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Philipp et al.

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(54) **PROXIMITY SENSOR**
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(65) **Prior Publication Data**

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Related U.S. Application Data

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G01R 27/26 (2006.01)
G08B 13/08 (2006.01)

(52) **U.S. Cl.**
USPC 324/663; 340/545.4

(58) **Field of Classification Search**
USPC 324/663, 658, 649, 600; 702/57;
340/545.4, 545.2, 545.1, 541, 540;
381/74

See application file for complete search history.

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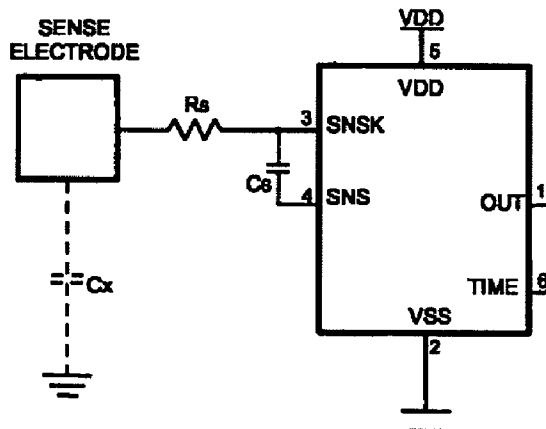
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(57) **ABSTRACT**

In one embodiment, a method includes monitoring detection by a sensing element of a key touch on a touch screen; determining an amount of time that has elapsed since the sensing element last detected a change of capacitance indicative of a key touch on the touch screen; and, if the amount of time that has elapsed exceeds a predetermined time duration, then initiating a particular function of an apparatus.

20 Claims, 10 Drawing Sheets



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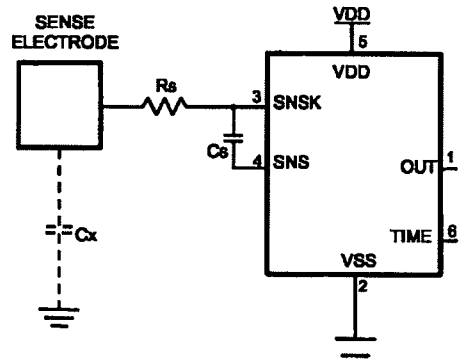


