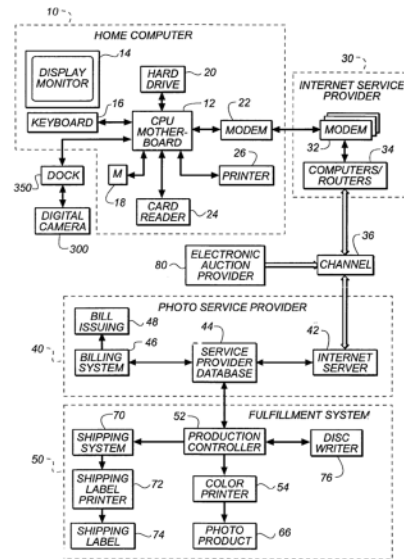


FIG. 1

Bryant '418 at FIG. 9A

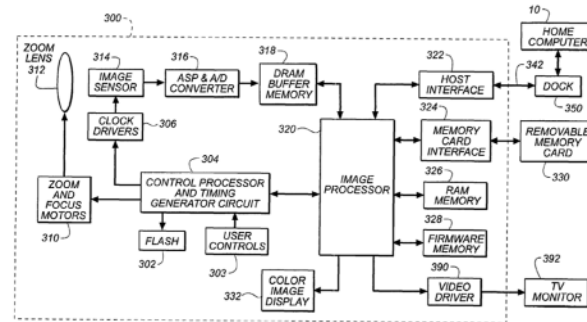


FIG. 2

Bryant '418 at FIG. 3B

# '815 Patent Claim Limitation

# Bryant '418 Exemplary Disclosure

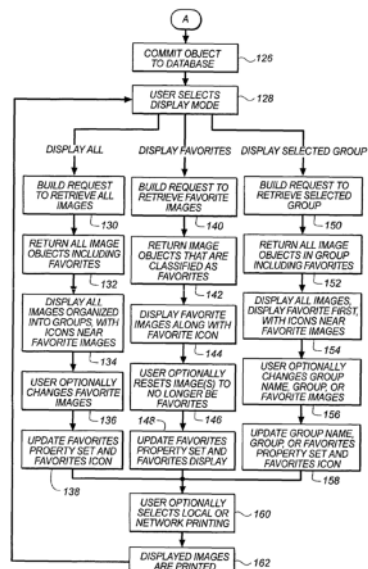


FIG. 3B

## Bryant '418 at FIG. 9A

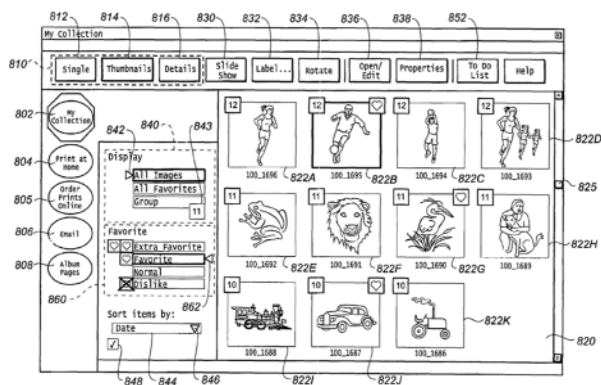


FIG. 9A

Bryant '418 at FIG. 9B

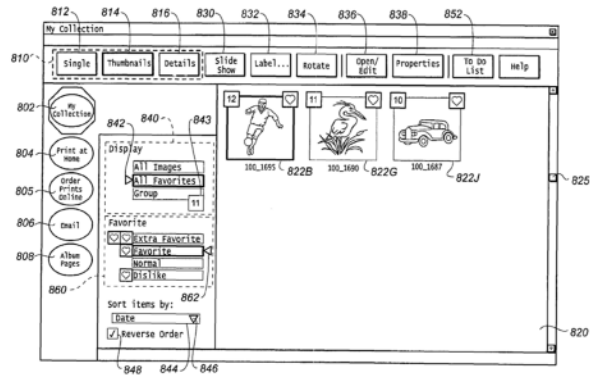


FIG. 9B

Bryant '418 at FIG. 9C

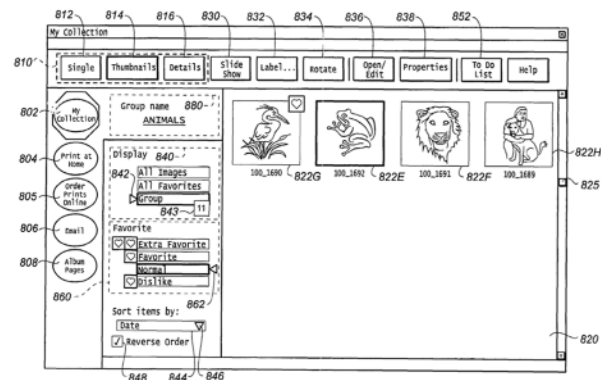


FIG. 9C

Bryant '418 at 3:50–59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a “favorite”. For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.

Bryant '418 at 3:60–4:4

Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images can be classified between a range of –10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and –10 is used for the “least favorite” image or images.

Bryant '418 at 4:47–57

Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.

Bryant '418 at 4:58–5:12

The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.

Bryant '418 at 10:20–24

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>FIG. 3A and 3B, taken together, depict a flow diagram showing a first embodiment of a method in accordance with the present invention for grouping images, identifying favorite images, and organizing the images, implemented using the system described earlier in relation to FIG. 1 and FIG. 2.</p> <p>Bryant '418 at 13:51–59</p> <p>The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).</p> <p>Bryant '418 at 13:60–14:4</p> <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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|                              | <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and −7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can</p> |

| '815 Patent Claim Limitation                                                                                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|                                                                                                                                                 | <p>also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [5pre] 5. The information processing apparatus of claim 4,                                                                                      | Bryant '418 discloses "[t]he information processing apparatus of claim 4." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [5a] wherein the display displays the third, fourth, and fifth video information according to predetermined playback sequence.                  | <p>Bryant '418 discloses "wherein the display displays the third, fourth, and fifth video information according to predetermined playback sequence." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                               |
| [6pre] 6. The information processing apparatus of claim 1,                                                                                      | Bryant '418 discloses "[t]he information processing apparatus of claim 1." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [6a] wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information, | <p>Bryant '418 discloses "wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information." For example:</p> <p>See above at row [4a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                |
| [6b] wherein the plurality of stored video information includes management information                                                          | Bryant '418 discloses "wherein the plurality of stored video information includes management information corresponding to the third, fourth, and fifth video information." For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## '815 Patent Claim Limitation

corresponding to the third, fourth, and fifth video information,

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 9A

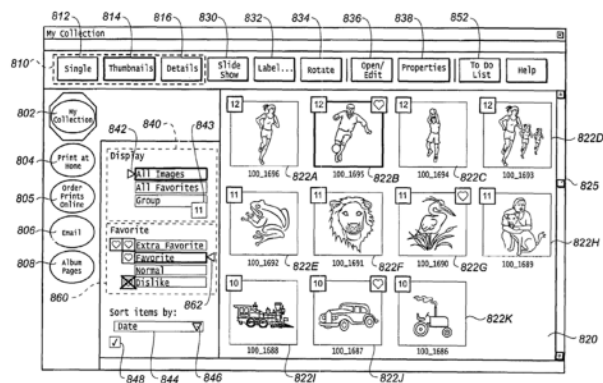


FIG. 9A

Bryant '418 at FIG. 9B

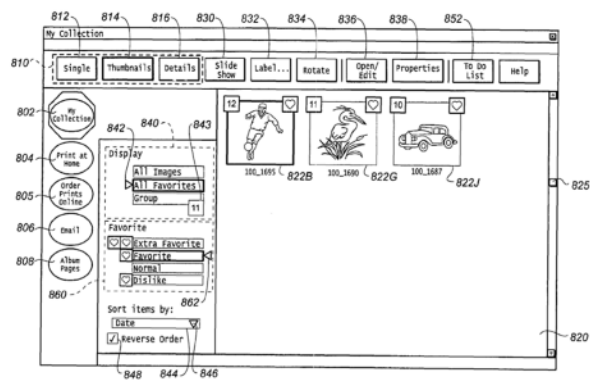


FIG. 9B

Bryant '418 at FIG. 9C

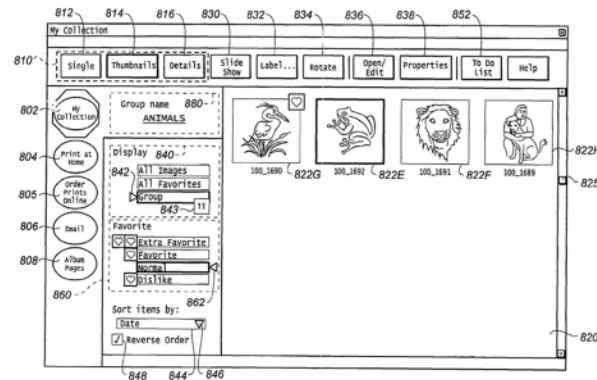


FIG. 9C

Bryant '418 at 3:19–21

The present invention defines methods for grouping and classifying digital still images and digital motion images captured using a handheld digital camera

Bryant '418 at 3:21–28

The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.

Bryant '418 at 11:63–12:12

In block 114 of FIG. 3A, the user identifies one or more images as “favorite” images. The user accomplishes this by pressing the “favorite” button 364 (see FIG. 4) while the favorite image is displayed. In block 115, after the user presses the “favorite” button 364, the image processor 320 in the digital camera 300 updates the GUI screen displayed on the color LCD display 332 to be as shown in FIG. 7B. The GUI screen 500B in FIG. 7B includes a “favorite” indicator 506B, for example, the heart shaped icon shown in FIG. 7B. In block 116, the image processor 320 in the digital camera 300 updates the FAVGROUP.MRK control file shown in FIG. 6 to indicate that the image has been identified as a favorite image. For example, lines 17-20 are appended to the file to indicate that image file 434 in FIG. 5

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                              | <p>named 100_1687.JPG is a favorite image. The user can identify additional favorite images in blocks 112-116 of FIG. 3A, such as image files 442 and 450, which are identified in lines 21 through 28 in FIG. 6.</p> <p>Bryant '418 at 12:45–61</p> <p>The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.</p> <p>Bryant '418 at 13:14–29</p> <p>The “capdate” metadata in row 660 provides the date/time that the image was captured using the digital camera 300. The “image caption” metadata in row 662 provides user entered caption. This metadata is null until the caption is optionally entered by the user using the keyboard 16 (see FIG. 1). The “clgdate” metadata in row 664 provides the date/time that the image was cataloged, in other words, the date/time that the object was committed to the database in block 126 of FIG. 3B. The “favlevel” metadata in row 666 indicates whether or not the image was selected as a favorite in block 114 of FIG. 3A. As described earlier, images are classified using a scale ranging between –10 and +10. If the image was not selected as a favorite in block 114, it is given a value of 0, and if it was selected as a favorite, it is given a value of +7. The other values can be used to enable images to later be reclassified as “more favorite” or “less favorite”.</p> <p>Bryant '418 at 13:32–38</p> <p>The “group number” metadata in row 672 gives the number of the group of images (e.g. 1, 2, 3, etc.) that this particular image is part of. The group job information in the FAVGROUP.MRK file 416 is used to determine the group number. The “group name” metadata in row 672 gives an optional name for the group, as will be discussed later with reference to block 156.</p> |

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                              | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                           | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[6c] wherein the management information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.</p> | <p>Bryant '418 discloses “wherein the management information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence.” For example:</p> <p>Bryant '418 at 3:21–28</p> <p>The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

Bryant '418 at 12:45–61

The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.

Bryant '418 at 13:14–29

The “capdate” metadata in row 660 provides the date/time that the image was captured using the digital camera 300. The “image caption” metadata in row 662 provides user entered caption. This metadata is null until the caption is optionally entered by the user using the keyboard 16 (see FIG. 1). The “clgdate” metadata in row 664 provides the date/time that the image was cataloged, in other words, the date/time that the object was committed to the database in block 126 of FIG. 3B. The “favlevel” metadata in row 666 indicates whether or not the image was selected as a favorite in block 114 of FIG. 3A. As described earlier, images are classified using a scale ranging between –10 and +10. If the image was not selected as a favorite in block 114, it is given a value of 0, and if it was selected as a favorite, it is given a value of +7. The other values can be used to enable images to later be reclassified as “more favorite” or “less favorite”.

Bryant '418 at 13:32–38

The “group number” metadata in row 672 gives the number of the group of images (e.g. 1, 2, 3, etc.) that this particular image is part of. The group job information in the FAVGROUP.MRK file 416 is used to determine the group number. The “group name” metadata in row 672 gives an optional name for the group, as will be discussed later with reference to block 156.

