



US005623552A

# United States Patent [19]

[11] Patent Number: **5,623,552**

Lane

[45] Date of Patent: **Apr. 22, 1997**

[54] **SELF-AUTHENTICATING IDENTIFICATION CARD WITH FINGERPRINT IDENTIFICATION**

[75] Inventor: **William F. Lane, Wilson, N.C.**

[73] Assignee: **CardGuard International, Inc., Wilson, N.C.**

4,760,245	7/1988	Fukaya	235/379
4,782,455	11/1988	Morinouchi et al.	235/380
4,802,218	1/1989	Wright et al.	380/23
4,864,115	9/1989	Imran et al.	235/492
4,926,325	5/1990	Benton et al.	364/408
4,983,036	1/1991	Froelich	356/71
4,995,086	2/1991	Lilley et al.	340/825.34
5,321,765	6/1994	Costello	382/4

### FOREIGN PATENT DOCUMENTS

0313288	12/1988	Japan	902/3
---------	---------	-------	-------

*Primary Examiner*—Jose L. Couso  
*Assistant Examiner*—Anh Hong Do  
*Attorney, Agent, or Firm*—Bell, Seltzer, Park & Gibson

[21] Appl. No.: **515,151**

[22] Filed: **Aug. 15, 1995**

### Related U.S. Application Data

[63] Continuation of Ser. No. 184,686, Jan. 21, 1994, abandoned.

[51] **Int. Cl.<sup>6</sup>** ..... **G06K 9/00**

[52] **U.S. Cl.** ..... **382/124; 340/825.34; 235/492**

[58] **Field of Search** ..... **382/124; 235/380, 235/492; 902/3, 4, 5; 340/825.34**

### [57] ABSTRACT

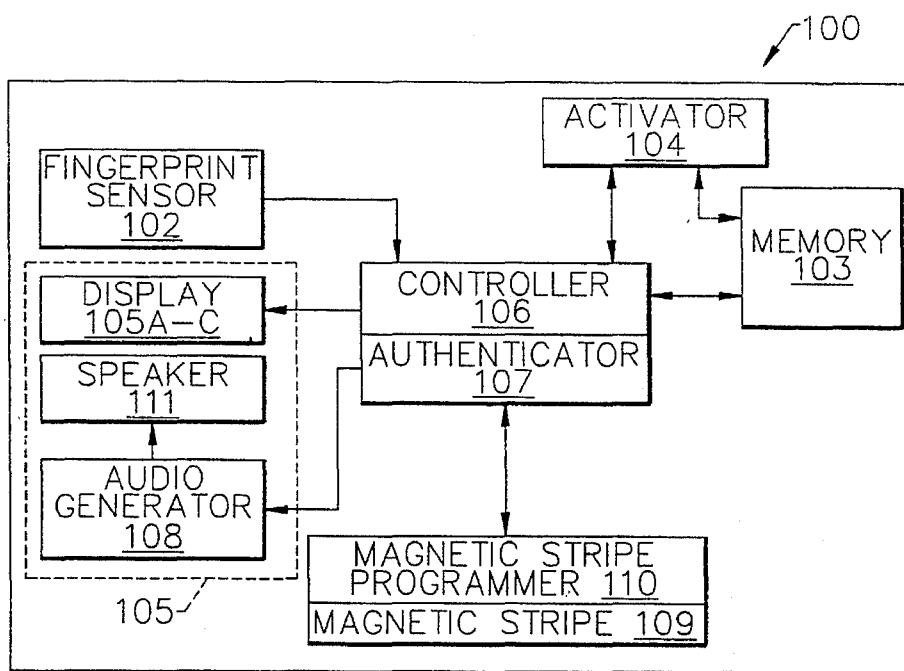
A self-authenticating identification card includes a fingerprint sensor for authenticating the identity of a user. An ID card memory permanently stores information related to a fingerprint of the card user. An on-card authenticator compares information related to a sensed fingerprint with the stored fingerprint information and produces an authentication signal if the sensed fingerprint information matches the stored fingerprint information. An audio generator is preferably included in the card for transmitting a predetermined audio signal to a speaker if a match is sensed. A second memory, in the form of a programmable magnetic stripe, may be included on the card for storing account information related to the card user. A magnetic stripe programmer is then used for loading predetermined account information into the programmable magnetic stripe if the sensed fingerprint information matches the stored fingerprint information. Account information is automatically cleared from the programmable magnetic stripe after a predetermined elapsed time.

