

plurality of areas displayed on said display corresponding to said at least one of said plurality of haptic elements.

25. The computer system of claim 22, wherein each haptic element of said plurality of haptic elements is configured to provide a haptic effect at a contact surface of said haptic element upon said contact surface of said haptic element being touched.

26. The computer system of claim 25, wherein multiple ones of said plurality of haptic elements can provide input and output when touched simultaneously.

27. The computer system of claim 25, wherein said plurality of haptic elements can provide input from concurrent touches in a plurality of locations.

28. The computer system of claim 25, wherein said each haptic element is further configured to provide said haptic effect in a cooperative manner.

29. The computer system of claim 25, further comprising:

a display; and

a processor, coupled to said display and to said plurality of haptic elements, wherein

said each one of said plurality of haptic elements corresponds to a corresponding one of a plurality of areas displayed on said display, and

said haptic effect provided by said each one of said plurality of haptic elements is related to said corresponding one of said plurality of areas displayed on said display.

30. A method of communicating information to and from a computer comprising:

reading movement information from a motion sensor of at least one of a plurality of haptic elements, wherein

each one of said plurality of haptic elements comprises a contact surface,

said contact surfaces define a surface, and

said movement information represents motion of a contact surface of said at least one of a plurality of haptic elements; and

causing said at least one of said plurality of haptic elements to produce a haptic effect in response to said motion.

31. The method of claim 30, further comprising:

displaying information in a plurality of areas displayed on a display, wherein

each one of said plurality of haptic elements corresponds to one of said plurality of areas.

32. The method of claim 31, wherein said each one of said plurality of haptic elements further comprises an actuator coupled to said contact surface of said each one of said plurality of haptic elements, the method further comprising:

applying force to said contact surface of said each one of said plurality of haptic elements, using said actuator of said each one of said plurality of haptic elements, based on information displayed in a corresponding one of said plurality of areas displayed on said display.

33. The method of claim 30, further comprising:

sensing a touch on said contact surface of said at least one of said plurality of haptic elements using a sensor coupled to said contact surface of said at least one of said plurality of haptic elements;

generating information based on said contact surface being touched; and

controlling said haptic effect provided by said at least one of said plurality of haptic elements based on information received from said sensor.

34. The method of claim 30, wherein each haptic element of said plurality of haptic elements is configured to provide a haptic effect at a contact surface of said haptic element in response to said contact surface of said haptic element being touched and each contact surface has a sensor coupled thereto, the method further comprising:

sensing a touch on a contact surface of certain ones of said plurality of haptic elements using corresponding ones of said sensors;

generating information corresponding to said certain ones of said plurality of haptic elements based on said touch; and

controlling said haptic effect provided by said certain ones of said plurality of haptic elements based on said information.

35. The method of claim 34, further comprising:

causing said certain ones of said plurality of haptic elements to provide a coordinated haptic effect regardless of a distribution of force of said touch among said certain ones of said plurality of haptic elements.

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