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(54) **TOUCH SENSITIVE DEVICE EMPLOYING IMPULSE RECONSTRUCTION**

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(57) **ABSTRACT**

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A touch sensitive apparatus includes a touch plate and a number of sensors coupled to the touch plate. Each of the sensors is configured to sense bending waves in the touch plate and, in response to a touch to the touch plate, generate sensor signals. A controller is coupled to the sensors. The controller corrects for dispersion in the sensor signals and determines a location of the touch using the dispersion corrected signals. The controller performs impulse reconstruction, by which impulses representative of impulses generated by the touch to the touch sensitive device are produced. Using the reconstructed impulses, the controller confirms the location of the touch.

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