EXHIBIT A

(12) **United States Patent**　　　　(10) **Patent No.:**　　**US 8,676,668 B2**
Wolfe　　　　　　　　　　　　　　　(45) **Date of Patent:**　　**Mar. 18, 2014**

| (54) | **METHOD FOR THE DETERMINATION OF A TIME, LOCATION, AND QUANTITY OF GOODS TO BE MADE AVAILABLE BASED ON MAPPED POPULATION ACTIVITY** |

(75) Inventor: **Andrew Wolfe**, Los Gatos, CA (US)

(73) Assignee: **Empire Technology Development, LLC**, Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 672 days.

(21) Appl. No.: **12/540,324**

(22) Filed: **Aug. 12, 2009**

(65) **Prior Publication Data**

US 2011/0040603 A1　　Feb. 17, 2011

(51) **Int. Cl.**
　　G06Q 30/00　　　　(2012.01)

(52) **U.S. Cl.**
　　USPC **705/26.7**; 705/14.49; 705/14.58; 705/7.31; 701/408; 701/487; 701/491; 701/516; 701/526

(58) **Field of Classification Search**
　　USPC 705/7.29, 7.31, 14.4, 14.49, 705/14.57–14.58, 26.1–27.2; 701/400, 408, 701/426, 465, 487, 491, 500, 516, 517, 526
　　See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,885,936 B2 *	4/2005	Yashio et al.	.... 701/515
7,103,370 B1 *	9/2006	Creemer	.... 455/456.3
7,386,485 B1 *	6/2008	Mussman et al.	.... 705/14.1
8,073,460 B1 *	12/2011	Scofield et al.	.... 455/456.1
2007/0260485 A1 *	11/2007	Shibata et al.	.... 705/2
2008/0004733 A1 *	1/2008	Finley et al.	.... 700/94

2008/0045234 A1 *	2/2008	Reed	.... 455/456.1
2009/0125343 A1 *	5/2009	Cradick et al.	.... 705/7
2009/0171749 A1 *	7/2009	Laruelle et al.	.... 705/10
2009/0197616 A1 *	8/2009	Lewis et al.	.... 455/456.1
2010/0042469 A1 *	2/2010	Chandrasekar et al.	.... 705/10
2010/0121716 A1 *	5/2010	Golan	.... 705/14.58
2010/0153174 A1 *	6/2010	Angell et al.	.... 705/10
2010/0223641 A1 *	9/2010	Hubbard	.... 725/35
2011/0022469 A1 *	1/2011	Fukui et al.	.... 705/14.58
2011/0035284 A1 *	2/2011	Moshfeghi	.... 705/14.58
2011/0066479 A1 *	3/2011	Benson	.... 705/14.4
2011/0124324 A9 *	5/2011	Friedenthal et al.	.... 455/418
2011/0276382 A1 *	11/2011	Ramchandani et al.	... 705/14.25

OTHER PUBLICATIONS

Personal Journal; Automotive Report: Mapping the Progress of Navigation Tools falseSapsford, Jathon. Wall Street Journal, Europe [Brussels] Jul. 29, 2005: p. 4.*
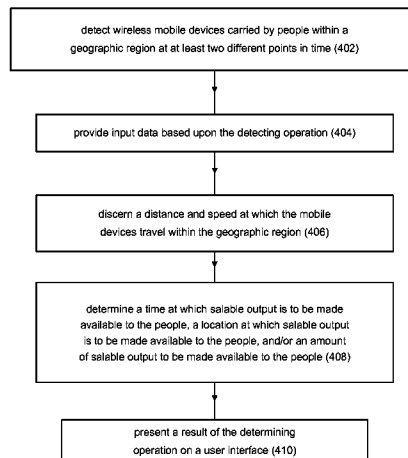
* cited by examiner

Primary Examiner — William Allen

(74) *Attorney, Agent, or Firm* — Moritt Hock & Hamroff LLP; Steven S. Rubin, Esq.