### [56] References Cited

#### U.S. PATENT DOCUMENTS

3,673,331	6/1972	Hair et al.	179/15 B
3,812,461	5/1974	Lemelson	340/149 A
3,940,795	2/1976	Lemelson	360/101
4,202,120	5/1980	Engel	356/71
4,253,086	2/1981	Szwarcwier	356/71
4,256,955	3/1981	Giraud et al.	235/380
4,353,056	10/1982	Tsikos	340/146.3 E
4,455,083	6/1984	Elmes	356/71
4,471,343	9/1984	Lemelson	340/571
4,575,621	3/1986	Dreifus	235/380
4,582,985	4/1986	Löfberg	340/825.34
4,614,861	9/1986	Pavlov et al.	235/380
4,667,087	5/1987	Quitana	235/380
4,677,657	6/1987	Nagata et al.	340/825.34

**29 Claims, 11 Drawing Sheets**



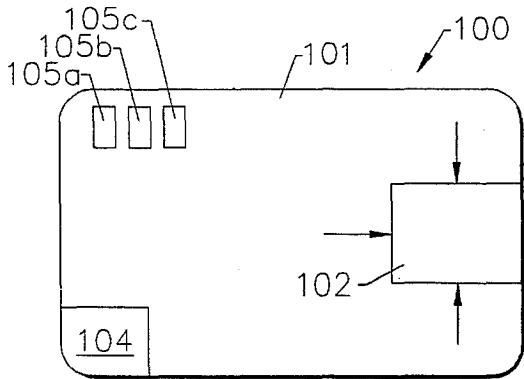


FIG. 1A.

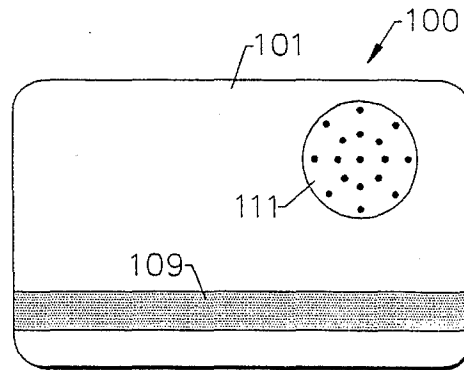


FIG. 1B.

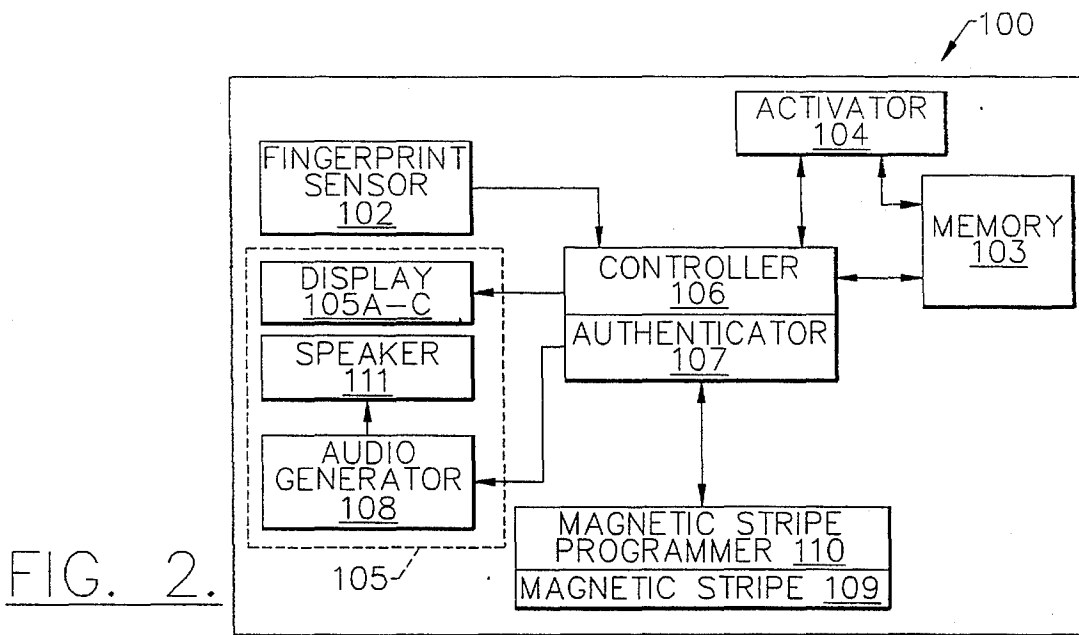


FIG. 2.

