

[0128] One embodiment of the exemplary multimodal device 1800, with the curved scroll device 1903, circular directional switch device 2300, and select actuator 2305 each presented to the user, may be representative of the exemplary multimodal device 1800 being operational in a navigation mode. In the navigation mode, a user may use the exemplary multimodal device 1800, perhaps with the assistance of the global positioning system, to determine a present location or to obtain directions to another location. Either the circular directional switch device 2300 or the curved scroll device 1903, in association with the navigation mode, may be used for both for switching modes and for scrolling through the different views associated with the navigation mode.

[0129] One exemplary embodiment of the exemplary multimodal device 1800, with the curved scroll device 1903, circular directional switch device 2300, and select actuator 2305 presented to the user, may further be representative of the multimodal device being operational in a gaming mode. In addition to the curved scroll device 1903, circular directional switch device 2300, and select actuator 2305, the gaming mode may further comprise another semicircular actuator 2307. As described above therein, the select actuator may be used to provide the gaming mode with a fire button, an action button, or the like.

[0130] In one embodiment with the segmented optical shutter device in one ON state, the dynamic user interface surface 1802 includes a multimedia control actuator set 2306. The multimedia control actuator set 2306 may be used to control media stored on the exemplary multimodal device 1800, such as audio and video. Some of the functionality controlled by the multimedia control actuator set may include playing a media file, fast forwarding a media file, or rewinding a media file. In one embodiment, the multimedia control actuator set comprises at least a play actuator 2307 (shown in FIG. 23 as a semicircular actuator), a fast forward actuator 2308, and a rewind actuator 2309. The multimedia control actuator set 2306 is not limited to comprising the play actuator 2307, the fast forward actuator 2308, and the rewind actuator 2309, but may further comprise other multimedia actuators such as a pause actuator, a record actuator, a volume actuator, and a select actuator. In one embodiment of the exemplary multimodal device 1800, the multimedia control actuator set 2306 is presented atop the curved scroll device 1903. Presenting the multimedia control actuator set 2306 atop the curved scroll device 1903 may allow other mode based actuators to be presented on the dynamic user interface surface 1802.

[0131] One embodiment of the exemplary multimodal device 1800 with the curved scroll device 1903, the play actuator 2307, the fast forward actuator 2308, and the rewind actuator 2309 presented is representative of a media player mode. In such a mode, the user may use the exemplary multimodal electronic device 1800 to store and playback music. In media player mode, the user may be able to play and otherwise control the music stored on the device.

[0132] Now briefly turning to FIG. 24, illustrated therein is one embodiment of multimedia control actuator set 2306 comprising the play actuator 2307, the fast forward actuator 2308, and the rewind actuator 2309 presented in a region disposed outside a perimeter of the curved scroll device 1903. By presenting the multimedia control actuator set 2306 outside the perimeter of the curved scroll device 1903, room may be available atop the curved scroll device 1903 for additional mode based actuators to be present. By way of example, the multimedia control actuator set 2306 may be present outside the perimeter of the curved scroll device 1903 and the ten-digit keypad actuator set 2000 may be presented atop the curved scroll device 1903.

[0133] As discussed, embodiments of the invention include a portable electronic device having a user interface employing a high-resolution display and a low-resolution display that is configured to present any of a plurality of keypad configurations associated with a plurality of device operational modes in a keypad region of the user interface. Embodiments of the device include a navigation interface disposed adjacent with the high-resolution display and the low-resolution display. The navigation interface is suitable for navigating among the plurality of operational modes of the device. In the foregoing specification, specific embodiments of the present invention have been described. However, one of ordinary skill in the art appreciates that various modifications and changes can be made without departing from the scope of the present invention as set forth in the claims below. Thus, while preferred embodiments of the invention have been illustrated and described, it is clear that the invention is not so limited. Numerous modifications, changes, variations, substitutions, and equivalents will occur to those skilled in the art without departing from the spirit and scope of the present invention as defined by the following claims. For example accordingly, the specification and figures are to be regarded in an illustrative rather than a restrictive sense, and all such modifications are intended to be included within the scope of present invention.

What is claimed is:

1. A portable electronic device comprising a high resolution display and a segmented optical shutter device configured to dynamically present at least one of a plurality of keypad configurations to a user by selective actuation of the segmented optical shutter device, each keypad configuration comprising a plurality of mode based actuators, wherein the plurality of mode based actuators comprise at least a ten-digit keypad actuator set and a curved scroll device.

2. The portable electronic device of claim 1, wherein the segmented optical shutter device traverses a keypad region of the portable electronic device and is configured to dynamically present the at least one of the plurality of keypad configurations by selectively transitioning from an opaque state to a translucent state.

3. The portable electronic device of claim 2, wherein the segmented optical shutter device further traverses the high resolution display.

4. The portable electronic device of claim 2, wherein when the segmented optical shutter device is in a first state, a dynamic user interface surface is blank, further wherein when the segmented optical shutter device is in a second state, at least the curved scroll device is presented on the dynamic user interface surface.

5. The portable electronic device of claim 4, wherein when the segmented optical shutter device is in the second state, the ten-digit keypad actuator set is further presented on the dynamic user interface surface.

6. The portable electronic device of claim 5, wherein when the segmented optical shutter device is in the second state, the ten-digit keypad actuator set is presented atop the curved scroll device.

7. The portable electronic device of claim 5, wherein when the segmented optical shutter device is in the second state, the ten-digit keypad actuator set is presented within a region circumscribed by the curved scroll device.

8. The portable electronic device of claim 7, wherein the plurality of mode based actuators further comprises a plurality of directional arrows, wherein when the segmented optical shutter device is in the second state, the plurality of directional arrows are presented in a region disposed outside a perimeter of the curved scroll device.