

US008588207B2

(12) United States Patent Dabbs, III et al.

(10) Patent No.: US 8,588,207 B2 (45) Date of Patent: Nov. 19, 2013

(54) METHOD AND APPARATUS FOR EFFICIENT AND DETERMINISTIC GROUP ALERTING

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(*) 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.: 13/476,641

(22) Filed: May 21, 2012

(65) Prior Publication Data

US 2012/0327781 A1 Dec. 27, 2012

Related U.S. Application Data

- (63) Continuation of application No. 13/154,138, filed on Jun. 6, 2011, now Pat. No. 8,199,740, which is a continuation of application No. 11/303,025, filed on Dec. 16, 2005, now Pat. No. 7,969,959.
- (60) Provisional application No. 60/636,094, filed on Dec. 16, 2004.
- (51) **Int. Cl. H04W 24/00**

(2009.01)

52) U.S. Cl.

See application file for complete search history.

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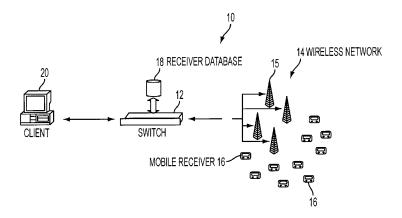
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(57) ABSTRACT

Systems and methods are provided for reliable, wireless group alerting in a system having a database, switch, wireless network, and a plurality of intelligent mobile receivers, and preferably employing a modified two-way paging based on ReFLEXTM protocol information service (IS) messages and a novel ALOHA command for multicast acknowledgement from mobile receivers. An encrypted message is broadcast to and received by a selected number of the mobile receivers. The network replies to the sender with detailed information about the individual members in the alert group. Each of the mobile receivers in the group then acknowledges the common message back to the system, decrypts the message, displays it to the user, and allows the user to respond. The system employs centralized management to simplify the roles of the mobile users and administrators, minimizing configuration and operational human errors that would otherwise result in confusion or lost messages.

13 Claims, 7 Drawing Sheets





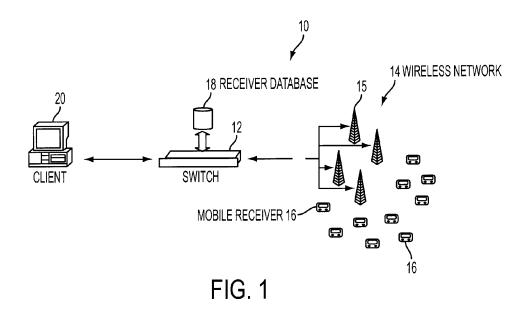
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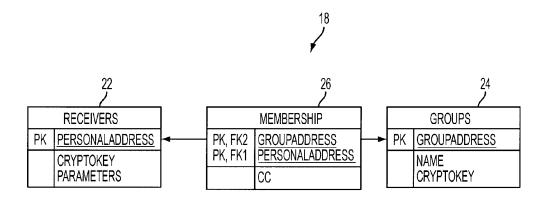


FIG. 2

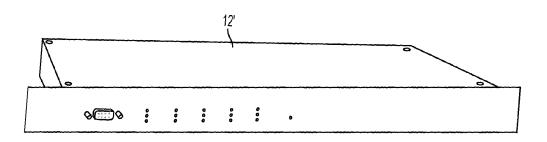


FIG. 3

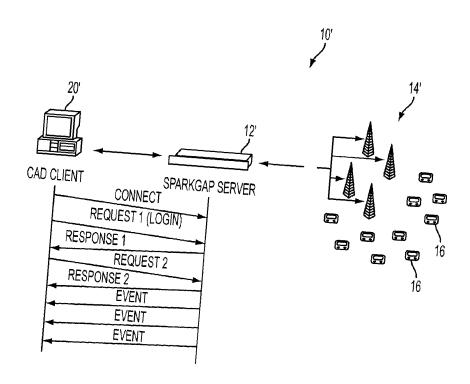
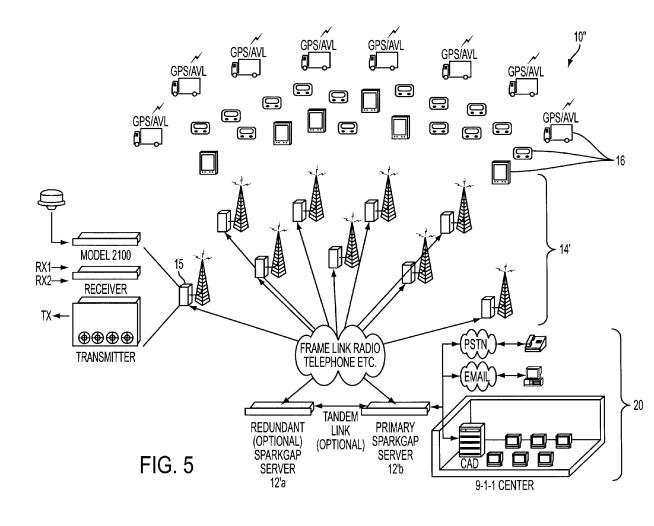


FIG. 4





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