functions at least as a cellular phone (and, in certain embodiments, as a camera, etc.), whereas in the landscape configuration, the device **100** functions as a text-messaging pager, PDA, and/or handheld computer. In these preferred embodiments, when the flip cover **104** is in the closed configuration, the device **100** is put into standby mode or turned off to conserve battery power. Thus, in these embodiments, the device **100** has three distinct physical configurations, with each configuration having a distinct mode of operation.

[**0033**] Although the figures illustrate the magnets and Hall-effect switches disposed in various positions about the device **100** in accordance with a preferred embodiment of the present invention, each of these magnets and Hall-effect switches can generally be positioned in any desired location of the device **100** as long as the magnets and Hall-effect switches are in a proper position with respect to one another to carry out the intended function of sensing the present physical configuration of the device **100**. Preferably, the magnets and Hall-effect switches are paired together, such that each magnet is paired with a corresponding Hall-effect switch and each Hall-effect switch is paired with a corresponding magnet.

[**0034**] Preferably, each pair (i.e., a Hall-effect switch in combination with a magnet) is positioned such that one member of the pair is positioned on a first body element (e.g., the main body **102**) of the device **100** and the other member of the pair is positioned on a second body element (e.g., the flip cover **104**) that is pivotally coupled to the first body element, with the relative positions of the first body element and second body element with respect to one another determining the physical configuration and corresponding mode of operation of the device **100** (and, consequently, the mode of operation of one or more of the inputs, displays, and/or active software applications). All that is required is that in each alternative physical configuration, a different combination of Hall-effect switches activated. Thus, a different combination of Hall-effect switches generate output signals in each physical configuration. Because the output signals from the Hall-effect switches differ between physical configurations, any change in the physical configuration of the device **100** can be detected by logic circuitry or a processor coupled to the switches.

[**0035**] For example, in the preferred embodiment, a first body element (the main body **102**) incorporates two Hall-effect switches and the second body element (the flip cover **104**) incorporates two magnets. The Hall-effect switches and magnets are positioned within the device **100** such that both Hall-effect switches are activated in the closed configuration, neither Hall-effect switch is activated in the portrait configuration, and a single Hall-effect switch is activated in the landscape configuration.

[**0036**] While in the preferred embodiment, as illustrated throughout the figures, the portrait magnet **302** and landscape magnet **304** are located in the flip cover **104**, whereas the portrait Hall-effect switch **306** and landscape Hall-effect switch **308** are located in the main body **102**, in an alternative embodiment the positions of these components can be reversed such that the portrait magnet **302** and landscape magnet **304** are located in the main body **102**, whereas the portrait Hall-effect switch **306** and landscape Hall-effect switch **308** are located in the flip cover **104**. In further embodiments, any combination thereof, such as positioning one or more of both a magnet and a Hall-effect switch in the main body **102**, and one or more of both a magnet and a Hall-effect switch in the flip cover **104**, can be implemented.

[**0037**] Additionally, although in the exemplary embodiment shown in the figures, the magnets and Hall-effect switches are positioned near a hinge or near the periphery of the device **100**, the magnets and Hall-effect switches can generally be disposed in any position throughout the main body **102** or flip cover **104**, such as closer to the center of the device **100**, as long as the magnets and corresponding Hall-effect switches are in a proper position with respect to one another to carry out the intended function of detecting the present physical configuration of the device **100**.

[**0038**] Furthermore, although in the exemplary embodiment shown in the figures, the Hall-effect switches are shown disposed on a single circuit board **300** within the main body **102**, the Hall-effect switches could be disposed on multiple circuit boards, not disposed on any circuit boards (e.g., disposed on the outer body casing), or a combination thereof. Moreover, the Hall-effect switches could be disposed in any desired position on the circuit board **300** and are not limited to being disposed near the periphery of the circuit board **300**, as shown in the exemplary embodiment. Furthermore, the Hall-effect switches could be disposed on either or both sides of the circuit board **300**.

[**0039**] Moreover, although a single portrait magnet **302**, a single landscape magnet **304**, a single portrait Hall-effect switch **306**, and a single landscape Hall-effect switch **308** are illustrated and described herein in accordance with a preferred embodiment of the present invention, the invention is not so limited, and any number of each of these magnets and Hall-effect switches can be implemented in a device. For example, additional Hall-effect switches and additional magnets may be desirable in further embodiments of the present invention in which the device has additional physical configurations (in addition to, for example, the portrait, landscape, and closed configurations).

[**0040**] Although the use of Hall-effect switches to detect magnetic fields is described herein as a preferred means of sensing the physical configuration of the device **100**, the invention is not so limited, and other means for detecting the physical configuration of the device (e.g., the position of the flip cover **104** or other body element in relation to the main body **102** or other body element) can be implemented. Hall-effect switches are the preferred sensing mechanism because they are compact, inexpensive, easy to manufacture, have low power consumption, and are reliable (because sensing does not require mechanical contact between a Hall-effect switch and magnet, wear and malfunction due to mechanical contact is essentially eliminated).

[**0041**] However, any other sensing mechanism can be used, including, for example, mechanical switches or contacts, electrical switches, optical switches, pressure-sensing sensing switches, and/or other types of magnetic-based sensing mechanisms. Further, different sensing mechanisms can be used to detect different physical configurations. For example, in one embodiment a mechanical switch is used to detect when the device is closed, while Hall-effect switches are used to determine whether, when open, the device is in the portrait or landscape configuration. All that is required is some means for detecting the present physical configuration