



US007329970B2

(12) **United States Patent**
Bruwer

(10) **Patent No.:** **US 7,329,970 B2**
(45) **Date of Patent:** **Feb. 12, 2008**

(54) **TOUCH SENSOR AND LOCATION INDICATOR CIRCUITS**

(58) **Field of Classification Search** 307/140
See application file for complete search history.

(75) **Inventor:** **Frederick Johannes Bruwer, Paarl (ZA)**

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,249,089 B1 * 6/2001 Bruwer 315/200 A

* cited by examiner

(73) **Assignee:** **Azoteq (Pte) Ltd, Paarl (ZA)**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Primary Examiner—Robert L. DeBeradinis

(74) *Attorney, Agent, or Firm*—Jones, Tullar & Cooper

(21) **Appl. No.:** **11/480,868**

(57) **ABSTRACT**

(22) **Filed:** **Jul. 6, 2006**

An electronic circuit for use with an exhaustible power source and load such as a light bulb, a radio or motor, includes a microchip with an input that transmits a signal to the microchip when the load is activated or deactivated. The input does not form a serial link between the power source and the load. The power switch, by on/off switching, controls energy flow from the power source to the load. The electronic circuit has an automatic delayed shut-off function for the load and, a find-in-the-dark indicator and a power source level indicator which are active when the load is not energized and the power source is not being charged. The input to the microchip acts as an activation/deactivation user interface. The microchip allows the user to select specific functions based on the time duration of activation signals, the time duration between activation signals and the number of activation signals at the input.

(65) **Prior Publication Data**

US 2006/0250028 A1 Nov. 9, 2006

Related U.S. Application Data

(63) Continuation of application No. 10/873,190, filed on Jun. 23, 2004, now Pat. No. 7,084,531, which is a continuation of application No. 09/806,860, filed as application No. PCT/ZA99/00107 on Oct. 8, 1999, now Pat. No. 6,984,900, which is a continuation-in-part of application No. 09/169,395, filed on Oct. 9, 1998, now Pat. No. 6,248,089.

(51) **Int. Cl.**
H01H 3/26 (2006.01)

