



US008810392B1

(12) **United States Patent**
Teller et al.

(10) **Patent No.:** **US 8,810,392 B1**
(45) **Date of Patent:** **Aug. 19, 2014**

(54) **DEVICE AND METHOD FOR MONITORING THE PRESENCE OF ITEMS AND ISSUING AN ALERT IF AN ITEM IS NOT DETECTED**

(75) Inventors: **Eric Teller**, San Francisco, CA (US); **Martin T. King**, Vashon Island, WA (US); **Cheryl Grunbeck**, legal representative, Vashon Island, WA (US); **Claes-Fredrik Mannby**, Mercer Island, WA (US); **Michael J. Smith**, Seattle, WA (US)

(73) Assignee: **Google Inc.**, Mountain View, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 450 days.

(21) Appl. No.: **13/019,701**

(22) Filed: **Feb. 2, 2011**

Related U.S. Application Data

(60) Provisional application No. 61/301,560, filed on Feb. 4, 2010, provisional application No. 61/301,544, filed on Feb. 4, 2010.

(51) **Int. Cl.**
G08B 1/08 (2006.01)

(52) **U.S. Cl.**
USPC **340/539.32**; 235/385; 340/539.11;
340/572.1

(58) **Field of Classification Search**
USPC 340/539.32, 572.1, 539.23, 539.11;
235/385; 705/28

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,939,981	A *	8/1999	Renney	340/539.32
6,084,517	A *	7/2000	Rabanne et al.	340/573.4
7,295,114	B1	11/2007	Drzaic et al.	
7,880,613	B1	2/2011	Maeng	
2005/0134459	A1 *	6/2005	Glick et al.	340/572.1
2005/0285739	A1 *	12/2005	Velhal et al.	340/572.1
2006/0202840	A1 *	9/2006	Korbonski	340/539.32
2007/0210930	A1 *	9/2007	Pyo et al.	340/573.1
2008/0174425	A1 *	7/2008	Torning	340/540
2008/0204233	A1 *	8/2008	Agrawal et al.	340/572.1
2009/0077675	A1	3/2009	Cabouli	
2010/0039266	A1 *	2/2010	Faris et al.	340/572.4
2010/0188226	A1 *	7/2010	Seder et al.	340/572.1
2010/0289646	A1 *	11/2010	Raniere	340/572.1
2010/0302032	A1 *	12/2010	Abed	340/539.32

* cited by examiner

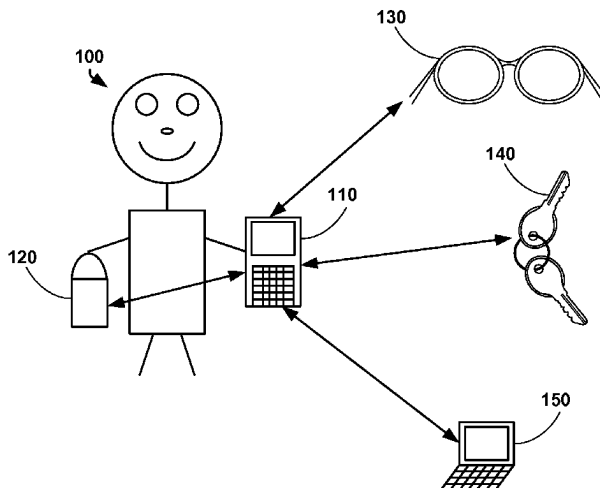
Primary Examiner — Thomas Mullen

(74) *Attorney, Agent, or Firm* — Fish & Richardson P.C.

(57) **ABSTRACT**

Disclosed herein are methods and systems that involve monitoring presence of items based on context. An exemplary method involves: (i) determining a context for a given user; (ii) determining a proximity framework between a monitoring device and one or more items, based on the determined context, wherein the proximity framework comprises (a) one or more proximity requirements, each proximity requirement indicating a required proximity between the monitoring device and at least one of the items and (b) a notification process corresponding to each proximity requirement; (iii) monitoring proximity of each of the items relative to the monitoring device, based on a presence signal from each of the items, in order to determine when one of the proximity requirements is not met; and (iv) responsive to determining that one of the proximity requirements is not met, initiating the corresponding notification process.

