Title: METHOD FOR MAINTAINING ANONYMITY OF AN E-MAIL ADDRESS

Abstract: A method for forwarding an e-mail message (500) from a preferred e-mail address (54) to a forwarding e-mail address (52) via a remote e-mail forwarding computer (44). Upon receipt of a reply e-mail message to the e-mail message (500) forwarded by the remote computer, the remote computer reconfigures the reply e-mail message to preserve the anonymity of the e-mail forwarding address and then transmits the reconfigured reply e-mail message to an original sender of the e-mail message.
METHOD FOR MAINTAINING ANONYMITY OF AN E-MAIL ADDRESS

FIELD OF THE INVENTION

The present invention relates to a system and method for forwarding electronic messages, and more particularly, relates to a method for preserving a lifetime e-mail address in which e-mail messages sent to the lifetime e-mail are automatically forwarded to a dynamically prescribed e-mail forwarding address and responses can be provided in the name of the lifetime e-mail address.

BACKGROUND OF THE INVENTION

Recent advances in telecommunications networks have drastically altered the manner in which people interact and conduct business. These advances promote efficiency and convenience in one's ability to receive important information. With this in mind, individuals and businesses today find that their physical and electronic addresses are changing faster than ever with increased mobility and competing message delivery services. Deregulation and privatization of the global postal systems, competing package delivery services, and rapid growth of multiple competing electronic mail (e-mail) systems are creating an environment in which there is no single point of contact for address correction as there was when the sole messaging provider was the national postal service.

Users who enjoy the benefit of sending and receiving e-mail messages typically subscribe to an Internet Service Provider (ISP) offering such e-mail capabilities (e.g., America Online (AOL), Netcom, and Redconnect) and/or may subscribe to an internet based e-mail service (e.g., juno, rocketmail, yahoo) which each is associated with a particular e-mail address. Thus, the e-mail address is unique to the e-mail service provider. The uniqueness of an address to a selected provider is often apparent on the face of the address, e.g., DQuine@aol.com, Quine@juno.com or DouglasQuine@yahoo.com. A user or subscriber to a particular e-mail service may from time to time desire or need to change service providers (e.g., from DQuine@aol.com to QuineDo@pb.com). Exemplary motivation for these changes may derive from the fact that an alternative service provider charges lower rates, or the existing provider's inability to upgrade its service.

A user who desires to change from one e-mail service provider to another suddenly faces the reality of being bound to the old service provider because the
user's address is unique to that one provider. A sudden and complete changeover is in many circumstances impossible because the community of people who wish to send electronic messages to the user are only aware that the old address exists. For example, an e-mail address may be published in an industry directory that is only published once every year or two years. Alternatively, the e-mail address may be printed on a business card which cannot be retracted and corrected. Thus, the user incurs a potentially significant loss of prospective business by abandoning the old address.

Currently, there is no effective means in place for address correction of e-mail addresses. Even if the e-mail sender is highly diligent, there are no resources or processes available to identify corrected electronic address information. The problem is further accentuated by the fact that extreme competition in internet service providers, and likewise e-mail service providers, results in extremely high obsolesce of e-mail addresses with no means for e-mail forwarding (e.g., closing an AOL e-mail account provides no option for forwarding e-mail intended for that account to a new e-mail address).

Further, today's web savvy users may have multiple e-mail addresses which periodically change as new features develop or are lost. Entire domain names can be lost (e.g., lostdomain.com) and all mail directed there may be lost as well. In either case, typically the MAIL DAEMON message is returned to the sender, notifying the sender that the e-mail address cannot be found and e-mail message is being returned to the sender.

Some service providers offer their user-subscribers the option of a message forwarding service. These forwarding services operate by receiving the incoming message, retrieving the portion of the incoming message that identifies a selected user who subscribes to the forwarding service, associating the selected user with a forwarding address through the use of a lookup table, and transmitting the message to the forwarding address. The forwarding services differ from the normal message delivery service that the central service provider offers because a portion of the forwarding address belongs to another central service provider. Thus, the forwarded message is actually delivered to its intended recipient by the other or second service provider, i.e., the forwarded message passes through two central service providers, as opposed to just one provider. The intended message recipient is free to change
the second provider with regularity provided that the recipient always informs the forwarding service of each change in the second provider. However, this message forwarding system only works with viable e-mail address, that is, the e-mail address associated with the first service provider must still be active and not obsolete. In fact, few e-mail services offer forwarding services and few, if any, offer to forward e-mail after the account is closed. Otherwise, the first service provider is only enabled to send the later mentioned MAIL DAEMON message back to the original sender of the e-mail message.

