

**[0019]** As an additional aspect of the invention, when three elements are identified as contacting the display device initially at positions on a frame of the displayed graphical window, the shape of the displayed graphical window is manipulated based on changes in the identified positions of the three elements in accordance with a best-fit methodology.

**[0020]** As a feature of this aspect, manipulation of the shape of the displayed graphical window is a 5-degree of freedom operation.

**[0021]** As yet another aspect of the invention, when first and second elements are identified as contacting the display device initially at positions on a first edge of a frame of the displayed graphical window and a third element is identified as contacting the display device initially at a position on a second edge opposite the first edge of the frame of the displayed graphical window, the displayed graphical window is manipulated based on the movement of one or more of the first, second and third elements.

**[0022]** As yet an additional aspect of the invention, the shape of the displayed graphical window is modified by moving the first edge of the frame of the displayed graphical window in alignment with identified joint movement of the first and second elements and the second edge of the frame is held in alignment with the identified position of the third element.

**[0023]** As another aspect of the invention, the second edge of the frame of the displayed graphical window is moved in alignment with the identified movement of the third element and the first edge of the frame is maintained at a fixed position.

**[0024]** As a further aspect of the invention, the length of the first and second edges of the frame of the displayed graphical window are changed in accordance with a change in distance between the identified positions of the first and second elements.

**[0025]** As an additional aspect of the invention, the displayed graphical window is rotated in accordance with changes in orientation of the identified positions of the first and second elements relative to one another so that the first edge of the frame of the displayed graphical window is aligned with an axis extending through the first and second elements as the first and second elements move.

**[0026]** As yet a further aspect of the invention, the displayed graphical window is rectangular in shape, and manipulating the displayed graphical window comprises aligning the first edge of the frame of the displayed graphical window with an axis extending through the identified positions of the first and second elements, aligning the first edge (including remaining stationary, moving vertically, moving horizontally, or rotating), changing a length of the first and second edges of the frame in accordance with a change in distance between the identified positions of the first and second elements, and aligning the second edge of the frame with the identified position of the third element.

**[0027]** In accordance with a further method embodiment of the present invention, a method of interfacing with a multi-input display device comprises 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.

**[0028]** In accordance with a further system embodiment of the present invention, a multi-input display system comprises 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.

**[0029]** As an aspect of these further method and system embodiments, a position and movement of three or more elements simultaneously contacting three or more different edges of the displayed graphical window are identified, 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 the identified movement of the respective element normal to an axis of the respective edge.

**[0030]** In accordance with an additional method embodiment of the present invention, a method of interfacing with a multi-input display device comprises displaying on a multi-input display device a graphical window and at least a first portion of an image within the graphical window, identifying positions and movement of a plurality of elements simultaneously contacting one or more edges of the displayed graphical window, manipulating the displayed graphical window in accordance with one or more modifications, the one or