

57. A force imaging display, comprising:

a display element;

a first layer having a first plurality of substantially transparent conductive traces oriented in a first direction on a first surface thereof, the first layer adjacent to a first surface of the display element;

a second layer having a second plurality of substantially transparent conductive traces oriented in a second direction on a first surface thereof, the first layer juxtaposed between the second layer and the display element; and

a deformable substantially transparent dielectric membrane juxtaposed between the first and second layers,

wherein the first and second plurality of conductive traces are adapted to create a capacitance image when a force is applied to the second layer, the capacitance image indicative of an intensity of the applied force.

58. The force imaging display of claim 57, wherein the display element comprises a liquid crystal display element.

59. The force imaging display of claim 57, wherein the first and second layers comprise Indium tin oxide traces.

60. The force imaging display of claim 57, wherein the first plurality of substantially transparent conductive traces and the second plurality of substantially transparent conductive traces are substantially orthogonal.

61. The force imaging display of claim 57, wherein the substantially transparent deformable dielectric membrane comprises:

a substantially flat membrane having a first surface oriented toward the first layer and a second surface oriented toward the second layer;

a first plurality of raised structures coupled to the first surface of the substantially flat membrane; and

a second plurality of raised structures coupled to the second surface of the substantially flat membrane, wherein the second plurality of raised structures are substantially offset from the first plurality of raised structures.

62. The force imaging display of claim 57, wherein the substantially transparent deformable dielectric membrane comprises:

a substantially flat membrane; and

a plurality of deformable beads affixed to one surface of the substantially flat membrane, wherein the deformable beads are adapted to compress when a force is applied to the first layer toward the second layer.

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