

with the ascertained amounts of pressure exerted by the elements on the display device and in accordance with the identified change in the attribute.

**14.** A method of interfacing with a multi-point input device, comprising the steps of:

- displaying an image on a display device;
- detecting positions of a plurality of elements simultaneously contacting a multi-point input device;
- ascertaining amounts of pressure exerted by the elements on the multi-point input device; and
- controlling a change in the image displayed on the display device in accordance with the ascertained amounts of pressure exerted by the elements on the multi-point input device.

**15.** A multi-point input system, comprising:

a display device for displaying an image on a display surface, the display device adapted to detect positions of a plurality of elements simultaneously contacting the display surface; and

a controller for ascertaining amounts of pressure exerted by the elements on the display surface, and controlling a change in the image displayed by the display device in accordance with the ascertained amounts of pressure exerted by the elements on the display surface.

**16.** The multi-point input system of claim **15**, wherein the controller controls the display device to display an image corresponding to a three-dimensional graphical representation of an object.

**17.** The multi-point input system of claim **16**, wherein the controller effects a rotation of the image displayed by the display device about an axis parallel to the display surface.

**18.** The multi-point input system of claim **15**, wherein the controller effects a rotation of the image displayed by the display device about an axis parallel to the display surface, the rotation being in a direction corresponding to the ascertained amounts of pressure exerted by the elements on the display surface.

**19.** The multi-point input system of claim **15**, wherein the controller effects a rotation of the image displayed by the display device about a rotation axis that is perpendicular to an axis extending through positions of first and second elements simultaneously contacting the display surface.

**20.** The multi-point input system of claim **19**, wherein the rotation axis is disposed substantially within the display surface.

**21.** The multi-point input system of claim **15**, where the controller identifies a circle in which positions of all of the elements simultaneously contacting the display surface are disposed, and effects a rotation of the image displayed by the display device about a rotation axis that extends through a centerpoint of the circle, the rotation axis being parallel to an

axis extending through positions of at least two of the elements and the rotation axis being disposed substantially within the display surface.

**22.** The multi-point input system of claim **15**, wherein the display device is a pressure-sensitive display device adapted to ascertain amounts of pressure exerted by elements contacting the display surface.

**23.** The multi-point input system of claim **15**, wherein the controller ascertains pressure as a function of an area of contact by a respective one of the elements contacting the display surface.

**24.** The multi-point input system of claim **15**, wherein the controller ascertains a virtual depth below the display surface of the display device of each of the elements contacting the display surface as a function of the amount of pressure exerted by the respective element on the display surface, and effecting a rotation of the image in accordance with the identified virtual depths of the elements contacting the display surface.

**25.** The multi-point input system of claim **15**, wherein the image includes first and second halves; and the controller compares the amounts of pressure exerted by the elements disposed on the first half of the image with the amounts of pressure exerted by the elements disposed on the second half of the image, and effects a rotation of the image displayed by the display device as a function of the compared amounts of pressure.

**26.** The multi-point input system of claim **15**, wherein the controller, when the pressure exerted by the elements on the display surface exceed a predetermined minimum threshold, effects a rotation of the image displayed by the display device about an axis in accordance with the ascertained amounts of pressure exerted by the elements on the display surface.

**27.** The multi-point input system of claim **15**, wherein the controller detects positions of at least three elements simultaneously contacting the display surface, identifies a change in an attribute of any of the elements; and controls a change in the image displayed on the display surface both in accordance with the ascertained amounts of pressure exerted by the elements on the display surface and in accordance with the identified change in the attribute of the elements.

**28.** A multi-point input system, comprising:

- a display device for displaying an image;
- a multi-point input device having a contact surface, the multi-point input device adapted to detect positions of a plurality of elements simultaneously contacting the contact surface; and

a controller for ascertaining amounts of pressure exerted by the elements on the contact surface, and controlling a change in the image displayed by the display device in accordance with the ascertained amounts of pressure exerted by the elements on the contact surface.

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