



(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0127263 A1**

**Vegh**

(43) **Pub. Date: Jul. 1, 2004**

(54) **METHOD AND APPARATUS TO REPLY TO CALL**

**Publication Classification**

(76) **Inventor: Moshe Vegh, Netanya (IL)**

(51) **Int. Cl.<sup>7</sup> ..... H04Q 7/20**

(52) **U.S. Cl. .... 455/567; 455/415**

Correspondence Address:

**EITAN, PEARL, LATZER & COHEN ZEDEK LLP**

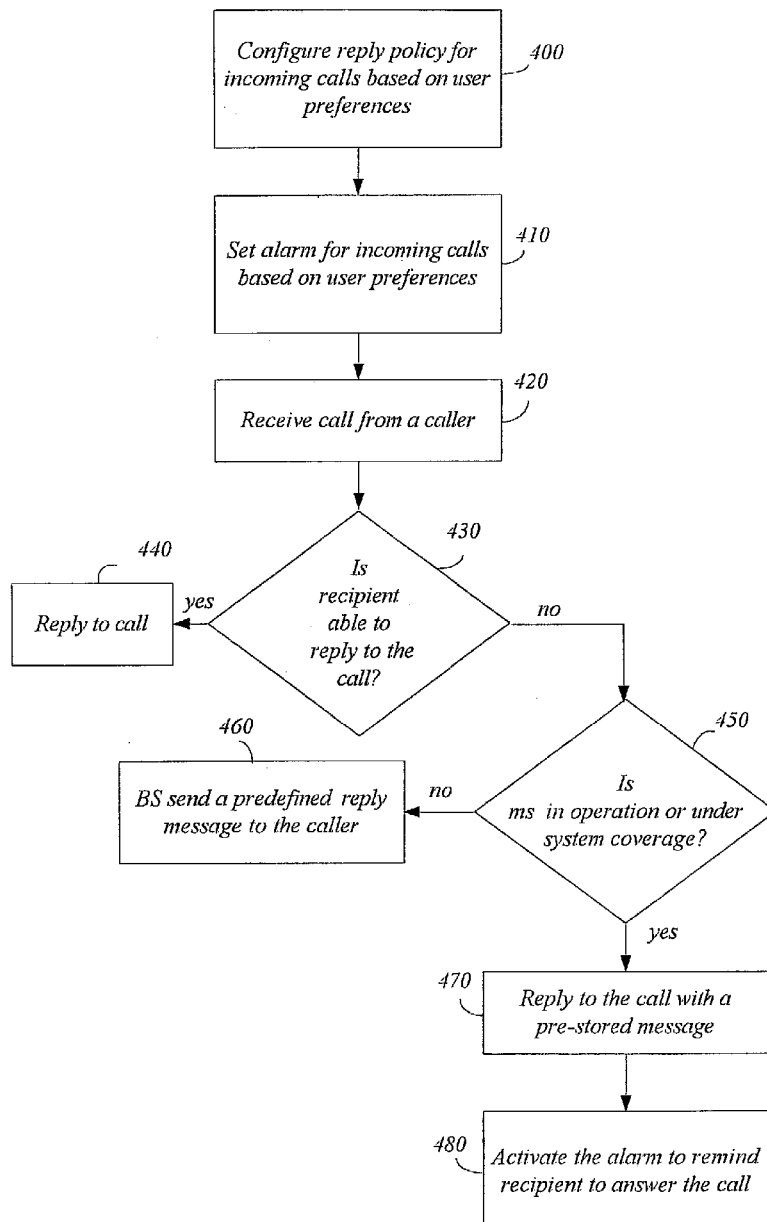
