



US007706778B2

(12) **United States Patent**
Lowe

(10) **Patent No.:** **US 7,706,778 B2**
(45) **Date of Patent:** **Apr. 27, 2010**

(54) **SYSTEM AND METHOD FOR REMOTELY ASSIGNING AND REVOKING ACCESS CREDENTIALS USING A NEAR FIELD COMMUNICATION EQUIPPED MOBILE PHONE**

(75) Inventor: **Peter R. Lowe**, Peyton, CO (US)

(73) Assignee: **Assa Abloy AB**, Stockholm (SE)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 600 days.

(21) Appl. No.: **11/397,542**

(22) Filed: **Apr. 3, 2006**

(65) **Prior Publication Data**

US 2006/0224901 A1 Oct. 5, 2006

Related U.S. Application Data

(60) Provisional application No. 60/668,828, filed on Apr. 5, 2005.

(51) **Int. Cl.**
H04M 1/66 (2006.01)
H04L 29/06 (2006.01)

(52) **U.S. Cl.** **455/411**; 713/200; 713/158

(58) **Field of Classification Search** 713/200,
713/201, 158; 455/403, 461, 414, 412, 411;
705/1

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,903,845 A * 5/1999 Buhrmann et al. 455/461

6,374,356 B1	4/2002	Daigneault et al.	
6,577,229 B1	6/2003	Bonneau et al.	
6,668,322 B1	12/2003	Wood et al.	
6,719,200 B1	4/2004	Wiebe	
6,766,450 B2	7/2004	Micali	
6,859,650 B1	2/2005	Ritter	
6,895,234 B1*	5/2005	Laursen et al.	455/403
2003/0023874 A1*	1/2003	Prokupets et al.	713/201
2004/0059590 A1*	3/2004	Mercredi et al.	705/1
2004/0177270 A1*	9/2004	Little et al.	713/200
2004/0180646 A1*	9/2004	Donley et al.	455/411
2008/0163361 A1	7/2008	Davis et al.	

FOREIGN PATENT DOCUMENTS

WO	WO 2004/025545	3/2004
WO	WO 2005/024549	3/2005

OTHER PUBLICATIONS

Phillips Semiconductors—"Near Field Communication PN511-Transmission module." (Feb. 2004) (18 pages).
Nokia—"Use Cases" <http://www.nokia.com> (Copyright 2005) (2 pages).

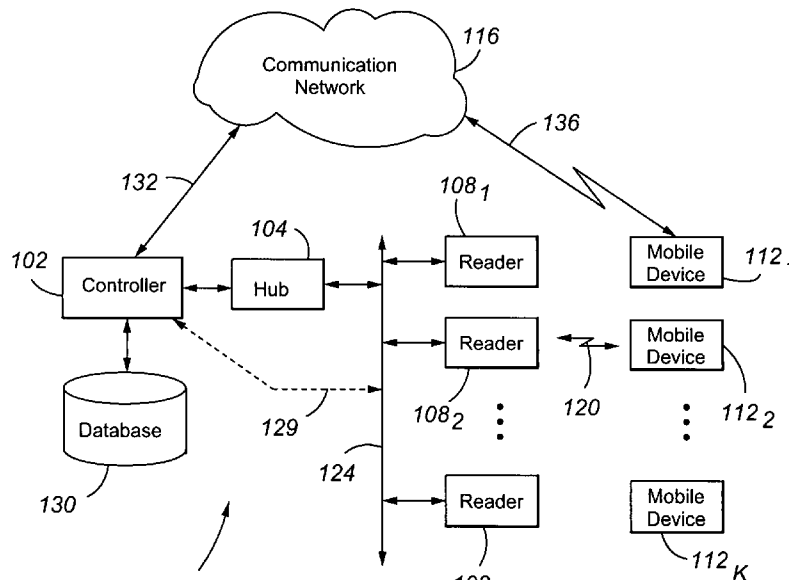
(Continued)

Primary Examiner—Charles N Appiah
Assistant Examiner—Kiet Doan
(74) *Attorney, Agent, or Firm*—Sheridan Ross P.C.

