

- a glass subassembly having a front side capable of being touched, and a back side opposite the front side;
- a plurality of first traces of a first substantially transparent conductive material formed on the back side of the glass subassembly;
- a plurality of second traces of a second substantially transparent material; and
- a dielectric material coupled between the first traces and the second traces;
- wherein the second and first traces are oriented to cross over each other at crossover locations separated by the dielectric material, the crossover locations forming mutual capacitance sensors for detecting one or more touches on the front side of the glass subassembly.
- 18.** A digital audio player including a multi-touch sensor panel, the multi-touch sensor panel comprising:
- a glass subassembly having a front side capable of being touched, and a back side opposite the front side;
- a plurality of first traces of a first substantially transparent conductive material formed on the back side of the glass subassembly;
- a plurality of second traces of a second substantially transparent material; and
- a dielectric material coupled between the first traces and the second traces;
- wherein the second and first traces are oriented to cross over each other at crossover locations separated by the dielectric material, the crossover locations forming mutual capacitance sensors for detecting one or more touches on the front side of the glass subassembly.
- 19.** A multi-touch sensor panel, comprising:
- a plurality of mutual capacitance sensors, the plurality of mutual capacitance sensors formed by a plurality of first traces of a first substantially transparent conductive material and a plurality of second traces of a second substantially transparent conductive material separated by a dielectric material, the plurality of first and second traces oriented to cross over each other at crossover locations separated by the dielectric material, the crossover locations forming the mutual capacitance sensors;
- wherein one or both of the plurality of first traces and the plurality of second traces are formed on a back side of a glass subassembly, the glass subassembly having a front side opposite the back side and capable of being touched.
- 20.** The multi-touch sensor panel of claim **19**, wherein the first and second substantially transparent conductive materials are the same.
- 21.** The multi-touch sensor panel of claim **19**, further comprising a mask layer formed on the back side of the glass subassembly for hiding electrical interconnect.
- 22.** The multi-touch sensor panel of claim **19**, wherein the dielectric material is formed over the first traces on the back side of the glass subassembly to create a planarization layer for use in forming subsequent conductive layers.
- 23.** The multi-touch sensor panel of claim **22**, wherein the second traces are formed over the dielectric material on the back side of the glass subassembly.
- 24.** The multi-touch sensor panel of claim **23**, further comprising a polyethylene terephthalate (PET) subassembly coupled to the glass subassembly, the PET subassembly having a continuous sheet of conductive material formed thereon for shielding the first traces.
- 25.** The multi-touch sensor panel of claim **24**, further comprising a liquid crystal display (LCD) module coupled to the PET subassembly.
- 26.** The multi-touch sensor panel of claim **19**, further comprising a polyethylene terephthalate (PET) subassembly coupled to the glass subassembly, the PET subassembly representing the dielectric material and the second traces formed on a bottom side of the PET subassembly.
- 27.** The multi-touch sensor panel of claim **26**, further comprising a chip on glass coupled to the glass subassembly, the chip on glass including sensor panel circuitry.
- 28.** The multi-touch sensor panel of claim **27**, further comprising a liquid crystal display (LCD) module coupled to the PET subassembly.
- 29.** The multi-touch sensor panel of claim **19**, further comprising a polyethylene terephthalate (PET) subassembly coupled to the glass subassembly, the PET subassembly representing the dielectric material and the second traces formed on a top side of the PET subassembly.
- 30.** The multi-touch sensor panel of claim **29**, the PET subassembly having a continuous sheet of conductive material formed on a bottom side for shielding the first traces.
- 31.** A method for forming a multi-touch sensor panel, comprising:
- forming a plurality of first traces of a first substantially transparent conductive material on a back side of a glass subassembly having a front side capable of being touched, and a back side opposite the front side;
- locating a plurality of second traces of a second substantially transparent material between the first traces and a layer of dielectric material; and
- orienting the second and first traces to cross over each other at crossover locations separated by the dielectric material, the crossover locations forming mutual capacitance sensors for detecting one or more touches on the front side of the glass subassembly.
- 32.** The method of claim **31**, wherein the first and second substantially transparent conductive materials are the same.
- 33.** The method of claim **31**, further comprising forming a mask layer on the back side of the glass subassembly for hiding electrical interconnect.
- 34.** The method of claim **31**, further comprising forming the dielectric material over the first traces on the back side of the glass subassembly to create a planarization layer for use in forming subsequent conductive layers.
- 35.** The method of claim **34**, further comprising forming the second traces over the dielectric material on the back side of the glass subassembly.
- 36.** The method of claim **35**, further comprising coupling a polyethylene terephthalate (PET) subassembly to the glass subassembly, and forming a continuous sheet of conductive material on the PET subassembly for shielding the first traces.
- 37.** The method of claim **36**, further comprising coupling a liquid crystal display (LCD) module to the PET subassembly.
- 38.** The method of claim **31**, further comprising coupling a polyethylene terephthalate (PET) subassembly to the glass subassembly, the PET subassembly representing the dielectric material and the second traces formed on a bottom side of the PET subassembly.
- 39.** The method of claim **38**, further comprising coupling a chip on glass to the glass subassembly, the chip on glass including sensor panel circuitry.
- 40.** The method of claim **39**, further comprising coupling a liquid crystal display (LCD) module to the PET subassembly.