

#### US006204844B1

### (12) United States Patent

Fumarolo et al.

(10) Patent No.: US 6,204,844 B1

(45) **Date of Patent:** Mar. 20, 2001

## (54) METHOD AND APPARATUS FOR DYNAMICALLY GROUPING COMMUNICATION UNITS IN A COMMUNICATION SYSTEM

(75) Inventors: Arthur L. Fumarolo, Schaumburg;

Brett A. Jackson, Arlington Heights,

both of IL (US)

(73) Assignee: Motorola, Inc., Schaumburg, IL (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.: 09/415,298

(22) Filed: Oct. 8, 1999

(51) Int. Cl.<sup>7</sup> ...... G09F 13/00

348–349, 326, 333; 707/9, 10; 709/201,

### (56) References Cited

#### U.S. PATENT DOCUMENTS

5,613,209 *	3/1997	Peterson et al 455/34.1
5,836,529 *	11/1998	Gibbs 246/122
5,884,035 *	3/1999	Butman et al 395/200.48
5,909,217	6/1999	Bereiter 345/357

5,966,443	*	10/1999	Gonzalez et al 380/21
			McDonald et al 455/445
6,016,478	*	1/2000	Zhang et al 705/9
6,072,490	*	6/2000	Bates et al 345/347
6 105 027	*	8/2000	Schneider et al

<sup>\*</sup> cited by examiner

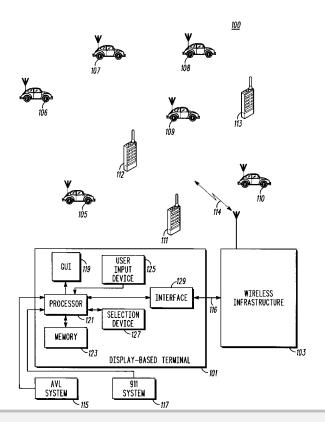
Primary Examiner—Steven Sax

(74) Attorney, Agent, or Firm—Val Jean Hillman

### (57) ABSTRACT

A display-based terminal (101) employs a method and apparatus for dynamically grouping communication units (105-113) operating in a communication system (100). The display-based terminal displays a map (300, 400) to a user of the terminal that indicates, among other things, locations of communication units in at least a portion of the communication system. The terminal receives the user's selection of communication units from the map and an identification of at least one talkgroup with which the selected units are to become members. The communication units may be selected individually, as a group (e.g., using "click and drag" rectangling techniques), or both. After communication units have been selected from the map, the terminal automatically groups the selected units into the indicated talkgroup. If the terminal user desires to ungroup a previously grouped communication unit, the user selects the unit from the map and the terminal automatically removes the newly selected unit from the talkgroup.