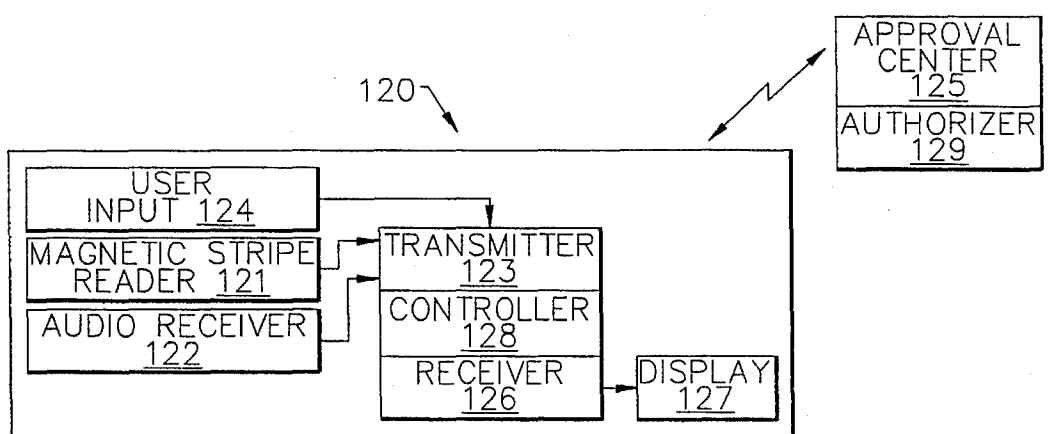
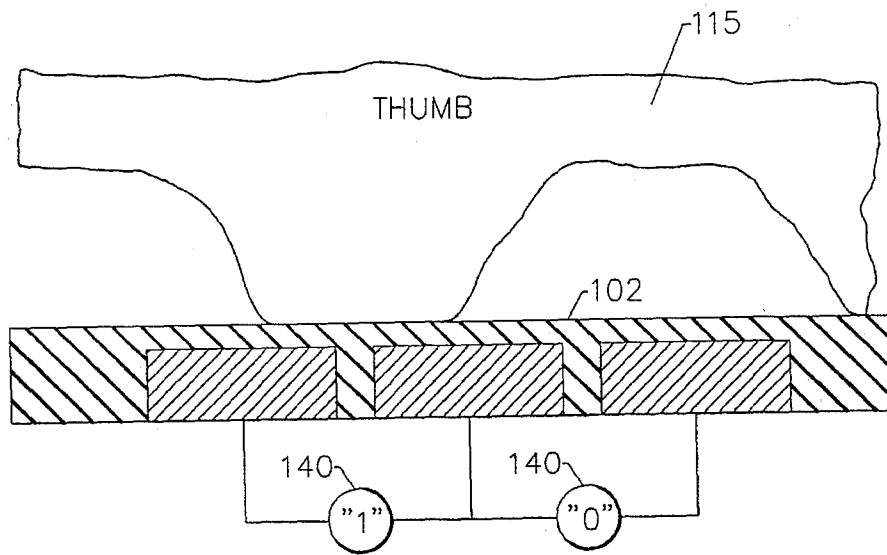
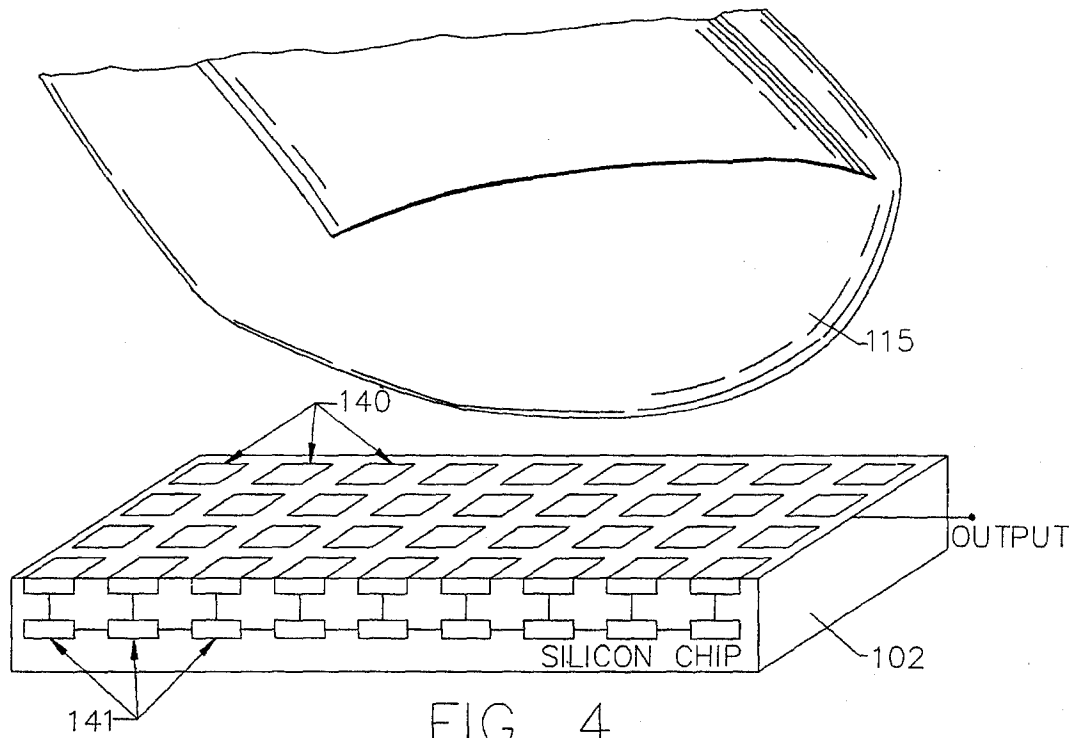


