

charging circuits control and distribute battery power or converted AC line power, control the charging of the internal battery or batteries when the device 12 is connected to an external AC adapter/charger device via the AC adapter/charger jack 66 and controls switchover between battery power and external AC line power when said AC power is available via the AC adapter/charger device. The rechargeable battery comprises a lithium ion battery, a nickel hydride (NiMH) battery, or the like. To use the system of the present invention actuates an on/off switch (not shown) which powers up the device. This action automatically applies power to the unit and displays the play, stop, fast forward, and rewind icons (not shown) on flat panel display 22. When the user touches the play icon, playback of the stored video sequence is initiated and played in a continuous loop until the operator touches the stop, fast forward, or reverse icon or switches the system off.

[0038] When it is desired to replace the currently stored video sequence or video document with a new document, a computer having the appropriate data file stored thereon is coupled to communications interface 58 which, illustratively, is an RS-232 interface. Before such data can be transferred to video display device 12, the operator will be prompted to enter a security identification code unique to the system. This may be done, for example, using a numeric keypad displayed on the touch-screen of the device itself for entry by the user. In accordance with an especially preferred embodiment of the present invention, however, the user of the remote computer (not shown) seeking to download the new or replacement video data file will be prompted to enter the appropriate key code via the keyboard of that remote computer. In any event, upon successful recognition of the key code, the video data stream will be accepted and stored in updateable storage unit 60. Downloaded video data is received in compressed formatted, stored in the storage unit 60, and then automatically decompressed when reproduced.

[0039] It will, of course, be readily appreciated by those skilled in the art that the system of the present invention may be configured to handle video input in any desired format and to encode, compress, and decompress such signals as necessary to display the applicable video sequence when needed. For example, an MPEG-2 encoder may be integrally provided for receiving unencoded video input directly from a video input source and compressing the same for later decoding. The compressed digital data representing the video sequence (video motion sequence) is a "non-proprietary" compressed video data. Because it is non-proprietary it may be derived from the internet, as well as from all digital and analog camcorders. Such non-proprietary compressed video includes MCP (motion compensated prediction); (MCI) motion compensation interpolation; MPEG (Motion Pictures Experts Group) I or II; AVI; and International Telegraph and Telephone Consultative Committee (CCITT).

[0040] Touch screen display screen 22 is mounted on the upper, inside surface of the housing section 24a, extends virtually over the entire face thereof, and is electrically connected to the other circuits and components of the video display device 12. By way of illustrative example, touch screen display screen may be configured as a liquid crystal display (LCD) type screen or an active matrix display type screen that employs an array of addressable transistors such as thin-film transistors (TFT) or the like, wherein each color dot or pixel is activated by a group of three transistors, one

each for red, green and blue. Various embodiments of the video display device comprise differing screen and case sizes to suit the needs of the various traditional printed media sizes. For the reasons discussed above, however, an overall housing size of 8 1/2 inches by 11 inches, taken with the miniaturization of the conventional electronic components employed herein, will typically serve as the decisive criteria in selecting the final size. Although a VGA 640 by 480 pixel resolution LCD or active matrix display provides acceptable detail for text and for some graphics, the preferred display for motion-video clips has at least a 800 by 600 pixel resolution and at least 256 colors.

[0041] In the embodiment of FIGS. 1-3, a touch-sensitive transparent plate (not shown) covers the screen and is further comprised of resistive touch, capacitive touch, infrared beam touch, or the like. A typical touch screen is the thin film transparent plate using resistive touch technology manufactured by Dynapro Corporation. The touch-sensitive transparent plate used in the video display device of the present invention is typically less than 0.01 inch in thickness. A flexible flat cable is typically used to connect the touch-sensitive transparent plate to its touch screen controller; although other connections methods are also employable. The touch-sensitive plate contains a matrix of touch-sensitive areas over its entire surface. The outlines of these areas can be programmed to be recognized to coincide with graphics or other information displayed on the underlying display screen.

[0042] Turning now to FIG. 4, there is shown a hybrid document 10' constructed in accordance with an alternative embodiment of the present invention. Internally, the video display device 12' of the present invention is almost identical to the system depicted in FIG. 3. Essentially, the differences therebetween relate to the substitution of a single section housing 24', as well as discrete mechanical pushbuttons 13, 15, and 17 (as opposed to a touch screen interface) for the Rewind (RW), Play, and Fast Forward (FF) command input functions. Corresponding modifications to the internal circuitry which are needed to accommodate the use of a mechanically actuated operator interface are believed to be well within the level of skill of the ordinary artisan and a detailed illustration and discussion of the same has been omitted herein for clarity.

[0043] With particular reference now to FIG. 5, there is shown a video display document 12' including housing 24' and display 22' contained therein. Essentially, the construction of the video display device itself is similar in all respects to the embodiments of FIGS. 1 and 4. However, in the embodiment of the invention depicted in FIG. 5 a binding attachment 25 is included to provide both a suitable binding surface 25a for mounting in a holder 14 (FIG. 1). In an especially preferred form of this embodiment, the binding attachment 25 comprises a thin panel of resilient, flexible material as, for example, a tear resistant vinyl or the like, which advantageously allows the device to be manipulated in the same fashion as a sheet of printed material within the holder.

[0044] As seen in FIG. 5, binding attachment 25 (which may also be considered a second section of the housing) and housing 24' (which may also be considered a first section of the housing) are disposed in laminar relation. As will be readily ascertained by those skilled in the art, the respective