Another problem encountered by e-mail forwarding services is that they do not preserve the anonymity of an e-mail forwarding address used to forward e-mail. That is, when a recipient receives forwarded e-mail and replies to that forwarded e-mail message using the native "reply" feature of an e-mail browser, the reply e-mail message indicates the forwarding e-mail address.

**SUMMARY OF THE INVENTION**

Accordingly, the present invention relates to a method for maintaining anonymity of a forwarding e-mail address as associated with a preferred e-mail address. The method includes the steps of prescribing a parameter of the preferred e-mail address and prescribing at least one forwarding e-mail address in association with the preferred e-mail address in the remote e-mail forwarding computer. A user then sends to the remote computer an e-mail message addressed to the preferred e-mail address of the subscriber. This e-mail is then received at the remote computer.

The remote computer then parses a parameter of the preferred e-mail address from the e-mail message to determine the associated forwarding e-mail address. The e-mail message is then transmitted from the remote computer to a computer associated with the forwarding e-mail address.

A reply e-mail message may then be sent from the computer associated with the forwarding e-mail address to the remote computer whereby the reply message includes at least the preferred e-mail address, the forwarding e-mail address and the user's e-mail address. Upon receipt of the reply e-mail message, the remote computer reconfigures the reply e-mail message to remove at least the forwarding e-mail address from the reply e-mail message. The reconfigured reply e-mail message is then sent from the remote computer to a computer associated with the user's e-
mail address with the e-mail forwarding address removed so as to preserve the anonymity of the e-mail forwarding address.

**DETAILED DESCRIPTION OF THE DRAWINGS**

The above and other objects and advantages of the present invention will become more readily apparent upon consideration of the following detailed description, taken in conjunction with accompanying drawings, in which like reference characters refer to like parts throughout the drawings and in which:

Fig. 1 depicts an electronic e-mail messaging system embodying the present invention;

Figs. 2 and 3 depict flowcharts depicting the operation of the present invention;

Fig. 4 depicts a look-up table used by the present invention;

Figs. 5A and 5B depict e-mail messages illustrating the operability of the e-mail messaging system of Fig. 1;

Fig. 6 depicts a look-up table having dynamic parameters in accordance with the present invention;

Figs. 7a and 7b depict flow charts illustrating the steps taken by the present invention messaging system to preserve the anonymity of an e-mail forwarding address;

Figs. 8a-8d depict exemplary e-mail messages transmitted in accordance with the flowcharts of Figs. 7a and 7b; and

Fig. 9 depicts a look-up table used in the present invention messaging system to preserve the anonymity of an e-mail forwarding address.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

FIG. 1 schematically depicts a conventional INTERNET telecommunications system 10. The FIG. 1 system is exemplary in nature. The present invention can be implemented as program control features on substantially all telecommunications service provider systems, and system 10 is intended to represent any operable telecommunications system that is used by any telecommunications service provider in conducting communication operations (e.g., facsimile, pager, mobile phone and PDA computers).
It is to be appreciated that the term "INTERNET" is well known in the art as designating a specific global international computer network that operates according to the TCP-IP protocol. A portion of the INTERNET receives or has in the past received funding from various United States governmental agencies including ARPA, NSF, NASA, and DOE. INTERNET communications protocols are promulgated by the Internet Engineering Task Force, according to standards that are currently set forth in RFC 1602.

Telecommunications system 10 includes a plurality of user or signal origination sites 12, 14 and 16, with each site being depicted in reference to a PC capable of generating and transmitting e-mail messages, wherein each site 12, 14 and 16 corresponds to a specific telecommunications address. A user may utilize one site or a plurality of sites. A single city or local service area may have millions of these signal origination sites. Each site 12, 14 and 16 corresponds to a telecommunication address that belongs to an individual, business, and other entity having need to avail themselves of telecommunications services.

It is to be understood that preferably each origination site 12, 14 and 16 feeds its signal (addressed to a subscriber identified at a selected service provider) to an internet service provider 18 (ISP), which in turn preferably feeds the signal to a local router node 20 that directs the local signal to a relay system, e.g., the INTERNET cloud 22, which transmits the signal to a router 24 through a series of relays. The signal eventually arrives at an internet service provider 26 through router 24.

