



US 20090027068A1

(19) **United States**

(12) **Patent Application Publication**
Philipp et al.

(10) **Pub. No.: US 2009/0027068 A1**

(43) **Pub. Date: Jan. 29, 2009**

(54) **PROXIMITY SENSOR**

Publication Classification

(75) Inventors: **Harald Philipp**, Southampton (GB); **Kevin Snoad**, Chichester (GB)

(51) **Int. Cl.**
G01R 27/26 (2006.01)

(52) **U.S. Cl.** **324/678**

Correspondence Address:
DAVID KIEWIT
5901 THIRD ST SOUTH
ST PETERSBURG, FL 33705 (US)

(57) **ABSTRACT**

A capacitive touch sensor providing an automatic switch-off function for an apparatus in which the sensor is incorporated is provided. The sensor comprises a sensing element coupled to a capacitance measurement circuit for measuring the capacitance of the sensing element. A control circuit is operable to determine from the capacitance measurement whether an object is in proximity with the sensor. The determined presence of an object may be used to toggle a function of the apparatus. Furthermore, when it is determined that an object has not been in proximity with the sensor for a predetermined time duration, an output signal for switching off the apparatus is provided. The predetermined time duration may be selected from a number of predefined time durations, or may be programmed using an resistor-capacitor network. Pulses may be applied to the control circuit to override features of the automatic switch-off functionality.

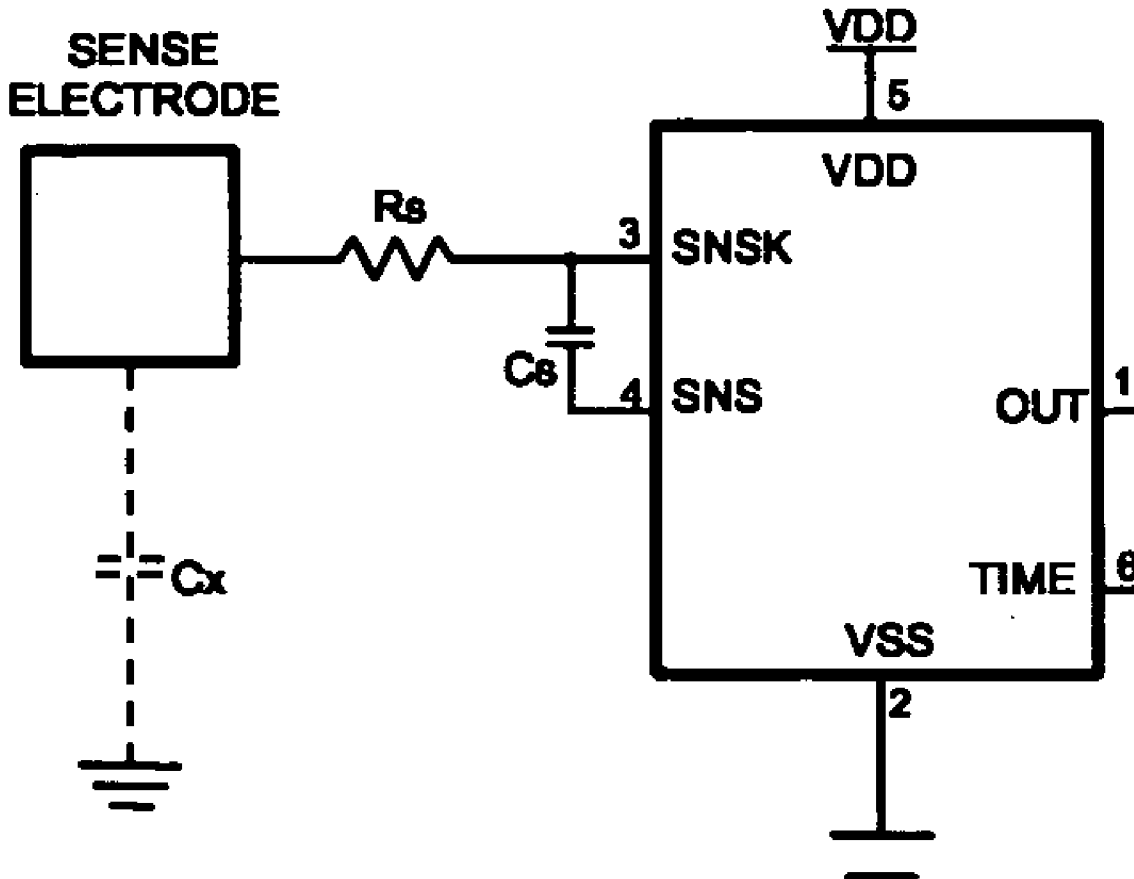
(73) Assignee: **QRG LIMITED**, Eastleigh (GB)