Bryant '418 at 13:43–48

The “moddate” metadata in row 682 indicates the date/time that the image last modified, or the date that the image was captured, if it has never been modified. The “imagename” metadata in row 684 indicates the name of the image file (e.g. 100\_1696 for image data object 652).

| '815 Patent Claim Limitation                                                                                                                       | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                                                                                                                                                    | <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>[7pre] 7. The information processing apparatus of claim 1, further comprising:</p>                                                              | <p>Bryant '418 discloses "[t]he information processing apparatus of claim 1." See above.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>[7a] an analog to digital converter for converting analog audio information being recorded into digital audio information;</p>                  | <p>Bryant '418 discloses "an analog to digital converter for converting analog audio information being recorded into digital audio information." For example:</p> <p>Bryant '418 at 7:16–19</p> <p style="padding-left: 40px;">The analog output signal from the image sensor 314 is amplified and converted to digital data by the analog signal processing (ASP) and analog-to-digital (A/D) converter circuit 316.</p> <p>Bryant '418 at 11:38–47</p> <p style="padding-left: 40px;">In an alternative embodiment, the digital camera 300 includes a microphone, and the user records a single audio annotation for the group of images as the user presses and holds the "group" button 362 (see FIG. 4). This audio annotation is stored as a separate audio file, such as a wave file, on the removable memory card 330. The audio annotation could describe the subject of the group of photos, or other information common to the group of photos. The FAVGROUP.MRK control file could include the name of this separate audio file created for each group.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[7b] a compressor for compressing the plurality of video information including digital video information and the digital audio information;</p> | <p>Bryant '418 discloses "a compressor for compressing the plurality of video information including digital video information and the digital audio information." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| '815 Patent Claim Limitation                                                                                                                                                                                                             | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                                                                                                                                                                                                                                          | knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [7c] a decoder for decoding, during playback, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user; and | <p>Bryant '418 discloses “a decoder for decoding, during playback, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [7d] a digital to analog converter for converting at least the decoded digital audio information into analog audio information during playback.                                                                                          | <p>Bryant '418 discloses “a digital to analog converter for converting at least the decoded digital audio information into analog audio information during playback.” For example:</p> <p>Bryant '418 at 11:38–47</p> <p>In an alternative embodiment, the digital camera 300 includes a microphone, and the user records a single audio annotation for the group of images as the user presses and holds the “group” button 362 (see FIG. 4). This audio annotation is stored as a separate audio file, such as a wave file, on the removable memory card 330. The audio annotation could describe the subject of the group of photos, or other information common to the group of photos. The FAVGROUP.MRK control file could include the name of this separate audio file created for each group.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [8pre] 8. The information processing apparatus of claim 1, further comprising:                                                                                                                                                           | Bryant '418 discloses “[t]he information processing apparatus of claim 1.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [8a] an on screen display generator generating on screen display information, wherein the plurality                                                                                                                                      | Bryant '418 discloses “an on screen display generator generating on screen display information, wherein the plurality of stored video information includes third video information such that, upon selection for playback,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                       | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <p>of stored video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.</p>                      | <p>the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p> |
| <p>[9pre] 9. An information processing method implemented on an information processing apparatus, the information processing method comprising:</p>                                                                                                                                                | <p>To the extent the preamble is limiting, Bryant '418 discloses “[a]n information processing method implemented on an information processing apparatus.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p>             |
| <p>[9a] storing a plurality of video information including first video information received wirelessly by a network interface over a network from another information processing apparatus, wherein at least some of the plurality of video information is associated with a user profile; and</p> | <p>Bryant '418 discloses “storing a plurality of video information including first video information received wirelessly by a network interface over a network from another information processing apparatus, wherein at least some of the plurality of video information is associated with a user profile.” For example:</p>                                                                                                                                                                                                             |

Bryant '418 at FIG. 1

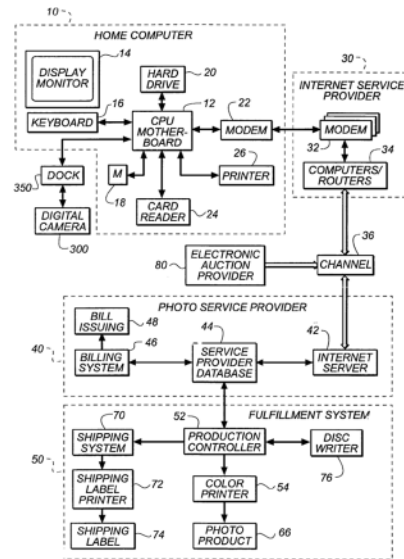


FIG. 1

Bryant '418 at 3:28-31

A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.

Bryant '418 at 3:31-35

In one embodiment of the present invention, the grouping and classification data is stored in a database on a host computer, and can later be used in retrieving digital images and in producing hardcopy output, such as album pages.

Bryant '418 at 3:42-47

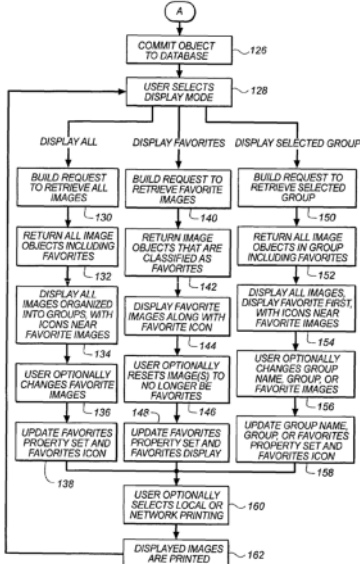
In a third embodiment, the digital camera includes a wireless modem which transmits some of the captured images to a service provider, and the grouping and classification information is used to simplify the process of selecting and organizing the images stored by a local host computer and by the service provider.

Bryant '418 at 4:5-24

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                              | <p>Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.</p> <p>Bryant '418 at 4:47–57</p> <p>Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.</p> <p>Bryant '418 at 4:58–5:12</p> <p>The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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|                              | <p>home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:30–37</p> <p>The CPU motherboard 12 also communicates with a card reader 24, which can read and write data on a removable flash memory card 330 (shown in FIG. 2) used in the digital camera 300, which is an alternative way of transferring images and control files from the digital camera 300 to the home computer 10. The home computer 10 also includes a printer 26, which communicates with the CPU motherboard 12 over a suitable interface, such as the USB interface.</p> <p>Bryant '418 at 5:43–50</p> <p>The ISP 30, for example, Earthlink Network, Inc. of Pasadena, Calif., includes banks of modems 32, one of which is connected to communicate with the modem 22 of the home computer 10. The modem 32 in turn communicates with computers/routers 34 in order to provide a connection to the channel 36, which is preferably the Internet, using equipment and techniques well-known to those skilled in the art. The ISP 30 provides e-mail services using the channel 36.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>Bryant '418 at 7:23–33</p> <p>The processed digital image file is provided to a memory card interface 324, which stores the digital image file on the removable memory card 330. Removable memory cards 330 are one type of removable digital image storage medium, and are available in several different physical formats. For example, the removable memory card 330 can include memory cards adapted to the well-known PC card, Compact Flash, SmartMedia, MemoryStick, MMC or SD memory card formats. Other types of removable digital</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                              | <p>image storage media, such as magnetic hard drives, magnetic tape, or optical disks, can alternatively be used to store the digital images.</p> <p>Bryant '418 at 8:29–46</p> <p>As shown in FIG. 2, an interface 342 can be used to connect between the host interface 322 in the digital camera 300 and the dock 350, which connects to the home computer 10. The interface 342 may conform to, for example, the well-known USB interface specification. Alternatively, the interface between the digital camera 300 and the home computer 10 can be a wireless interface, such as the well-known Bluetooth wireless interface or the well-known 802.11b wireless interface. The interface 342 can be used to download images from removable memory card 330 to the home computer 10, instead of using card reader 24 (FIG. 1). The interface 342 can also be used to transfer data from the home computer 10 to the firmware memory 328 in the digital camera 300. In particular, it can be used to transfer a user name and e-mail addresses from the home computer 10 to the firmware memory 328, as described in commonly-assigned U.S. patent application Ser. No. 08/977,382, filed Oct. 18, 2002, the disclosure of which is herein incorporated by reference.</p> <p>Bryant '418 at 12:45–61</p> <p>The image files are stored in a default directory, such as in a “my collection” directory, or in a directory selected by the user when the software was installed in block 100. In block 124, an object is created for each transferred image, and the favorite and group properties of each object are set to correspond to the information read from the control file in block 122. In block 126 shown in FIG. 3B, the object created for each transferred image is committed to the local database stored on the hard drive 20 of the home computer 10. It will be understood that while in a preferred embodiment, the local database stores objects in an object oriented database management system (OODBMS). In alternative embodiments, the local database can use many different types of more primitive data structures, including arrays, tables, lists, registries, and the like, to store the data identifying favorite images and groups of images.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [9b] displaying:             | Bryant '418 discloses “displaying.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p>See above at row [1c].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>[9c] a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification, the first group of video information being configured to allow a user to edit, wherein the first group of video information and the second group of video information are part of the plurality of stored video information, and</p> | <p>Bryant '418 discloses “a first area including a first character associated with a first group of video information for a first classification and a second character associated with a second group of video information for a second classification different from the first classification, the first group of video information being configured to allow a user to edit, wherein the first group of video information and the second group of video information are part of the plurality of stored video information.” For example: Bryant '418 at FIG. 3B</p>  <pre> graph TD     A((A)) --&gt; 126[COMMIT OBJECT TO DATABASE]     126 --&gt; 128[USER SELECTS DISPLAY MODE]     128 --&gt; 130[DISPLAY ALL]     128 --&gt; 140[DISPLAY FAVORITES]     128 --&gt; 150[DISPLAY SELECTED GROUP]     130 --&gt; 132[BUILD REQUEST TO RETRIEVE ALL IMAGES]     132 --&gt; 134[RETURN ALL IMAGE OBJECTS INCLUDING FAVORITES]     134 --&gt; 136[DISPLAY ALL IMAGES ORGANIZED INTO GROUPS WITH ICONS NEAR FAVORITE IMAGES]     136 --&gt; 138[USER OPTIONALLY CHANGES FAVORITE IMAGES]     138 --&gt; 140     140 --&gt; 142[BUILD REQUEST TO RETRIEVE FAVORITE IMAGES]     142 --&gt; 144[RETURN IMAGE OBJECTS THAT ARE CLASSIFIED AS FAVORITES]     144 --&gt; 146[DISPLAY FAVORITE IMAGES ALONG WITH FAVORITE ICON]     146 --&gt; 148[USER OPTIONALLY RESETS IMAGES TO NO LONGER BE FAVORITES]     148 --&gt; 150     150 --&gt; 152[BUILD REQUEST TO RETRIEVE SELECTED GROUP]     152 --&gt; 154[RETURN ALL IMAGE OBJECTS IN GROUP INCLUDING FAVORITES]     154 --&gt; 156[DISPLAY ALL IMAGES, DISPLAY FAVORITE FIRST, WITH ICONS NEAR FAVORITE IMAGES]     156 --&gt; 158[USER OPTIONALLY CHANGES GROUP NAME, GROUP, OR FAVORITE IMAGES]     158 --&gt; 160[UPDATE GROUP NAME, GROUP, OR FAVORITES PROPERTY SET AND FAVORITES ICON]     160 --&gt; 162[USER OPTIONALLY SELECTS LOCAL OR NETWORK PRINTING]     162 --&gt; 164[DISPLAYED IMAGES ARE PRINTED]   </pre> <p><b>FIG. 3B</b></p> |

