US006075455A

United States Patent [19]

DiMaria et al.

[11] Patent Number: 6,075,455

[45] Date of Patent: *Jun. 13, 2000

[54] **BIOMETRIC TIME AND ATTENDANCE SYSTEM WITH EPIDERMAL TOPOGRAPHICAL UPDATING CAPABILITY**

[75] Inventors: **Peter C. DiMaria**, Somers; **James Madsen**, Enfield, both of Conn.

[73] Assignee: **Accu-Time Systems, Inc.**, Ellington, Conn.

[*] Notice: This patent is subject to a terminal disclaimer.

[21] Appl. No.: **09/374,734**

[22] Filed: **Aug. 13, 1999**

Related U.S. Application Data

[63] Continuation of application No. 08/936,031, Sep. 23, 1997, Pat. No. 5,959,541.

[51] **Int. Cl.**[7] **G07D 7/00**

[52] **U.S. Cl.** **340/825.34**; 340/825.3; 340/825.31; 382/115; 382/124; 382/125; 382/126; 382/127

[58] **Field of Search** 340/825.34, 825.31, 340/825.3; 382/115, 124, 125, 126, 127

[56] **References Cited**

U.S. PATENT DOCUMENTS

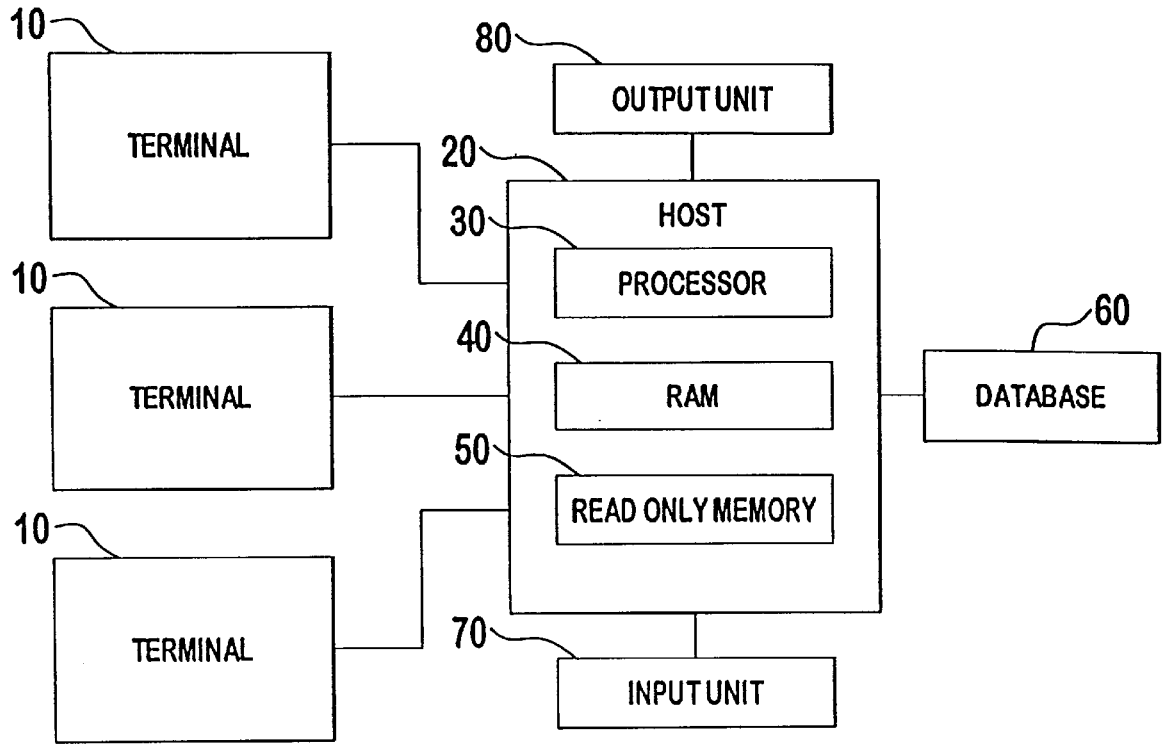
3,581,282	5/1971	Altman	340/149
4,006,459	2/1977	Baker et al.	340/149
4,151,512	4/1979	Riganati et al.	340/146.3
4,210,899	7/1980	Swonger et al.	340/146.3
4,525,859	7/1985	Bowles et al.	382/5
4,805,223	2/1989	Denyer	382/4
4,995,086	2/1991	Lilley et al.	382/4
5,195,145	3/1993	Backus et al.	382/4
5,335,288	8/1994	Faulkner	382/4
5,337,043	8/1994	Gokcebay	340/825.31
5,483,601	1/1996	Faulkner	382/115
5,509,083	4/1996	Abtahi et al.	382/124
5,552,766	9/1996	Lee et al.	340/541
5,559,504	9/1996	Itsumi et al.	340/825.3
5,594,806	1/1997	Colbert	382/115
5,812,252	9/1998	Bowker et al.	356/71
5,959,541	9/1999	DiMaria et al.	340/825.34

OTHER PUBLICATIONS

"Zugang flexibel kontrollieren," Elektronik, Nov. 5, 1982, vol. 31, No. 22, p. 26.

Primary Examiner—Brian Zimmerman
Assistant Examiner—Yves Dalencourt
Attorney, Agent, or Firm—Volpe and Koenig, P.C.

[57] **ABSTRACT**

A biometric time and attendance device for scanning an epidermal portion of a human body, generating an epidermal topographical pattern and transmitting the epidermal topographical pattern to a host computer for determining access privileges and for updating epidermal topographical database.

18 Claims, 6 Drawing Sheets