(21) Appl. No.: **12/179,769**

(22) Filed: **Jul. 25, 2008**

Related U.S. Application Data

(60) Provisional application No. 60/952,053, filed on Jul. 26, 2007.



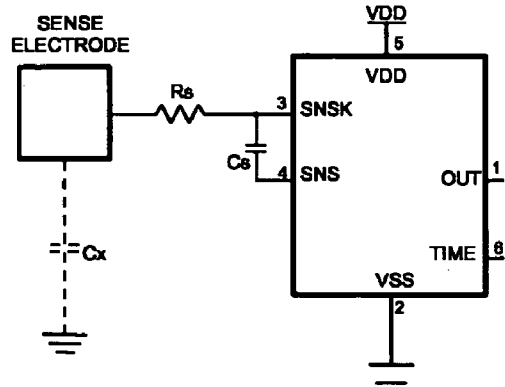


Fig. 1

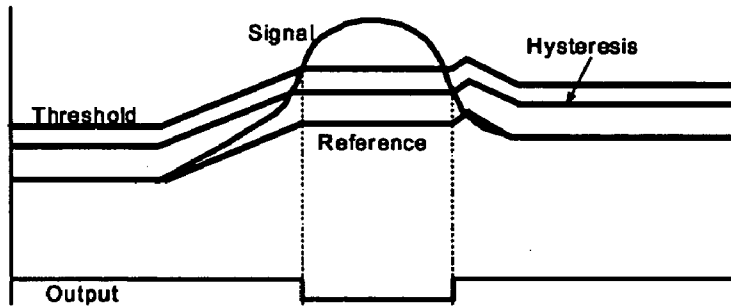


