Claims

1. A personal safety network comprising:

a plurality of wireless communication devices, each of said wireless communication devices associated with one of a plurality of authorized personal safety network participants, each of said wireless communication devices running a mobile application operable to register with an administrative server, to originate messages by a first one of said plurality of authorized personal safety network participants, wirelessly transmit said messages to said administrative server, and wirelessly receive push notifications related to said messages from a push notification server;

said administrative server running an administrative application, said administrative application operable to create and maintain an identification record for each of said plurality of authorized personal safety network participants, to organize said plurality of authorized personal safety network participants into members of one or more groups, each of said members having a personal safety network permission, said personal safety network permission enabling each of said messages to be effectively addressed to a second one of said plurality of authorized personal safety network participants or each of the members of at least one of said one or more groups, to convert at least one of said messages into a first push notification distribution, and to forward said push notification distribution to said push notification server;

said push notification server coupled in communicating relationship with said administrative server, said push notification server operable, in response to receiving said first push notification distribution, to transmit push notifications, which include information from at least one of said messages, to each of said plurality of wireless communication devices which is associated with each of the authorized personal safety network participants to whom said at least one of said messages is addressed; and

wherein said plurality of ~~mobile~~wireless communication devices, said administrative server, and said push notification server cooperate to enable distribution of ~~virtually real-time,~~ multi-way~~,~~ messaging among all of the members of said at least one of said one or more groups.

2. The network as in claim 1 wherein at least one of said messages includes

information identifying a geographical location of one of said plurality of wireless communication devices which originated said at least one of said messages.

3. The network as in claim 1 wherein said mobile application includes an emergency broadcast operable to transmit an emergency message to each of said plurality of wireless communication devices by an emergency push notification distribution.

4. The network as in claim 1 wherein at least one of said messages is addressed to all of said plurality of authorized personal safety network participants.

5. The network as in claim 1 wherein at least one of said messages is addressed to only one of said plurality of authorized personal safety network participants.

6. The network as in claim 1 wherein at least one of said messages is addressed to all members of at least one of said one or more groups of said plurality of authorized personal safety network participants.

7. The network as in claim 1 wherein following receipt of said push notification distribution, one of said plurality of wireless communication devices originates a response message which is related by subject matter to said at least one of said messages.

8. The network as in claim 7 wherein said response message is transmitted only to one of said plurality of wireless communication devices which originated said at least one of said messages.

9. The network as in claim 7 wherein said response message is transmitted to all of the members of the group which received said push notification distribution related to said at least one of said messages.

10. The network as in claim 7 wherein said response message is transmitted to all of said plurality of authorized personal safety network participants.

11. The network as in claim 1 wherein said network includes one or more security devices interfaced with an access control management system, said access control management system in communicating relationship with said administrative server, said access control management system operable, in response to receiving sensor data from any of said one or more security devices, to communicate said sensor data to said administrative server, said administrative server operable to format said sensor data into one or more human-readable sensor data messages, to convert at least one of said human-readable sensor data messages into a second push notification distribution, and to forward said second push notification distribution to said push notification server, said push notification server operable, in response to receiving said second push notification distribution, to transmit push notifications which include information from at least one of said human-readable sensor data messages, to each of said plurality of wireless communication devices which is associated with each of the authorized personal safety network participants to whom said at least one of said messages is addressed.

12. The network as in claim 11 wherein said access control management system forwards said sensor data to said administrative server.

13. The network as in claim 11 wherein said administrative server polls said access control management system to retrieve said sensor data.

14. The network as in claim 11 wherein said administrative server maintains a location data database, said location data database providing virtually real-time location information with respect to one or more persons, said virtually real-time location information originating from one or more of said plurality of wireless communication devices, or one or more of said one or more security devices, or one or more location beacons.

~~15. A method for reducing congestion in a network which distributes virtually real-time, multi-way, messaging among a plurality of authorized network participants, said method comprising the steps of:~~

~~receiving at an administrative server a first message originating from a first one of said plurality of authorized network participants;~~

~~designating said first message as a reference message;~~

~~receiving at said administrative server a second message originating from a second one of said plurality of authorized network participants;~~

~~determining whether said second message is an effective duplicate of said reference message;~~

~~when said second message is determined to be an effective duplicate of said reference message, said administrative server does not distribute said second message to any of said plurality of authorized network participants; and~~

~~when said second message is determined not to be an effective duplicate of said reference message, said administrative server distributes said second message in accordance with a protocol for providing virtually real-time, multi-way, messaging among said plurality of authorized network participants.~~

~~16. The method as in claim 15 wherein said determining is done at least in part by comparing a first timestamp associated with said reference message with a second timestamp associated with said second message.~~

~~17. The method as in claim 15 wherein said determining is done at least in part by comparing a first location associate with said reference message with a second location associated with said second message.~~

~~18. The method as in claim 15 wherein said determining is done at least in part by comparing a plurality of keywords found in said reference message with said second message.~~

~~19. The method as in claim 15 wherein said determining is done at least in part by determining whether said second message includes a synonym for a keyword found in said reference message.~~

~~20. The method as in claim 15 wherein said determining is done at least in part by making a Soundex comparison between said reference message and said second message.~~