Bryant '418 at FIG. 9A

**First area**

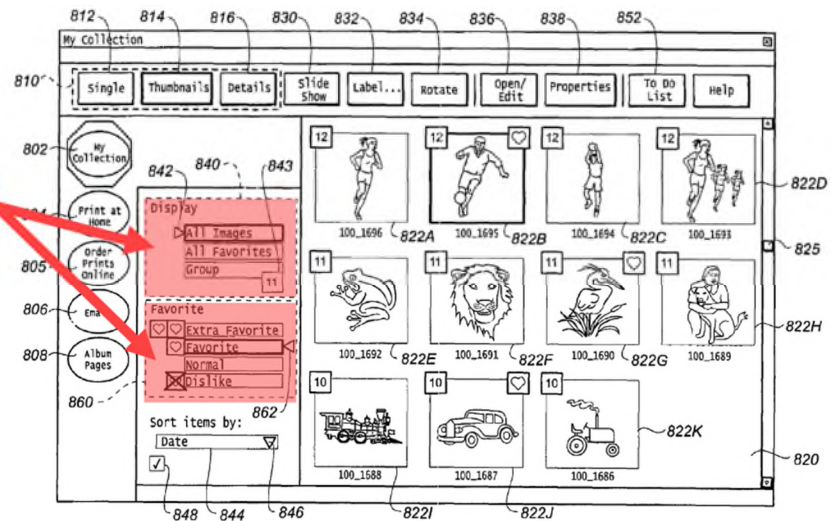


**FIG. 9A**

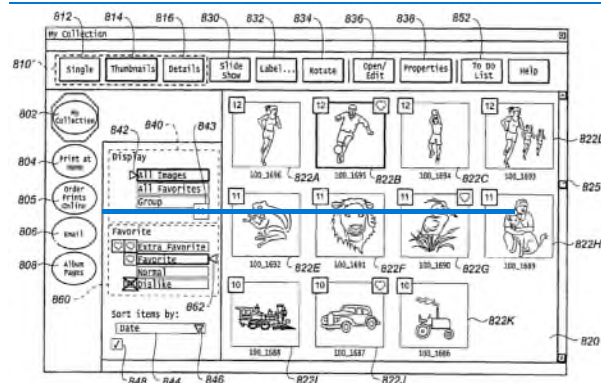


**FIG. 9A**

Bryant '418 at FIG. 9B

'815 Patent Claim Limitation

Bryant '418 Exemplary Disclosure

First area

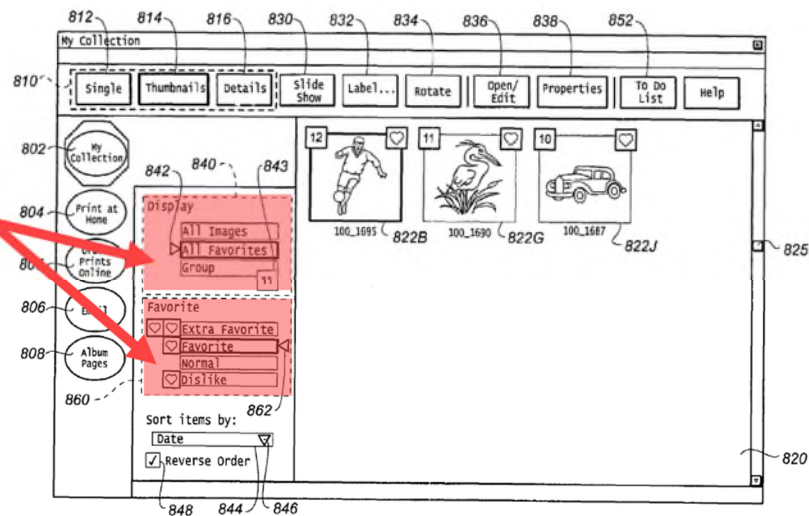


FIG. 9B

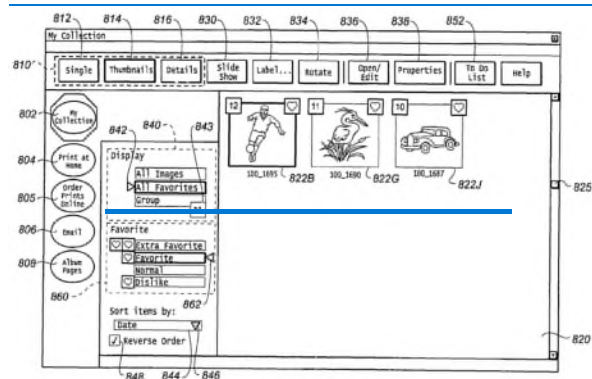


FIG. 9B

Bryant '418 at FIG. 9C

**First area**

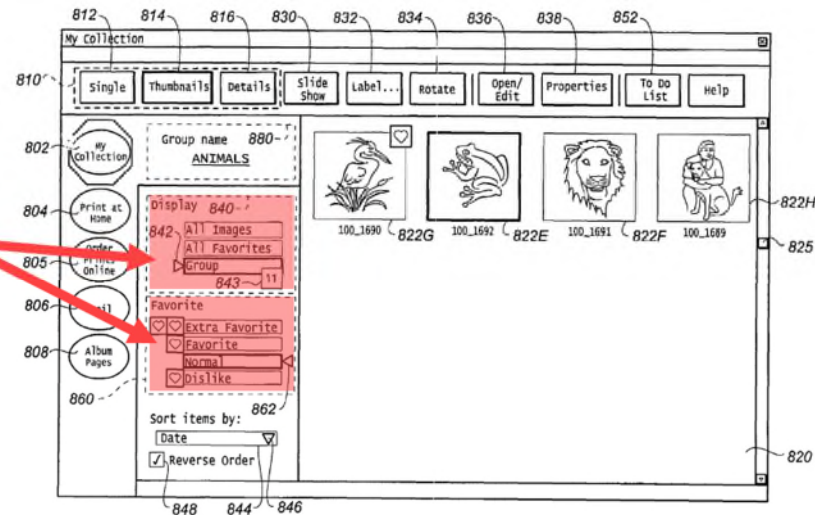


**FIG. 9C**

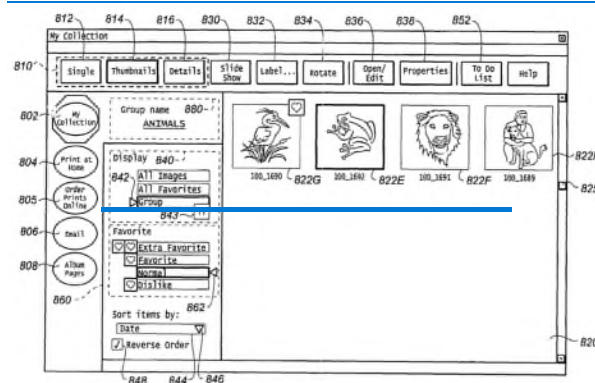


**FIG. 9C**

Bryant '418 at 3:50-59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a "favorite". For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|                              | <p>these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.</p> <p>Bryant '418 at 3:60–4:4</p> <p>Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images can be classified between a range of –10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and –10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 4:33–39</p> <p>The affective information, such as whether an image is classified as a “favorite”, can be associated with a digital image by storing the classification data within the image file, for example, using a TIFF IFD within an Exif image file. Alternatively, the classification data can be stored in a separate file, such as a “Favorites” file, that provides a list of all of the stored images that are classified as favorites.</p> <p>Bryant '418 at 4:40–46</p> <p>Affective information can be manually entered by a user, for example, using pushbuttons, a touch screen, or voice recognition, or can be collected automatically, as described in commonly assigned U.S. patent application Ser. No. 10/304,037 entitled “Imaging Method and System for Health Monitoring and Personal Security” by Elena Fedorovskaya et al. the disclosure of which is incorporated herein by reference.</p> <p>Bryant '418 at 10:20–24</p> <p>FIG. 3A and 3B, taken together, depict a flow diagram showing a first embodiment of a method in accordance with the present invention for grouping images, identifying favorite images, and organizing the images, implemented using the system described earlier in relation to FIG. 1 and FIG. 2.</p> <p>Bryant '418 at 11:63–12:12</p> <p>In block 114 of FIG. 3A, the user identifies one or more images as “favorite” images. The user accomplishes this by pressing the “favorite” button 364 (see FIG. 4) while the favorite image is displayed. In block 115, after the user presses the “favorite” button 364, the image processor 320 in the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                              | <p>digital camera 300 updates the GUI screen displayed on the color LCD display 332 to be as shown in FIG. 7B. The GUI screen 500B in FIG. 7B includes a “favorite” indicator 506B, for example, the heart shaped icon shown in FIG. 7B. In block 116, the image processor 320 in the digital camera 300 updates the FAVGROUP.MRK control file shown in FIG. 6 to indicate that the image has been identified as a favorite image. For example, lines 17-20 are appended to the file to indicate that image file 434 in FIG. 5 named 100_1687.JPG is a favorite image. The user can identify additional favorite images in blocks 112-116 of FIG. 3A, such as image files 442 and 450, which are identified in lines 21 through 28 in FIG. 6.</p> <p>Bryant '418 at 13:51–59</p> <p>The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).</p> <p>Bryant '418 at 13:60–14:4</p> <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                              | <p>by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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|                              | <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                              | <p>“Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping</p> |

| '815 Patent Claim Limitation                                                                                               | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                            | <p>information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [9d] a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information, | <p>Bryant '418 discloses "a second area displaying thumbnails corresponding to at least a portion of the plurality of stored video information." For example:</p> <p>See above at row [9c].</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Bryant '418 at FIG. 9A

**Second  
area**

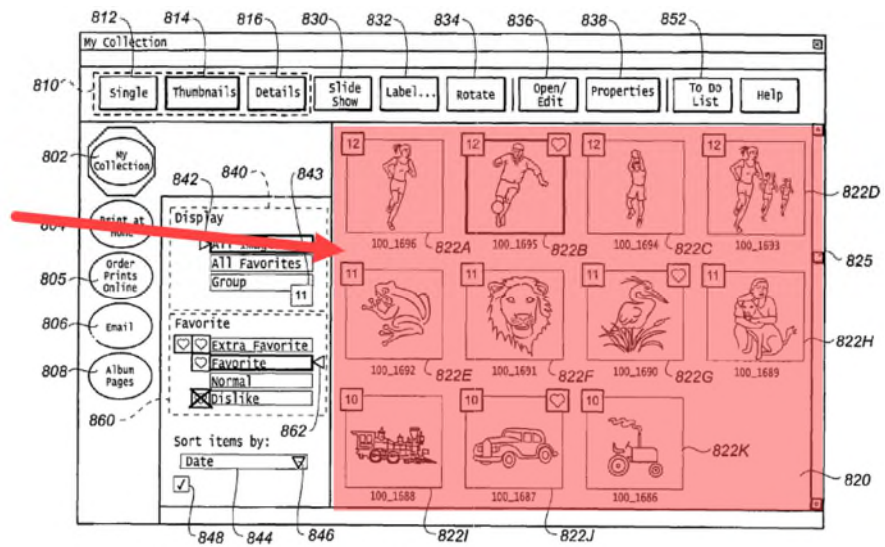


**FIG. 9A**

Bryant '418 at FIG. 9B

**Second  
area**

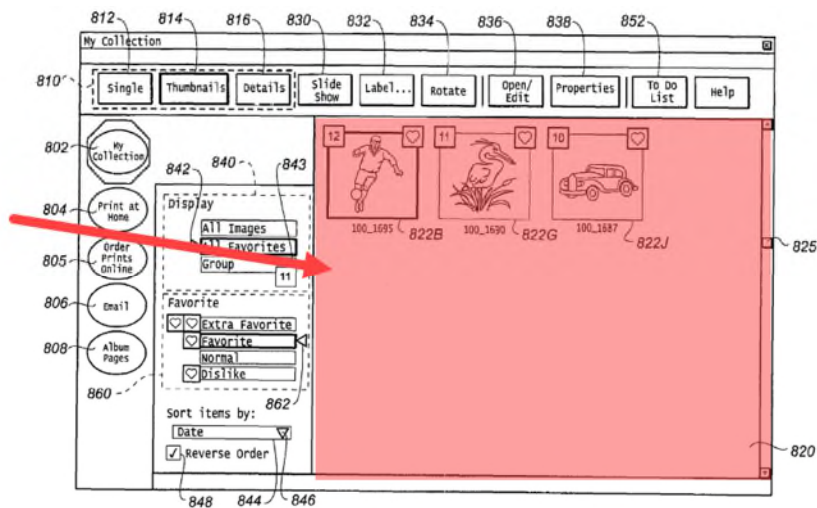
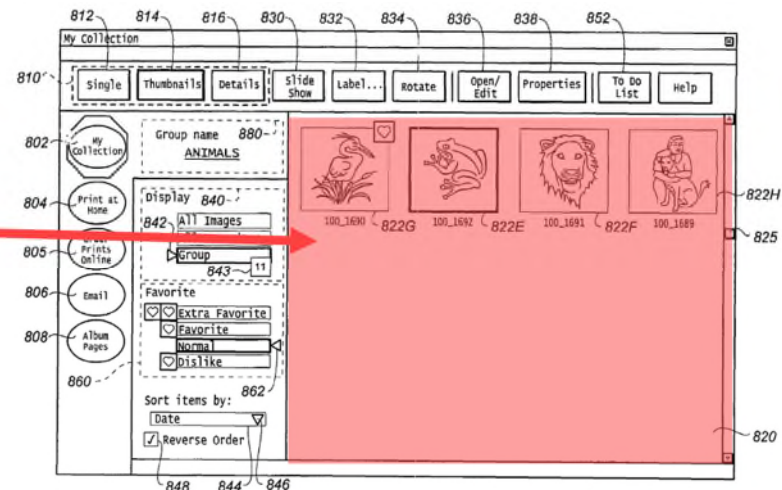


**FIG. 9B**

| '815 Patent Claim Limitation                                                                                                                                                        | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                     | <p><a href="#">Bryant '418 at FIG. 9C</a></p> <div><div>Second area</div><p><b>FIG. 9C</b></p></div> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [9e] wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area, and | Bryant '418 discloses “wherein user selection of the first character enables the display of a first group of thumbnails corresponding to the first group of video information in the second area.” For example:                                                                                                                                                                                                                                                                                                                            |