Fig. 2

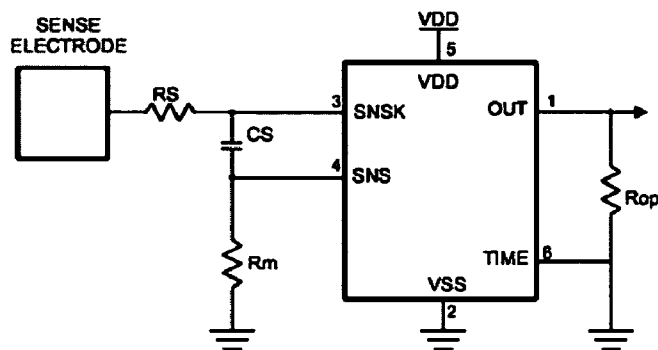


Fig. 3

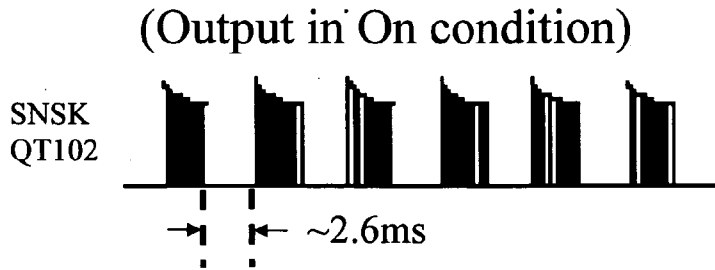


Fig. 4

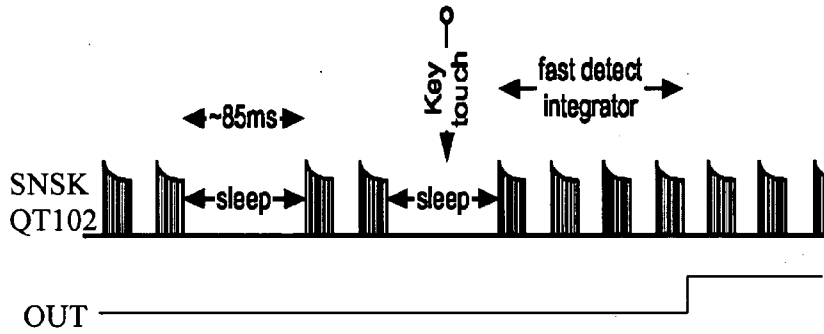


Fig. 5

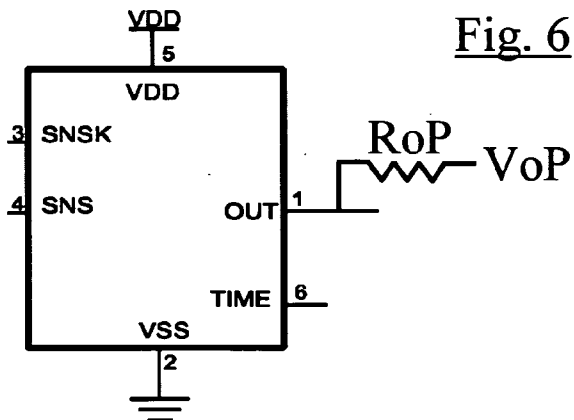


Fig. 6