~~21. The method as in claim 15 wherein when said second message is determined not to be an effective duplicate of said reference message, said administrative server send a response to said second one of said plurality of authorized network participants.~~

~~22. The method as in claim 15 wherein when said second message is determined not to be an effective duplicate of said reference message, said administrative server creates an automatic response intended for a subsequently received third message which is determined to be an effective duplicate of said second message.~~

~~23~~15. A method for establishing an expanded personal safety network, said method comprising the steps of:

establishing a first personal safety network (first PSN) having a first plurality of wireless communication devices each of which is running a first PSN mobile application, each of said first plurality of wireless communication devices associated with one of a plurality of authorized first PSN participants, a first PSN administrative server running a first PSN administrative application, and a first PSN push notification server, wherein said first plurality of wireless communication devices, said first PSN administrative server, and said first PSN push notification server cooperate to enable distribution of ~~virtually real-time,~~ multi-way~~,~~ messaging among up to all of said plurality of authorized first PSN participants;

establishing a second personal safety network (second PSN) having a second plurality of wireless communication devices each of which is running a second PSN mobile application, each of said second plurality of wireless communication devices associated with one of a plurality of authorized second PSN participants, a second PSN administrative server running a second PSN administrative application, and a second PSN push notification server, wherein said second plurality of wireless communication devices, said second PSN administrative server, and said second PSN push notification server cooperate to enable distribution of ~~virtually real-time,~~ multi-way~~,~~ messaging among up to all of said plurality of authorized second PSN participants;

transmitting a request to link from said first PSN to said second PSN;

approving said request;

updating said first PSN administrative application to recognize said plurality of authorized second PSN participants; and

updating said second PSN administrative application to recognize said plurality of authorized first PSN participants.

~~24~~16. The method as in claim ~~23~~ 15 wherein said first PSN administrative application is operable to organize said first plurality of authorized first PSN participants into members of one or more groups.

~~25~~17. The method as in claim ~~23~~ 15 wherein said first PSN mobile application is operable to transmit an emergency message to each of said first plurality of wireless communication devices by an emergency push notification distribution.

~~26~~18. The method as in claim ~~23~~ 15 wherein said first PSN mobile application is operable to transmit an emergency message to all of said first plurality of wireless communication devices and all of said second plurality of wireless communication devices.

~~27~~19. A personal safety network comprising:

a plurality of wireless communication devices, each of said wireless communication devices associated with one of a plurality of authorized personal safety network participants, each of said wireless communication devices running a mobile application operable to register with an administrative server, to originate outbound messages by a first one of said plurality of authorized personal safety network participants, to wirelessly transmit said outbound messages to said administrative server, and to wirelessly pull inbound messages from said administrative server by polling said administrative server;

said administrative server running an administrative application, said administrative application operable to create and maintain an identification record for each of said plurality of authorized personal safety network participants, to organize said plurality of authorized personal safety network participants into members of one or more groups, each of said members having a personal safety network permission, said personal safety network permission enabling each of said messages to be

effectively addressed to a second one of said plurality of authorized personal safety network participants or each of the members of at least one of said one or more groups; and

wherein said plurality of ~~mobile~~wireless communication devices and said administrative server cooperate to enable distribution of ~~virtually real-time,~~ multi-way~~,~~ messaging among all of the members of said at least one of said one or more groups.

~~28~~20. The network as in claim ~~27~~ 19 wherein at least one of said outbound messages includes information identifying a geographical location of one of said plurality of wireless communication devices which originated said at least one of said outbound messages.

~~29~~21. The network as in claim ~~27~~ 19 wherein said mobile application includes an emergency broadcast operable to transmit an emergency message to each of said plurality of wireless communication devices.

~~30~~22. The network as in claim ~~27~~ 19 wherein at least one of said outbound messages is addressed to all of said plurality of authorized personal safety network participants.

~~31~~23. The network as in claim ~~27~~ 19 wherein at least one of said outbound messages is addressed to only one of said plurality of authorized personal safety network participants.

~~32~~24. The network as in claim ~~27~~ 19 wherein at least one of said outbound messages is addressed to all members of at least one of said one or more groups of said plurality of authorized personal safety network participants.

~~33~~25. The network as in claim ~~27~~ 19 wherein following receipt of at least one of said inbound messages, one of said plurality of wireless communication devices originates an outbound response message which is related by subject matter to said at least one of said inbound messages.

~~34~~26. The network as in claim ~~33~~ 25 wherein said outbound response message is

transmitted only to one of said plurality of wireless communication devices which originated said at least one of said inbound messages.

~~35~~27. The network as in claim ~~33~~ 25 wherein said outbound response message is transmitted to all of the members of the group which received said at least one of said inbound messages.

~~36~~28. The network as in claim ~~33~~ 25 wherein said outbound response message is transmitted to all of said plurality of authorized personal safety network participants.

~~37~~29. The network as in claim ~~27~~ 19 wherein said outbound messages are encrypted prior to transmission to said administrative server.

~~38~~30. The network as in claim ~~27~~ 19 wherein said outbound messages are transmitted to said administrative server and stored in encrypted form.