Bryant '418 at FIG. 3B

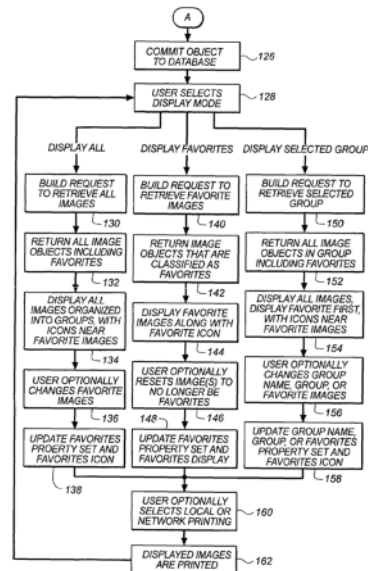


FIG. 3B

Bryant '418 at FIG. 9A

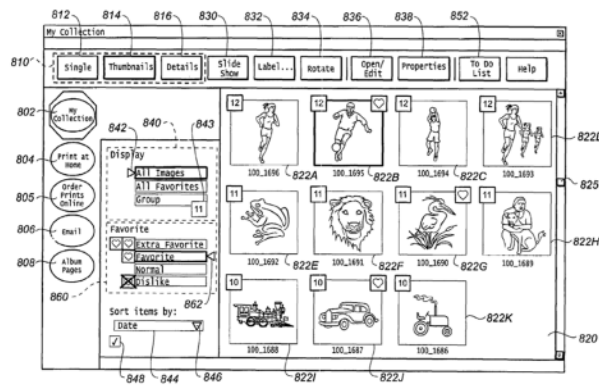


FIG. 9A

Bryant '418 at FIG. 9B

## '815 Patent Claim Limitation

## Bryant '418 Exemplary Disclosure

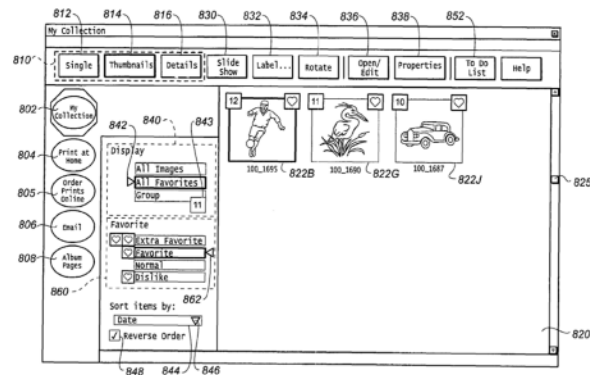


FIG. 9B

### Bryant '418 at FIG. 9C

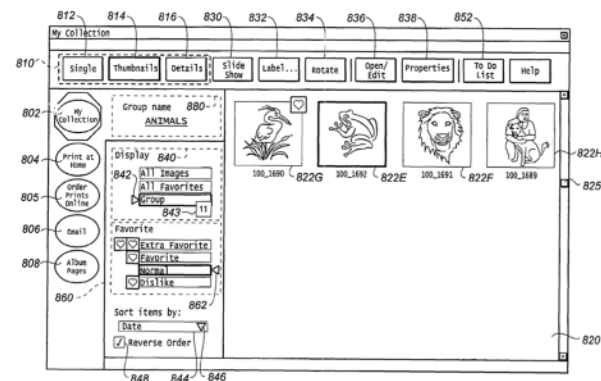


FIG. 9C

### Bryant '418 at 13:51-59

The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnlail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and -7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                              | <p>selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> |

| '815 Patent Claim Limitation                                                                                                 | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                                                                                                                              | <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., "ANIMALS ") in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the "Print at Home" icon 804 or the "Order Prints Online" icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled "Effective Transfer Of Images From A User To A Service Provider" to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the "Album Pages" icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [9f] wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the | <p>Bryant '418 discloses "wherein user selection of the second character enables the display of a second group of thumbnails corresponding to the second group of video information in the second area." For example:</p> <p>See above at row [1h].</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| <b>'815 Patent Claim Limitation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Bryant '418 Exemplary Disclosure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| second group of video information in the second area;                                                                                                                                                                                                                                                                                                                                                                                                                      | To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [9g] upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information, and displaying a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected; | <p>Bryant '418 discloses “upon one video information stored on the recording medium included in both the first group of video information and the second group of video information being deleted from the first group of video information, the one video information continues to be included in the second group of video information, and displaying a thumbnail corresponding to the one video information as one of the second group of thumbnails when the second character is selected.” For example:</p> <p>See above at row [1i].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [9h] wherein the processor generating a group of video information based on user preferences determined by the user selections of the video information, and                                                                                                                                                                                                                                                                                                               | <p>Bryant '418 discloses “wherein the processor generating a group of video information based on user preferences determined by the user selections of the video information.” For example:</p> <p>See above at row [2a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                   |
| [9i] upon user selection of the group, displaying thumbnails that correspond to the video information and no other                                                                                                                                                                                                                                                                                                                                                         | Bryant '418 discloses “upon user selection of the group, displaying thumbnails that correspond to the video information and no other thumbnails associated with video information of other users.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## '815 Patent Claim Limitation

thumbnails associated with video information of other users.

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 3B

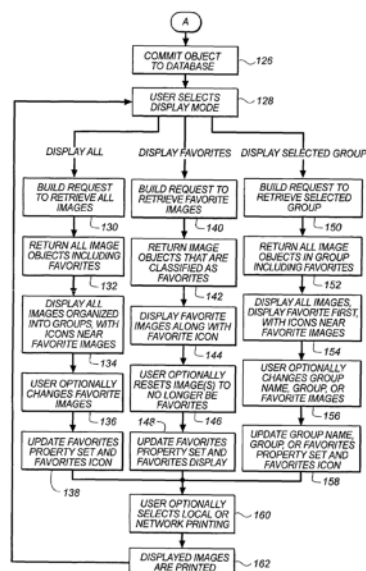
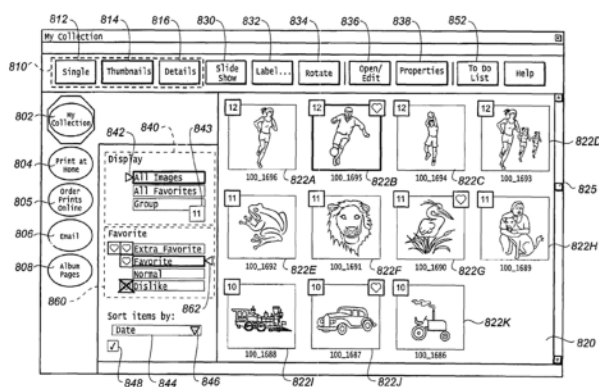


FIG. 3B

Bryant '418 at FIG. 9A



Bryant '418 at FIG. 9B

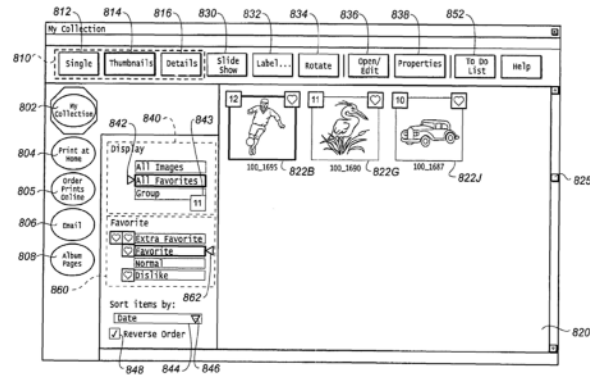


FIG. 9B

Bryant '418 at FIG. 9C

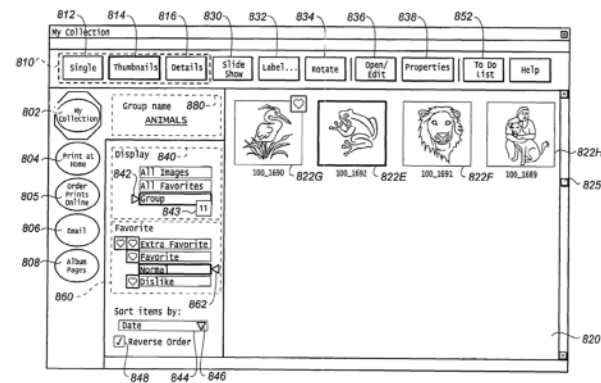


FIG. 9C

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

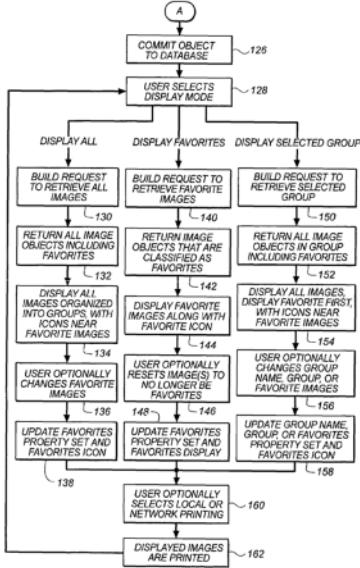
In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                                                                                                   | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [10pre] 10. The information processing method of claim 9, further comprising:                                                                                  | Bryant '418 discloses “[t]he information processing method of claim 9.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [10a] wirelessly receiving the first video information from the other information processing apparatus via an antenna of the information processing apparatus. | <p>Bryant '418 discloses “wirelessly receiving the first video information from the other information processing apparatus via an antenna of the information processing apparatus.” For example:</p> <p>See above at row [3a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [11pre] 11. The information processing method of claim 9,                                                                                                      | Bryant '418 discloses “[t]he information processing method of claim 9.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| '815 Patent Claim Limitation                                                                                                                                                                      | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| [11a] wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information, | <p>Bryant '418 discloses “wherein the plurality of stored video information includes third video information recorded by the information processing apparatus, fourth video information, and fifth video information.” For example:</p> <p>See above at row [4a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [11b] wherein the information processing apparatus displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.                           | <p>Bryant '418 discloses “wherein the information processing apparatus displays a user interface having thumbnails corresponding to each of the third, fourth, and fifth video information.” For example:</p> <p>See above at row [1f].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                           |
| [12pre] 12. The information processing method of claim 11,                                                                                                                                        | Bryant '418 discloses “[t]he information processing method of claim 11.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| [12a] wherein the information processing apparatus displays the third, fourth, and fifth video information according to predetermined playback sequence.                                          | <p>Bryant '418 discloses “wherein the information processing apparatus displays the third, fourth, and fifth video information according to predetermined playback sequence.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                        |
| [13pre] 13. The information processing method of claim 9,                                                                                                                                         | Bryant '418 discloses “[t]he information processing method of claim 9.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [13a] wherein the plurality of stored video information includes                                                                                                                                  | Bryant '418 discloses “wherein the plurality of stored video information includes third video information, fourth video information, and fifth video information.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                        | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| third video information, fourth video information, and fifth video information,                                                                                                                                                                                                                                                     | <p>See above at row [4a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                           |
| [13b] wherein the plurality of stored video information includes management information corresponding to the third, fourth, and fifth video information,                                                                                                                                                                            | <p>Bryant '418 discloses "wherein the plurality of stored video information includes management information corresponding to the third, fourth, and fifth video information." For example:</p> <p>See above at row [6b].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                            |
| [13c] wherein the management information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence. | <p>Bryant '418 discloses "wherein the management information includes filename information and timing information for each of the third, fourth, and fifth video information such that when the third, fourth, and fifth video information is stored in the recording medium the filename information is updated according to a predetermined sequence." For example:</p> <p>See above at row [6c].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [14pre] 14. The information processing method of claim 9, further comprising:                                                                                                                                                                                                                                                       | Bryant '418 discloses "[t]he information processing method of claim 9." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [14a] converting, by an analog to digital converter of the information processing apparatus,                                                                                                                                                                                                                                        | Bryant '418 discloses "converting, by an analog to digital converter of the information processing apparatus, analog audio information being recorded into digital audio information." For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| <b>'815 Patent Claim Limitation</b>                                                                                                                                                                                                                                                  | <b>Bryant '418 Exemplary Disclosure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| analog audio information being recorded into digital audio information;                                                                                                                                                                                                              | See above at row [7a].<br><br>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                          |
| [14b] compressing, by a compressor of the information processing apparatus, the plurality of video information including digital video information and the digital audio information;                                                                                                | Bryant '418 discloses "compressing, by a compressor of the information processing apparatus, the plurality of video information including digital video information and the digital audio information." For example:<br><br>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                            |
| [14c] decoding, during playback and by a decoder of the information processing apparatus, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user; and | Bryant '418 discloses "decoding, during playback and by a decoder of the information processing apparatus, the compressed digital video information and the compressed digital audio information included in the plurality of stored video information and selected for reproduction by the user." For example:<br><br>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions. |
| [14d] converting, by a digital to analog converter of the information processing apparatus, at least the decoded digital audio information into analog audio information during playback.                                                                                            | Bryant '418 discloses "converting, by a digital to analog converter of the information processing apparatus, at least the decoded digital audio information into analog audio information during playback." For example:<br><br>See above at row [7d].<br><br>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                          |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                       | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [15pre] 15. The information processing method of claim 9, further comprising:                                                                                                                                                                                                                      | Bryant '418 discloses “[t]he information processing method of claim 9.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [15a] generating, by the information processing apparatus, on screen display information,                                                                                                                                                                                                          | <p>Bryant '418 discloses “generating, by the information processing apparatus, on screen display information.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [15b] wherein the plurality of stored video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information. | <p>Bryant '418 discloses “wherein the plurality of stored video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.” For example:</p> <p>Bryant '418 at FIG. 3B</p>  <pre> graph TD     A((A)) --&gt; 126[COMMIT OBJECT TO DATABASE]     126 --&gt; 128[USER SELECTS DISPLAY MODE]     128 --&gt; 130[DISPLAY ALL]     128 --&gt; 140[DISPLAY FAVORITES]     128 --&gt; 150[DISPLAY SELECTED GROUP]     130 --&gt; 130a[BUILD REQUEST TO RETRIEVE ALL IMAGES]     130a --&gt; 132[RETURN ALL IMAGE OBJECTS INCLUDING FAVORITES]     132 --&gt; 134[DISPLAY ALL IMAGES ORGANIZED INTO GROUPS WITH ICONS NEAR FAVORITE IMAGES]     134 --&gt; 136[USER OPTIONALLY CHANGES FAVORITE IMAGES]     136 --&gt; 138[UPDATE FAVORITES PROPERTY SET AND FAVORITES ICON]     140 --&gt; 140a[BUILD REQUEST TO RETRIEVE FAVORITE IMAGES]     140a --&gt; 142[RETURN IMAGE OBJECTS THAT ARE CLASSIFIED AS FAVORITES]     142 --&gt; 144[DISPLAY FAVORITE IMAGES ALONG WITH FAVORITE ICON]     144 --&gt; 146[USER OPTIONALLY RESETS IMAGES TO NO LONGER BE FAVORITES]     146 --&gt; 148[UPDATE FAVORITES PROPERTY SET AND FAVORITES DISPLAY]     150 --&gt; 150a[BUILD REQUEST TO RETRIEVE SELECTED GROUP]     150a --&gt; 152[RETURN ALL IMAGE OBJECTS IN GROUP INCLUDING FAVORITES]     152 --&gt; 154[DISPLAY ALL IMAGES, DISPLAY FAVORITE FIRST, WITH ICONS NEAR FAVORITE IMAGES]     154 --&gt; 156[USER OPTIONALLY CHANGES GROUP NAME, GROUP OR FAVORITE IMAGES]     156 --&gt; 158[UPDATE GROUP NAME, GROUP OR FAVORITES PROPERTY SET AND FAVORITES ICON]     138 --&gt; 160[USER OPTIONALLY SELECTS LOCAL OR NETWORK PRINTING]     148 --&gt; 160     158 --&gt; 160     160 --&gt; 162[DISPLAYED IMAGES ARE PRINTED]   </pre> <p>FIG. 3B</p> |