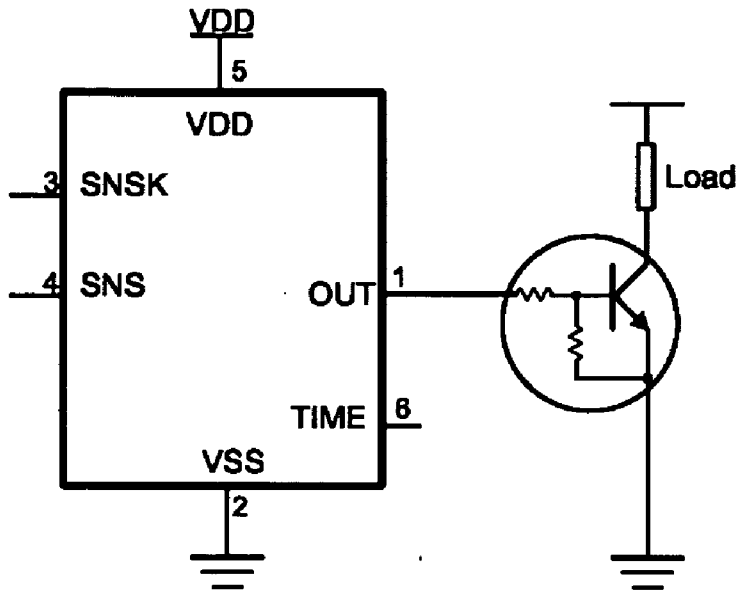


Fig. 7

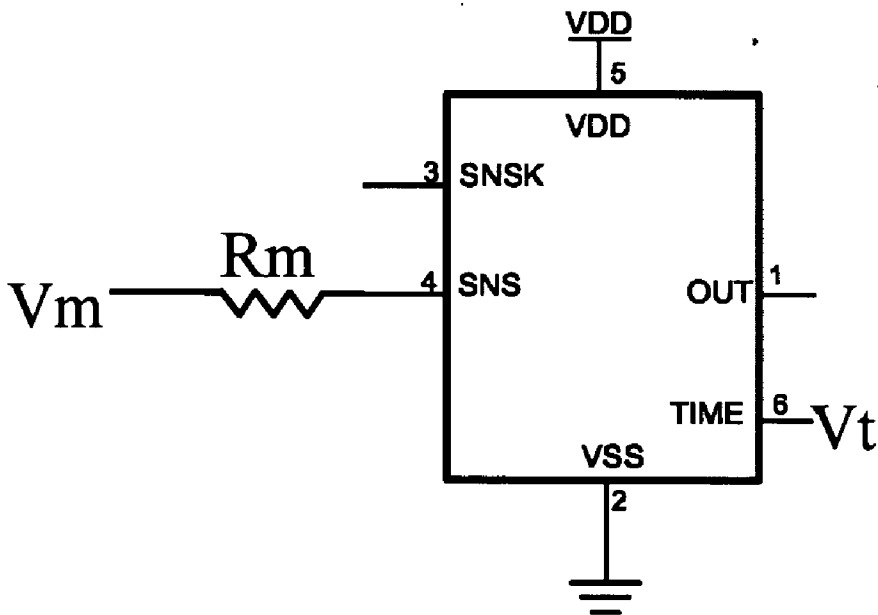


Fig. 8

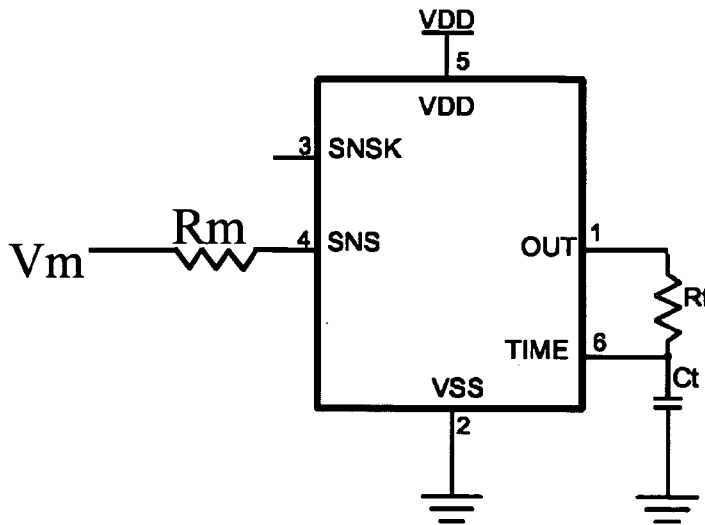


Fig. 9

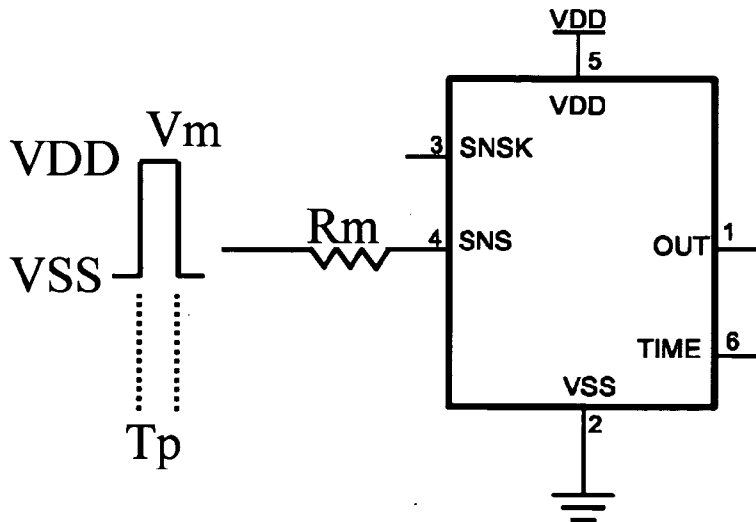


Fig. 10

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.