



US 20080066360A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2008/0066360 A1**
Simon (43) **Pub. Date:** **Mar. 20, 2008**

(54) **PROCESS AND APPARATUS FOR
DISPLAYING AUDIOVISUAL CONTENT
THROUGH TOUCH-SCREEN TECHNOLOGY**

(22) **Filed:** **Sep. 11, 2007**

Related U.S. Application Data

(75) Inventor: **Susan Mary Simon**, Richmond,
VA (US)

(60) Provisional application No. 60/844,697, filed on Sep.
15, 2006.

Correspondence Address:
Susan Simon
2309 Haverford Circle
Richmond, VA 23235

Publication Classification

(73) Assignee: **Susan Mary Simon**, Richmond,
VA (US)

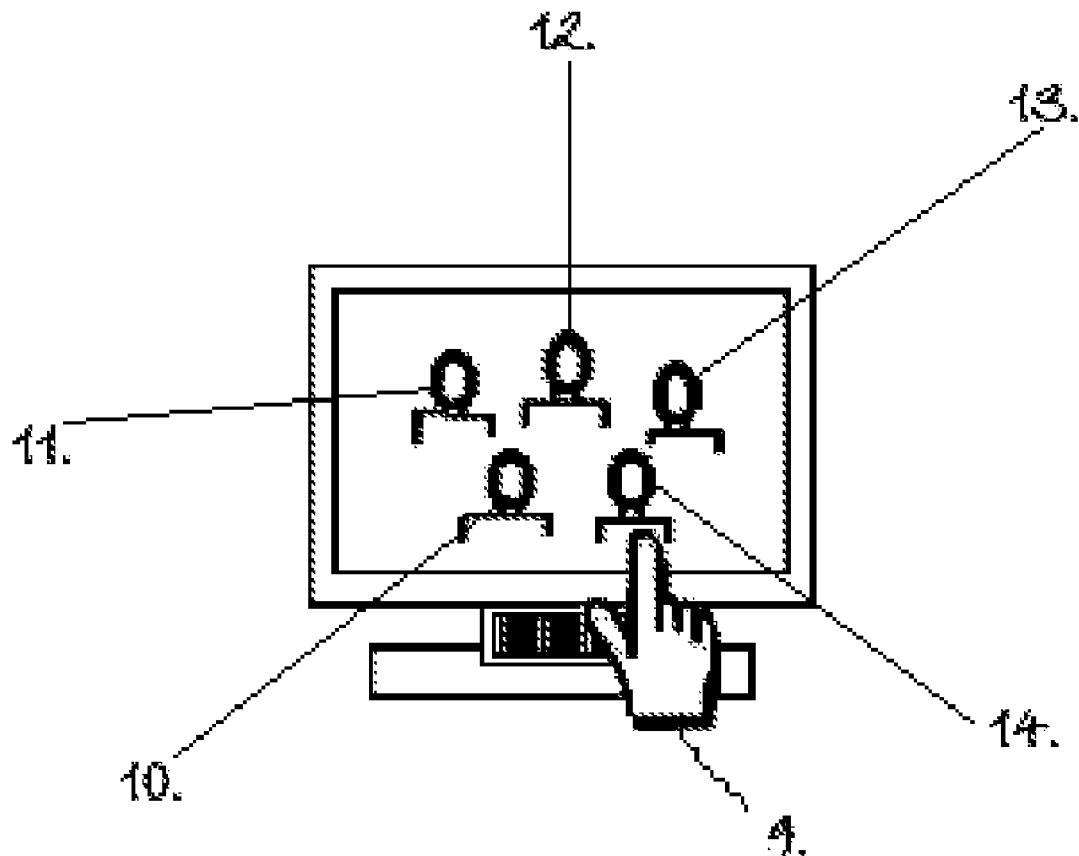
(51) **Int. Cl.**
A47G 1/06 (2006.01)