Bryant '418 at FIG. 9A

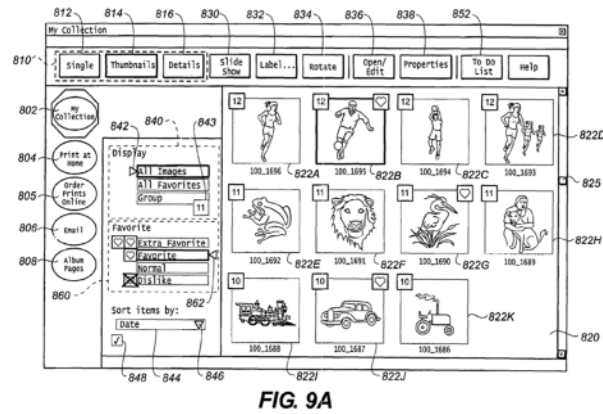


FIG. 9A

Bryant '418 at FIG. 9B

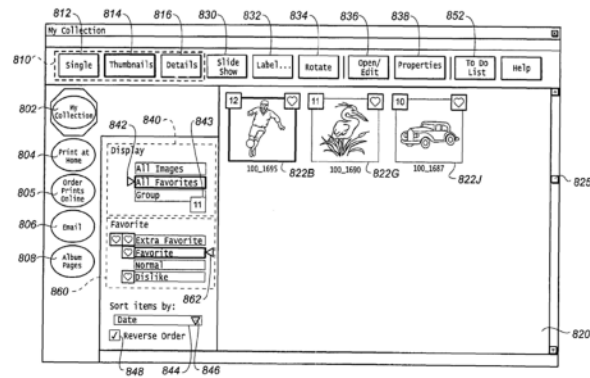
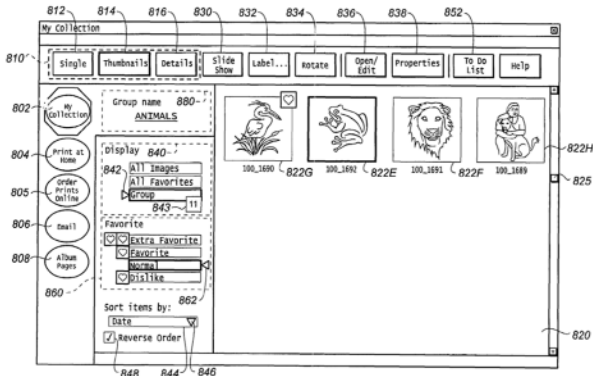


FIG. 9B

Bryant '418 at FIG. 9C

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |  <p><b>FIG. 9C</b></p> <p>Bryant '418 at 3:50–59</p> <p>This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a “favorite”. For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.</p> <p>Bryant '418 at 3:60–4:4</p> <p>Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images can be classified between a range of –10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and –10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 10:20–24</p> <p>FIG. 3A and 3B, taken together, depict a flow diagram showing a first embodiment of a method in accordance with the present invention for grouping images, identifying favorite images, and organizing the images, implemented using the system described earlier in relation to FIG. 1 and FIG. 2.</p> |

Bryant '418 at 13:51–59

The “thmheight” and “thmwidth” metadata in rows 688-690 give the size of the thumbnail image (e.g., 160×120 pixels) and the “thmnail” metadata in row 692 is a data blob which holds a copy of the compressed thumbnail image that was stored by the digital camera 300 in each Exif image file. Providing a copy of each thumbnail image in the general assets table 600 of FIG. 8 allows all of the thumbnails to be quickly retrieved from the hard drive 20 for display on the display monitor 14 (see FIG. 1).

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                              | <p>“Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and −7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                  | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                               | knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| [16pre] 16. A method for reproducing video content associated with user profiles being implemented on an information processing apparatus, comprising:                                                                                                                                                        | <p>To the extent the preamble is limiting, Bryant '418 discloses "[a] method for reproducing video content associated with user profiles being implemented on an information processing apparatus." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [16a] receiving, via a network, first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted;                                                                           | <p>Bryant '418 discloses "receiving, via a network, first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted." For example:</p> <p>Bryant '418 at 3:42–47</p> <p style="padding-left: 40px;">In a third embodiment, the digital camera includes a wireless modem which transmits some of the captured images to a service provider, and the grouping and classification information is used to simplify the process of selecting and organizing the images stored by a local host computer and by the service provider.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [16b] displaying, on a display device, a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, the plurality of user profiles being | <p>Bryant '418 discloses "displaying, on a display device, a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character." For example:</p> <p>Bryant '418 at 3:28–31</p> <p style="padding-left: 40px;">A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.</p>                                                                                                                                                                                                                                  |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                     | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <p>associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character;</p>                                                                      | <p>Bryant '418 at 4:5–24</p> <p>Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[16c] receiving a selection of the first user profile;</p>                                                                                                                                                                                                                    | <p>Bryant '418 discloses “receiving a selection of the first user profile.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>[16d] displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information, the second user interface being associated with the first user profile and displaying the</p> | <p>Bryant '418 discloses “displaying, in response to the selection, a second user interface for a user to select desired video information to be reproduced from among the first video information, the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile, the second user interface further displaying thumbnails corresponding to the first group of video information.” For example:</p> <p>See above at row [9c].</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| <b>'815 Patent Claim Limitation</b>                                                                                                                                                                                                                                                                                                         | <b>Bryant '418 Exemplary Disclosure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| first character, the first character associated with a first group of video information and indicating an identity of the user of the first user profile, the second user interface further displaying thumbnails corresponding to the first group of video information;                                                                    | To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [16e] displaying the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, the first group of video information and the second group of video information including one video information that is the same; | <p>Bryant '418 discloses “displaying the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, the first group of video information and the second group of video information including one video information that is the same.” For example:</p> <p>See above at row [1h].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [16f] receiving a selection to remove the one video information from the first group of video information associated with the first user profile;                                                                                                                                                                                           | <p>Bryant '418 discloses “receiving a selection to remove the one video information from the first group of video information associated with the first user profile.” For example:</p> <p>See above at row [1i].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                           |
| [16g] removing the one video information from the first group of video information, wherein, upon the one video information being removed from the first group of                                                                                                                                                                           | Bryant '418 discloses “removing the one video information from the first group of video information, wherein, upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected.” For example:                                                                                                                                                                                                                                                                   |

## '815 Patent Claim Limitation

video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected;

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 9A

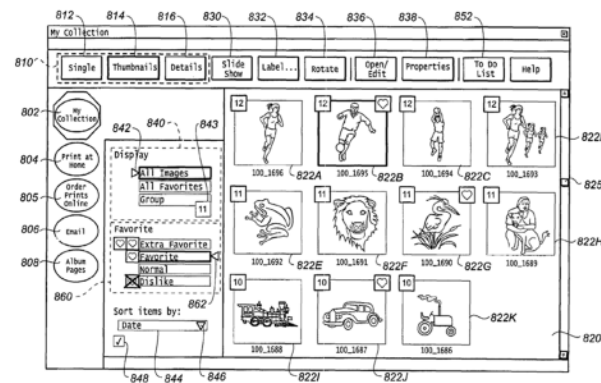


**FIG. 9A**

Bryant '418 at FIG. 9B

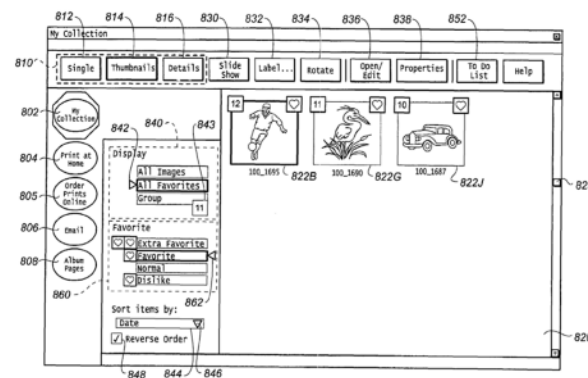


**FIG. 9B**

Bryant '418 at FIG. 9C

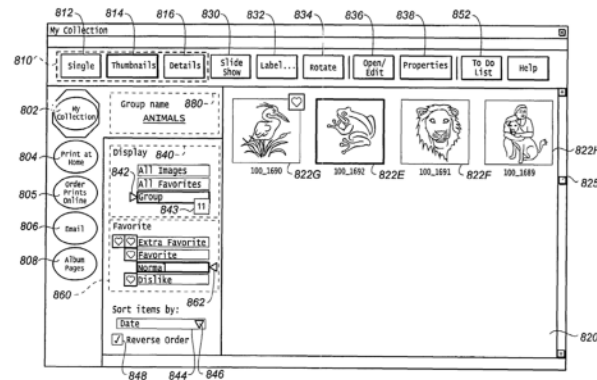


FIG. 9C

Bryant '418 at 3:21–28

The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.

Bryant '418 at 3:50–59

This affective information usually describes or represents a person's subjective reaction to a given image. One very important type of affective information is the level of importance a user associates with an image, such as whether the image is a “favorite”. For example, a user may take dozens of still photographs or video segments during an event, such as a Wedding or Christmas celebration. Out of these many images, there are normally only a few that the user feels are particularly special, or “favorite” images.

