US006792536B1

(12) **United States Patent** (10) Patent No.: **US 6,792,536 B1**
Teppler (45) Date of Patent: **Sep. 14, 2004**

(54) **SMART CARD SYSTEM AND METHODS FOR PROVING DATES IN DIGITAL FILES**

(75) Inventor: **Steven W. Teppler**, Washington, DC (US)

(73) Assignee: **TimeCertain LLC**, Washington, DC (US)

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

(21) Appl. No.: **09/421,279**

(22) Filed: **Oct. 20, 1999**

(51) Int. Cl.^{7} **H04L 9/00**
(52) **U.S. Cl.** **713/178**; 713/415; 713/201
(58) **Field of Search** 713/178, 175, 713/207; 705/44

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,001,752 A	3/1991	Fischer	
5,022,080 A	6/1991	Durst et al.	
5,136,643 A	8/1992	Fischer	
5,136,646 A	8/1992	Haber et al.	
5,136,647 A	8/1992	Haber et al.	
5,189,700 A	2/1993	Blandford	
5,373,561 A	12/1994	Haber et al.	
RE34,954 E	5/1995	Haber et al.	
5,422,953 A	6/1995	Fischer	
5,500,897 A	3/1996	Hartman, Jr.	
5,619,571 A	4/1997	Sandstrom et al.	
5,748,738 A	5/1998	Bisbee et al.	
5,781,629 A	7/1998	Haber et al.	
5,781,630 A	7/1998	Huber et al.	
5,903,882 A *	5/1999	Asay et al.	705/44
5,910,988 A	6/1999	Ballard	
5,923,763 A	7/1999	Walker et al.	
5,970,146 A	10/1999	McCall et al.	
6,047,282 A	4/2000	Wilson et al.	
6,081,899 A	6/2000	Byrd	
6,209,090 B1	3/2001	Aisenberg et al.	
6,209,091 B1 *	3/2001	Sudia et al.	713/175
6,226,744 B1 *	5/2001	Murphy et al.	713/200
6,237,096 B1 *	5/2001	Bisbee et al.	713/178
6,253,331 B1	6/2001	Kotami	
6,263,438 B1	7/2001	Walker et al.	
6,356,937 B1	3/2002	Montville et al.	
6,393,126 B1	5/2002	van der Kaay et al.	
6,393,566 B1	5/2002	Levine	
6,408,388 B1	6/2002	Fischer	
6,442,691 B1	8/2002	Blandford	
6,449,255 B1	9/2002	Waclawsky	
6,490,355 B1	12/2002	Epstein	
6,530,023 B1	3/2003	Nissl et al.	
6,601,172 B1	7/2003	Epstein	
2001/0011350 A1	8/2001	Zabetian	

