cable **57** for communication with the main microprocessor. It is further contemplated that a given system can employ multiple forms of sensory feedback simultaneously; auditory, tactile and visual.

[0050] **FIG. 5** depicts a preferred embodiment of the invention for use with a system requiring both graphical user interface and alphanumeric interface, but lacking the space required for a keyboard. The depicted embodiment would also work in an application requiring a completely sealed system as described in relation to the embodiment shown in **FIG. 2**. Such a system would be useful in an industrial plant, a scientific lab, a hospital, a kitchen, or even a kiosk exposed to the weather where the nature of the environment is such that space is premium and the possibility for contamination or contact with fluids is high.

[0051] Depicted in **FIG. 5** is a panel **73** comprising a monitor **25**, a touch pad **21** and a cover plate **31**. The touch pad's programmable touch-sensitive surface **26** comprises a relative cursor positioning zone **27** and an enter/select zone **29**, similar to previously described embodiments, but also including other absolute positioning zones **75**. These absolute positioning zones **75**, similar to the enter/select zone **29**, each directly correspond to a given function which is communicated to the microprocessor when a corresponding zone **75** is selected. An example of absolute positioning zones is described in co-owned, co-pending U.S. patent application Ser. No. 08/923,677 to Glad (filed Sep. 4, 1997). These zones can correspond to familiar functions such as alphanumeric, or numeric entry functions, or to other functions specific for a given system. As will be clear to one of skill in the art, tactile feedback is also beneficial with regard to this embodiment to distinguish between each of the above described zones. An absolute positioning zone may also be programmed to correspond to a function which toggles the operating mode of the touch pad so that a portion of the touch pad operates either as a relative positioning zone, or an absolute positioning zone to increase the functionality and applicability of the touch pad. It is further contemplated that an embodiment of the present invention may include multiple absolute positioning zones programmed to communicate "hold", "drag lock", "release", or numerous other commands when touched.

[0052] **FIG. 6** depicts the front view of a preferred embodiment of a touch pad **21** having a cover plate **31** marked for use with a touch pad programmed to respond as an alphanumeric keypad. For a touch pad **21** used with the cover shown, the touch pad touch-sensitive surface **26** comprises multiple absolute positioning zones **29**, each programmed to respond independently to a touch within the zone **29** by submitting the function indicated within the zone **29** to a microprocessor (not shown) associated with the touch pad. The directional zone **81** shown in this embodiment preferably operates as a relative positioning zone, but may alternatively be programmed to respond as four independent cursor positioning zones such as those found on a standard keyboard. Alternatively, or additionally, a function key (not shown) may be provided so that the touch-sensitive surface, or a portion of it, can functionally toggle between multiple absolute positioning zones and a single relative positioning zone. Preferably, the boundaries of each zone are raised for tactile feedback in distinguishing between the zones. As with the other embodiments discussed in conjunction with this disclosure, other forms of sensory feedback may also be used to assist a touch pad operator with use of this touch pad embodiment.

[0053] **FIG. 7** depicts an embodiment of the invention for use as an information kiosk. **FIG. 7** shows a kiosk panel **73** housing a monitor **25** having graphic symbols **39** corresponding to assigned functions, a touch pad **21**, and a cover plate **31**. An advantage of this embodiment for use in an information kiosk is its simplicity and low cost. Information kiosks using graphical user interface require an operator to select an object on the screen to access specific information. After an operator selects specific information, the operator often needs to scroll up or down to view all of it. A typical example of an application where this embodiment would be particularly useful is an operator viewing a web page. Where there is a web link an operator wishes to follow, the operator can simply navigate the screen cursor using the touch pad until the cursor points to the desired link. The operator then simply needs to touch the enter/select zone and the kiosk will provide the next linked screen full of information. Such a simplified touch pad **21**, having only a relative cursor positioning zone **27**, a touch sensitive enter/select zone **29**, and a scroll zone **61** is easy to use for both beginners and experts, and considerably less expensive than a touch screen. It is contemplated that this invention need not only be used in public or frequently used systems. A desktop or portable computer which needs a simplified user interface will similarly benefit from such a device.

[0054] As will be clear to one of ordinary skill in the art, the touch pad may be programmed to operate with standard, familiar graphical user interfaces (e.g., Microsoft WINDOWS or an Internet browser) without special driving software. Similarly, the touch pad may contain all that is needed to function in any given system without the special software required for touch screen interface.

[0055] **FIG. 8** depicts another embodiment of the invention for use with a kiosk such as an ATM. **FIG. 8** shows a monitor **25**, a touch pad **21**, a cover plate **31** and a stylus **77**. The touch pad **21** for this embodiment includes a relative cursor positioning zone **27**, an enter/select zone **29**, several absolute positioning zones **75** arranged for use in part as a numeric pad, and a signature recognition zone **79**.

[0056] **FIG. 9** depicts a block diagram depicting a method of operating a touchsensitive absolute positioning zone associated with a microprocessor. First, the z-value (surface area touched) of the zone is monitored. Second, when the z-value of the zone exceeds a predetermined level, a function command associated with the zone is relayed to the microprocessor. The function command continues to be relayed until the z-value, which is still being monitored, drops below the predetermined level. In this way, the absolute positioning zone responds much like a mechanical button. For example, using the embodiment of a touch pad depicted in **FIG. 7**, if the absolute positioning zone **29**, is programmed to operate as a "select" function button, when the zone **29** is touched with sufficient z-value, the select function will continue, or select and keep selecting, until the touch is released to a point below the predetermined z-value. Thus, to operate the touch pad **21**, a user moves or "glides" a finger across the relative positioning zone **27** to control the corresponding movement of a cursor shown on the monitor **25**. When the cursor is near a desired icon **39** to select, the