### 31 Claims, 12 Drawing Sheets





Mar. 20, 2001

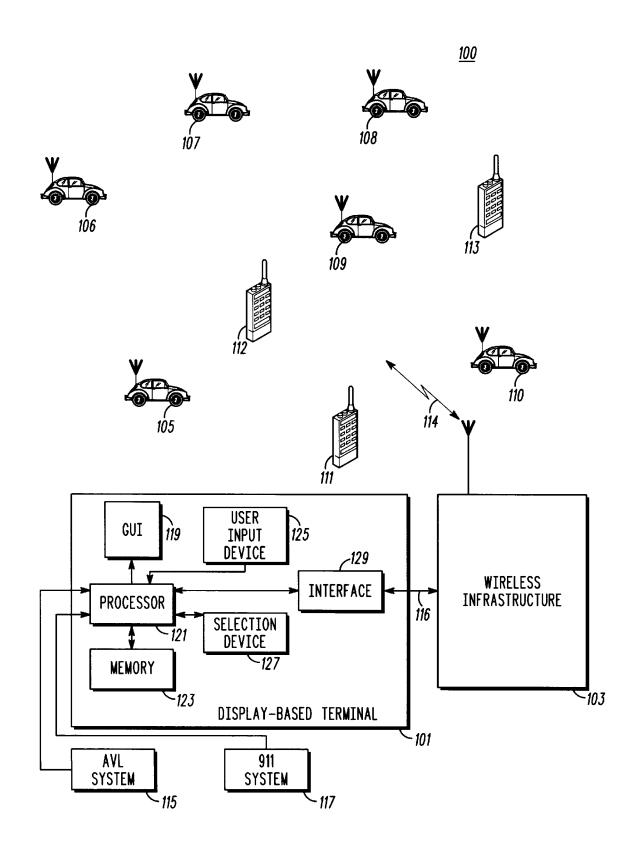


FIG. 1



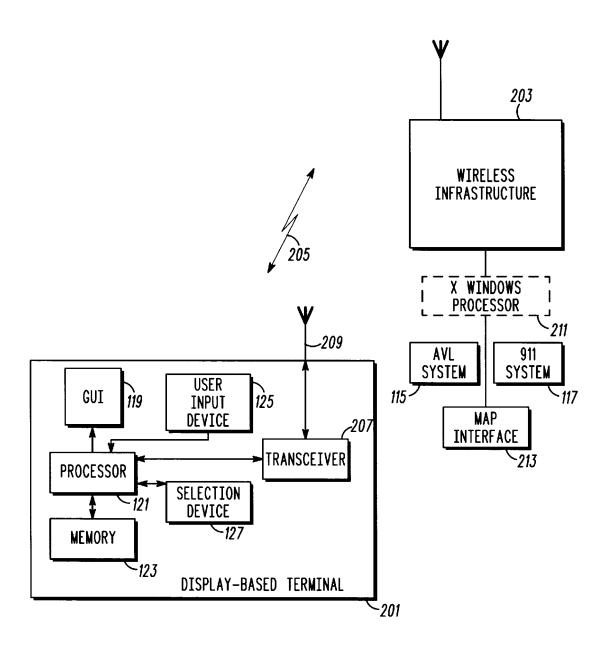


FIG. 2



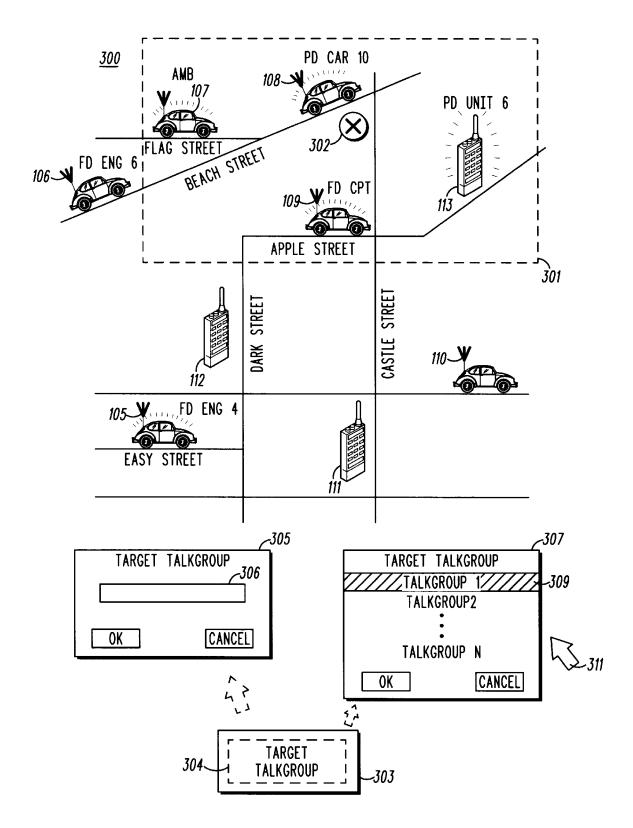


FIG. 3



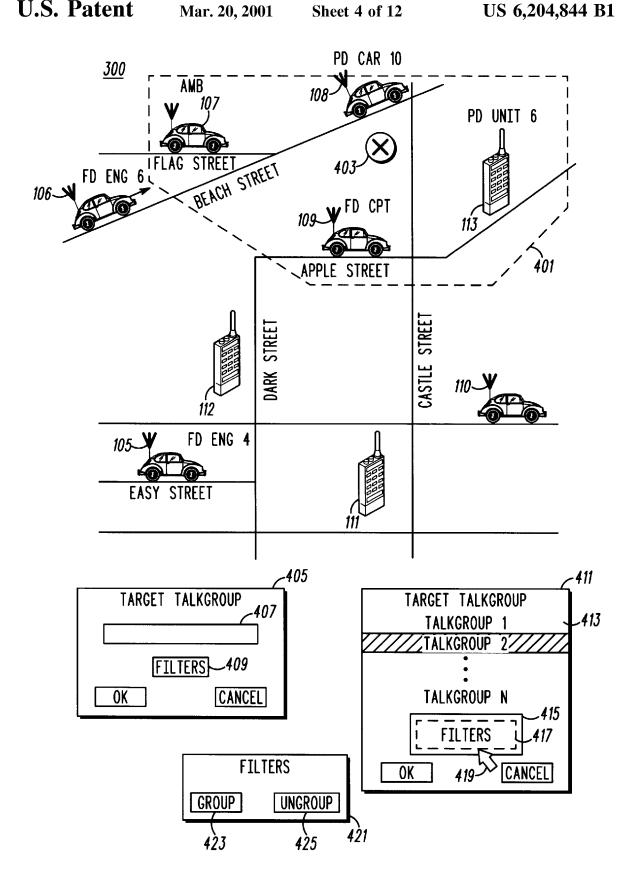


FIG. 4

# DOCKET A L A R M

## 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.