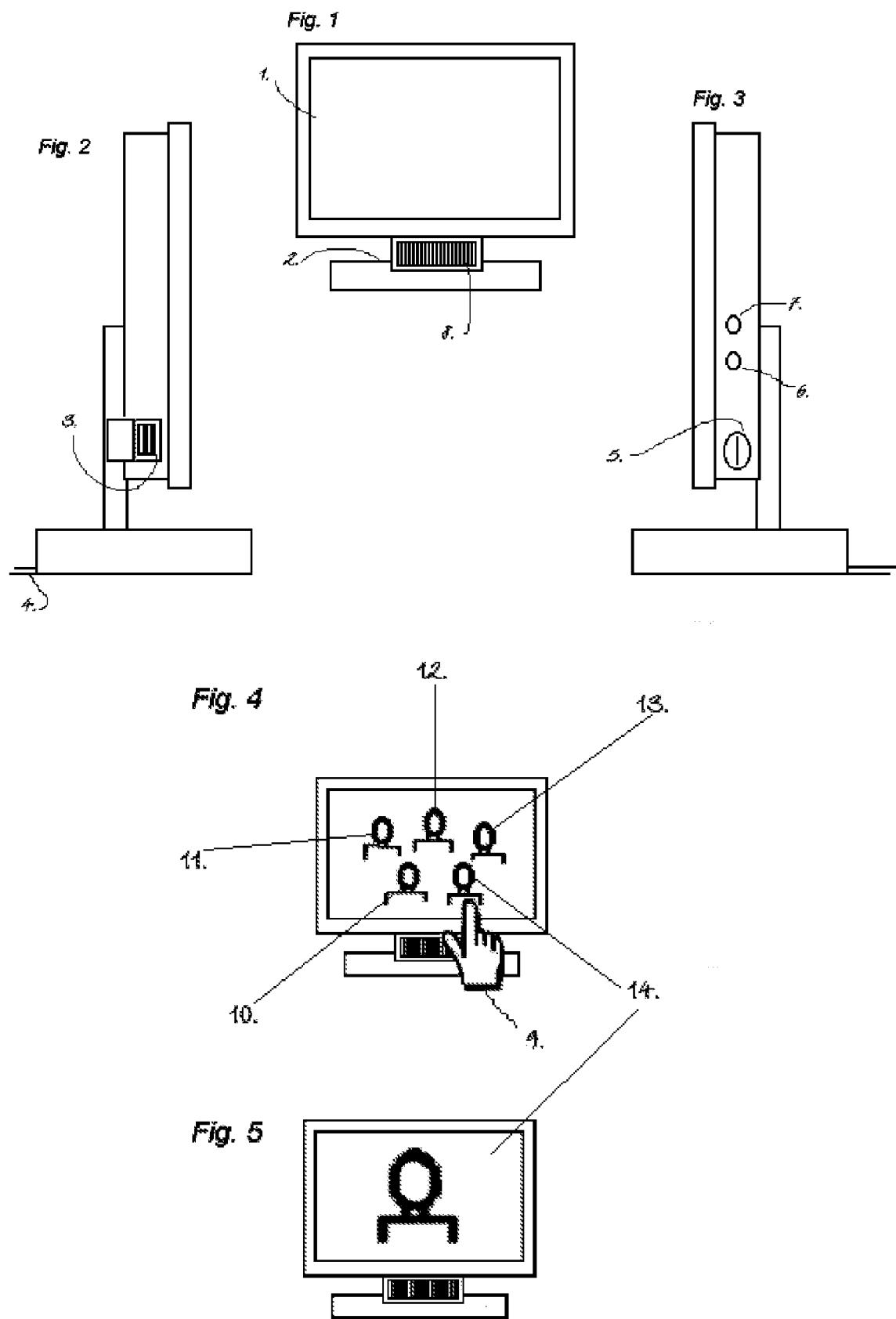
(21) Appl. No.: **11/853,732**

(52) **U.S. Cl.** **40/715**

(57) **ABSTRACT**

The present invention encompasses a viewing system and media playing digital picture frame and method of integrating audiovisual recordings with the use of embedded links within the images to defined audiovisual content.





**PROCESS AND APPARATUS FOR
DISPLAYING AUDIOVISUAL CONTENT
THROUGH TOUCH-SCREEN TECHNOLOGY**

**CROSS-REFERENCE TO RELATED
APPLICATIONS**

[0001] This application claims an invention which was disclosed in Provisional Application No. 60/844,697, filed 15 Sep. 2006, entitled "Process and Apparatus for Displaying Audiovisual Content Through Touch-Screen Technology". The benefit under 35 USC §119(e) of the U.S. provisional application is hereby claimed, and the aforementioned application is hereby incorporated herein by reference.

[0002] This application claims the benefit of U.S. Pat. No. 6,535,139 Lindler Mar. 18, 2003, Electronic picture viewing apparatus

[0003] This application claims the benefit of U.S. Pat. No. 4,748,756 Ross Jun. 7, 1988, Touch activated enhanced picture frame

[0004] This application claims the benefit of U.S. Pat. No. 6,434,271 Christian, et al. Aug. 13, 2002 Technique for locating objects within an image

[0005] This application claims the benefit of U.S. Pat. No. 7,107,605 Janik Sep. 12, 2006 Digital image frame and method for using the same

**STATEMENT REGARDING FEDERALLY
SPONSORED RESEARCH OR DEVELOPMENT**

[0006] Not Applicable

REFERENCE TO A MICROFICHE APPENDIX

[0007] Not Applicable

BACKGROUND OF THE INVENTION

[0008] The capability to record home videos has been available for decades and current technology has made the ability to record personal audiovisuals more prevalent. Many people have audiovisuals they would like to view or share, but do not have a way of displaying them in a convenient and non-time consuming manner.

