select and activate various graphical images in order to initiate functions and tasks associated therewith. By way of example, a user can select a button that opens, closes, minimizes, or maximizes a window, or an icon that launches a particular program. GUI **116** can additionally or alternatively display information, such as non interactive text and graphics, for the user on the display device **112**.

[0041] As shown more clearly in FIG. **1**B in a side view perspective of device **100**, user interface **110** can include protective layer **120** disposed on top of display device **112**. In this way, protective layer **120** can be used as protective top layer of transparent or semitransparent material (clear) thereby affording display device **112** protection from potentially damaging external insults caused by, for example, sharp objects, dropping, and so on and yet still allow any image presented by display device **112** to be clearly viewed by a user. Protective layer **120** can be formed of many well known transparent materials such as glass (e.g., referred to as cover glass), and more particularly highly polished glass. It should be appreciated, however, that other transparent materials (or at least translucent materials) such as clear plastic may also be used. In some embodiments, protective top layer **120** can be acoustically isolated from housing **102** using, for example, acoustic isolation buffers **121**. By acoustically isolating housing **102** and protective top layer **120** from each other, it is possible to provide separate and independent haptic responses, one directed at housing **102** and another directed at protective top layer **120** without interfering with each other. For example, it may be desirable to provide one type of haptic response at protective layer **120** and another type haptic response at housing **102** at the same time or at a different time independent of each other or in some cases one being the result of or related to the other.

[0042] User interface **110** can be touch sensitive suitable for receiving one or more user touch events by which information can be passed between the user and the portable electronic device **100**. In some cases, the one or more inputs in the form of user touch events can be substantially simultaneously received (e.g., multi-touch). In these embodiments, user interface **110** is rendered touch sensitive by means of a touch sensing layer **122** that can be disposed below protective layer **120** such that touch sensing layer **122** is between protective layer **120** and the display device **112**. This arrangement can be accomplished by, for example, applying touch sensing layer **122** to display device **112** or by applying touch sensing layer **122** to protective layer **120** using any number of attachment processes, such as printing, depositing, laminating, etc. Touch sensing layer **122** generally includes at least one touch sensing device **124** configured to detect an object in close proximity to or exerting pressure on an upper surface **126** of protective layer **120**. In keeping with the wide applicability of the invention, sensing device **124** can be widely varied and can be configured to activate as the finger touches the upper surface **126**. In the simplest case, an electrical signal is produced each time a finger (or other appropriate object) passes a sensor. The number of signals in a given time frame may indicate location, direction, speed and acceleration of the finger on the touch sensitive portion, i.e., the more signals, the more the user moved his or her finger.

[0043] Touch sensing layer **122** can be configured to act as a multi-touch input device. Multi-touch input devices have several advantages over conventional single point devices in that they can distinguish more than one object (finger). As a multi-touch input device, touch sensing layer **122** can distinguish a wide range of different gestures. By way of example, the gestures may be single point or multi-touch gestures, static or dynamic gestures, continuous or segmented gestures, and the like. It should be noted that single point gestures are those gestures that are performed with a single contact point, e.g., the gesture is performed with a single touch as for example from a single finger, a palm or a stylus. Multi-touch gestures are those gestures that can be performed with multiple points, e.g., the gesture is performed with multiple touches as for example from multiple fingers, fingers and palms, a finger and a stylus, multiple styli and/or any combination thereof. Static gestures are those gestures that do not include motion, and dynamic gestures are those gestures that do include motion. Continuous gestures are those gestures that are performed in a single stroke, and segmented gestures are those gestures that are performed in a sequence of distinct steps or strokes.

[0044] Touch sensing device **124** can be sensitive to at least one of several independent and spatially distinct touch sensing nodes or regions **128**. Touch sensing device **124** can positioned throughout touch sensing layer **122**. Sensing regions **128** are typically not visible to the user and dispersed about protective layer **120** with each sensing region **128** representing a different position on surface **126** in coordination with the locations of sensing device **124**. Sensing regions **128** can be positioned in a grid or other such array where each sensing region **128** can generate a signal in response to a user touch event in proximity thereto. Typically, the number of fingers in contact with the surface **126** can indicate an input mode. For example, a single touch by one finger can indicate the desire to perform tracking, i.e., pointer or cursor movements, or selections. On the other hand, multiple touches using, for example, a group of fingers can indicate the desire to perform gesturing. The number of fingers in the group used for implementing gesturing may be widely varied. By way of example, two fingers can indicate a first gesture mode, three fingers may indicate a third gesture mode, etc. Alternatively, any number of fingers, i.e., more than one, may be used for the same gesture mode, which can include one or more gesture controls.

[0045] The number and configuration of sensing nodes **128** can be widely varied. The number of sensing nodes **128** generally depends on the desired sensitivity as well as the desired transparency of touch sensing layer **122**. For example, more nodes or sensing nodes generally increases sensitivity, but may reduce transparency (and vice versa). With regards to configuration, sensing nodes **128** generally map touch sensing layer **122** into a coordinate system such as a Cartesian coordinate system, a polar coordinate system or some other coordinate system. When a Cartesian coordinate system is used (as shown), sensing regions **128** typically correspond to x and y coordinates. When a polar coordinate system is used, the sensing nodes typically correspond to radial (r) and angular coordinates (θ). In this way, touch sensing layer **122** can track multiple objects, such as fingers, which rest on, tap on, or move across an upper surface **126** of protective layer **120**. In this way, a user can perform several touch initiated tasks at the same time. For example, the user can select an onscreen button with one finger, while moving a cursor with another finger. In addition, a user can move a scroll bar with one finger while selecting an item from a menu with another finger. Furthermore, a first object can be dragged with one finger while a second object can be dragged with another finger.