Bryant '418 at 3:60–4:4

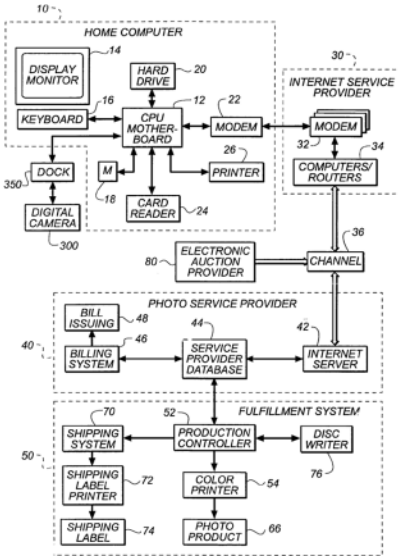
Affective information can be stored using a “tag” or “flag”, associated with an image, which indicates whether or not the image has been identified as a “favorite” or “important” image for the user. The absence of such a tag indicates that the image has not been identified as a favorite or important image for the user. Such tag represents a binary categorization, classifying images into “favorite” and “normal” categories. Alternatively, favorite images can be categorized into a range of levels. For example, images

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                              | <p>can be classified between a range of -10 to +10, where 0 is used for an unclassified image, +10 is used for the “most favorite” image or images, and -10 is used for the “least favorite” image or images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagenam” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                              | <p>object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a "Slide Show" icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a "Label" icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a "Rotate" icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an "Open/Edit" icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a "Properties" icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the "My Collection" (current) GUI screen, tab 804 selects a "Print at Home" GUI screen, tab 805 selects the "Order Prints Online" GUI screen, tab 806 selects the "Email" GUI screen, and tab 801 selects the "Album Pages" GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either "Normal" or "Favorite". Using the selector 862, the user can change the level of the selected image to be an "Extra Favorite", a "Favorite", a "Normal" image, or a "Dislike" image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an "Extra Favorite", +7 if the image has been set to be a "Favorite", 0 if the image has been set to "Normal", and -7 if the image has been set to be "Dislike". The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an "Extra Favorite" level has been selected, a double heart icon is displayed, if a "Favorite" level has been selected, a single heart icon is displayed, if a "Normal" level has been selected, no icon is displayed, and if a "Dislike" icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the "Display Favorites" option, for example, by selecting the "All Favorites" option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|                              | <p>objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                                                                                                                                                                                                                 | <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[16h] receiving a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, the desired video information included in the second video information;</p> | <p>Bryant '418 discloses “receiving a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, the desired video information included in the second video information.” For example:</p> <p>See above at row [1g].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| '815 Patent Claim Limitation                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| [16i] decrypting video information corresponding to the selected thumbnail; and | <p>Bryant '418 discloses “decrypting video information corresponding to the selected thumbnail.” For example: To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                  |
| [16j] displaying the decrypted video information.                               | <p>Bryant '418 discloses “displaying the decrypted video information.” For example: Bryant '418 at FIG. 1</p>  <p><b>FIG. 1</b></p> <p>Bryant '418 at 4:47–57</p> <p>Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|                              | <p>cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.</p> <p>Bryant '418 at 4:58–5:12</p> <p>The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:13–24</p> <p>The CPU motherboard 12 is coupled to a display monitor 14 and a keyboard 16. A mouse 18 permits the user to readily communicate with the CPU motherboard 12. The home computer 10 also includes a dial-up modem 22 for communicating with an Internet Service Provider (ISP) 30 in order to connect to a channel 36, such as the Internet, in order to email images to others, or to provide images to a service provider for storage and/or printing. The CPU motherboard 12 can communicate with the digital camera 300 when the digital camera 300 is placed in a dock 350. The communication uses a suitable wired or wireless interface, such as the well-known Universal Serial Bus (USB) interface.</p> <p>Bryant '418 at 6:56–66</p> <p>The digital camera 300 is shown in block diagram form in FIG. 2. The back of the digital camera 300, which provides a camera user interface, is shown in FIG. 4. Preferably, the digital camera 300 is a portable battery operated device, small enough to be easily handheld by a user when capturing and reviewing images. The digital camera 300 can be, for example, a Kodak EasyShare DX4330 Zoom Digital Camera. The digital camera 300 produces digital images that are stored on the removable memory</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                              | <p>card 330. The digital camera 300 includes a zoom lens 312 having zoom and focus motor drives 310 and an adjustable aperture and shutter (not shown).</p> <p>Bryant '418 at 7:34–8:5</p> <p>The processor 320 performs color interpolation followed by color and tone correction, in order to produce rendered sRGB image data. The processor 320 can also provide various image sizes selected by the user, for example, 3.1 megapixel (MP) “best quality” images, 2.2 MP “better quality” images, 0.8 MP “e-mail quality” images, and 0.4 MP “web quality” images. The rendered sRGB image data is then JPEG compressed and stored as a JPEG image file on the removable memory card 330. The JPEG file uses the so-called “Exif” image format defined in “Digital Still Camera Image File Format (Exif)” version 2.1, July 1998 by the Japan Electronics Industries Development Association (JEIDA), Tokyo, Japan. This format includes an Exif application segment that stores particular image metadata, for example, the date and time the picture was captured, the lens f/number and other camera settings, and image captions or comments that can be selected or entered by the camera user. In some embodiments of the present invention, this metadata can include metadata identifying favorite images and groups of images. In other embodiments, the favorites and grouping metadata is provided in a separate control file. The control processor and timing generator 304 also provide a real-time clock value to the image processor 320, which can store this value as date/time metadata in each image file.</p> <p>The processor 320 also creates a low-resolution “thumbnail” size image, which can be created as described in commonly-assigned U.S. Pat. No. 5,164,831, entitled “Electronic Still Camera Providing Multi-Format Storage Of Full And Reduced Resolution Images” to Kuchta, et al., the disclosure of which is herein incorporated by reference. In a preferred embodiment, this thumbnail image has 160×120 pixels, to conform to the DCF rules described later, and is stored in RAM memory 326 and supplied to a color LCD image display 332. After images are captured, they can be quickly reviewed on the color LCD image display 332 by using the thumbnail image data. The digital camera 300 can also include a video output driver 390 for displaying the captured images and the graphical user interface on a separate TV monitor 392.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p> |

| '815 Patent Claim Limitation                                                                                                                                                      | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| [17pre] 17. The method of claim 16,                                                                                                                                               | Bryant '418 discloses “[t]he method of claim 16.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [17a] wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information. | <p>Bryant '418 discloses “wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information.” For example:</p> <p>Bryant '418 at 3:28–31</p> <p style="padding-left: 40px;">A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.</p> <p>Bryant '418 at 4:5–24</p> <p style="padding-left: 40px;">Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [18pre] 18. The method of claim 16, further comprising:                                                                                                                           | Bryant '418 discloses “[t]he method of claim 16.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [18a] generating a list of video information based on preferences of a user determined by a user                                                                                  | Bryant '418 discloses “generating a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## '815 Patent Claim Limitation

selections of thumbnails from the first or second group of thumbnails.

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 3B

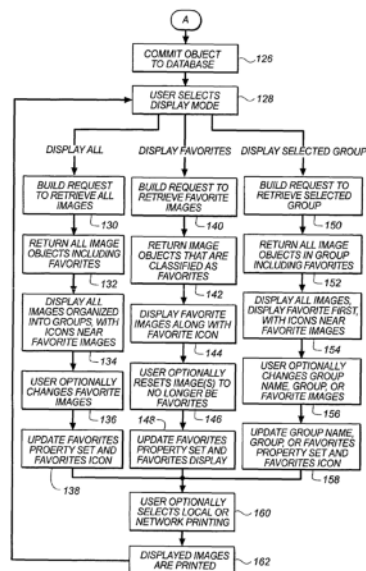


FIG. 3B

Bryant '418 at FIG. 9A

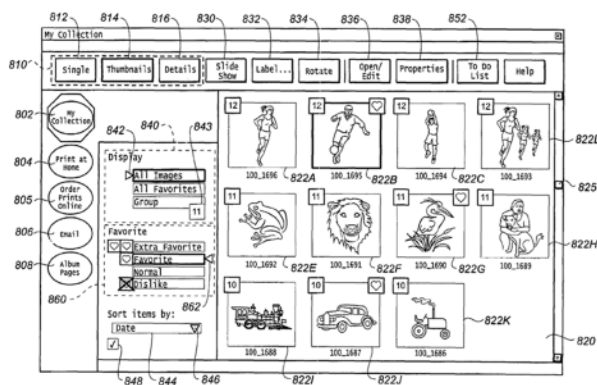


FIG. 9A

Bryant '418 at FIG. 9B

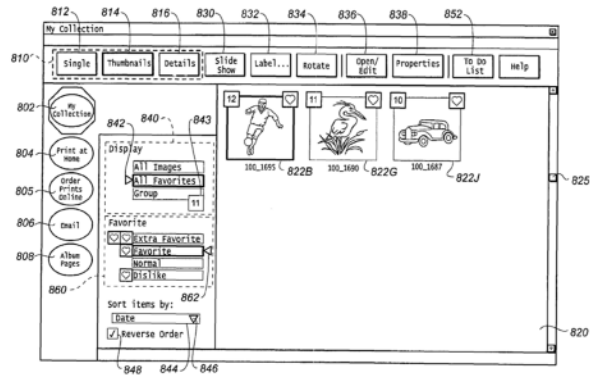


FIG. 9B

Bryant '418 at FIG. 9C

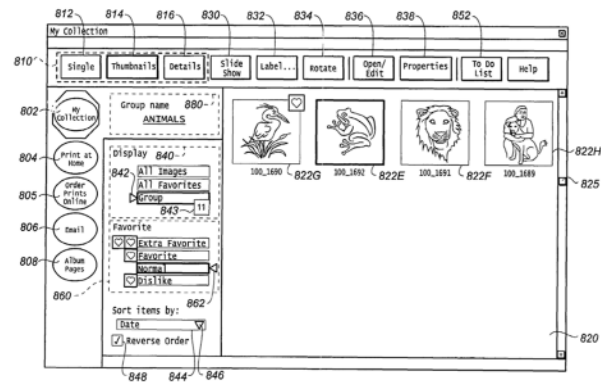


FIG. 9C

Bryant '418 at 3:21-28

The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.

Bryant '418 at 13:60-14:4

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                              | <p>In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and -7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                              | <p>selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> |

| '815 Patent Claim Limitation                            | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         | <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., "ANIMALS ") in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the "Print at Home" icon 804 or the "Order Prints Online" icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled "Effective Transfer Of Images From A User To A Service Provider" to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the "Album Pages" icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [19pre] 19. The method of claim 16, further comprising: | Bryant '418 discloses "[t]he method of claim 16." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

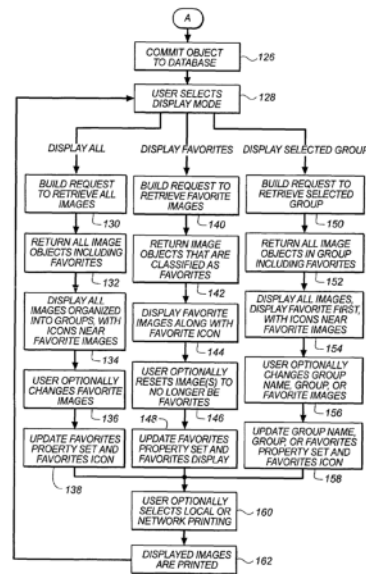
## '815 Patent Claim Limitation

[19a] generating a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third video information; receiving a selection of the list by the user; and in response to the selection of the list, displaying the thumbnails that correspond to the third video information and no other thumbnails associated with video information of other users.

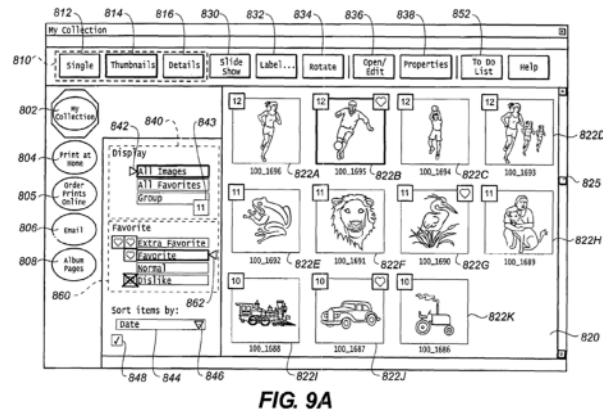
## Bryant '418 Exemplary Disclosure

Bryant '418 discloses “generating a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third video information; receiving a selection of the list by the user; and in response to the selection of the list, displaying the thumbnails that correspond to the third video information and no other thumbnails associated with video information of other users.” For example:

