

a separator layer formed of transparent insulator disposed between the first and second outer layers and having an opening formed therethrough, the opening corresponding to a button location;

a display means disposed in correspondence with the button location for displaying a first image when the electronic device is operated in a first configuration of operation, and for displaying a second image when the electronic device is operated in a second configuration of operation;

wherein the first and second transparent conductor traces intersect at the button location.

**7.** A transparent push button apparatus as defined in claim 6, wherein the separator layer comprises a plurality of openings, each of the plurality of opening corresponding to a different one of a plurality of button locations;

the display means displays a first image set having a plurality of images when the electronic device is operated in the first configuration of operation;

the display means displays a second image set having a plurality of images when the electronic device is operated in the second configuration of operation; and

wherein each of the plurality of images in the first and second image sets are displayed at a different one of the plurality of button locations so as to be visible to a user of the electronic device.

**8.** A transparent push button apparatus as defined in claim 7, wherein a voltage is applied to the first trace of transparent conductor thereby creating a voltage gradient across the first trace of transparent conductor, and wherein a voltage level at the button location may be read via the second trace of transparent conductor when the first and second traces of transparent conductor make contact upon being pressed together by a user of the touch screen display.

**9.** A transparent push button apparatus as defined in claim 8, wherein the second trace of transparent conductor is electrically coupled to a detection circuit for detecting the voltage level at the button location.

**10.** A transparent push button apparatus as defined in claim 6, wherein the first and second traces of transparent conductor are formed of indium tin oxide.

**11.** A transparent push button apparatus as defined in claim 6, wherein the first and second traces of transparent conductor form pad segments corresponding to the button locations.

**12.** A multi-configuration portable electronic device, comprising:

a first portion and a second portion, the first and second portion hingeably joined and moveable with respect to each other into at least a first configuration and a second configuration;

a touch screen display disposed on the first portion, the touch screen display including a display element and a

touch screen assembly disposed on the display element, the touch screen assembly comprising:

a first outer layer of transparent insulator having a first trace of transparent conductor disposed thereon on an inside surface;

a second outer layer of transparent insulator having a second trace of transparent conductor disposed thereon on an inside surface; and

a separator layer formed of transparent insulator disposed between the first and second outer layers and having a plurality of openings formed therethrough, each of the openings corresponding to one of a plurality of button locations;

wherein the first and second transparent conductor traces intersect at the button locations.

**13.** A multi-configuration portable electronic device as defined in claim 12, wherein:

when the multi-configuration portable electronic device is operated in the first configuration, a first image set is displayed on the display element, the first image set comprising a plurality of images, each one of the images being displayed at a different one of the plurality of button locations; and

when the multi-configuration portable electronic device is operated in the second configuration, a second image set is displayed on the display element, the second image set comprising a plurality of images, each one of the images being displayed at a different one of the plurality of button locations.

**14.** A multi-configuration portable electronic device as defined in claim 13, where in the first and second image sets comprise characters, the characters having an orientation, the first and second image sets having different orientations.

**15.** A multi-configuration portable electronic device as defined in claim 12, wherein a voltage is applied to the first trace of transparent conductor thereby creating a voltage gradient across the first trace of transparent conductor, and wherein a voltage level at the button location may be read via the second trace of transparent conductor when the first and second traces of transparent conductor make contact upon being pressed together by a user of the touch screen display.

**16.** A multi-configuration portable electronic device as defined in claim 15, wherein the second trace of transparent conductor is electrically coupled to a detection circuit for detecting the voltage level at the button location.

**17.** A multi-configuration portable electronic device as defined in claim 12, wherein the first and second traces of transparent conductor are formed of indium tin oxide.

**18.** A multi-configuration portable electronic device as defined in claim 12, wherein the first and second traces of transparent conductor form pad segments corresponding to the button locations.

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