(52) **U.S. Cl.** 307/140

55 Claims, 6 Drawing Sheets

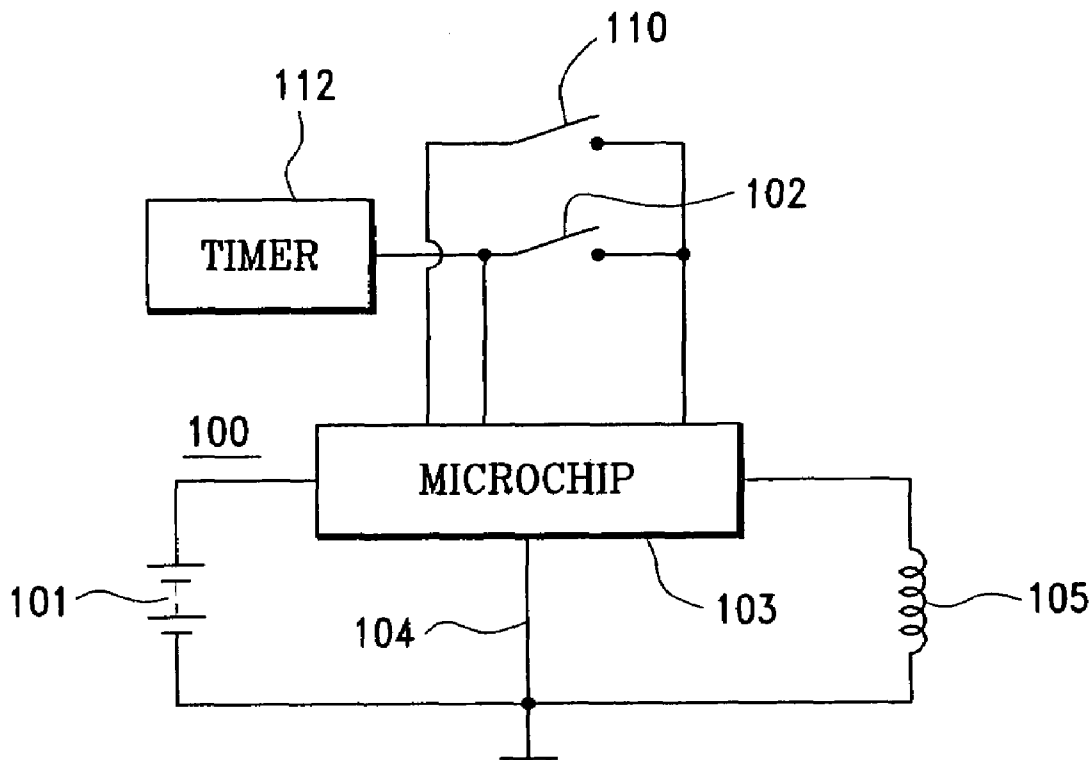


FIG. 1

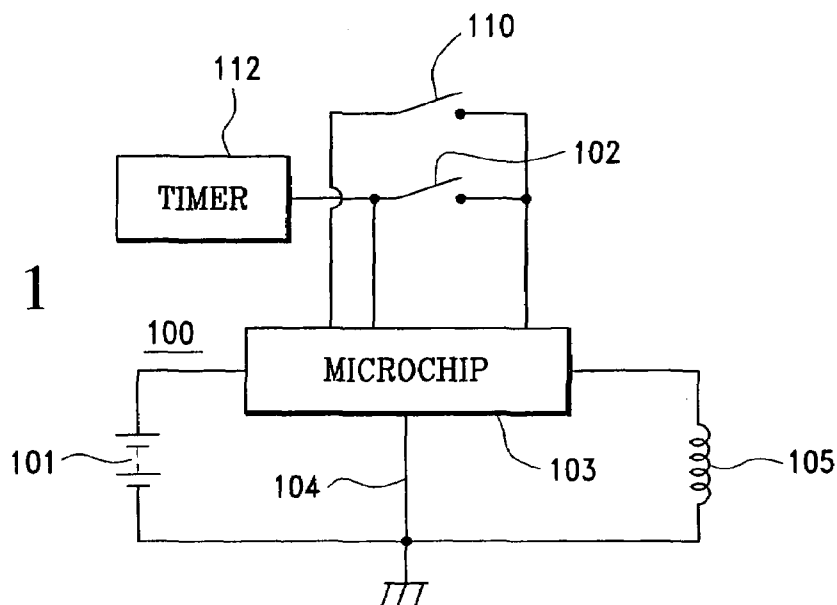


