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(54) INTEGRATED FORCE SENSITIVE LENS AND SOFTWARE

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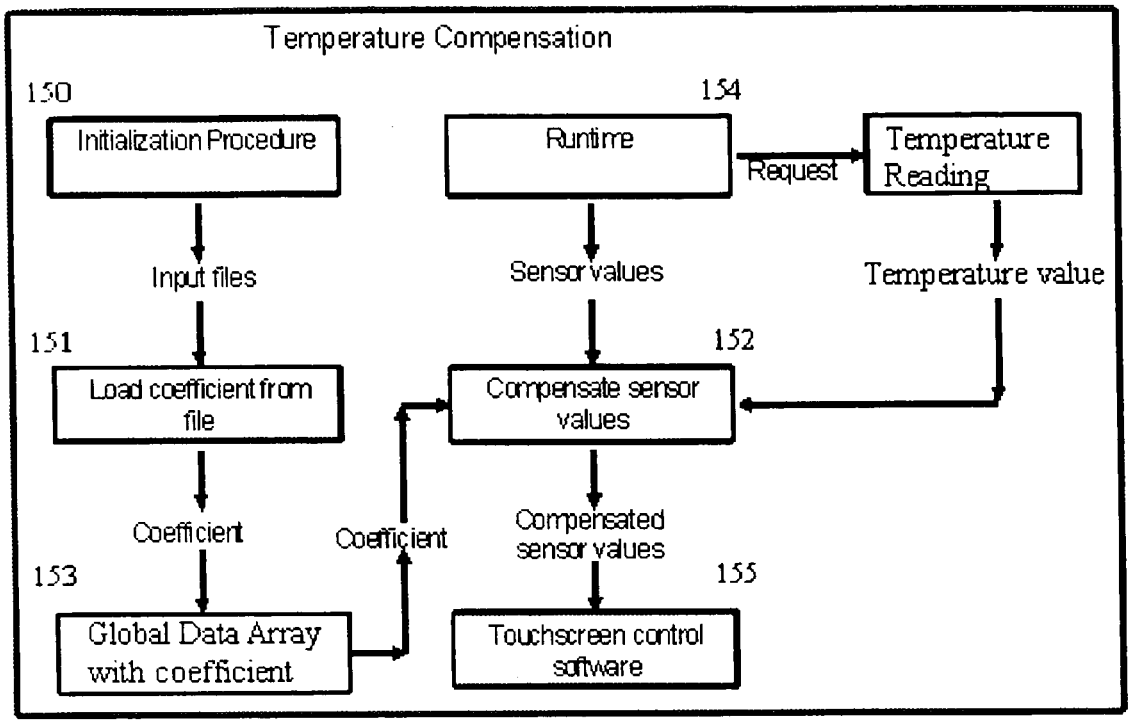
(57) **ABSTRACT**

A software compensation method that allows a touch sensitive display to be built using low-cost FSR force sensors The compensation method comprises an array of functional compensation modules including filtering, voltage conversion, temperature compensation, humidity compensation, sensor calibration, sensor reading linearization, auto calibration, positioning determination and finally end-user and mechanical calibration. The array of compensation modules can bring system accuracy from a non-compensated average positioning error in the 25% to 50% range, down to aN end-user acceptable range of 0% to 5%. The increased positioning accuracy makes it possible to use FSRs as opposed to traditional piezoresistive based touch screen sensors.