Method for customization of the user/cell phone interface

Disclosed is a method for customization of the user/cell phone interface. Benefits include improved useability, improved functionality, and improved design flexibility.

Background

With conventional cell phones, the ringer can be set to off or the phone can be put into vibrate mode to ensure privacy. This system enforces the same action for all incoming calls. Some locations are installing cellular phone jammers so that no calls can be received on premises, which do not allow critical emergency calls to get through.

Web logging (blogging) is a popular pastime. Many free services enable users to start their own web logs. Users publish their thoughts and opinions on life throughout the day. Conventionally, the Web publishing software requires a computer with an Internet connection to post to a blog.

The buddy list concept of the web enables the user to predefine a set of friends. The user can detect when they are online and can be contacted with another form of communication, such as real-time messaging or e-mail.

General description

The disclosed method is customization of the user/cell phone interface. The conventional contact list is expanded to enable the classification of numbers into categories that defines the ring and availability setting. Short message service (SMS) capability enables the user to do blogging and exchanges messages with the members of a buddy list.

Advantages

The disclosed method provides advantages, including:

- Improved useability due to improved user customization of the user/cell phone interface
- Improved functionality due to the processing of SMS messages using a cell phone
- Improved application design flexibility

Detailed description

The disclosed method is customization of the user/cell phone interface. The method enables the phone to make a more complex decision based on the state that the user has set and the phone number of the incoming call. The setting that enables the ring, vibrate, or off mode is increased to allow the following states:

- Ring all
- Ring contact, vibrate others
- Ring contact, off others

- Ring emergency, vibrate others
- Ring emergency, off others
- Vibrate all
- Vibrate emergency, off others
- Off all

The improved contact list enables the user to specify one or more of those contacts as emergency contacts (see Figure 1).

When an incoming call occurs, the caller's phone number is compared to the contact list. One of several actions is taken depending on the state of the ring mode (see Figure 2).

This process gives the user increased flexibility in setting their cell phone response to the social setting. For instance if a user is out at a movie while a babysitter is watching her children, she may set the phone to "Vibrate Emergency, Off Others." Calls from the babysitter are able to reach the user, but other calls are blocked, reducing the interruptions during the movie.

The disclosed method greatly increases the overall flexibility of the system to support other settings. For example, a sales person may be involved in a task that can be interrupted only by a set of key clients. The user can set the phone to "Ring Contact, Vibrate Others." If the user has programmed all of the key clients into the contact list, the phone rings only with calls from those people. Anyone else that calls is assigned the less obtrusive vibrate mode. In this mode, the user does not jump to answer an expected call from an important client only to find that someone else is calling.

The disclosed method supports SMS messaging, which enables the user to perform blogging (see Figure 3). A server within the cellular service receives the SMS messages, determines the appropriate blog, and verifies that the message came from the owner of that blog (possibly through verifying the return SMS address within its database). The server forwards it to the blog Web server with instructions to append the message to the end of the blog with the date and the time of creation. Blogging can be offered by either the cellular carrier as a value added service, or by an independent website that can receive SMS messages as e-mail from any of its subscribers.

Support for SMS messaging also enables the use of a buddy list (see Figure 4). With a cell phone, the list indicates when the friend's phone is on and the appropriate message format for contact. For example, the user is at a movie. The caller receives the appropriate method of contact.

Several states can be defined, such as:

- Available for call
- SMS me
- Leave a message
- Only in an emergency

The user can set the different states depending on how they would prefer to be contacted given the current social setting. The cell carrier's network determines if the user's cell phone is on and receives the state setting and stores it in a database that is available for queries from other users. The caller's phone queries the carrier's database for the phones of the members of the buddy list and displays the stored call state.

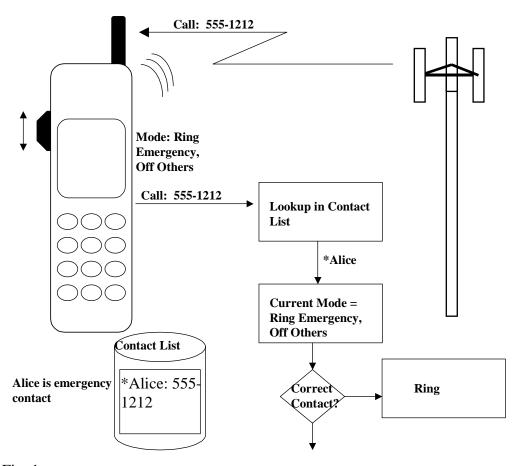


Fig. 1

| Ring all | All calls ring the phone |
|------------------------------|--|
| Ring contact, vibrate others | If the caller's number is in the contact list, ring the phone; |
| | otherwise, vibrate |
| Ring contact, off others | If the caller's number is in the contact list, ring the phone; |
| | otherwise, do not indicate incoming call |
| Ring emergency, vibrate | If the caller's number is a designated emergency contact in the |
| others | contact list, ring the phone, otherwise vibrate |
| Ring emergency, off others | If the caller's number is a designated as an emergency contact in |
| | the contact list, ring the phone; otherwise, do not indicate |
| | incoming call. |
| Vibrate all | Vibrate on all calls |
| Vibrate emergency, off | If the caller's number is a designated emergency contact in the |
| others | contact list, vibrate the phone; otherwise, do not indicate incoming |
| | call. |
| Off all | Do not indicate any incoming calls |

Fig. 2

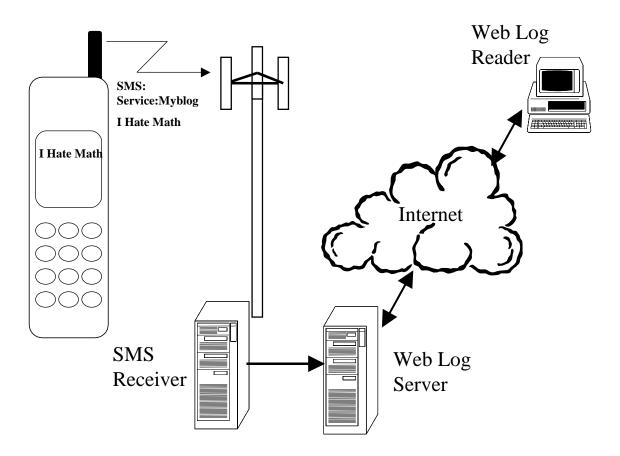


Fig. 3

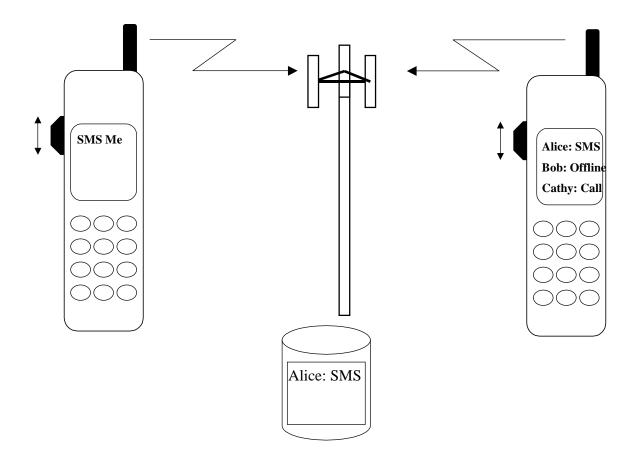


Fig. 4

Disclosed anonymously