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(54) **SYSTEM AND METHOD FOR MONITORING THE LOCATION OF INDIVIDUALS VIA THE WORLD WIDE WEB USING A WIRELESS COMMUNICATIONS NETWORK**

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(52) U.S. Cl. **455/456.1**; 455/404.2; 455/457; 455/521; 340/989; 701/200

(58) Field of Search 455/404.2, 426.1, 455/457, 456.1, 456.3, 456.6, 458, 440, 521; 340/539, 573.1, 573.4, 988, 994; 701/207, 208, 209, 213, 214, 300

(56) **References Cited**

U.S. PATENT DOCUMENTS

|			
5,526,401 A		6/1996	Roach, Jr. et al.
5,546,445 A	*	8/1996	Dennison et al. 455/408
5,646,839 A	*	7/1997	Katz 379/142.11
5,802,468 A	*	9/1998	Gallant et al. 455/422
5,936,530 A	*	8/1999	Meinhold 340/573.1
6,088,594 A	*	7/2000	Kingdon et al. 455/457
6,154,727 A	*	11/2000	Karp et al. 705/3
6,216,157 B1	*	4/2001	Vishwanath et al. 709/208
6,243,039 B1	*	6/2001	Elliot 342/457
6,246,882 B1	*	6/2001	Lachance 455/456
6,292,743 B1	*	9/2001	Pu et al. 701/202
6,331,825 B1	*	12/2001	Ladner et al. 340/988
6,470,181 B1	*	10/2002	Maxwell 455/413
2001/0044310 A1	*	11/2001	Lincke 455/456

* cited by examiner

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(57) **ABSTRACT**

A system is described for monitoring the geographical location of a subscriber's mobile cellular telephone, and for providing the location information to an authorized user through the world wide web. The geographical location of the subscriber's mobile cellular telephone is tracked using registration signals transmitted over the control channel by the cellular telephone. This information is supplied to a geographical location coordinator system, which determines the geographical coordinates for the cellular telephone. A database stores the geographical location information along with a subscriber's telephone number and account code. The database is updated to track the movement of the cellular telephone user across a geographical area.