35 Claims, 22 Drawing Sheets



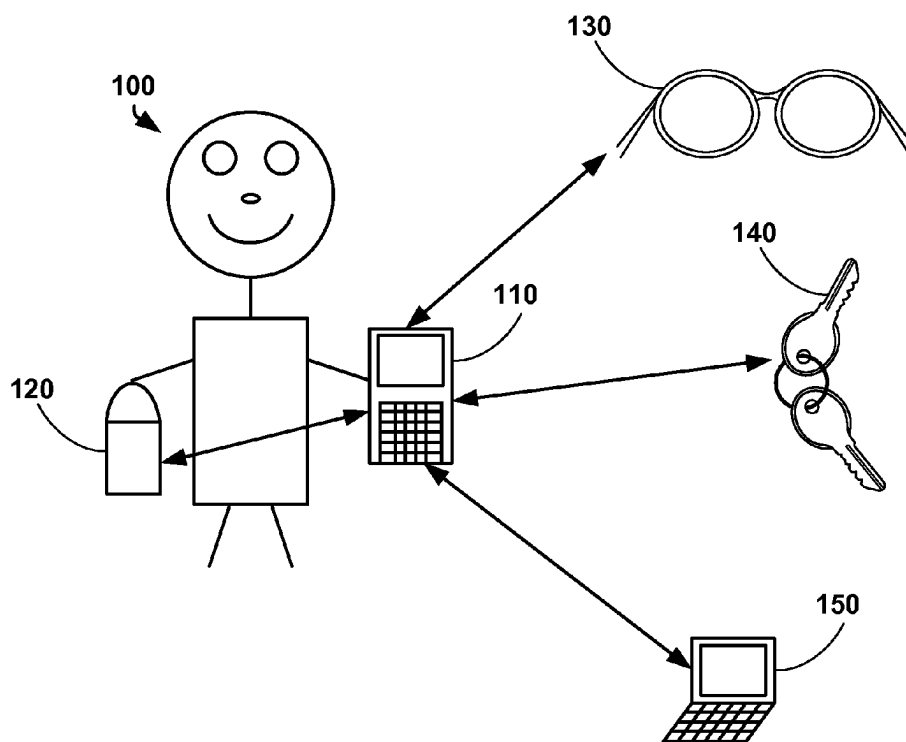


FIGURE 1

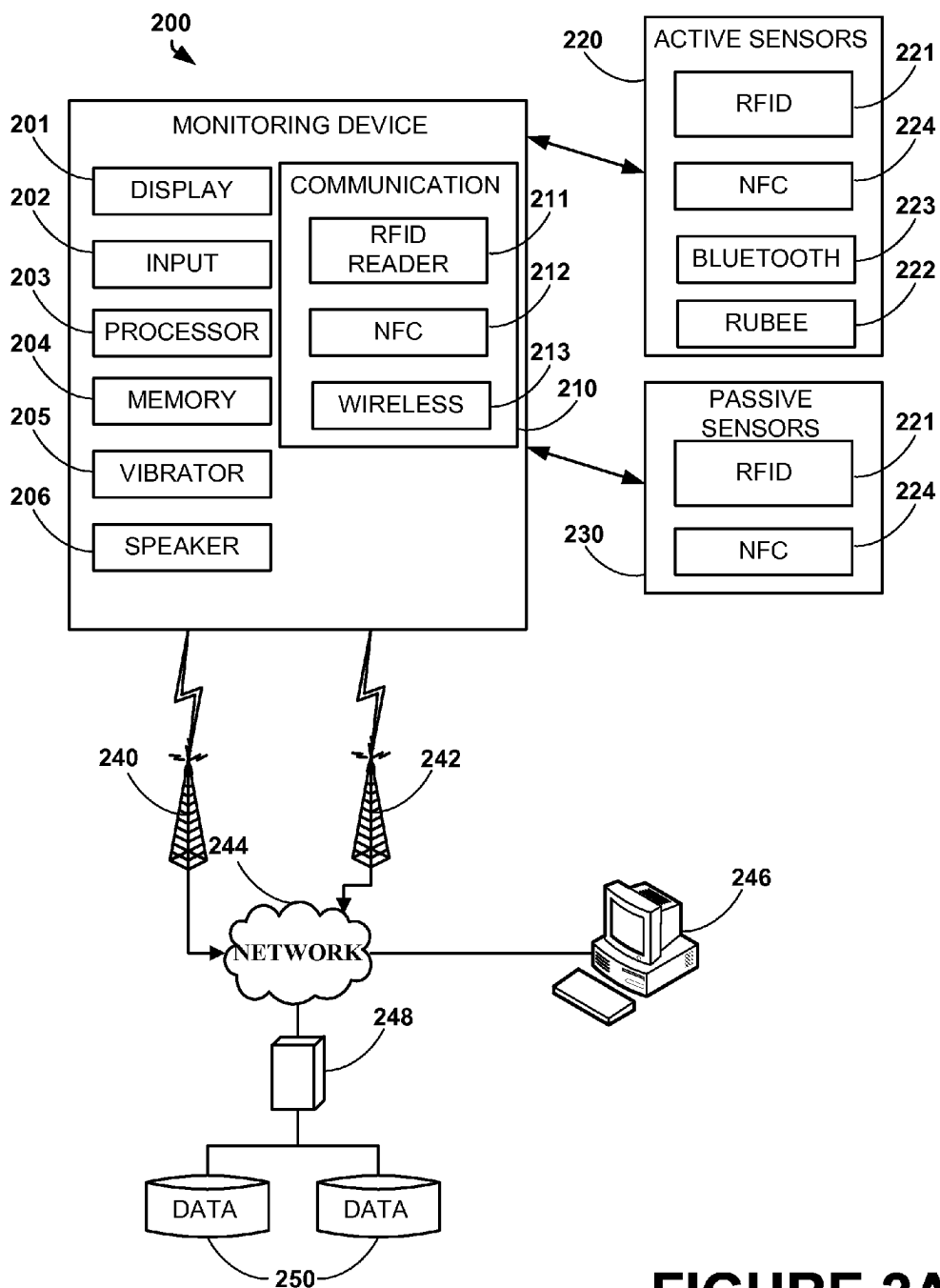


FIGURE 2A

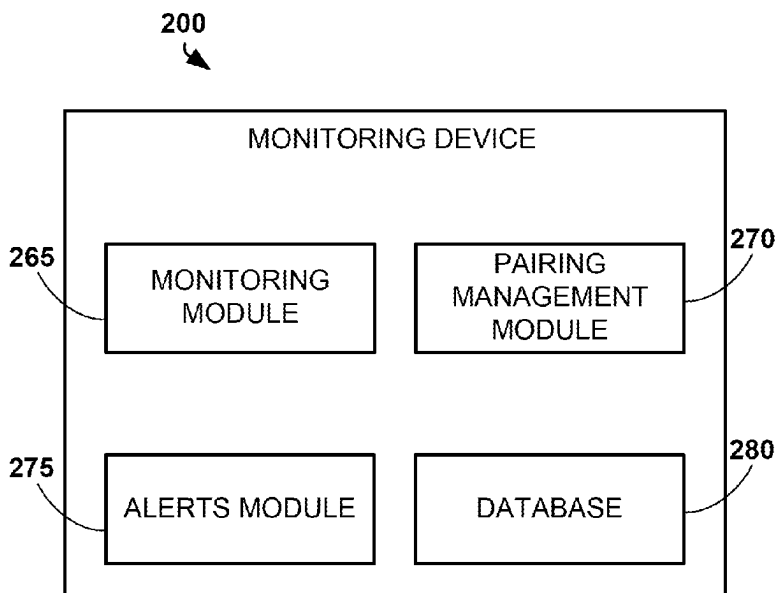


