

to at least one of a plurality of lead lines, and the first end each of the sensor bars in the second layer of sensor bars is connected to at least one of the plurality of lead lines.

**23.** The method of claim 21, wherein the first ends of at least two of the sensor bars of the sensor layers are connected to the same lead line and a signal-processing scheme is used to distinguish which of the jointly-connected sensor bars experienced the touch.

**24.** The method of claim 23, wherein the first ends of at least two of the sensor bars in the other sensor layer are connected to the same lead line and a signal-processing scheme is used to distinguish which of the jointly-connected sensor bars experienced the touch.

**25.** The method of claim 16, wherein analyzing the first and second signals comprises identifying a first coordinate in a first direction corresponding to the first sensor bar and identifying a second coordinate in a second direction corresponding to the second sensor bar, the first and second directions being about orthogonal in the plane of the touch-sensitive screen.

**26.** The method of claim 25, wherein analysis of the position of the first sensor bar and the second sensor bar comprises evaluating the location identified by the first coordinate in the first direction and the second coordinate in the second direction.

**27.** A method for determining a location of a touch to a touch-sensitive screen, comprising:

determining if a least one signal is present from each of at least two layers of sensor bars;

if so:

evaluating a first signal corresponding to a first sensor bar in a first layer of sensor bars to determine a first position in a first direction associated with the first layer of sensor bars, and

evaluating a second signal corresponding to a second sensor bar in a second layer of sensor bars to determine a position in a second direction associated with the second layer of sensor bars; and

reporting the location of the touch as the first position in the first direction and the second position in the second direction.

**28.** The method of claim 27, wherein the first and second directions are about orthogonal in the plane of the touch-sensitive screen.

**29.** The method of claim 27, wherein each of the sensor bars of the first layer of sensor bars is connected at only one end to one of a plurality of lead lines.

**30.** The method of claim 29, wherein each of the sensor bars of the second layer of sensor bars is connected at only one end to another of the plurality of lead lines.

**31.** The method of claim 27, further comprising refining the location of the touch by analyzing secondary signals on one or more sensor bars neighboring the first sensor bar or the second sensor bar.

\* \* \* \* \*