FIG. 2

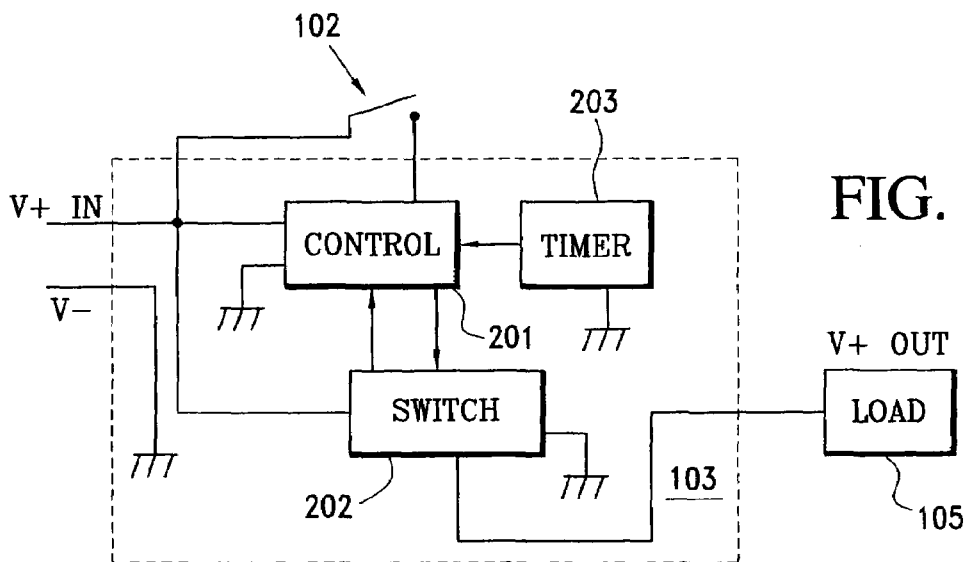
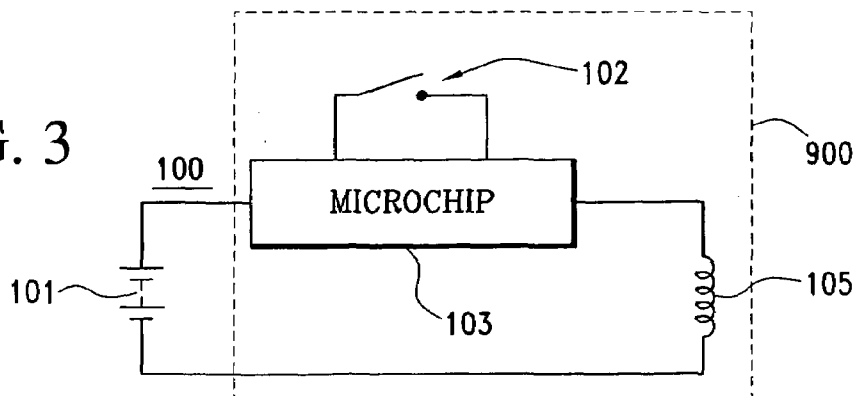
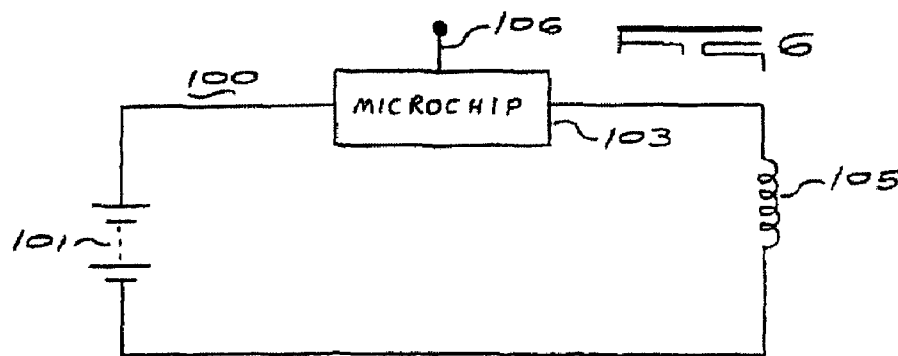
