

United States Patent [19]

Heiman et al.

[54] POWER-SAVING ARRANGEMENT AND METHOD FOR MOBILE UNITS IN COMMUNICATIONS NETWORK

- [75] Inventors: Frederic Heiman, Los Gatos; Patrick Pinard, Santa Clara; Andrew Werback; Michael Shiba, both of San Jose, all of Calif.
- [73] Assignee: **Symbol Technologies, Inc.**, Holtsville, N.Y.
- [21] Appl. No.: 08/747,034
- [22] Filed: Nov. 8, 1996

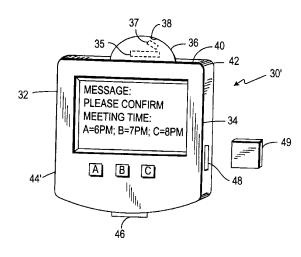
Related U.S. Application Data

- [63] Continuation-in-part of application No. 08/549,051, Oct. 27, 1995, Pat. No. 5,815,811, which is a continuation-in-part of application No. 08/044,648, Apr. 8, 1993, Pat. No. 5,528, 621, which is a continuation-in-part of application No. 07/799,172, Nov. 27, 1991, Pat. No. 5,280,498, which is a continuation-in-part of application No. 07/635,859, Dec. 28, 1990, Pat. No. 5,142,550, which is a continuation-in-part of application No. 07/374,452, Jun. 29, 1989, Pat. No. 5,029, 183.
- [51] Int. Cl.⁶ H04Q 7/32; H04B 1/16; H04B 7/00
- [52] U.S. Cl. 455/38.3; 455/38.4; 455/566; 455/574; 455/343

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,465,401 11/1995 Thompson 455/566



US006002918A

[11] Patent Number: 6,002,918

[45] Date of Patent: Dec. 14, 1999

5,519,762	5/1996	Bartlett 455/38.3
5,568,513	10/1996	Croft et al 455/38.3
5,584,048	12/1996	Wieczorek 455/38.3
5,630,207	5/1997	Gitlin et al 455/38.4
5,649,289	7/1997	Wang et al 455/31.3
5,793,303	8/1998	Koga 455/38.4
5,815,811	9/1998	Pinard et al 455/434

OTHER PUBLICATIONS

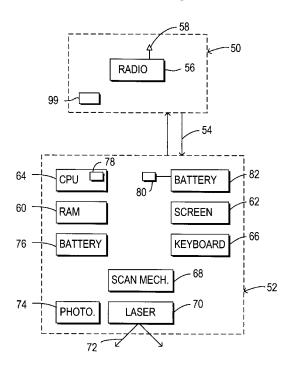
Wireless LAND Medium Access Control (MAC) and Physical Layer (PHY) Specifications, The Editors of IEEE, p. 802.11, May 20, 1996.

Primary Examiner—Willis R. Wolfe Attorney, Agent, or Firm—Kirschstein, et al.

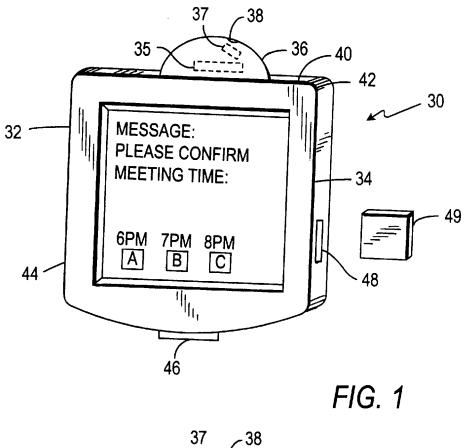
[57] ABSTRACT

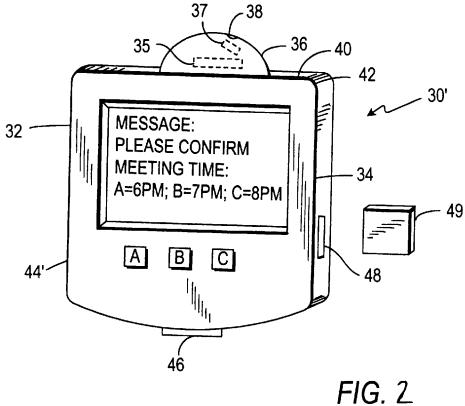
A communications network comprising a cellular local area wireless network includes a plurality of access points connected to a housed computer and each other, and a plurality of mobile units each mobile unit being arranged for association with an access point. The mobile units are arranged to periodically scan for and identify the most eligible access point for association on the basis of the criteria of best quality signal strength and loading factor. In order to identify when mobile units are being removed from a predetermined area, access points having directional antennae are situated adjacent exit points to detect when mobile units are in a vicinity. Each mobile unit may include paging facilities, including the capability of transmitting information in a coded form known both to the unit and to a host, and power-saving facilities.

