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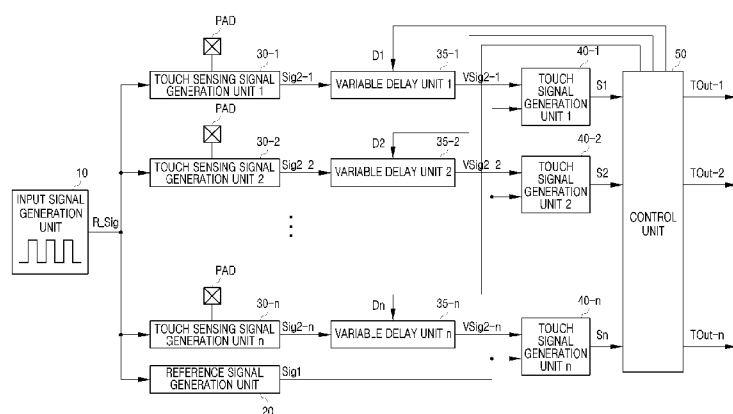
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(54) Title: TOUCH SENSOR AND SIGNAL GENERATION METHOD THEREOF



(57) Abstract: A touch sensor and a signal generation method thereof are provided. The touch sensor includes: an input signal generation unit generating an input signal; a reference signal generation unit delaying the input signal by a predetermined time to generate a first signal; a plurality of touch sensing signal generation units having a touch pad and delaying the input signal differently according to whether or not the touch pad is touched to generate a second signal; a plurality of variable delay units varying a delay time in response to a control signal and delaying the second signal in response to the varied delay time to generate a varied second signal; a plurality of touch signal generation units generating a touch signal according to a difference in delay time between the first signal and the second signal; and a control unit receiving and analyzing the plurality of touch signals, generating touch outputs when the touch pad is in a touched state, and supplying the control signals to the variable delay units when the touch pad is in a standby state. Accordingly, the delay value may be automatically adjusted even when the delay value, which has been initially set, is varied due to an external environment, so that the touch pad may be prevented from being mis-operated.