As can be seen in Fig. 1, a plurality of destination sites 28, 30, 32, 38, 40 and 42 are shown connected to internet service providers 26 and 36 with each site being depicted in reference to a PC capable of generating and transmitting e-mail messages, wherein each site corresponds to a specific telecommunications address. It is of course to be appreciated that telecommunications system 10 includes a plurality of routers (e.g., routers 24 and 34) with each internet service provider being connected to a plurality of user sites (e.g., PC's 38, 40 and 42).

In accordance with the present invention, telecommunications system 10 additional includes a messaging forwarding system 44, which as will be further discussed below, enables e-mail messages to be automatically forwarded to a forwarding address, which forwarding address is associated with a currently undeliverable e-mail address. Messaging forwarding system 44 preferably includes
a PC 46 connected to an internet service provider 48, which PC 46 is provided with a
unique e-mail address (corrections@emailangel.com) and software programmed to
perform the below described steps necessary to operate the present invention e-mail
forwarding system 44. Internet service provider 48 is preferably connected to

INTERNET 22 via router 50.

As shown in Fig. 4, system 44 includes a software program that includes a
look-up table 50, which is programmable by users to provide an e-mail forwarding
address 52 associated with pre-programmed defunct (undeliverable) e-mail
address(es) 54. It is to be appreciated that users of the present invention e-mail
forwarding system 44 may access and program the look-up table 50 of system 44
through any conventional known means, including via the internet 22 in which a user
at PC site 28 accesses the look-up table 50 in system 44, via the internet 22, via
routers 24 and 50, and internet service providers 26 and 48. Look-up table 50 may
include a plurality of defunct subscriber addresses (54+N), with each defunct
address being associated with one or more forwarding addresses (52+M).

It is to be appreciated that in this description of the present invention system
44, mention is made to both a “user” and “subscriber” of system 44. It is to be
understood that a “user” of system 44 refers to anyone who is capable of transmitting
an e-mail message and accesses system 44 when it is desired to forward the
message to a forwarding address, which forwarding address the sender is unaware
of. A “subscriber” of system 44 refers to anyone who subscribes to the e-mail
forwarding service of system 44 in which the subscriber registers both a defunct e-
mail address 54 and at least one e-mail forwarding address 52 with system 44. And
of course e-mail forwarding system 44 is accessible by any user.

In illustration, if a subscriber of system 44 closes an e-mail account (e.g.,
user@oldaccount.com) for what ever reason, the subscriber may however still desire
to continue to receive messages sent to that address (e.g., user@oldaccount.com),
but now wants to receive those messages at a different account (e.g.,
subscriber@newaccount.com). In the prior art, to accomplish this the subscriber had
to resort to informing everyone who had the old e-mail address (e.g.,
user@oldaccount.com) of the new e-mail address (e.g.,
subscriber@newaccount.com). In accordance with the present invention, the
subscriber now merely accesses the subscriber’s designated account in system 44,
via any known means such as the internet, registers the defunct e-mail address (e.g., user@oldaccount.com) and associates it with a desired forwarding e-mail address (e.g., subscriber@newaccount.com). Thus when a sender of an e-mail desires to transmit a message to a subscriber of system 44 but only knows the subscribers old e-mail address (e.g., user@oldaccount.com), which account is no longer active, the user now merely looks to system 44 to forward the message to an active account (e.g., subscriber@newaccount.com), as will be discussed further below.

As indicated above, FIG. 1 is exemplary in nature, and those skilled in the art understand that equivalent substitutions of system components can be made. For example, electrical communications over conductive telephone lines, optical communications over optical fibers, radio communications, and microwave communications are substantially equivalent for purposes of the invention. Likewise, messages could be relayed through e-mail, facsimile, pager, PDA device or other capable communications system.