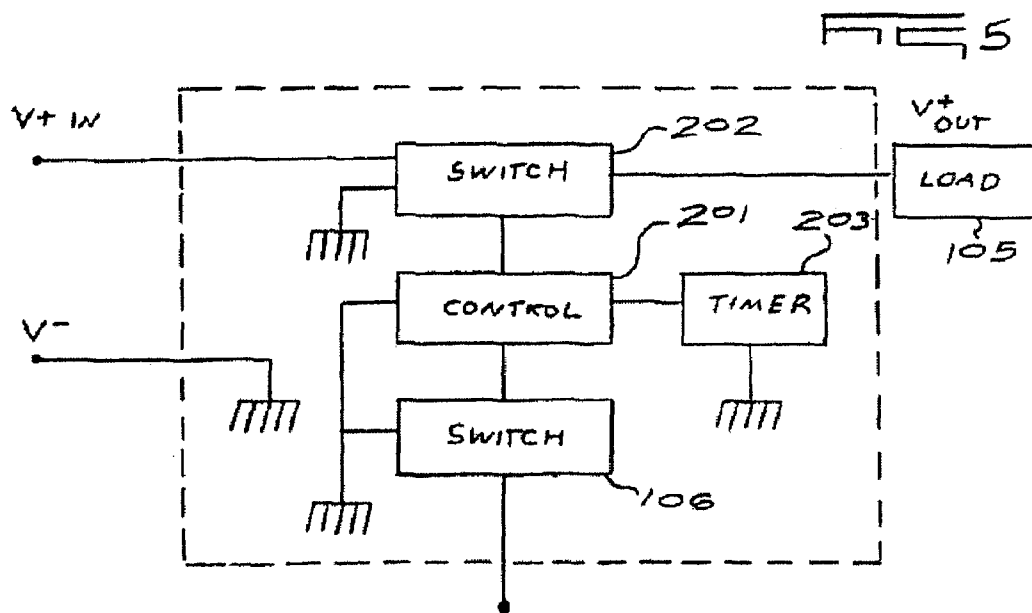
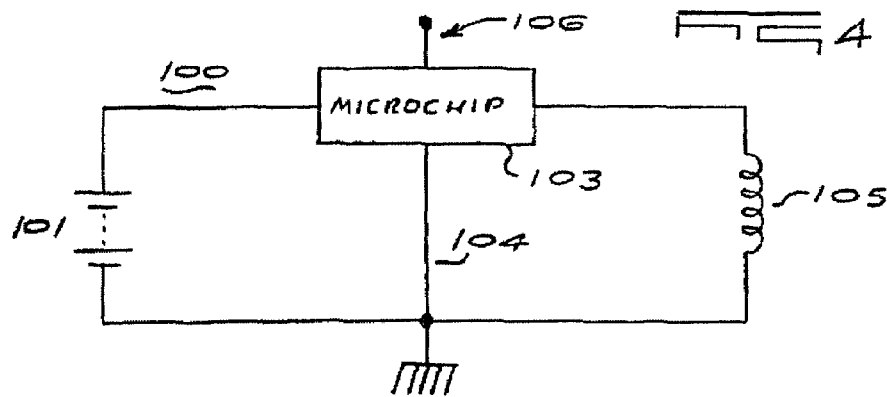
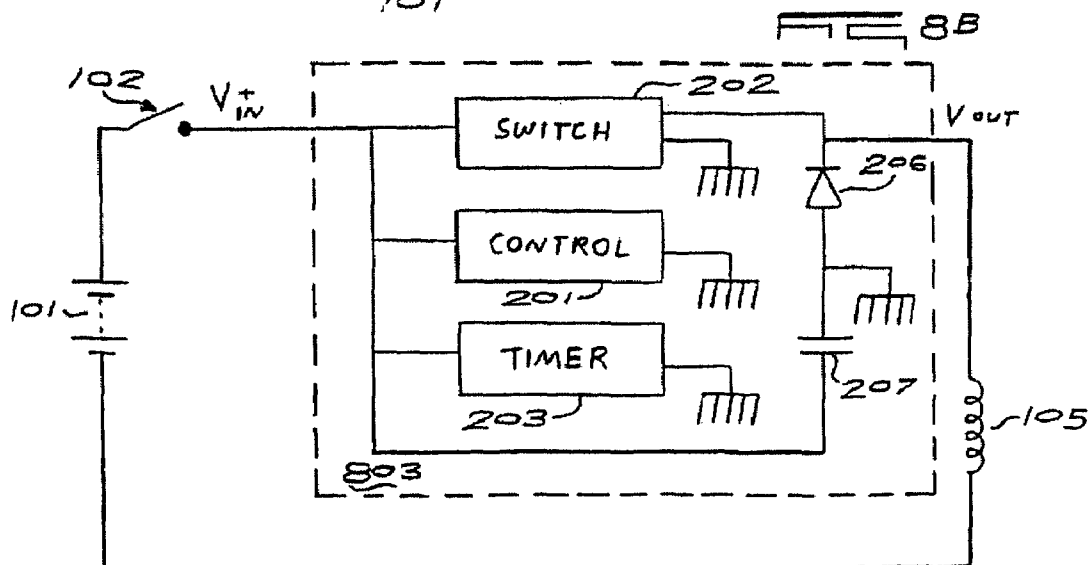