Fig. 1

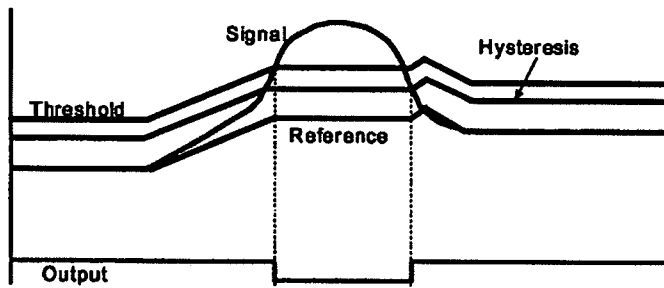


Fig. 2

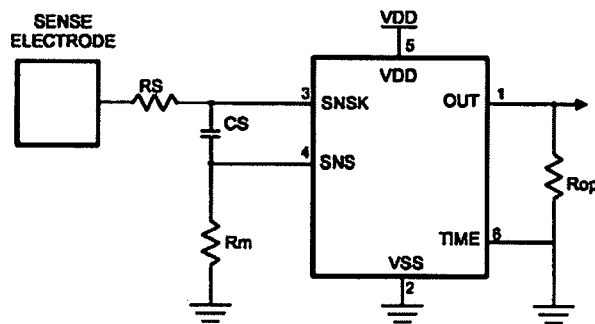
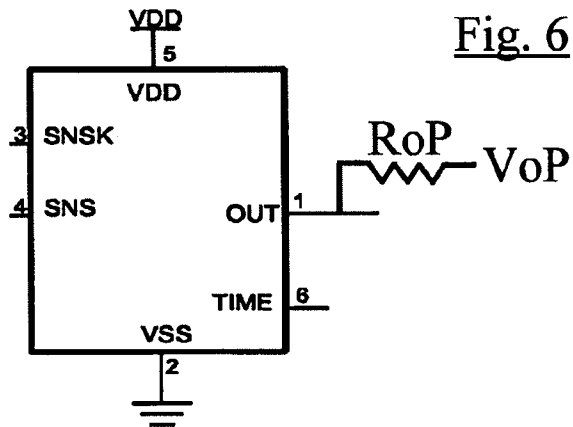
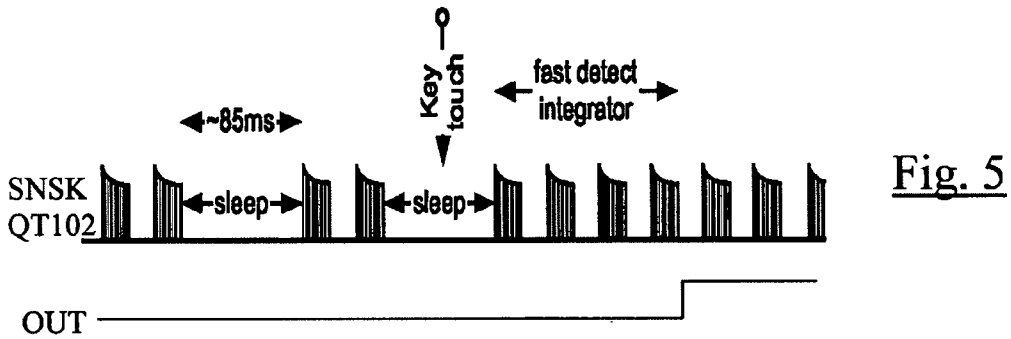
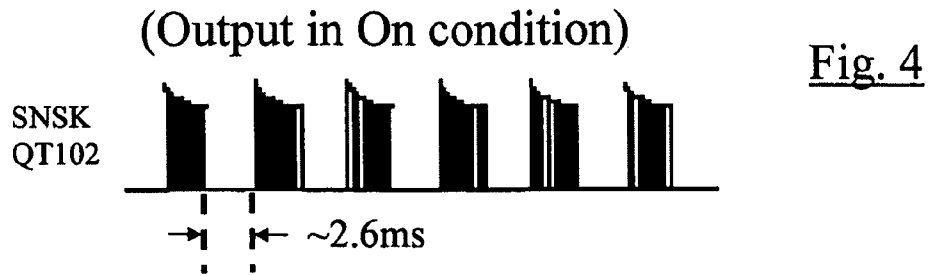


Fig. 3



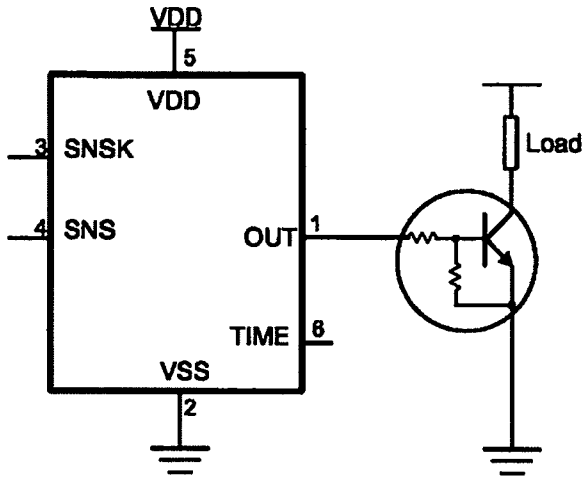


Fig. 7

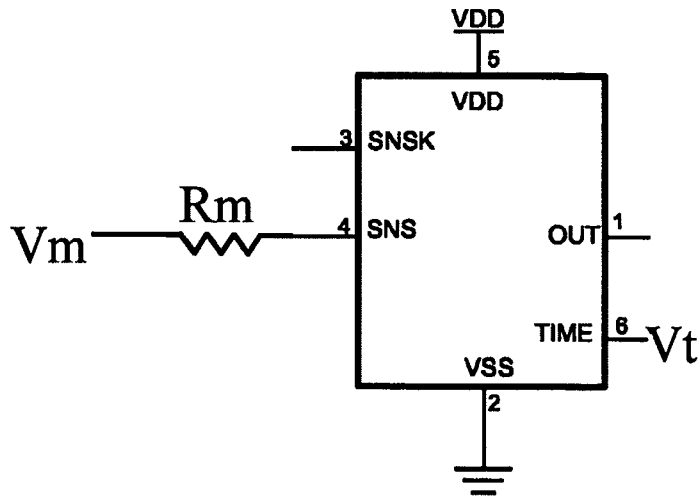


Fig. 8

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