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(54) **Title:** FAST MULTI-TOUCH SENSOR WITH USER IDENTIFICATION TECHNIQUES

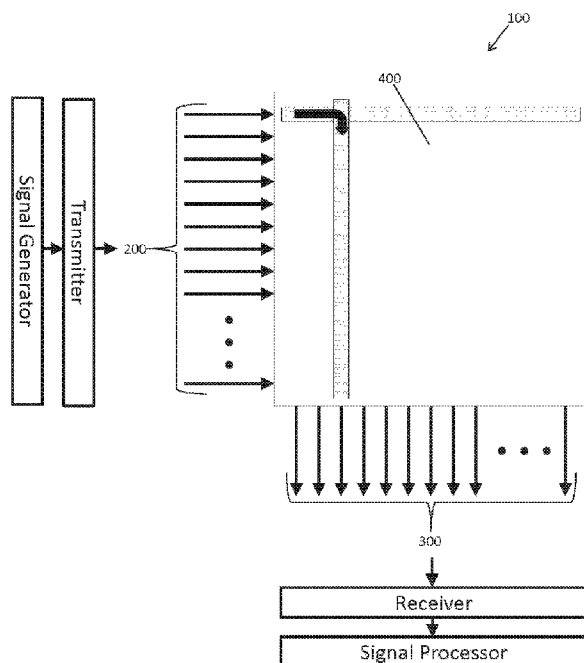


FIG. 1

(57) **Abstract:** A method and system for distinguishing between sources of simultaneous touch events on a touch sensitive device with row conductors and column conductors, the path of each of the row conductors crossing the path of each of the column conductors. Each of a plurality of orthogonal row signals are simultaneously transmitted on a respective one of at least some of the plurality of row conductors. An amount of each of the orthogonal row signals present on each of the plurality of column conductors is detected, and the touch events are identified using the detected amount. Each of the simultaneous touch events is associated with a discrete source based on the detected amount of each of the plurality of orthogonal row signals.



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