(57)　　　　　　　**ABSTRACT**

A population activity mapping method may include detecting a plurality of wireless mobile devices within a geographic region. Individual wireless mobile devices may include a processor, a user interface, a transmitter and a receiver. The detecting operation may be performed by use of a wireless access point, a GPS satellite, and/or a base station, and may be performed at at least two different points in time. Input data may be provided based upon the detecting operation. A distance and speed at which the mobile devices travel within the geographic region may be discerned dependent upon the input data. The discerning operation is performed by at least one processor of a computer network. A time and/or location at which salable output is to be made available and/or an amount of salable output to be made available may be determined dependent upon the discerning operation.
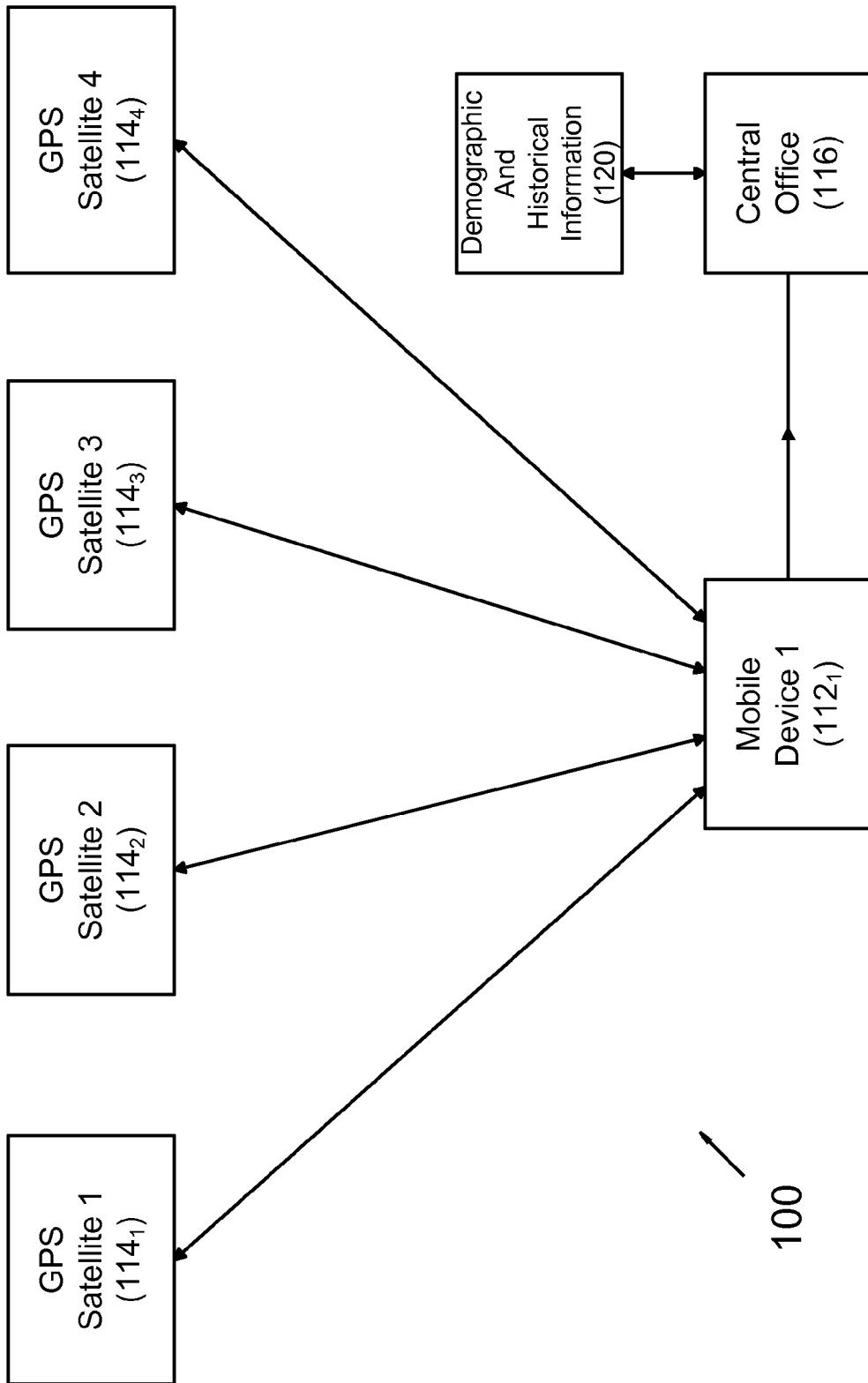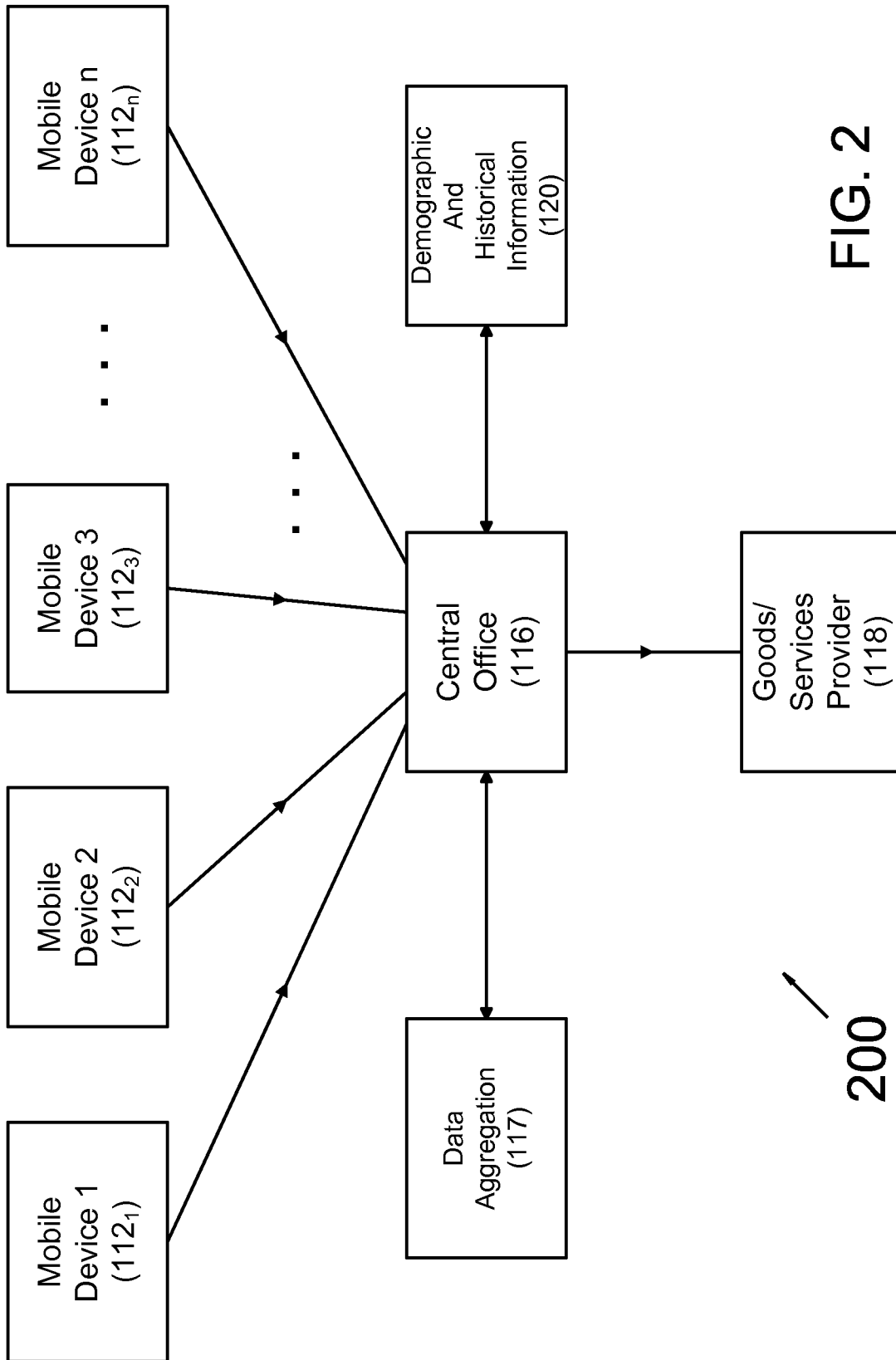
7 Claims, 5 Drawing Sheets

