telephone. The wireless communication functionality **660** may be removed or replaced with other functionality based on the particular application of the portable electronic device **600**.

[**0048**] In another preferred embodiment, referring to FIG. **7**, a block diagram of a portable electronic device **700** having only an adaptable skin is shown. As previously described with reference to FIGS. **5** and **6**, portable electronic device **700** includes a processor **710**, memory **720**, adaptable skin **740**, skin controller/driver **750**, wireless communication functionality **760** including an antenna **770**, a touch sensor **780** and a touch input processor **790**. In this embodiment, the adaptable skin **740** performs the functions of a typical LCD, including displaying information to a user of the device **700**.

[**0049**] To better illustrate the portable electronic device **700**, reference is made to FIG. **8**. The touch sensing adaptable skin **740** is configured to display an information pane **810** and a numeric keypad pane **820**. These panes are configurable based on operator preference. Various other functional panes may be selected, such as a keyboard pane, a camera viewfinder pane, and the like. The size, shape, placement, appearance, and function of the various panes may be customized based on user preference. In conjunction with the touch sensor capability of the portable electronic device, a programmable, highly customizable input/output device is realized.

[**0050**] In another embodiment, the portable electronic device **700** includes one or a plurality of piezoelectric elements on, in, or under the adaptable skin **740**. As mentioned above, since the adaptable skin **740** will typically not perfectly hold a written image for an indeterminate amount of time, a refresh charge may need to be periodically applied to ensure the adaptable skin **740** maintains a uniform appearance. The electrical potential created by the piezoelectric element when the portable electronic device **700** is handled by a user is captured for refreshing the adaptable skin **740**. Additionally, when the adaptable skin is electrochromic based, a photochromic effect may be captured and used for refreshing the adaptable skin **740**. Compensating for a leakage current of the adaptable skin **740** may also be accomplished by a sensor feedback mechanism, wherein a sensor embedded in the skin senses the color, charge, or other characteristic of the adaptable skin **740**, and is driven by the skin controller/driver **750**.

[**0051**] Referring to FIG. **9**, a wireless communication network **900** capable of supporting skin image files on portable electronic devices is shown. A portable electronic device **910** includes wireless communication functionality that allows wireless communication with base station/access point **920**. The wireless communication technology may be any wireless communication technology, as disclosed above. The base station/access point **920** is connected to its respective communication network **930** via a network **940**, which may be an Internet protocol (IP) network. In the case where portable electronic device **910** is a mobile telephone, the communication network **930** would include various equipment that is operated and maintained by the service provider of the mobile phone. In the case where the portable electronic device is an IEEE 802.x compliant device, the base station/access point **920** may be a wireless access point and/or router and the communication network **930** may be the Internet. It is noted that portable electronic device **910** may be compliant with a plurality of wireless communication technologies, and may request and receive skin image files over any network.

[**0052**] A skin database **950** is connected to the network **940** and is configured to store skin image files. A service provider may store skin image files in the skin database **950** for purchase by a user, or a user may design a custom skin image file and store the skin image file in the skin database **950**.

[**0053**] Optionally, a skin service provider **960** is connected to the network and provides skin image files to the portable electronic device **910** based on its location and function. Preferably, the skin service provider **960** includes a local database **965** for storing skin image files. However, the skin service provider **960** may alternatively use the skin database **950**. The skin service provider **960** determines the location of the portable electronic device **910** using various methods, such as by way of a global positioning system (GPS) signals forwarded by the device **910**, triangulation of base station or access point signals, identifying a base station or access point communicating with the device **910**. When the device is determined to be within a predetermined area, the skin service provider **960** retrieves a skin image file from the local database **965**, if it exists, or the skin database **950** and forwards the skin image file to the portable electronic device **910** via the network **940** and the base station/access point **920**. In this manner, the skin service provider **960** provides relevant, timely skins to a portable electronic device **910** having an adaptable skin.

[**0054**] Subscription services may be provided by the skin service provider **960**. For example, a user of the portable electronic device **910** may enroll in a coupon program, wherein the skin service provider **960** provides relevant skin image files to the device **910**. Coupons of nearby products may appear on the skin of the portable electronic device **910** while the user browses store shelves. Content providers could subsidize a user's fee for accessing certain networks based on the user's enrollment in a subscription program.

[**0055**] Functionality of the portable electronic device may change based on the skin image file provided to the portable electronic device **910** as well. For example, a user of the portable electronic device **910** may be a preferred member of a local coffee shop. One of the benefits of this membership may be free access to the shop's wireless local area network (WLAN). The skin service provider **960** recognizes the user's membership and provides as part of the skin image file information for altering the functionality of the device **910**, in this case information relating to the WLAN, such as security settings. The displayed skin would preferably indicate the altered functionality. In the case where the portable electronic device includes a touch sensor as described above, the skin could include functional icons that could be selected in conjunction with the touch sensor.

[**0056**] Referring to FIG. **10**, a method **1000** for a user of portable electronic device to request skin image files is shown. In this embodiment, the portable electronic device includes wireless communication functionality. Available skins are displayed to the user on the display of the device, (step **1010**). Thumbnails or icons representative of the skin as it would appear on the portable electronic device are preferably displayed. A user may then select a desired skin