**10 ROCKEFELLER PLAZA, SUITE 1001  
NEW YORK, NY 10020 (US)**

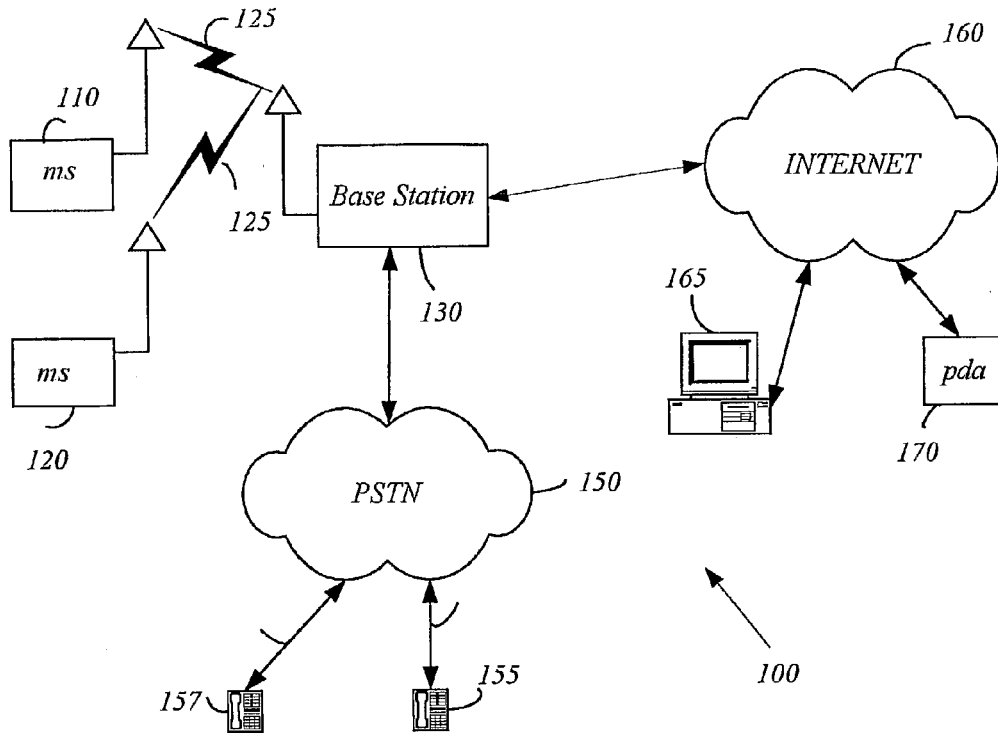
(57) **ABSTRACT**

Briefly, a method and a wireless communication system that may include at least one mobile station and at least one base station to reply to an incoming call addressed to the mobile station with a predefined message. The mobile station may be configured to reply to the incoming call based on the preferences of a user of the mobile station.