22 Claims, 7 Drawing Sheets
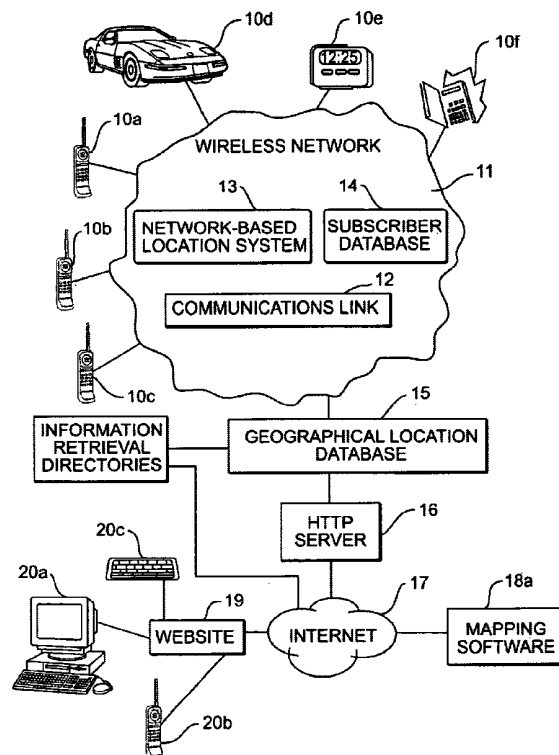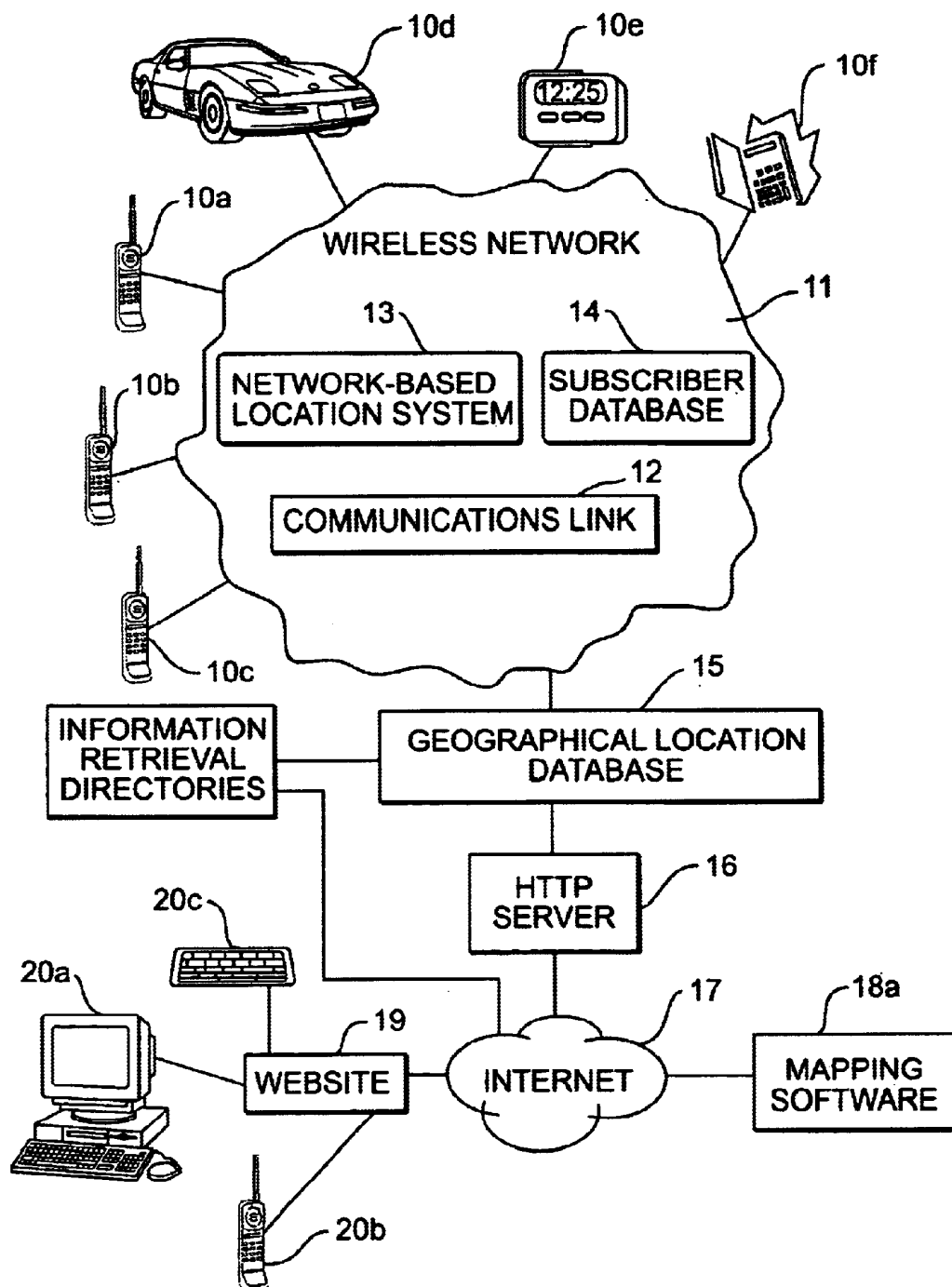
FIG. 1
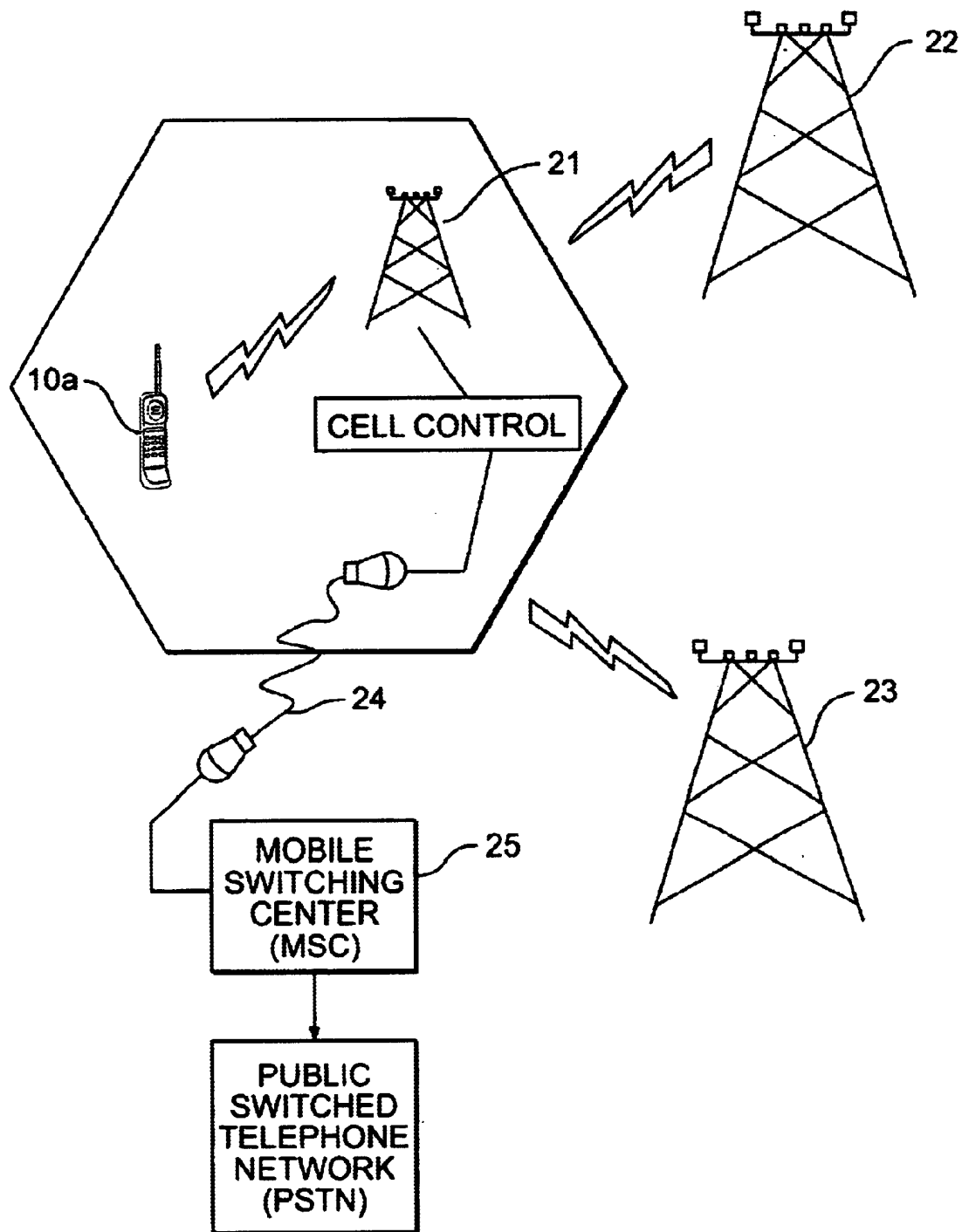
FIG. 2