FIG. 3.



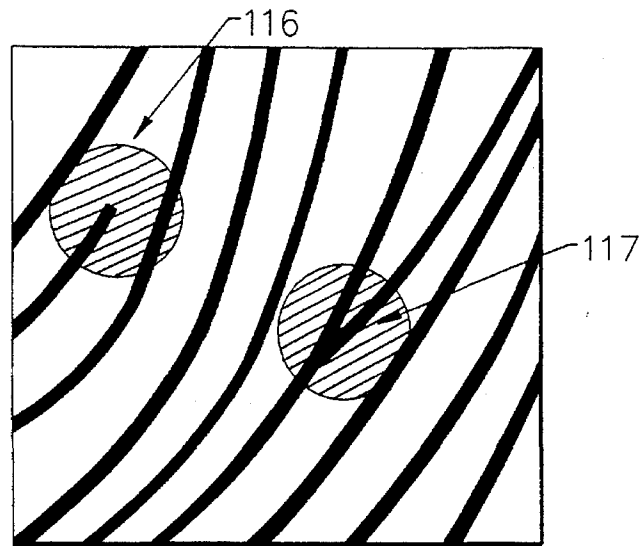


FIG. 6.

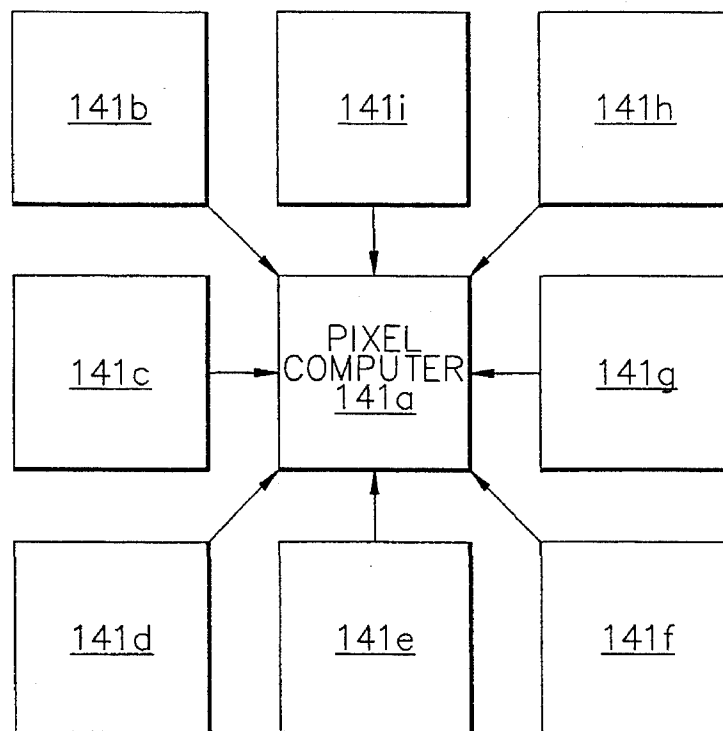


FIG. 7.

