

devices that may be employed include those described in U.S. Patent Publication No. 2008/0029691A1, which is incorporated herein by reference. Controller 66 operates to carry out the various processing functions described herein, and may be a pre-programmed general purpose computer or other known system or device that carries out the novel functions/steps as previously described. Controllers suitable for use within the present invention are well known, and it is within the abilities of one of ordinary skill in the art to design and/or program a controller to implement the processes, techniques and features of the present invention, given the description provided herein. By way of example only, the system of the present invention may be embodied within a programmed computer system that is coupled to or has an integrated multi-touch display device. By way of another example, the system of the present invention may be embodied within a portable multifunctional device (e.g., PDA) that contains an integrated multi-touch display. Various examples of portable multifunctional devices that may be modified or otherwise designed/programmed to implement the processes/techniques of the present invention are disclosed in U.S. Pat. No. 7,479,949, which is incorporated herein by reference. Accordingly, the present invention encompasses a system that includes a display device and a controller capable of implementing the above-described techniques and processes. Consistent with other variations described herein, display device 62 may include a multi-input device and, as a separate element, a display device.

[0132] In describing the present invention as set forth herein, the terms “first”, “second”, and “third”, etc., are used to distinguish one element, thing, contact, etc., from another, and are not used to designate relative position or arrangement in time, unless otherwise stated explicitly. For example, the phrases “first modification” and “second modification” as used herein does not mean that the second modification follows in time the first modification, but rather that the “first modification” and the “second modification” are distinct from one another.

[0133] The present invention has been described in the context of a number of embodiments, and for various ones of those embodiments, a number of variations and examples thereof. It is to be understood, however, that other expedients known to those skilled in the art or disclosed herein may be employed without departing from the spirit of the invention.

[0134] Therefore, it is intended that the appended claims be interpreted as including the embodiments described herein, the alternatives mentioned above, and all equivalents thereto.

What is claimed is:

1. A method of interfacing with a multi-input display device, comprising the steps of:

displaying on a multi-input display device a graphical window and at least a first portion of an image within the graphical window;

identifying a position and movement of one element contacting an edge of the displayed graphical window or a plurality of elements simultaneously contacting respectively different edges of the displayed graphical window;

manipulating the displayed graphical window in accordance with one or more modifications,

the one or more modifications comprising:

a first modification implemented when only one element is contacting an edge of the displayed graphical window, the first modification moving the edge of the

displayed graphical window contacted by the element in a direction of identified movement of the one element normal to an axis of the edge;

a second modification implemented when a plurality of elements are simultaneously contacting respectively different edges of the displayed graphical window, the second modification simultaneously moving each of the edges of the displayed graphical window contacted by a respective one of the elements in a direction of identified movement of the respective element normal to an axis of the respective edge;

displaying on the display device at least a second portion of the image within the manipulated graphical window, and positions on the display device of common portions of the first and second portions of the image being substantially the same.

2. The method of claim 1, wherein identifying a position and movement comprises identifying a position and movement of three or more elements simultaneously contacting three or more different edges of the displayed graphical window; and the second modification simultaneously moves each of the three or more edges of the displayed graphical window contacted by the three or more elements in a respective direction of identified movement of the respective element normal to an axis of the respective edge.

3. A multi-input display system, comprising:

a display device for displaying on a display surface a graphical window and at least a first portion of an image within the graphical window, the display device adapted to detect one or more elements contacting the display surface;

a controller for identifying a position and movement of one element contacting an edge of the displayed graphical window or a plurality of elements simultaneously contacting respectively different edges of the displayed graphical window, the controller adapted to manipulate the displayed graphical window in accordance with one or more modifications,

the one or more modifications comprising:

a first modification implemented when only one element is contacting an edge of the graphical window, the first modification moving the edge of the graphical window contacted by the element in a direction of identified movement of the one element normal to an axis of the edge;

a second modification implemented when a plurality of elements are simultaneously contacting respectively different edges of the graphical window, the second modification simultaneously moving each of the edges of the graphical window contacted by a respective one of the elements in a direction of identified movement of the respective element normal to an axis of the respective edge;

the controller controlling the display device to display on the display surface at least a second portion of the image within the manipulated graphical window, positions on the display surface of common portions of the first and second portions of the image being substantially the same.

4. The system of claim 3, wherein the controller is adapted to identify a position and movement of three or more elements simultaneously contacting three or more different edges of the displayed graphical window; and the second modification simultaneously moves each of the three or more edges of the