CODE	DEVICE NUMBER	USER NAME	LOC. ADDR.	LOCATION NAME	TIME	DIRECTION	SPEED
1582	(301) 663-9580	DEBORAH	1225 P STREET	SAFEWAY SUPERMARKET	2:30 PM	— — —	— — —
1983	(301) 982-9503	BRETT	I-95	———	2:33 PM	NORTH	67 MPH
2092	(301) 666-9292	BETH	WALNUT ST.	RITE-AID PHARMACY	2:30 PM	— — —	— — —
1582	(410) 222-3344	MARCIA	HOWARD ST.	— — —	2:32 PM	— — —	— — —
2933	(215) 947-5555	NANCY	I-66	— — —	2:34 PM	EAST	55 MPH
1582	(301) 663-9301	BRIAN	PHILA AVE.	— — —	2:32 PM	N.E.	64 MPH
2290	(301) 444-3926	ADAM	1333 N ST.	WALMART	2:35 PM	— — —	— — —
3955	(301) 999-9826	ALLISON	10 PHILA AVE.	MICRO GRAPHIC STORE	2:33 PM	— — —	— — —
1983	(410) 555-3355	ASLAN	I-94	— — —	2:31	S.E.	72 MPH
1983	(301) 487-7265	DAVID	56 COVE ST.	SIMS BAR	2:31		
1582	(301) 494-5220	ADAM	Q ST.	BILLY'S BAR	2:32	— — —	— — —