The method of use of system 44 will now be described with reference to Figs. 2, 3 and 5 in conjunction with Fig. 1. Referring now to Fig. 2, when an email sender 14 desires to transmit a message to a recipient 30 having a known e-mail address (e.g., quine@luv-npi.com) of the recipient, the sender 14 transmits the e-mail message 500 (Fig. 5a) through conventional e-mail protocol, whereby the message is delivered to the identified mail server 26 (e.g., luv-npi) of the recipient 30, via the senders ISP server 18 (step 100). The recipient's 30 mail server 26 then receives the e-mail message (step 102), and if the e-mail account is valid (e.g., quine@luv-npi.com) (step 104), the e-mail message is then accessible to the view and thus considered delivered (step 106). If the account is not a valid account (e.g., quine@luv-npi.com) then the identified e-mail server 26 (e.g., luv-npi) rejects the request (step 108) and sends a MAIL-DAEMON message 510 (Fig. 5b) to the senders 14 e-mail server 18 indicating that the message is not deliverable (step 110). The sender's e-mail server 18 then sends a message to the sender 14 that the attached e-mail message is undeliverable.

Since the sender 14 cannot contact the recipient (e.g., quine) via the now defunct e-mail address 54 (e.g., quine@luv-npi.com), the sender 14 is presented with the problem of how to contact the recipient. In order to overcome this problem,
the present invention e-mail forwarding system 44 provides a solution by forwarding the e-mail message to a new address so long as the recipient 30 (e.g., quine) subscribes to the forwarding service of the system 44. In the current illustrative example, the recipient (e.g., quine) registers the defunct e-mail address 54 (e.g., quine@luv-npi.com) with the system 44 and instructs the system to forward all messages to a specified forwarding e-mail address 52 (e.g., quine@docsense.com), as depicted in the look-up table of Fig. 4.

Returning now to the sender's 14 situation in which the sender 14 still desires to transmit the e-mail message 500 but does not know the correct e-mail address. In accordance with the present invention, the sender 14 now forwards the entire message 510 that was previously sent to the intended recipient's defunct e-mail address (e.g., quine@luv-npi.com), and rejected, to the e-mail address (e.g., corrections@emailangel.com) assigned to the e-mail forwarding system 44 (step 200). The e-mail server 48 (e.g., emailangel.com) that received the message then informs the forwarding system 44 of the receipt of this message and afterwards the forwarding system 44 receives the message from the e-mail server 48 (step 202). The forwarding system 44 then parses message 510 and extracts the intended address for the recipient (e.g., quine@luv-npi.com) from the message (step 204). The forwarding service 44 then does a look-up in table 50 for the intended address (e.g., quine@luv-npi.com) to determine if this address has been registered by a subscriber in the forwarding system 44 (step 206). If no, system 44 sends an e-mail message back to the sender 14 informing the sender 14 that the defunct address of the recipient 30 (e.g., quine@luv-npi.com) is not registered with the forwarding system 44 (step 208). If yes, forwarding system 44, sends the e-mail message 510 addressed to the recipients defunct address 54 (e.g., quine@luv-npi.com) to the recipient subscriber's new e-mail address 52 (e.g., quine@docsense.com) as prescribed in the look-up table 50 of the forwarding system 44. Preferably, forwarding system 44 then sends an e-mail to the sender 14 indicating that the message original addressed to a defunct e-mail address has now been properly forwarded.

Thus, a clear advantage of the present invention e-mail forwarding system 44 is that a sender merely forward a rejected e-mail message to the e-mail address (e.g., corrections@emailangel.com) associated with the forwarding system 44 to
determine if the previously rejected message can be forwarded to a proper e-mail address. And if it can, the forwarding system automatically forwards the message to an e-mail address as prescribed by the recipient. Thus, a user of system merely has to forward a rejected e-mail message to forwarding system 44 to utilize its forwarding services. Therefore, no internet access is required, only access to an e-mail server is required which is quite advantageous since many e-mail users only have access to an e-mail server and not an internet server, such as staff employees in corporations and home users who utilize free, or inexpensive e-mail services. Furthermore, in contrast to directory services, the system design preserves recipient privacy by not providing the new e-mail address to the sender.

