

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.

5. 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 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 more modifications comprising:

a first modification implemented when two of the plurality of elements are contacting opposite edges of the displayed graphical window, the first modification changing at least one of a position and shape of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the opposite edges;

a second modification implemented when two of the plurality of elements are contacting adjacent edges of the displayed graphical window, the second modification changing at least one of a shape and size of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the adjacent edges;

a third modification implemented when two of the plurality of elements are contacting a same edge of the displayed graphical window, the third modification changing at least one of a position and shape of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the same 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.

6. The method of claim 5, wherein the first modification comprises changing the shape of the displayed graphical window by positioning a first of the opposite edges of the displayed graphical window to align with the identified position of a first of the two elements contacting opposite edges, and by positioning a second of the opposite edges of the displayed graphical window to align with the identified position of a second of the two elements contacting opposite edges.

7. The method of claim 5, wherein the first modification comprises changing one of a vertical and horizontal position of the displayed graphical window on the display device in accordance with a change in an axis defined by the positions of the two elements contacting the opposite edges.

8. The method of claim 5, wherein the second modification comprises uniformly scaling the size of the displayed graphical window in accordance with the identified movement of the two elements contacting the adjacent edges.

9. The method of claim 5, wherein the third modification comprises changing the shape of the displayed graphical window by changing a length of said same edge in accordance with a change in distance between the positions of the two elements contacting said same edge.

10. 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 elements simultaneously contacting the display surface;

a controller for identifying positions and movement of a plurality of elements simultaneously contacting one or more edges of the displayed graphical window, and for manipulating the displayed graphical window in accordance with one or more modifications,

the one or more modifications comprising:

a first modification implemented when two of the plurality of elements are contacting opposite edges of the displayed graphical window, the first modification changing at least one of a position and shape of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the opposite edges;

a second modification implemented when two of the plurality of elements are contacting adjacent edges of the displayed graphical window, the second modification changing at least one of a shape and size of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the adjacent edges;

a third modification implemented when two of the plurality of elements are contacting a same edge of the displayed graphical window, the third modification changing at least one of a position and shape of the displayed graphical window in accordance with the identified positions and movement of the two elements contacting the same 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.

11. The system of claim 10, wherein the first modification comprises changing the shape of the displayed graphical window by positioning a first of the opposite edges of the displayed graphical window to align with the identified position of a first of the two elements contacting opposite edges, and by positioning a second of the opposite edges of the displayed graphical window to align with the identified position of a second of the two elements contacting opposite edges.

12. The system of claim 10, wherein the first modification comprises changing one of a vertical and horizontal position of the displayed graphical window in accordance with a change in an axis defined by the positions of the two elements contacting the opposite edges.

13. The system of claim 10, wherein the second modification comprises uniformly scaling the size of the displayed graphical window in accordance with the identified movement of the two elements contacting the adjacent edges.

14. The system of claim 10, wherein the third modification comprises changing the shape of the displayed graphical window by changing a length of said same edge in accordance with a change in distance between the positions of the two elements contacting said same edge.

* * * * *