detect wireless mobile devices carried by people within a geographic region at at least two different points in time (402)

↓

provide input data based upon the detecting operation (404)

↓

discern a distance and speed at which the mobile devices travel within the geographic region (406)

↓

determine a time at which salable output is to be made available to the people, a location at which salable output is to be made available to the people, and/or an amount of salable output to be made available to the people (408)

↓

present a result of the determining operation on a user interface (410)
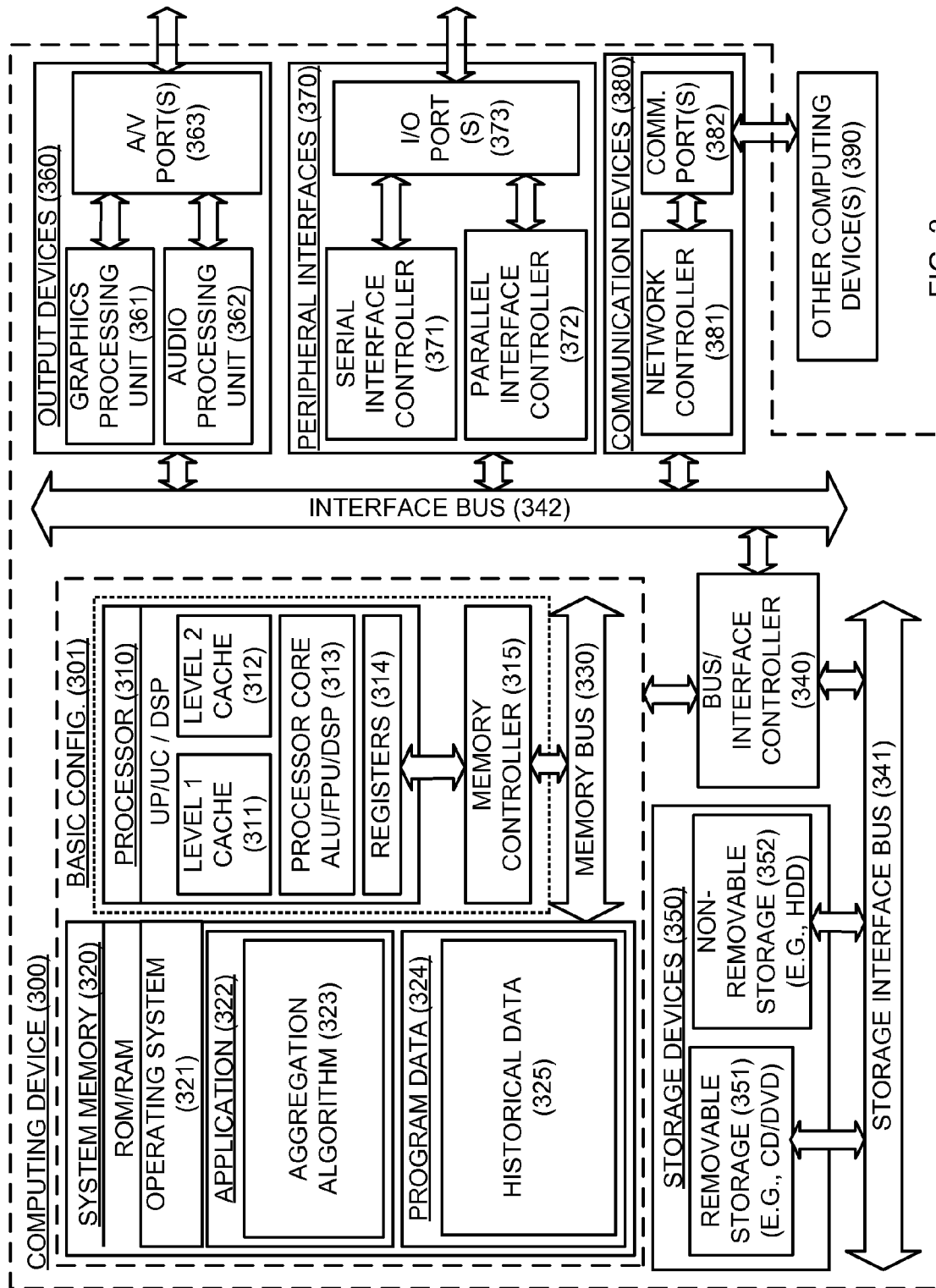
FIG. 1

FIG. 2

FIG. 3

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.