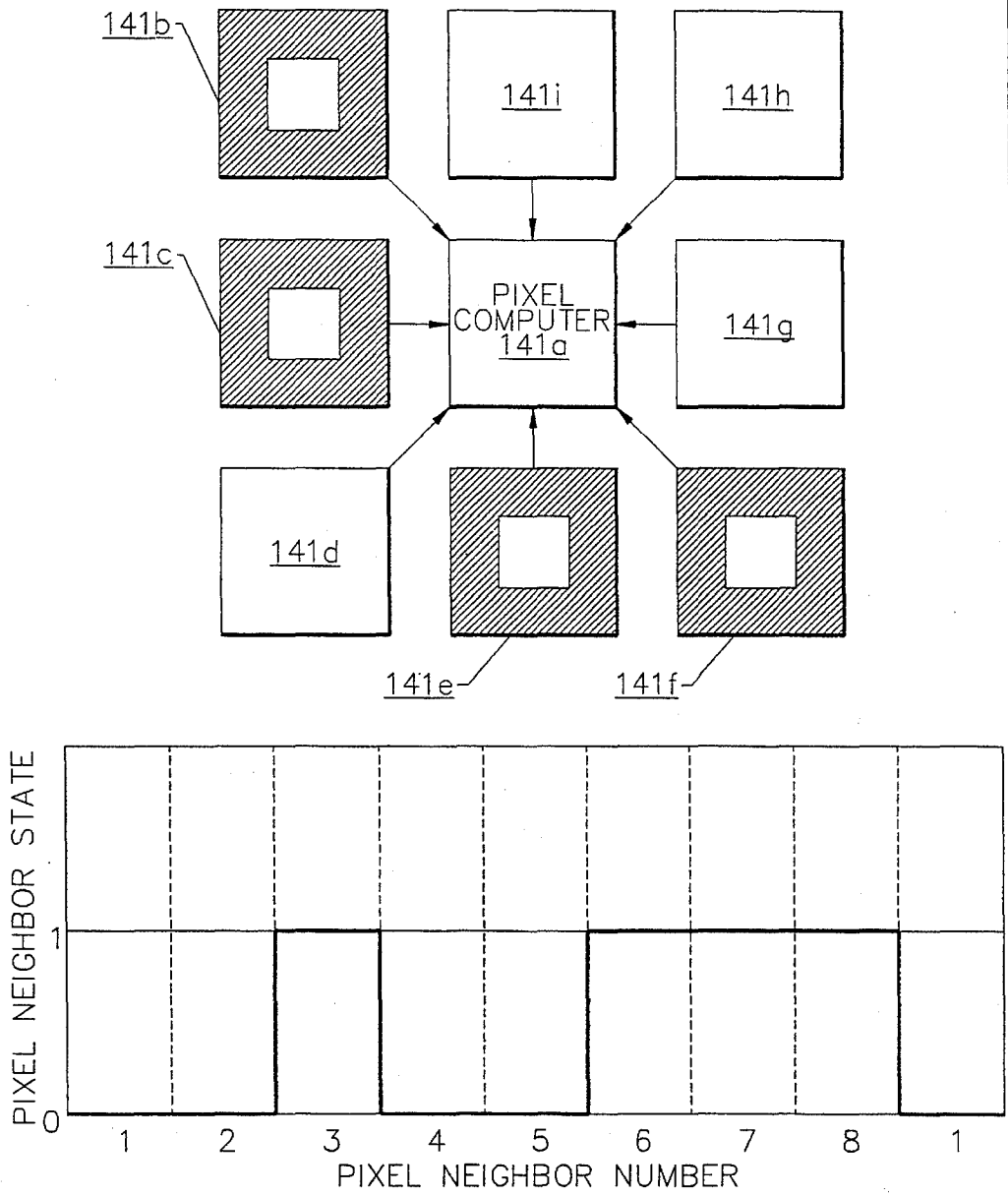


FIG. 8.

# 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.