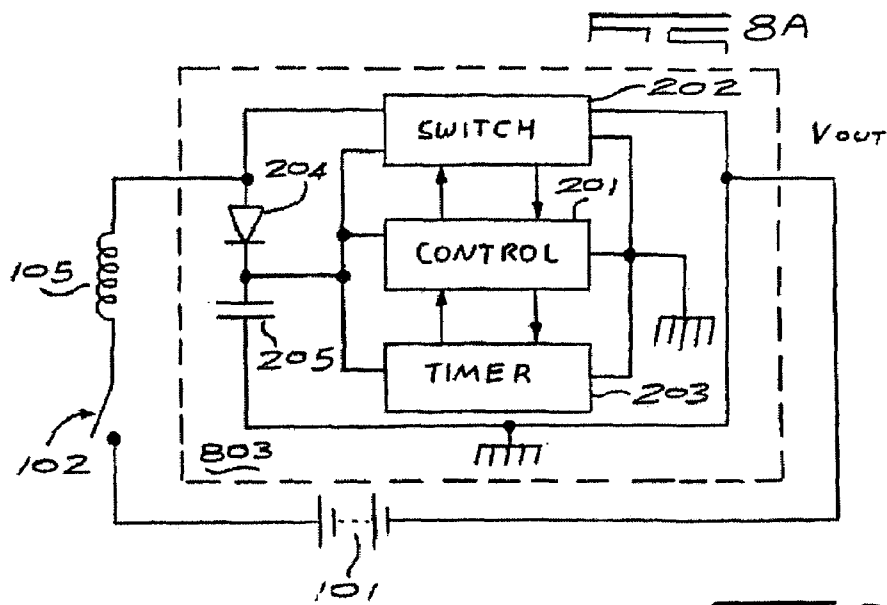
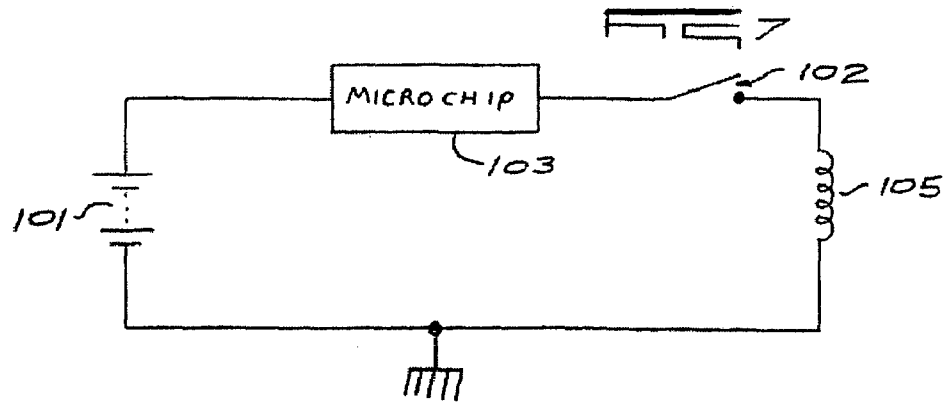
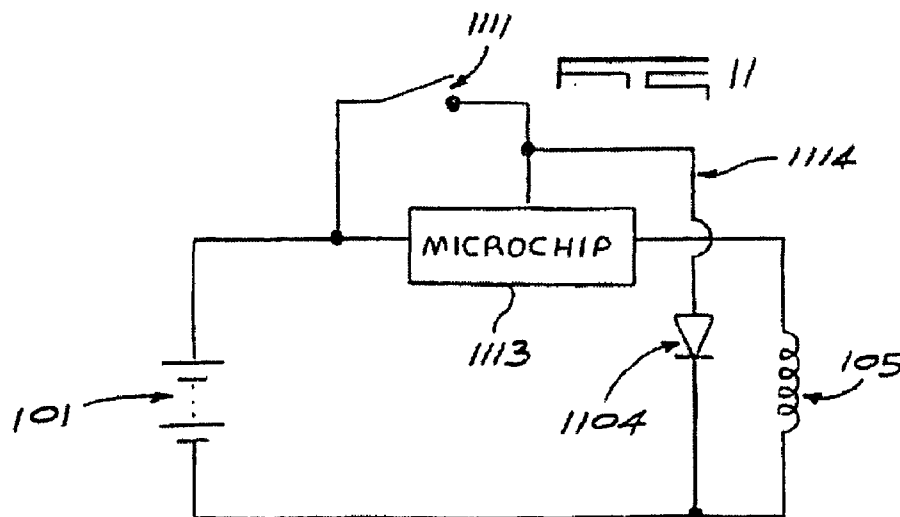