[0009] The incorporation of touch screen technology and picture frames dates back to, at least, the 1988 patent U.S. Pat. No. 4,748,756. However, this patent and others include only audio playback in response to the touch function. Touch screen technology is used with hand-held devices, computers or business kiosk interfaces, as with patent U.S. Pat. No. 6,434,271, but not in small devices with limited purpose.

BRIEF SUMMARY OF THE INVENTION

[0010] The present invention is an audiovisual delivery system consisting of the integration of a flat screen display, memory system and touch screen technology and method of presentation for audiovisual media using embedded links within images.

[0011] In the preferred embodiment, the device could be used to access separate audiovisual files for any one of multiple objects (people, items, locations) in the static or alternating display by simply touching the screen area displaying the image of that object. The audiovisual recording would be mapped/linked to the location on the screen of an object and would replace the static image as it plays, returning to the static or alternating image when finished.

[0012] Alternately, a favorite audiovisual could be stored in the device with a still image from that audiovisual as the static display or multiple images in rotation. On touching any part of the screen image, the stored audiovisual would play, returning to the static or alternating images when finished.

[0013] The current invention would allow access to a single audiovisual or multiple audiovisuals mapped/linked to a corresponding point on the display. e.g. a wedding party photo could be embedded with mapped links to the audiovisual content corresponding with each person in the image.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1—Front representational diagram of the invention.

[0015] The device screen(1.) is similar in appearance to an LCD or flat-screen monitor, differing in that it utilizes touch screen capabilities and can be of any size for reasonable viewing. The speakers(8.) of the unit are in the stem of the base(2.) in this representational diagram, though they could easily be located elsewhere, including along the base of the screen;

[0016] FIG. 2—Right side representational diagram.

[0017] The input into the device is made through the flash/USB port(3.) or similar means. The power cord(4.) in this representation is located on the back of the base;

[0018] In another embodiment, an auxiliary USB port or wireless connection could be incorporated into the unit for a peripheral access device like a mouse or remote control;

[0019] FIG. 3—Left side representational diagram.

[0020] The power button—on/off switch(5.) is on the left hand side of the unit in this representational diagram and the volume controls for the speakers(6. & 7.) are above it, though location of the controls is not necessary at any specific location;

[0021] In another embodiment, the base(2.) could be removed, with the speakers(8.) located along the bottom of the screen(1.) and the power cord(4.) coming from the back of the unit for wall-mounting;

[0022] FIG. 4—Representational diagram of invention in use.

[0023] In this example, and image with five people is displayed on the screen. By touching the screen(9.) on a specific person(14.) in the image the user can view a video of that person, mapped to the location of their image on the screen; each person in the image(10., 11., 12., 13.) could have a similarly linked video;

[0024] FIG. 5—Representational diagram of video recording playing, showing the full-screen image of the video;

[0025] Accordingly, it is to be understood that the embodiments of the invention herein described are merely illustrative of the application of the principles of the invention. Reference herein to details of the illustrated embodiments is not intended to limit the scope of the claims, which themselves recite those features regarded as essential to the invention.

**DETAILED DESCRIPTION OF THE
INVENTION**

[0026] The system comprises a display screen with integrated memory, capable of holding and playing audiovisual medium accessed via a static or alternating image display as the resting screen image, mapped/linked audiovisuals could

be accessed through the touch screen, with specific audiovisuals accessed according to the mapping location of the selection on the screen or a single audiovisual housed in the memory of the device accessed by touching the screen. Initial input into the device is achieved via an USB or similar connection.

[0027] The display is a flat panel display (e.g., liquid crystal display (LCD), plasma display, organic light emitting diode (OLED) display, TFT (Thin Film Transistor), or similar technology utilizing ROM, RAM, and flash memory capabilities like those found in PDA or hand-held devices with an operating system such as, but not limited to, Linux or Unix-like programming and simple software/programming to control audiovisual presentation. The system contains integrated sound and speakers, and touch-screen capabilities including, but not limited to Capacitive, Surface Wave, Optical Imaging, Dispersive Signal Technology. Alternate access can be provided via a peripheral or wireless device.

[0028] The screen of the device displays a static or alternating images that have been embedded with links using object oriented programming according to the number of screen locations necessary to deliver the audiovisual files contained therein. If one audiovisual is contained in the

device, any touch on the screen will play the one audiovisual contained. If the image is of multiple people, locations, objects, etc. the location of each object on the screen image is mapped/linked to the corresponding audiovisual.

I claim:

1. A digital, touch screen picture frame and objects of the type having a screen to display digital images, a memory unit to receive files to be stored in the memory unit, the ability to play audiovisual recordings, a transparent touch screen device above the display which registers touch events and sends these signals to the controller where the controller processes these signals and sends the data to the computer system where software or memory function translates the touch events into display events, in which the improvement comprises:

a method for displaying audiovisual content using embedded links within still images, the touch screen executing virtual input, detecting that a user has touched the touch screen to nominally activate at least one embedded link and executing the programmed action with respect to said touch.

* * * * *