FOREIGN PATENT DOCUMENTS

GB	2323455 A	9/1998

OTHER PUBLICATIONS

D. Mills, "Simple Network Time Protocol (SNTP) Version 4 for IPva, IPv6, and OSI", Oct. 1996.

* cited by examiner

(57) **ABSTRACT**

A smart card system and methods for proving dates of digital data files includes a trusted time source, a first subsystem for saving the file at a moment in time, a second subsystem for retrieving from the trusted time source a date and a time corresponding to the moment in time, a third subsystem for appending the date and the time retrieved from the trusted time source to the saved file, a fourth subsystem for signing the saved file with the date and the time retrieved from the trusted time source appended thereto, a fifth subsystem for hashing the signed file to produce a digest, a sixth subsystem for signing the digest with a key to produce a certificate, a seventh subsystem for appending the certificate to the saved file, and an eighth subsystem for saving the file with the certificate appended thereto. All of the subsystems are preferably sealed together within a smart card.
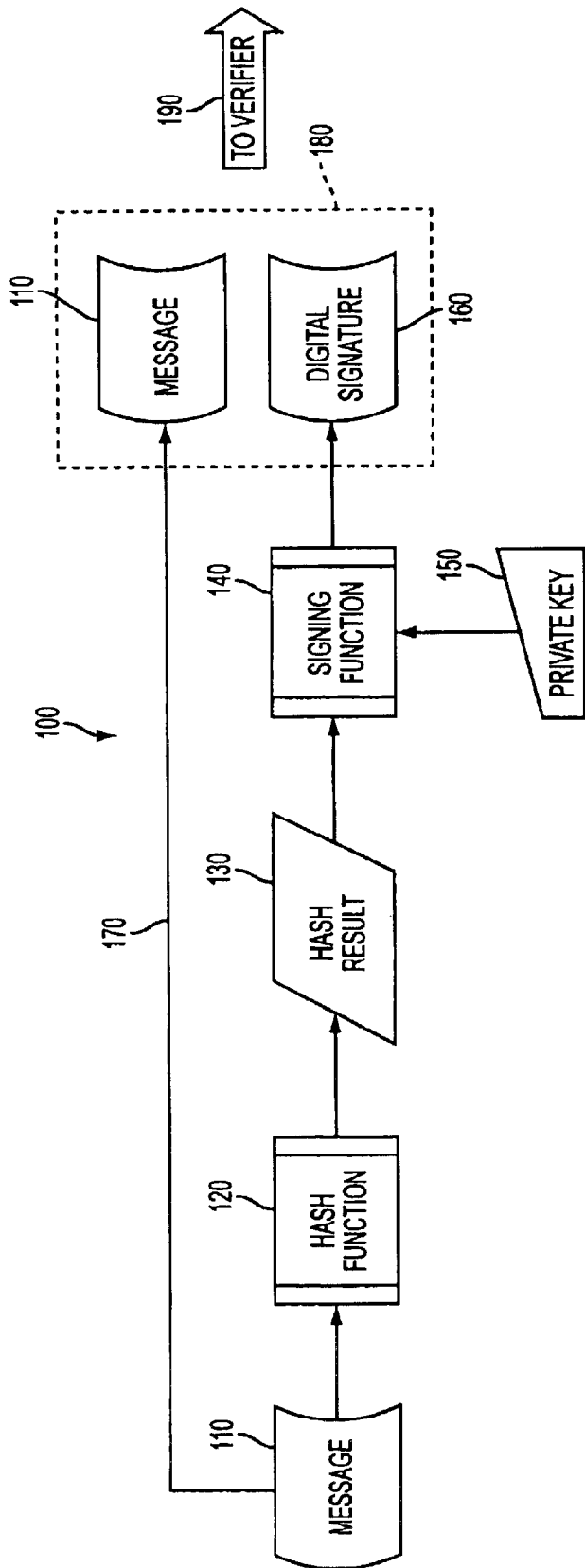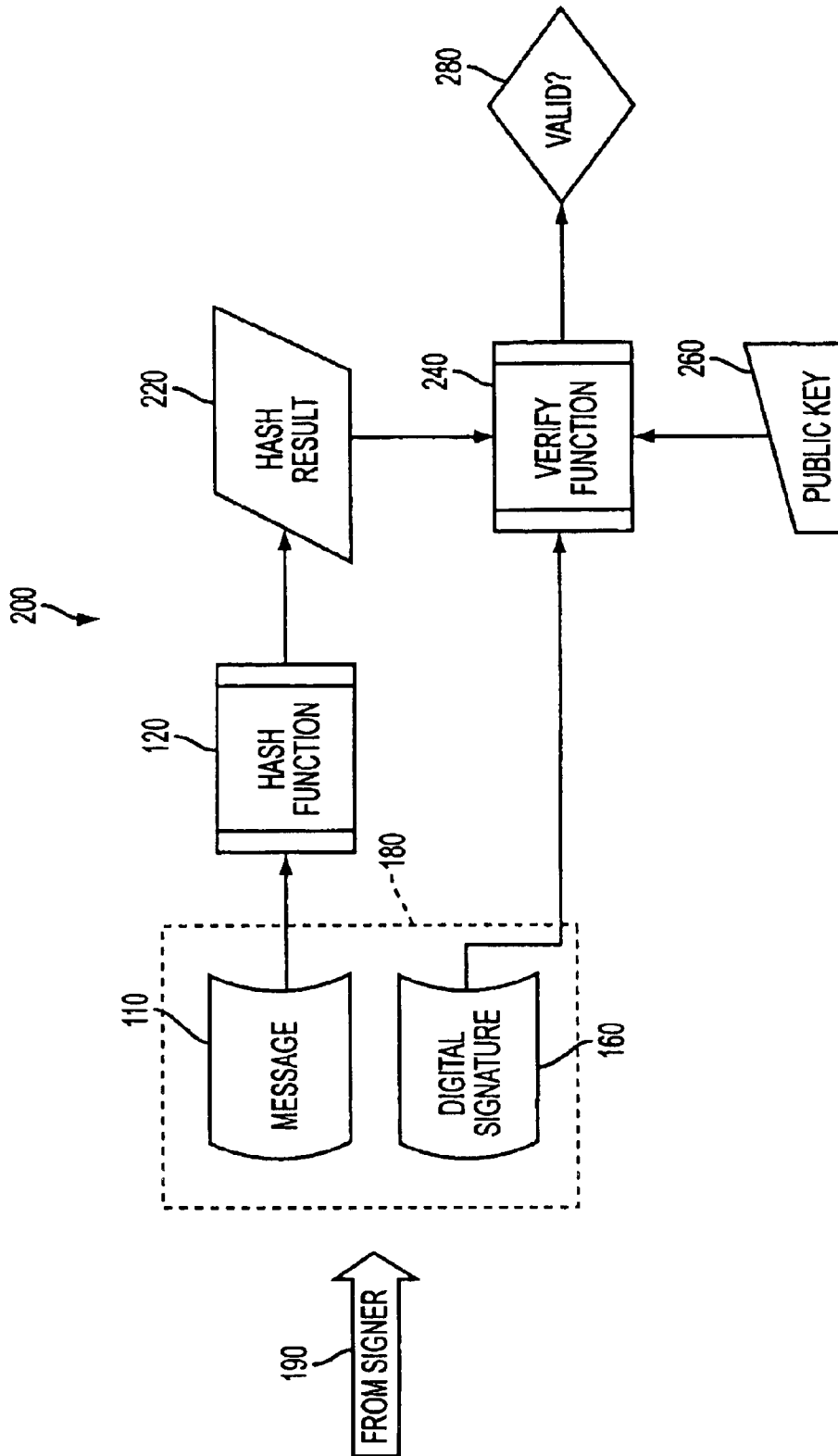
20 Claims, 10 Drawing Sheets
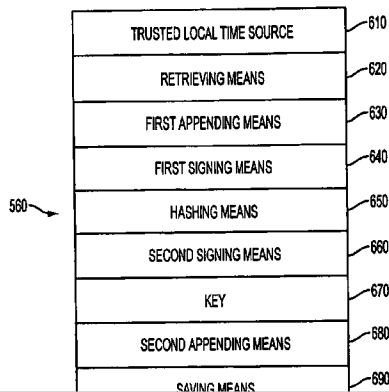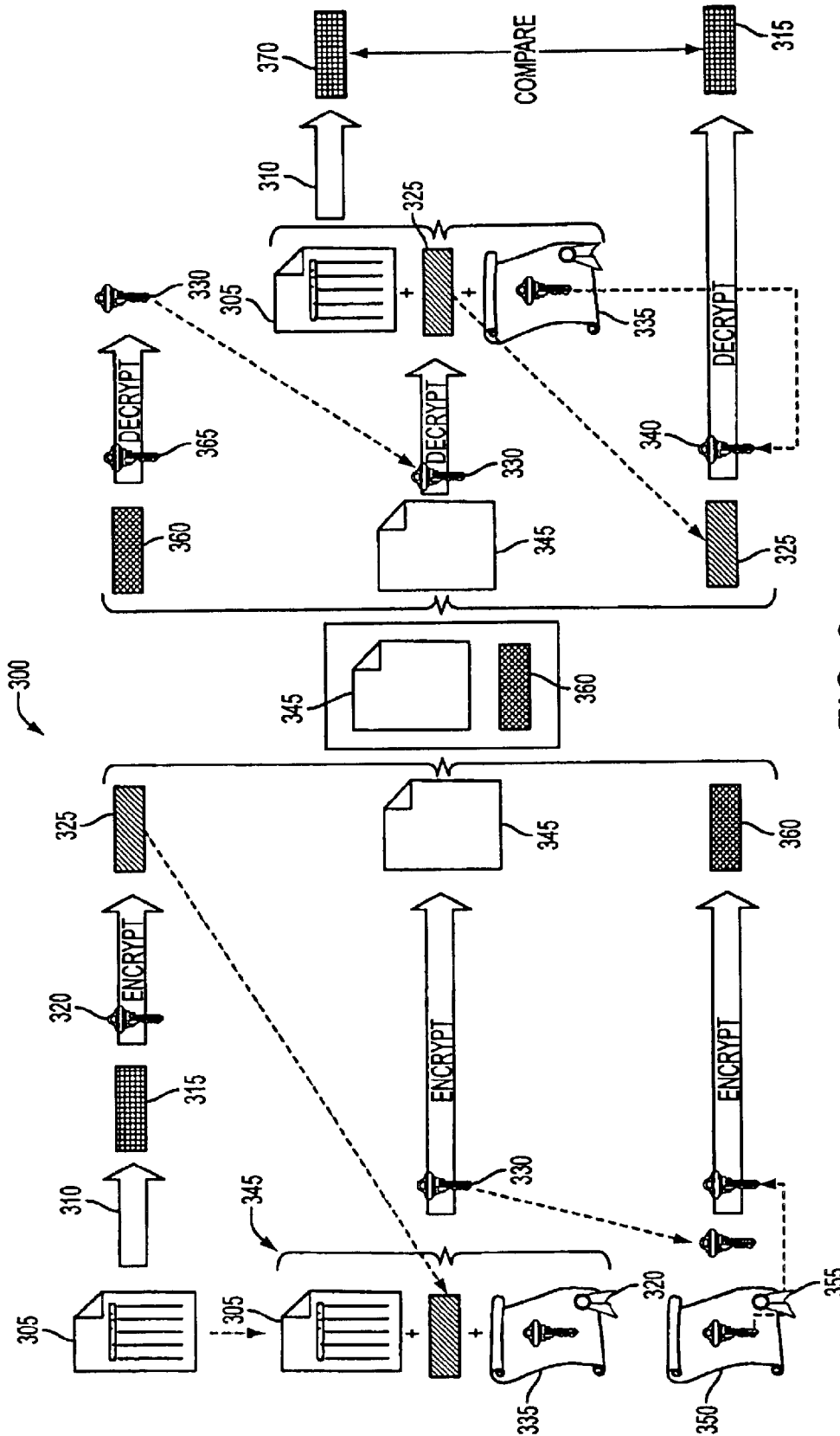
FIG. 1
PRIOR ART