(57) **ABSTRACT**

The present invention is generally directed toward a mobile device that can be used in a secure access system. More specifically, the mobile device can have credential data loaded thereon remotely updated, enabled, disabled, revoked, or otherwise altered with a message sent from, for example, a control panel and/or controller in the system.

42 Claims, 5 Drawing Sheets



OTHER PUBLICATIONS

Esato—"Nokia Launches NFC Shell for Mobile Payments" <http://www.esato.com/news/article.php?id=436> (Feb. 25, 2005) (3 pages).

NFC Forum—"About Near Field Communication" <http://www.nfc-forum.org/aboutnfc/> (Copyright 2005) (3 pages).

Indala—"Product Families" www.indala.com/products/index.html (Copyright 2004) (2 pages).

International Search Report for International (PCT) Patent Application No. PCT/US06/15304, mailed Jun. 11, 2008.

Written Opinion for International (PCT) Patent Application No. PCT/US06/15304, mailed Jun. 11, 2008.

* cited by examiner

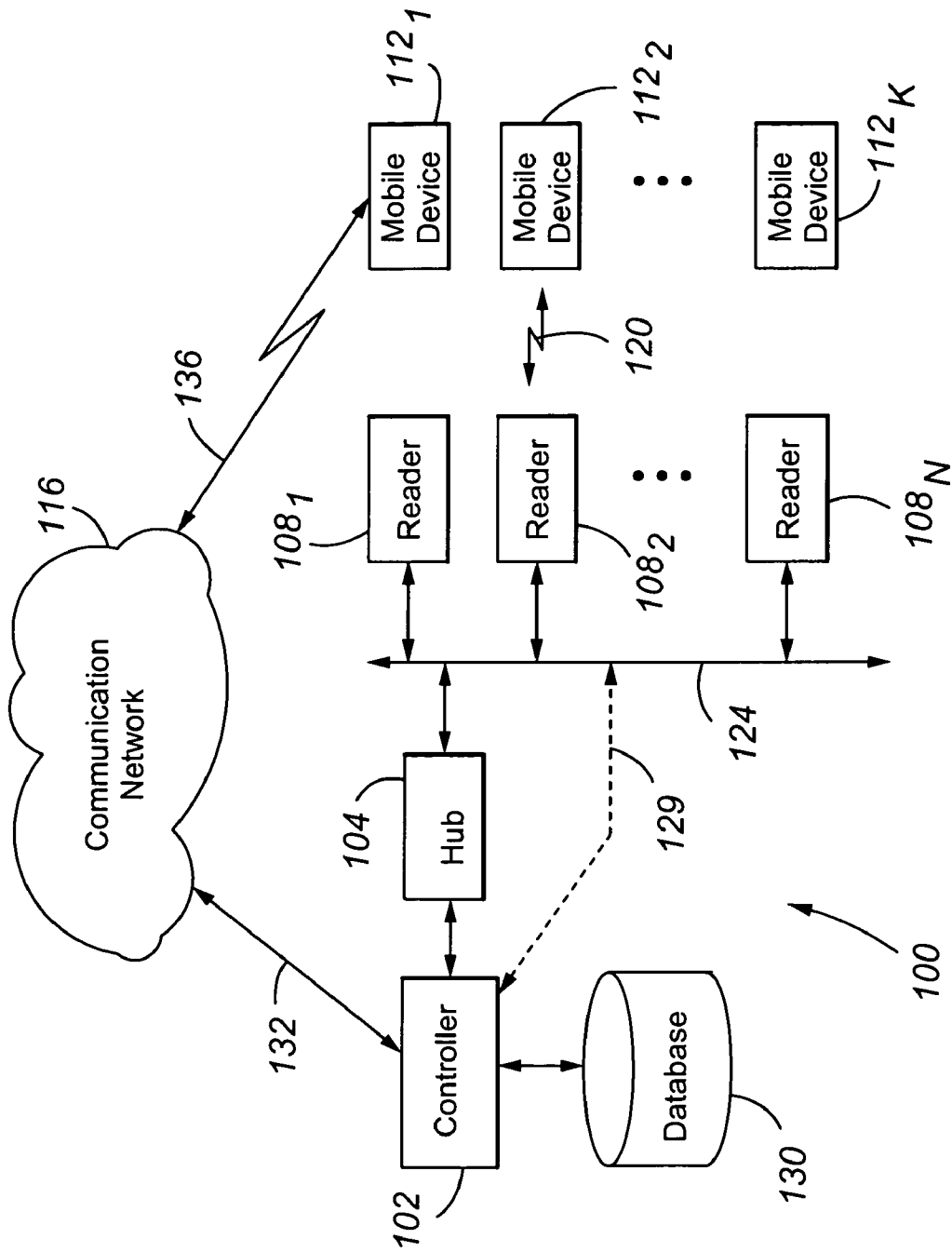


Fig. 1

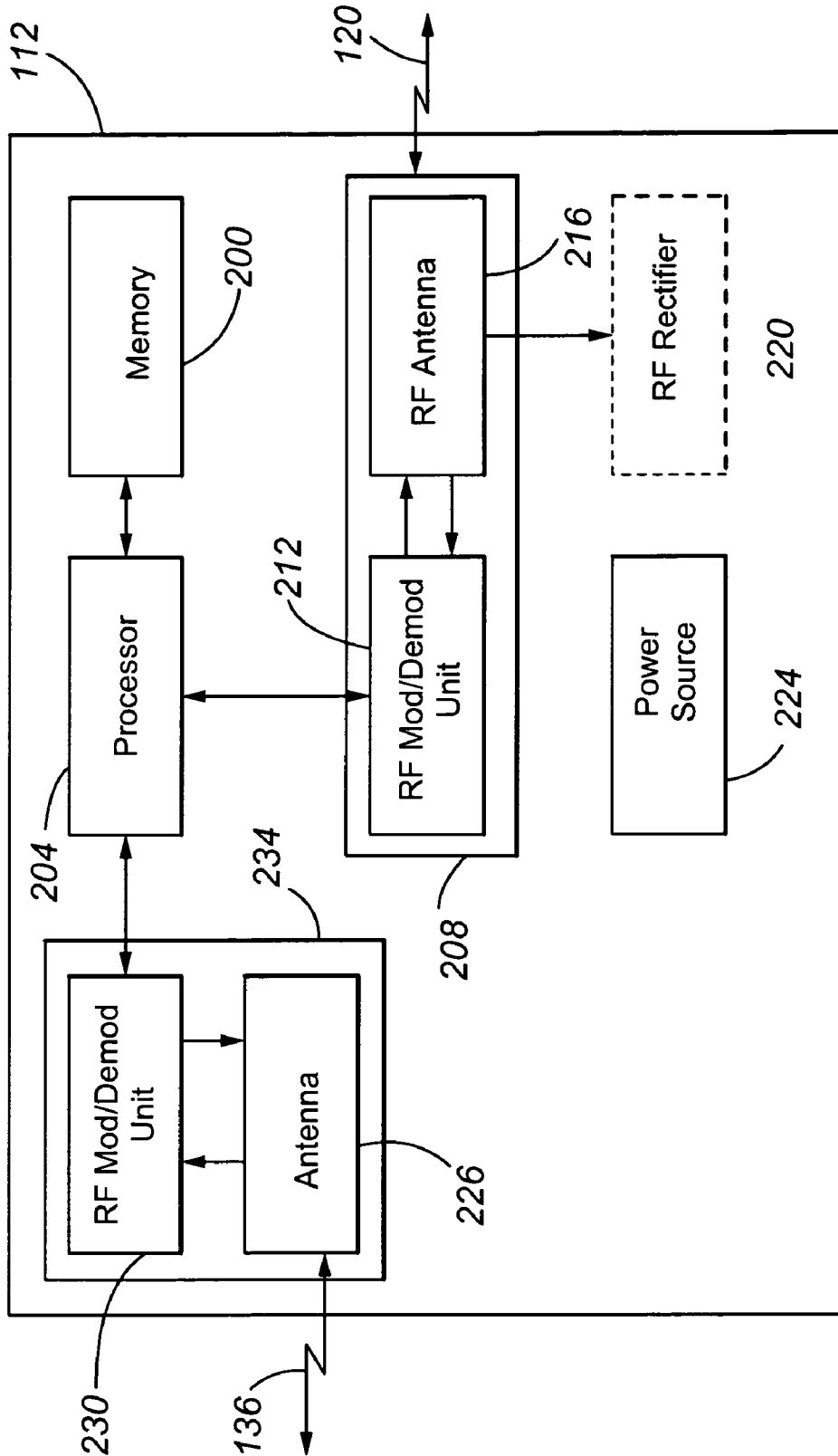


Fig. 2

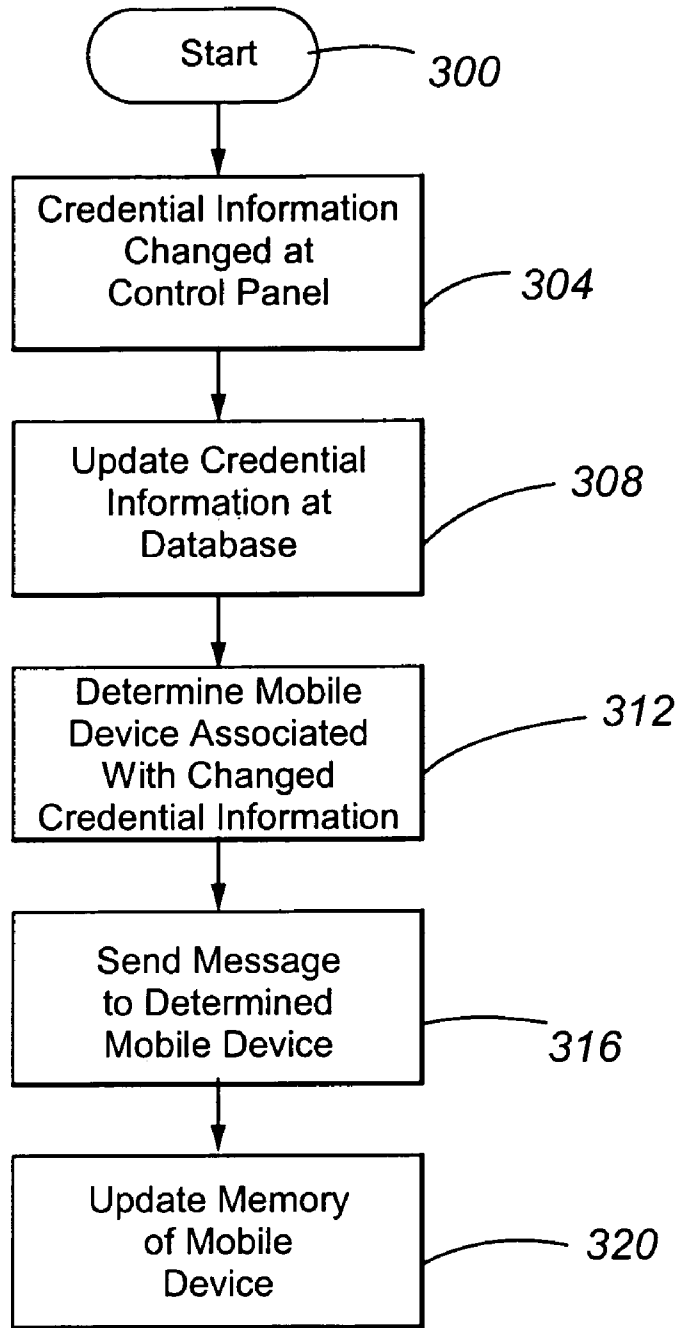


Fig. 3

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.