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(54) **CAPACITIVE TOUCH SENSOR**

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(57) **ABSTRACT**

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A method for determining the location of a touch made to a capacitive touchscreen in which the touchscreen includes a plurality of electrodes distributed around a touch sensitive area of the touchscreen, and a control circuit connected to the plurality of electrodes. The control circuit includes circuitry for measuring capacitance on the sensor, and provides a control signal indicating coordinates of a touch position on the screen, and includes multiple input/output connections, and multiple sub-circuits, where one sub-circuit is associated with one electrode. The method includes using a first switching element of each sub-circuit, when closed, to connect an electrode to an energy storage element which is in turn connected to a reference or ground, and using a second switching element, when closed, to connect the energy storage element to a detector. The method includes charging an electrode to a set voltage level when the associated first and second switching elements are closed and opened, respectively, and measuring energy in the energy storage element with the detector when the first and second switching elements are opened and closed, respectively.

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