FIGURE 2B

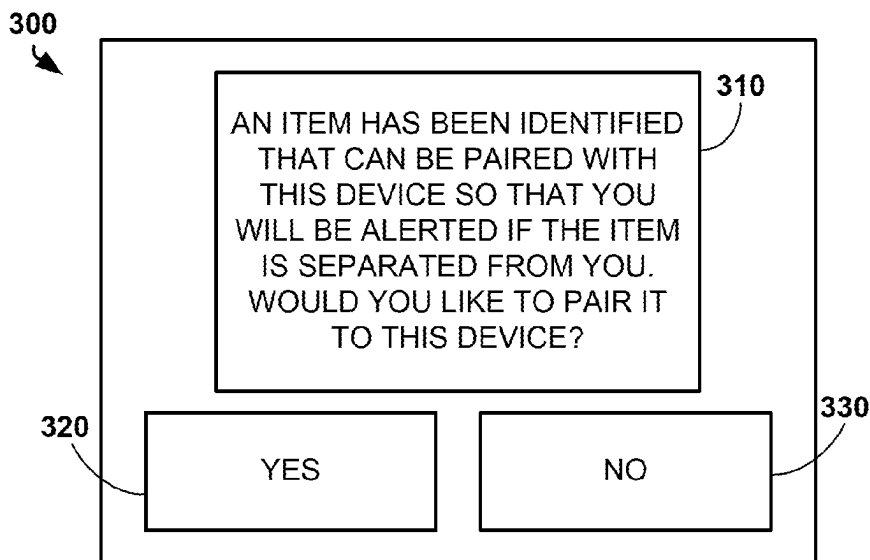


FIGURE 3A

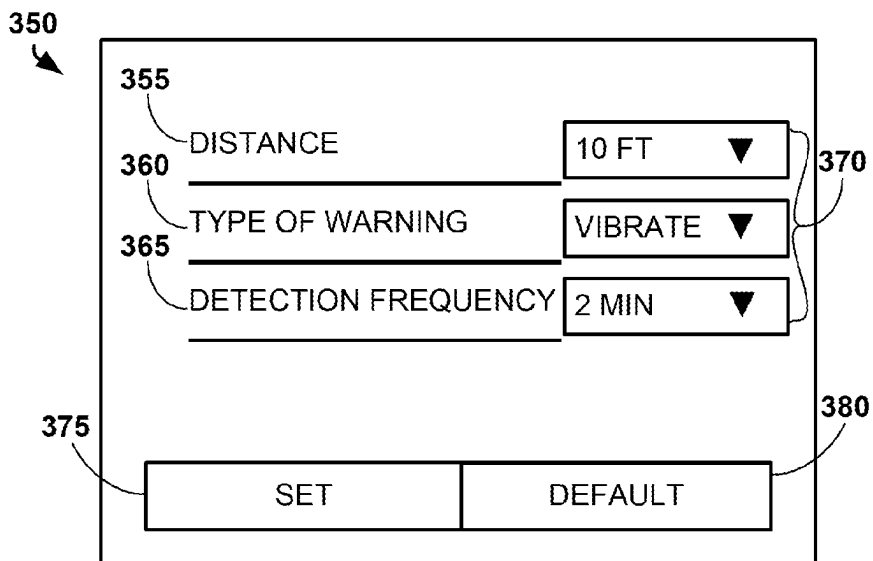


FIGURE 3B

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.