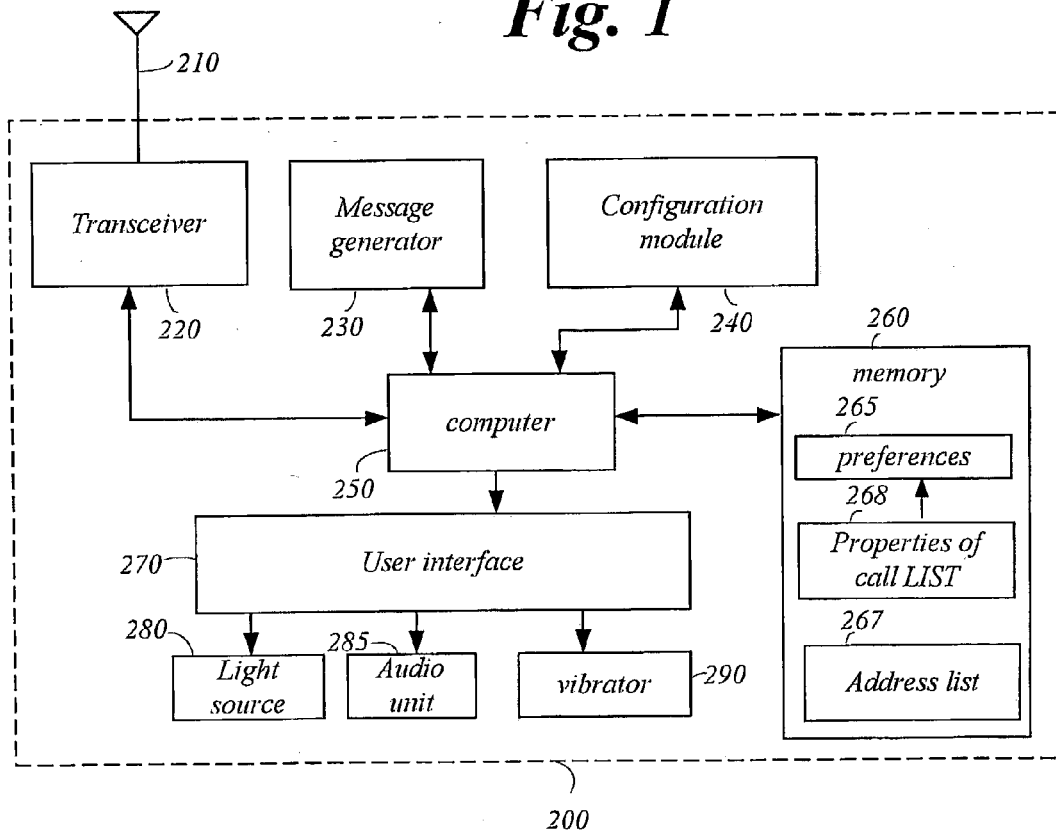
(21) **Appl. No.: 10/327,950**

(22) **Filed: Dec. 26, 2002**

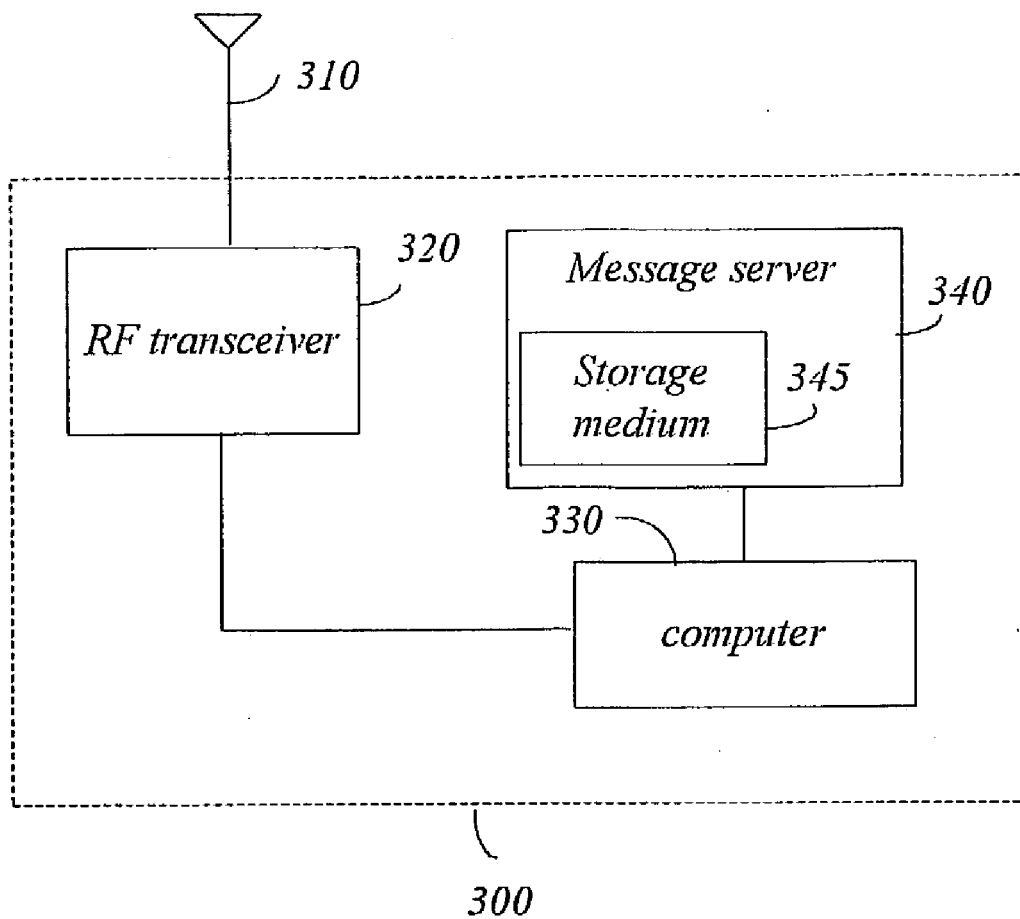




**Fig. 1**



**Fig. 2**



*Fig. 3*

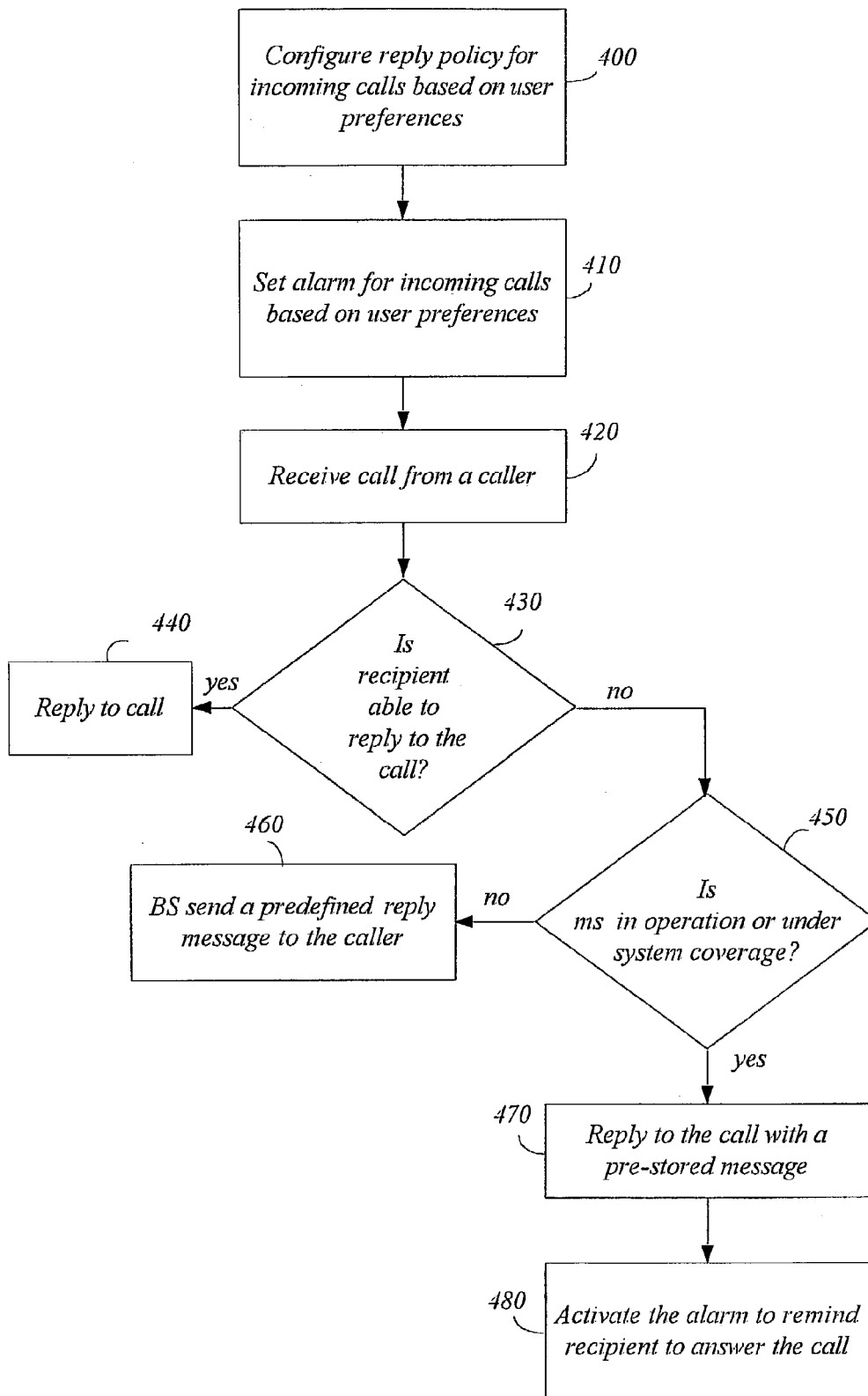


Fig. 4

**METHOD AND APPARATUS TO REPLY TO CALL****BACKGROUND OF THE INVENTION**

[0001] Mobile communications devices, for example, handsets of a cellular communication system, may be used to send and receive calls between a caller and a recipient, e.g., a handset user. Types of calls may include voice calls, video calls, text calls, data calls and the like.