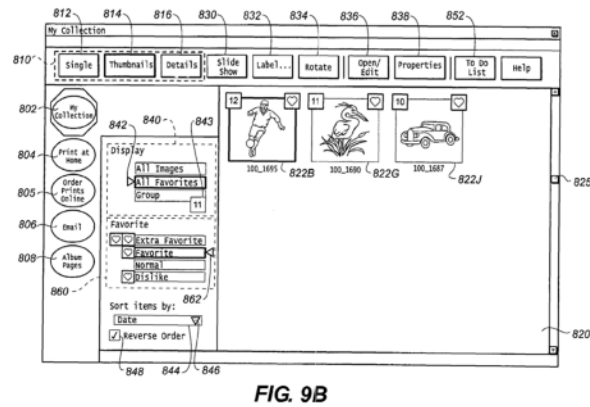
Bryant '418 at FIG. 3B



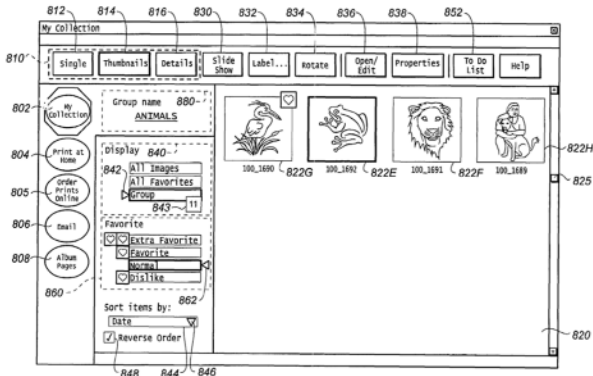
Bryant '418 at FIG. 9A



Bryant '418 at FIG. 9B



Bryant '418 at FIG. 9C

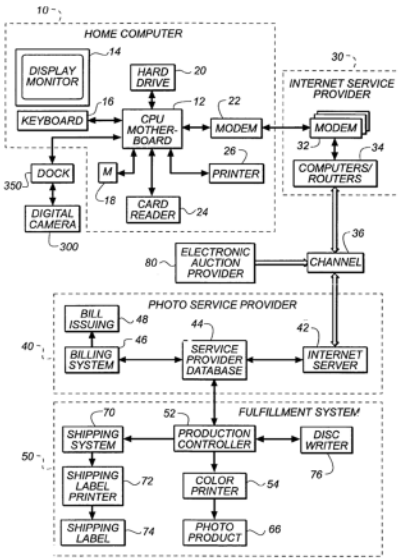
| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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|                              |  <p style="text-align: center;"><b>FIG. 9C</b></p> <p>Bryant '418 at 3:21–28</p> <p>The grouping can be done manually by the camera user, by pressing a “new group” button on the digital camera before capturing a group of digital images. The classification can be done manually by the camera user, for example, by identifying a “favorite” image within each group of captured images, using a control button on the digital camera as the user reviews the group of captured digital images on the camera's image display.</p> <p>Bryant '418 at 14:5–15:43</p> <p>FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmtnail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.</p> <p>The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.</p> <p>Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and −7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                              | <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                   | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                | <p>also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                  |
| [20pre] 20. The method of claim 16, further comprising:                                                                                                                                                                                                                                                                        | Bryant '418 discloses "[t]he method of claim 16." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [20a] generating on screen display information, wherein the first video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information. | <p>Bryant '418 discloses "generating on screen display information, wherein the first video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [21pre] 21. An information processing apparatus comprising:                                                                                                                                                                                                                                                                    | <p>To the extent the preamble is limiting, Bryant '418 discloses "[a]n information processing apparatus." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                           |
| [21a] a network interface receiving first video information wirelessly from a device external to the information processing apparatus,                                                                                                                                                                                         | Bryant '418 discloses "a network interface receiving first video information wirelessly from a device external to the information processing apparatus, the first video information being received including second video information that is encrypted." For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| '815 Patent Claim Limitation                                                                            | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <p>the first video information being received including second video information that is encrypted;</p> | <p>Bryant '418 at FIG. 1</p>  <p><b>FIG. 1</b></p> <p>Bryant '418 at 4:47–57</p> <p>Referring to FIG. 1, there is illustrated a digital photography system in accordance with the present invention. As shown in FIG. 1, the system includes a digital camera 300 that captures and classifies still and motion video images, as will be described later with reference to FIG. 2. The digital camera 300 is one example of an imaging device that can be used in a digital photography system made in accordance with the present invention. Other examples of imaging devices include still-only or motion video-only cameras, and combination cell phone/digital cameras that can capture and transmit digital still and video images.</p> <p>Bryant '418 at 4:58–5:12</p> <p>The digital photography system of FIG. 1 also includes a home computer system 10. The home computer 10 includes a CPU motherboard 12, having for example, an Intel Pentium IV processor as well as RAM memory (not shown). The CPU motherboard 12 executes software stored on a hard drive 20, for example, the well-known Windows XP operating system software and the Internet Explorer web browser software, both provided by Microsoft Corp. of Redmond, Wash. The hard drive 20 is also used to store</p> |

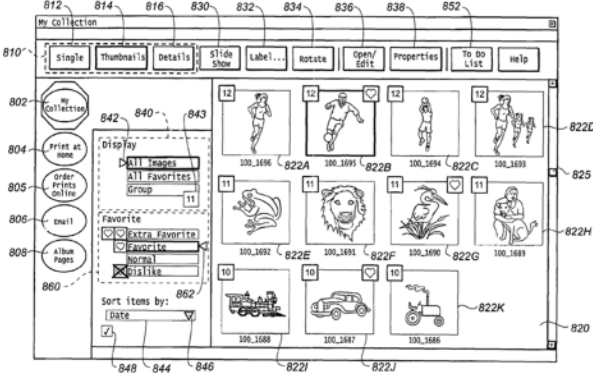
| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                              | <p>application software that can be provided along with the digital camera 300 using any suitable software distribution media or method, such as a CD-ROM, floppy disc, or Internet download, as is well-known to those skilled in the art. As will be described later with reference to FIG. 3, the hard drive 20 is also used to store images downloaded from the digital camera 300 and to store a local database of information associated with these downloaded images. The hard drive 20 is one type of memory associated with the home computer 10. Other types of memory could alternatively be used with the home computer 10 to store downloaded images, such as solid-state Flash EPROM memory and optical read/write discs, such as recordable and erasable DVD discs.</p> <p>Bryant '418 at 5:43–50</p> <p>The ISP 30, for example, Earthlink Network, Inc. of Pasadena, Calif., includes banks of modems 32, one of which is connected to communicate with the modem 22 of the home computer 10. The modem 32 in turn communicates with computers/routers 34 in order to provide a connection to the channel 36, which is preferably the Internet, using equipment and techniques well-known to those skilled in the art. The ISP 30 provides e-mail services using the channel 36.</p> <p>Bryant '418 at 8:29–46</p> <p>As shown in FIG. 2, an interface 342 can be used to connect between the host interface 322 in the digital camera 300 and the dock 350, which connects to the home computer 10. The interface 342 may conform to, for example, the well-known USB interface specification. Alternatively, the interface between the digital camera 300 and the home computer 10 can be a wireless interface, such as the well-known Bluetooth wireless interface or the well-known 802.11b wireless interface. The interface 342 can be used to download images from removable memory card 330 to the home computer 10, instead of using card reader 24 (FIG. 1). The interface 342 can also be used to transfer data from the home computer 10 to the firmware memory 328 in the digital camera 300. In particular, it can be used to transfer a user name and e-mail addresses from the home computer 10 to the firmware memory 328, as described in commonly-assigned U.S. patent application Ser. No. 08/977,382, filed Oct. 18, 2002, the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <p>[21b] a display displaying a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character;</p> | <p>Bryant '418 discloses “a display displaying a first user interface for a user to select a user profile from among a plurality of user profiles including a first user profile associated with a first character and a second user profile associated with a second character, the plurality of user profiles being associated with video information and the first user interface including an option for a user to select the first user profile from the plurality of user profiles by selecting the first character.” For example:</p> <p>Bryant '418 at 3:28–31</p> <p>A user identifier can also be stored along with the classification data, in order to identify the particular camera user for whom the classification was made.</p> <p>Bryant '418 at 4:5–24</p> <p>Different users can have different emotional reactions to the same image. Therefore, to be most useful, affective information relating to images should be associated with a particular user, if the images are to be shared with various users. In some embodiments, this is accomplished by associating a user identifier with the affective information. The user identifier can be any type of information that helps enable a particular user to be identified. For example, the user identifier can be a personal identification code such as a globally unique ID (GUID), a user number, a social security number, a camera serial number, or the like. The user identifier can also be a complete legal name, a nickname, a computer user name, or the like. The user identifier can be stored along with the affective information at the time the image is classified using the digital camera, or can alternatively be added when the images are transferred from the digital camera to a host computer. In the latter case, an identification number such as a serial number associated with the camera can be stored within the image files, and a user identifier can later be associated with this serial number.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[21c] an input interface receiving a selection of the first user profile at a first time and a selection of the second character at a second time,</p>                                                                                                                                                                                                                                                                                                                                                     | <p>Bryant '418 discloses “an input interface receiving a selection of the first user profile at a first time and a selection of the second character at a second time.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p>[21d] wherein, in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information, the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with, the second user interface further displaying thumbnails corresponding to the first group of video information, and</p> | <p>Bryant '418 discloses "wherein, in response to the selection of the first user profile, the display displays a second user interface for a user to select desired video information to be reproduced from among the first video information, the second user interface being associated with the first user profile and displaying the first character, the first character associated with a first group of video information and indicating an identity of the user which the first user profile is associated with, the second user interface further displaying thumbnails corresponding to the first group of video information." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[21e] wherein, in response to the selection of the second user profile, the display displays the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, the first group of video information and the second group of video information including one</p>                                                                                                                                                                                                                                      | <p>Bryant '418 discloses "wherein, in response to the selection of the second user profile, the display displays the second character and a second group of thumbnails corresponding to a second group of video information associated with the second user profile when the second character is selected, the first group of video information and the second group of video information including one video information that is the same." For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                              |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| video information that is the same;<br>and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>[21f] a processor for removing one video information from the first group of video information after the input interface receives a selection to remove the one video information from the first group of video information associated with the first user profile, wherein, upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected,</p> | <p>Bryant '418 discloses “a processor for removing one video information from the first group of video information after the input interface receives a selection to remove the one video information from the first group of video information associated with the first user profile, wherein, upon the one video information being removed from the first group of video information, the one video information continues to be included in the second group of video information for the second user profile and the second group of thumbnails continues to display a thumbnail corresponding to the one video information when the second character is selected.” For example:</p> <p>See above at row [1i].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| <p>[21g] wherein the processor decrypts second video information corresponding to a selected thumbnail when the input interface receives a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails, and</p>                                                                                                                                                                                                                                                                                                                                                                                         | <p>Bryant '418 discloses “wherein the processor decrypts second video information corresponding to a selected thumbnail when the input interface receives a selection of desired video information based on a selection of a thumbnail from the first group of thumbnails.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p>[21h] wherein the display displays the decrypted video information.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Bryant '418 discloses “wherein the display displays the decrypted video information.” For example:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| '815 Patent Claim Limitation                                                                                                                                                      | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                                                                                                                                                                                   | To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.                                                                                                                                                                                                                                                        |
| [22pre] 22. The information processing apparatus of claim 21, further comprising:                                                                                                 | Bryant '418 discloses "[t]he information processing apparatus of claim 21." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [22a] an antenna for wirelessly receiving the first video information.                                                                                                            | <p>Bryant '418 discloses "an antenna for wirelessly receiving the first video information." For example: See above at row [3a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                             |
| [23pre] 23. The information processing apparatus of claim 21,                                                                                                                     | Bryant '418 discloses "[t]he information processing apparatus of claim 21." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [23a] wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information. | <p>Bryant '418 discloses "wherein any user can delete stored video information regardless of a user profile from the plurality of user profiles that was used to record the stored video information." For example: See above at row [17a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [24pre] 24. The information processing apparatus of claim 21,                                                                                                                     | Bryant '418 discloses "[t]he information processing apparatus of claim 21." See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| '815 Patent Claim Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <p>[24a] wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails.</p>                                                                                                                                                                                                                                                                                                                             | <p>Bryant '418 discloses “wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails from the first or second group of thumbnails.” For example:</p> <p>See above at row [19a].</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung’s Invalidity Contentions.</p>                                                                           |
| <p>[25pre] 25. The information processing apparatus of claim 21,</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>Bryant '418 discloses “[t]he information processing apparatus of claim 21.” See above.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>[25a] wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information, and, in response to the input interface receiving a selection of the list by the user, the display displays only those thumbnails that correspond to the third and fourth video information and no other thumbnails associated with video information of other users.</p> | <p>Bryant '418 discloses “wherein the processor generates a list of video information based on preferences of a user determined by a user selections of thumbnails associated with the first video information, the list including third and fourth video information, and, in response to the input interface receiving a selection of the list by the user, the display displays only those thumbnails that correspond to the third and fourth video information and no other thumbnails associated with video information of other users.” For example:</p> <p>Bryant '418 at FIG. 9A</p>  <p>FIG. 9A</p> |

Bryant '418 at FIG. 9B

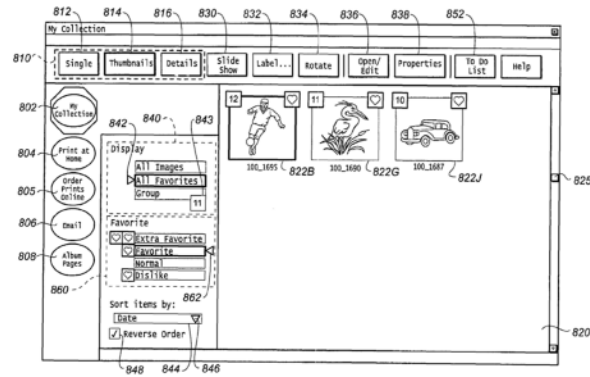


FIG. 9B

Bryant '418 at FIG. 9C

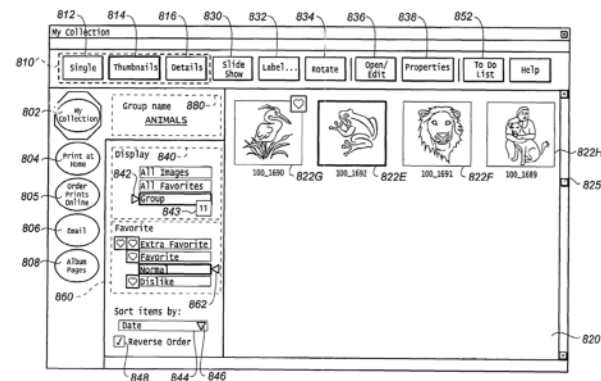


FIG. 9C

Bryant '418 at 13:60–14:4

In block 128 of FIG. 3, the user selects a display mode, and the appropriate transferred images are displayed. The user can select a display of “all images”, a display of “all favorite” images, or a display of a “selected group” of images. If the user selects the “display all” option, in block 130 the CPU motherboard 12 in the home computer 10 builds a request to retrieve all of the thumbnail images from the general assets table 600 in FIG. 8. In block 132 all of the image objects are retrieved, which includes the “favlevel” favorites level metadata 666. In block 134 all of the images are displayed in a way that organizes them into groups, with icons indicating the favorite images in the collection of images.