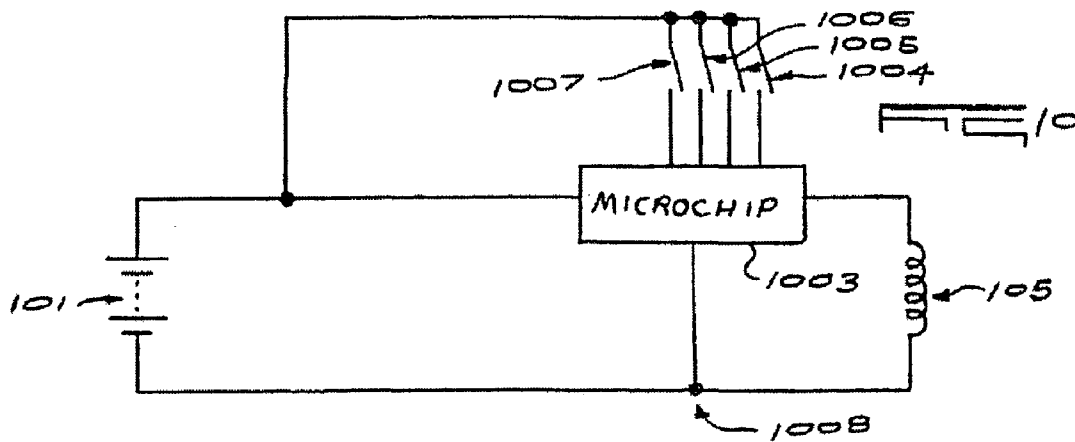
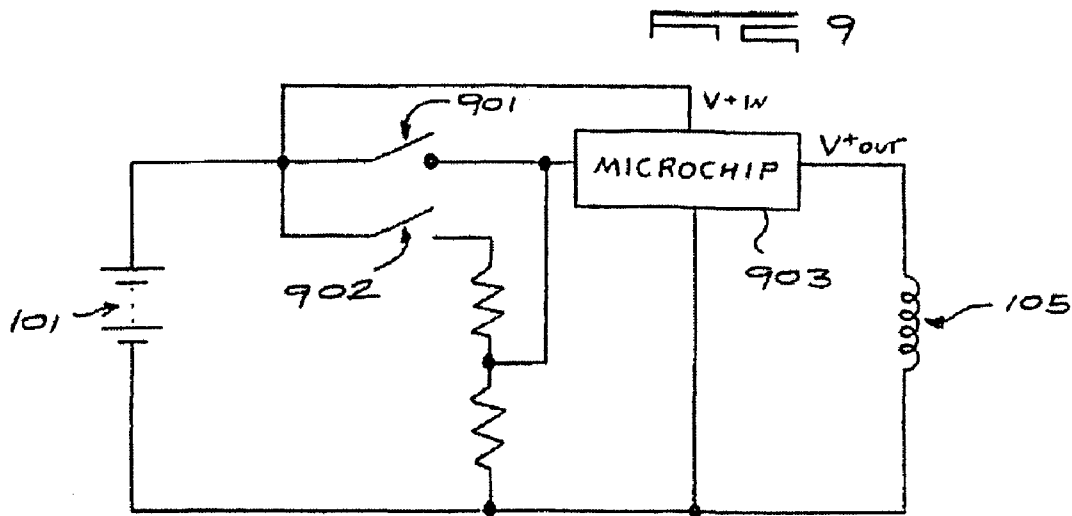


FIG. 3









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.