FIG. 3

WELCOME TO THE WORLD WIDE WATCHER

ACCESS CODE: 1582

			STATUS
1.	DEBORAH	(301) 663-9580	ACTIVE
2.	MARCIA	(410) 222-3344	ACTIVE
3.	BRIAN	(301) 663-9301	ACTIVE
4.	ADAM	(301) 494-5000	ACTIVE

PLEASE SELECT INDIVIDUALS TO MONITOR

①   ②   ③   ④   ALL

FIG. 4a

ANYTOWN, U.S.A.

PHILA

②

③

HOWARD

④   Q

①

P
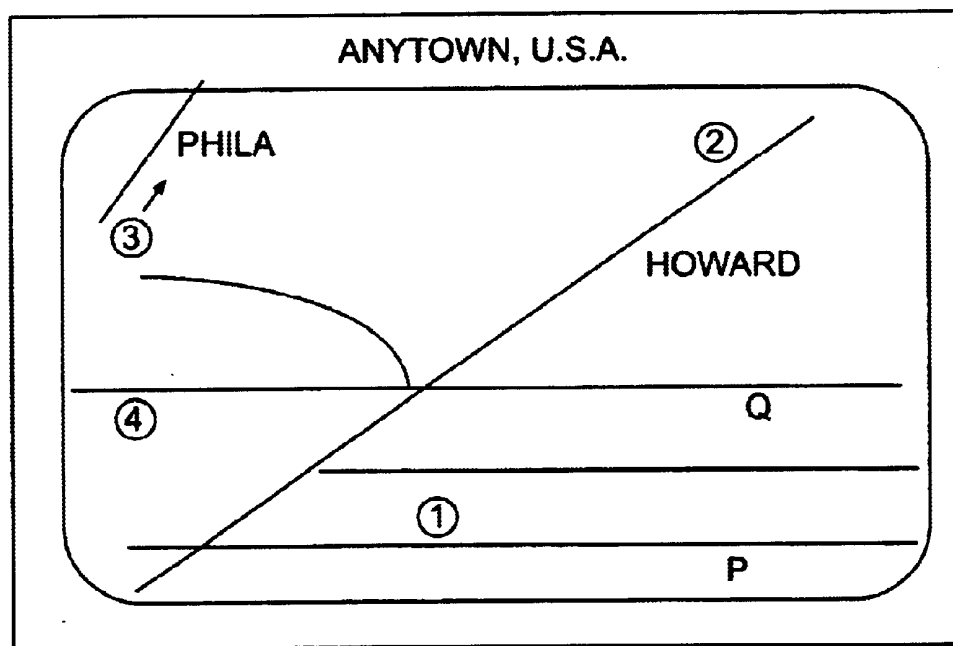
FIG. 4b

DOCKET ALARM

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