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmnl” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843”. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a FAVGROUP.MRK file 416. Thus, the group containing the image named 100\_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.

Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.

The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                              | <p>words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> |

Bryant '418 at 15:44–16:5

FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.

In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.

In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.

Bryant '418 at 16:6–49

FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.

In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.

In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No.

| '815 Patent Claim Limitation                                                               | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                                                                                            | <p>09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |
| [27pre] 27. The information processing apparatus of claim 21, further comprising:          | Bryant '418 discloses “[t]he information processing apparatus of claim 21.” See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [27a] an on screen display generator generating on screen display information,             | <p>Bryant '418 discloses “an on screen display generator generating on screen display information.” For example:</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [27b] wherein the first video information includes third video information such that, upon | Bryant '418 discloses “wherein the first video information includes third video information such that, upon selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.” For example:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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selection for playback, the third video information is outputted with the on screen display information for display of the third video information and the on screen display information.

## Bryant '418 Exemplary Disclosure

Bryant '418 at FIG. 9A

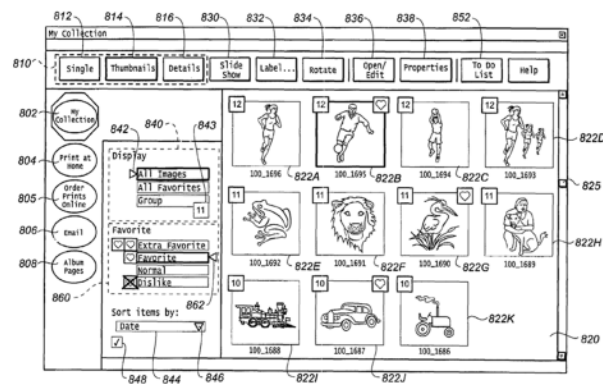


FIG. 9A

Bryant '418 at FIG. 9B

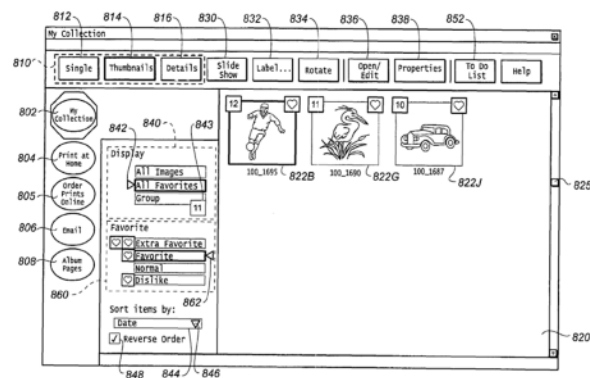


FIG. 9B

Bryant '418 at FIG. 9C

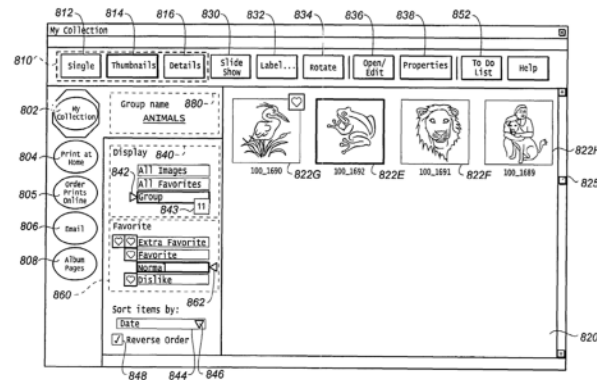


FIG. 9C

Bryant '418 at 14:5–15:43

FIG. 9A depicts an example of a computer user interface screen for displaying all of the transferred images. A GUI screen 800A includes an area 820 for displaying the thumbnail images provided using the “thmtnail” metadata 692 of each object in the general assets table 600 in FIG. 8. By moving a selector 842 within a display selection area 840, the user can select a display of “All Images”, a display of “All Favorites”, or a display of a “Group” of images selected using a group number/name box 843. In the example of FIG. 9A, the “All Images” display mode is selected.

The GUI screen 800A also includes a display format selection area 810, which provides three types of display formats. A “Thumbnails” display icon 814 displays an array of thumbnails in the image display area 820, as shown in the example of FIG. 9. Alternatively, a “Single” display icon 812 can be selected by the user in order to display a single image at a time in the image display area 820, or a “Details” display icon 816 can be selected by the user in order to display thumbnails and other information (including the capture date /time metadata indicating when the picture was taken, group number/name, and the like) in the image display area 820. Since the “Thumbnails” display mode has been selected the example shown in FIG.9A, a group of thumbnail images 822A -822K are displayed in the image display area 820. A slider 825 is used for scrolling through the collection of thumbnail images. Beneath each thumbnail image 822A-822K is the image name, provided using the “imagename” metadata 684 in FIG. 8.

Adjacent the top left of each thumbnail image 822A-822K is a text box indicating the group to which the image belongs (e.g., group 12 for image 100\_1696). The group number is provided by the “group number” metadata 672 in FIG. 8. This number is incremented for each group of images identified in a

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|                              | <p>FAVGROUP.MRK file 416. Thus, the group containing the image named 100_1696 was the 12<sup>th</sup> group created by the digital camera 300 and transferred to the home computer 10.</p> <p>Adjacent the top right of thumbnail images 822B, 822G, and 822J is an icon including an object indicating a favorite image, since these particular images have been identified as favorites by the user in block 114 of FIG. 3 and therefore have a “favlevel” metadata 666 value of +7. In the example shown in FIG. 9A, the object in the icon which is used to identify thumbnail images 822B, 822G, and 822J as favorite images is a heart. It would be understood to those skilled in the art that a different object, such as a smiley face, a checkmark, or a star, could be used to identify an image as a favorite image. As will be described later, a most favorite image can be indicated with an icon having multiple copies of the same object, for example, two hearts or two stars. Alternatively, the object could be larger for an extra favorite image, or could be bolded or represented in a different color.</p> <p>The GUI screen 800A also includes a “Slide Show” icon 830 for initiating a slide show of the images displayed in the image display window 820. One or more images can be labeled with one or more key words using a “Label” icon 832. The keywords can indicate the event or subject of the picture, for example. Selected images can be rotated by selecting a “Rotate” icon 834 or edited (e.g., by cropping, removing red-eye, changing the brightness, etc.) by selecting an “Open/Edit” icon 836. Information contained in a selected Exif image file (such as the date/time, camera settings and the like), as well as the keywords, can be viewed by selecting a “Properties” icon 838.</p> <p>The GUI screen 800A also includes sort options that are selected using a sort items text box 844 and a pull-down arrow icon 846 to select a desired sort option from a list, including sort by date, caption, or keyword. A reverse order checkbox 848 is used to reverse the display of the thumbnail images.</p> <p>The GUI screen 800A also includes tabs 802-810 for selecting other GUI screens. Tab 802 selects the “My Collection” (current) GUI screen, tab 804 selects a “Print at Home” GUI screen, tab 805 selects the “Order Prints Online” GUI screen, tab 806 selects the “Email” GUI screen, and tab 801 selects the “Album Pages” GUI screen.</p> <p>In block 136 of FIG. 3B, the user optionally changes which images are favorites. This is done by using a favorites level selection area 860 shown in FIG. 9A. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 138 of FIG. 3B, the favorites metadata is updated in the general assets table 600 to be +10 if the image has been set to be an “Extra Favorite”, +7 if the image has been set to be a “Favorite”, 0 if the</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                              | <p>image has been set to “Normal”, and –7 if the image has been set to be “Dislike”. The icon displayed next to each thumbnail image is also updated to reflect the level selected by the user. For example, if an “Extra Favorite” level has been selected, a double heart icon is displayed, if a “Favorite” level has been selected, a single heart icon is displayed, if a “Normal” level has been selected, no icon is displayed, and if a “Dislike” icon has been selected, a crossed out heart icon is displayed.</p> <p>If in block 128 the user selects the “Display Favorites” option, for example, by selecting the “All Favorites” option using selection window 840 in FIG. 9A, in block 140 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to favorite and extra favorite images from the general assets table 600 in FIG. 8. In block 142, all of the image objects classified as favorites are retrieved. In block 144, all of the favorite image thumbnails are displayed, with icons indicating the favorite level.</p> <p>Bryant '418 at 15:44–16:5</p> <p>FIG. 9B depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800B displays in area 820 the thumbnail images 822B, 822G and 822J that correspond to favorite images.</p> <p>In block 146 of FIG 3B the user optionally resets images that are no longer considered favorites. This is accomplished using the favorites level selection area 860. The user first selects one of the thumbnail images (e.g., thumbnail image 822B), and the favorites level selection area 860 then displays the current favorites level. If the user has not previously modified the level, the images are either “Normal” or “Favorite”. Using the selector 862, the user can change the level of the selected image to be an “Extra Favorite”, a “Favorite”, a “Normal” image, or a “Dislike” image.</p> <p>In block 148, the favorites metadata is updated in the general assets table 600, and the icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>If in block 128 the user selects the “Display Selected Group” option, for example by selecting the “Group” option using selection window 840 in FIG. 9B, in block 150 the CPU motherboard 12 in the home computer 10 builds a request to retrieve only those thumbnail images which correspond to the selected group (e.g., group number 11) from the general assets table 600 in FIG. 8. In block 152, all of the image objects belonging to the selected group are retrieved, along with the metadata indicating the favorites level. In block 154, all of the image thumbnails in the group are displayed, with icons indicating the favorite level.</p> |

| '815 Patent Claim Limitation | Bryant '418 Exemplary Disclosure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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|                              | <p>Bryant '418 at 16:6–49</p> <p>FIG. 9C depicts an example of a computer user interface screen for displaying all of the favorite images. A GUI screen 800C displays in area 820 the thumbnail images 822E, 822F, 822G and 822H that belong to the selected group.</p> <p>In block 156 of FIG 3B the user optionally sets or changes the name of the group. This is done using naming window 880, by typing in an appropriate name (e.g., “ANIMALS ”) in the underline area. The user can also change the favorites level of one or more images as was described earlier in relation to block 136. In block 158, the favlevel metadata 666 and group name metadata 674 are updated in the general assets table 600, and the favorites level icon displayed next to each thumbnail image is also updated, as was described earlier in relation to block 138.</p> <p>In block 160, the user optionally selects local or network printing, by selecting the “Print at Home” icon 804 or the “Order Prints Online” icon 805 shown in FIG. 9C. If network printing is selected, the displayed images are uploaded to the photo service provider 40 over the channel 36 (see FIG. 1). This uploading can use the methods described in commonly-assigned U.S. patent application Ser. No. 09/691,364, filed Oct. 18, 2000, entitled “Effective Transfer Of Images From A User To A Service Provider” to Berarducci et. al., the disclosure of which is incorporated herein by reference.</p> <p>In block 162, the displayed images are printed either as normal prints, or alternatively, as album pages, if the “Album Pages” icon 808 shown in FIG. 9C is selected. If album pages are selected, in block 162 either the CPU motherboard 12 (for local printing) or the production controller 52 (for on-line printing) automatically creates album pages from the selected images. In a preferred embodiment of the present invention, the images are automatically organized into album pages corresponding to the grouping information. In addition, favorite images are used as emphasis images, as described in commonly-assigned U.S. patent application Ser. No. 09/559,478, filed Apr. 27, 2000 by Simon, the disclosure of which is incorporated herein by reference. As described in the Simon et al. patent, the emphasis image is located in the center of the page and is larger than other images on the page. The emphasis image can also be surrounded by a border or other background designed to draw attention to the emphasis image. The album pages can be produced using the methods described in commonly-assigned U.S. Pat. No. 6,004,061 to Manico et al., the disclosure of which is herein incorporated by reference.</p> <p>To the extent Maxell contends Bryant '418 does not disclose this limitation, a person of ordinary skill in the art would have readily arrived at this limitation by combining or modifying it in view of their general knowledge and/or the prior art references disclosed in the corresponding section of Samsung's Invalidity Contentions.</p> |