FIG. 2
PRIOR ART
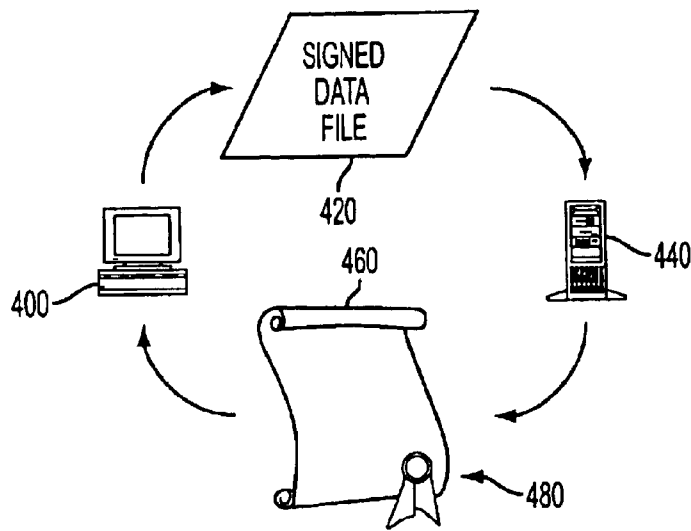
FIG. 3
PRIOR ART

FIG. 4
PRIOR ART

FIG. 5

DOCKET ALARM
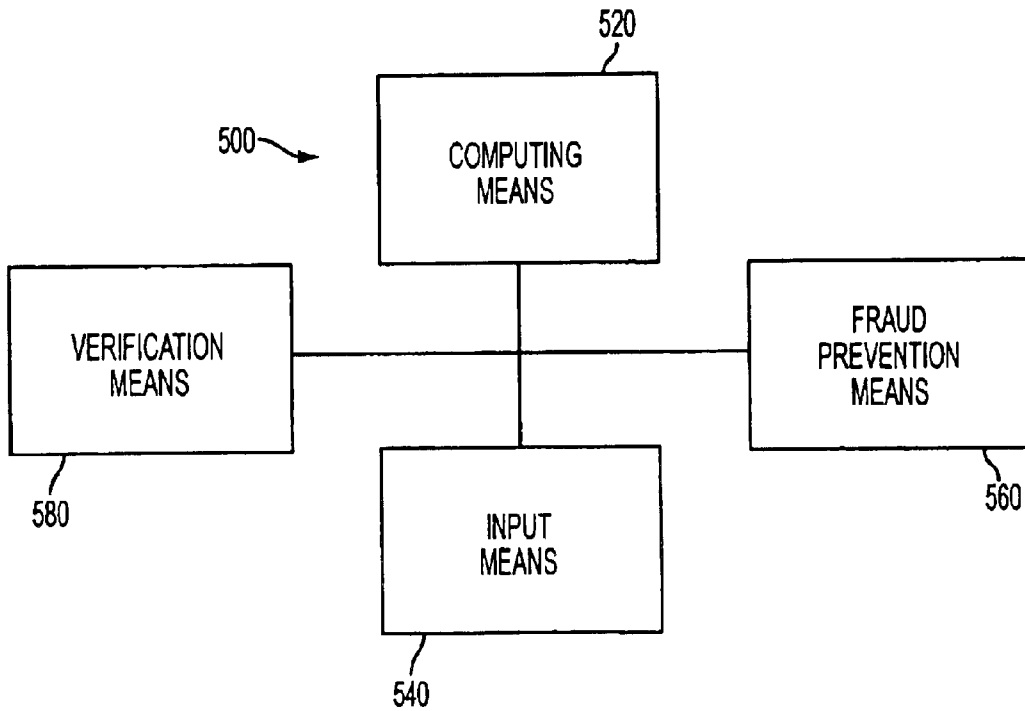
Explore Litigation Insights

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.