[0002] In certain situations, the recipient may not be able to receive incoming calls. Those situations may occur when, for example, the handset is not in operation, the handset is not under the coverage of a cellular communication system, the handset user is attending a social event or a meeting, the handset is operated in a restricted zone where operation of wireless communication devices is not authorized, e.g., some hospitals, or in other situations in which a user does not respond to calls.

[0003] Thus, the user may not respond to some of the calls and the caller may have no indication whether or not the intended recipient receives the call.

**BRIEF DESCRIPTION OF THE DRAWINGS**

[0004] The subject matter regarded as the invention is particularly pointed out and distinctly claimed in the concluding portion of the specification. The invention, however, both as to organization and method of operation, together with objects, features and advantages thereof, may best be understood by reference to the following detailed description when read with the accompanied drawings in which:

[0005] **FIG. 1** is a schematic block diagram of a portion of wireless communication system according to an exemplary embodiment of the present invention;

[0006] **FIG. 2** is a schematic block diagram of a mobile station according to an exemplary embodiment of the present invention;

[0007] **FIG. 3** is a schematic block diagram of a base station according to an exemplary embodiment of the present invention; and

[0008] **FIG. 4** is a schematic flowchart of a method of automatically replying to incoming calls according to exemplary embodiments of the present invention.

[0009] It will be appreciated that, for simplicity and clarity of illustration, elements shown in the figures have not necessarily been drawn to scale. For example, the dimensions of some of the elements may be exaggerated relative to other elements for clarity. Further, where considered appropriate, reference numerals may be repeated among the figures to indicate corresponding or analogous elements.

**DETAILED DESCRIPTION OF THE INVENTION**

[0010] In the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of the invention. However, it will be understood by those of ordinary skill in the art that the present invention may be practiced without these specific details. In other instances, well-known methods, procedures, compo-

[0011] Some portions of the detailed description, which follow, are presented in terms of algorithms and symbolic representations of operations on data bits or binary digital signals within a computer memory. These algorithmic descriptions and representations may be the techniques used by those skilled in the data processing arts to convey the substance of their work to others skilled in the art.

[0012] Unless specifically stated otherwise, as apparent from the following discussions, it is appreciated that throughout the specification discussions utilizing terms such as “processing,” “computing,” “calculating,” “determining,” or the like, refer to the action and/or processes of a computer or computing system, or similar electronic computing device, that manipulate and/or transform data represented as physical, such as electronic, quantities within the computing system’s registers and/or memories into other data similarly represented as physical quantities within the computing system’s memories, registers or other such information storage, transmission or display devices. In addition, the term “plurality” may be used throughout the specification to describe two or more components, devices, elements, parameters and the like. For example, “plurality of mobile stations” describes two or more mobile stations.

[0013] It should be understood that the present invention may be used in a variety of applications. Although the present invention is not limited in this respect, the circuits and techniques disclosed herein may be used in many apparatuses such as mobile stations and base stations of a radiotelephone communication systems, for example a cellular communication system.

[0014] Types of cellular communication systems intended to be within the scope of the present invention may include, although are not limited to, Code Division Multiple Access (CDMA) and WCDMA cellular radiotelephone portable devices for transmitting and receiving spread spectrum signals, Global System for Mobile communication (GSM) cellular radiotelephone, Time Division Multiple Access (TDMA), Extended-TDMA (E-TDMA), General Packet Radio Service (GPRS), Extended GPRS, and the like.

[0015] Turning to **FIG. 1**, a schematic block diagram of a portion of cellular communication system **100** according to an exemplary embodiment of the invention is shown. Although the scope of the present invention is not limited in this respect, the cellular communication system may include mobile stations (MS) **110** and **120** and a base station (BS) **130**. In some embodiments of the invention, BS **130** may be operably coupled to a public switched telephone network (PSTN) **150** to enable MS **110** and **120** to receive calls and/or to place calls to a telephone **155** and/or a facsimile machine **157**. Furthermore, in some embodiments of the present invention, BS **130** may be operably coupled to the Internet **160**, allowing MS **110** and **120** to access services and other entities over the Internet, if desired. For example, using an Internet connection, MS **110** and **120** may establish access to electronic mail services, surfing services, voice over Internet protocol (IP) telephone calls and the like. Those services may be provided to a user of a personal computer (PC) **165** and/or to a user of a personal digital assistance **170**, if desired.

[0016] Although the scope of the present invention is not

# 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.