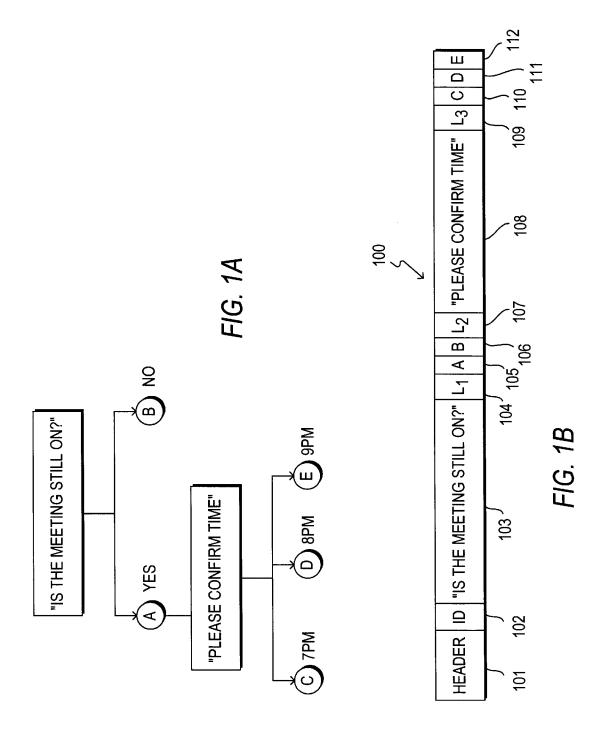
29 Claims, 7 Drawing Sheets



Find authenticated court documents without watermarks at <u>docketalarm.com</u>.







DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

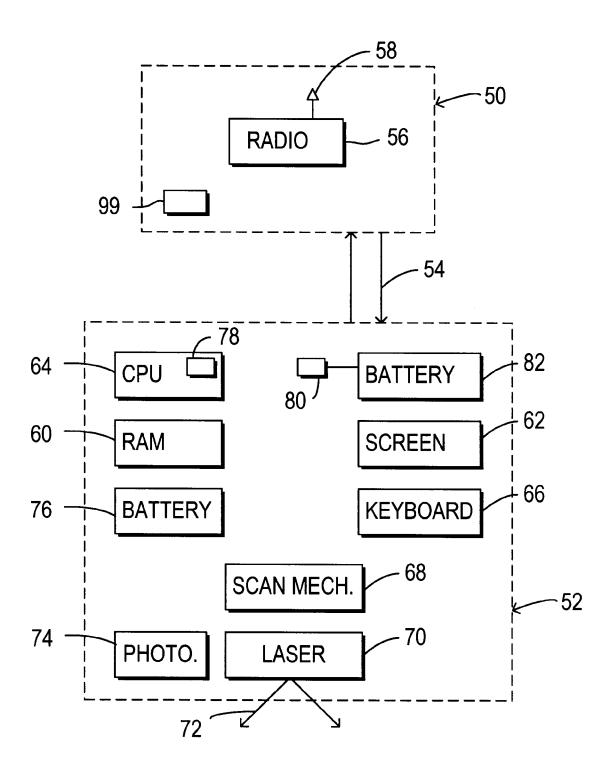
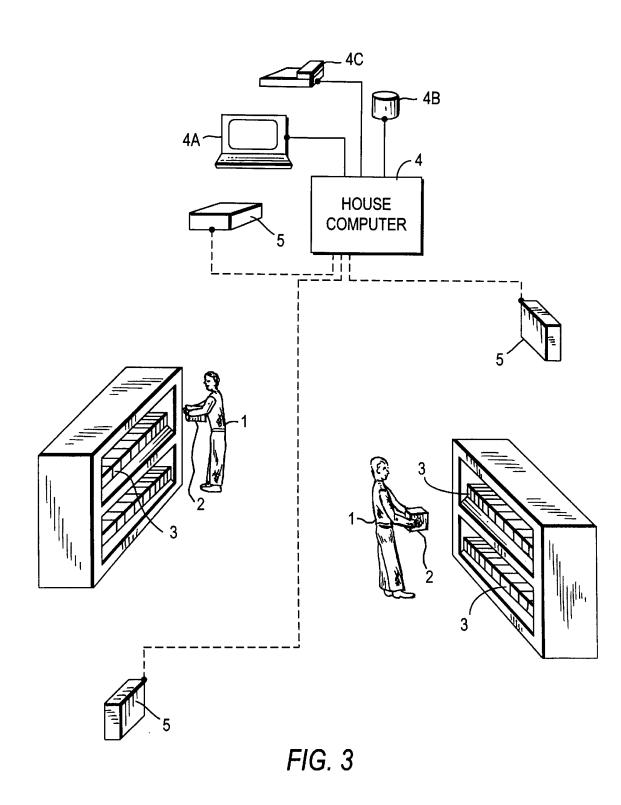


FIG. 2B



DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

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.