In an alternative embodiment of the present invention, the look-up table of the e-mail forwarding system 44 may preferably have dynamic parameters in which a subscriber of system may have an account including one or more disfavored e-mail addresses that are associated with one or more forwarding e-mail addresses. For example, and with reference to Fig. 6, look-up table 60 is shown having three subscriber accounts 62, 64 and 66. In account 62, a subscriber is shown to have listed three disfavored e-mail addresses (e.g., doug@yahoo.com, doug@hotmail.com and doug@obsolete.com) in association with a single forwarding e-mail address (e.g., doug@current.com). Thus, when a user of system 44 uses it to forward e-mail to anyone of the listed disfavored e-mail addresses (e.g., doug@yahoo.com, doug@hotmail.com and doug@obsolete.com) the system 44 automatically forwards the e-mail to the single prescribed forwarding e-mail address (e.g., doug@current.com) regardless of which one the disfavored e-mail addresses (e.g., doug@yahoo.com, doug@hotmail.com and doug@obsolete.com) the e-mail message was intended for.

With reference to account 64, a subscriber is shown to have listed a single disfavored e-mail address (e.g., doug@obsolete.com) in association with three forwarding e-mail addresses (e.g., doug@work.com, doug@home.com and doug@wireless.com). Now, when a user of system 44 uses it to forward e-mail intended for the listed single disfavored e-mail address (e.g., doug@obsolete.com), the system 44 automatically forwards the e-mail message to each one of the prescribed e-mail addresses (e.g., doug@work.com, doug@home.com and doug@wireless.com).
Referring now to account 66, a subscriber is shown to have listed three
disfavored e-mail addresses (e.g., doug@yahoo.com, doug@hotmail.com and
doug@obsolete.com) in association with three forwarding e-mail addresses (e.g.,
doug@work.com, doug@home.com and doug@wireless.com). Thus, when a user
of system 44 uses it to forward e-mail to anyone of the listed disfavored e-mail
addresses (e.g., doug@yahoo.com, doug@hotmail.com and doug@obsolete.com),
the system 44 automatically forwards the e-mail message to each one of the
prescribed e-mail addresses (e.g., doug@work.com, doug@home.com and
doug@wireless.com).

Of course it is to be appreciated that a subscriber of system 44 may maintain
multiple accounts whereby a single subscriber may maintain each of the previous
described accounts 62, 64 and 66.

In yet another embodiment of the present invention, the e-mail forwarding
system 44 is preferably configured to prescribe lifetime e-mail addresses to it's
subscribers. More specifically, a subscriber is assigned a lifetime e-mail address
(e.g., doug@PBlifetime.com) which is registered with the internet service provider 48
of the e-mail forwarding system 44. The e-mail forwarding system 44 is operative to
forward all e-mail messages sent to the lifetime e-mail address (e.g.,
doug@PBlifetime.com) to a forwarding address (e.g., doug@aol.com) as prescribed
by the subscriber. Thus, an obvious advantage is that the subscriber may inform all
e-mail users only of it's lifetime e-mail address (e.g., doug@PBlifetime.com)
regardless of the account(s) the subscriber is currently maintaining for receiving e-
mail messages. As will also be described below, a reply by the subscriber to e-mail
transmitted to the subscriber's lifetime e-mail address will only indicate the
subscriber's lifetime e-mail address (e.g., doug@PBlifetime.com) and not the
subscriber's e-mail forwarding address (e.g., doug@aol.com). This maintains the
subscriber's anonymity and use of the subscriber's lifetime address (e.g.,
doug@PBlifetime.com).

Operation of the e-mail forwarding system 44 in conjunction with a
subscriber's lifetime e-mail address will now be described. With reference to Fig. 7a,
a subscriber is assigned a lifetime e-mail address (e.g., doug@PBlifetime.com),
which lifetime e-mail address is registered with the internet service provider 48 of the
e-mail forwarding system 44 (step 70). Thus, all e-mail transmitted to this lifetime e-
mail address (e.g., doug@PBlifetime.com) is routed to internet service provider 48 enabling the e-mail forwarding system 44 to in-turn receive the e-mail messages transmitted to the "lifetime" addresses (e.g., lifetime.com). Therefore, when a user (e.g., ChrisC@PB.com) transmits an e-mail message 80 (Fig. 8a) to the subscriber's lifetime e-mail address (e.g., doug@PBlifetime.com) (step 72) this e-mail message 80 is received at the present invention e-mail forwarding system 44, via internet service provider 48 (step 74).

Upon receipt of the e-mail message 80, the e-mail message system 44 parses the subscriber's username (e.g., Doug) from the e-mail message 80 and accesses a look-up table 90 for lifetime e-mail addresses (Fig. 9) to determine the prescribe forwarding e-mail address (e.g., Doug@aol.com) for the subject username (e.g., Doug) (step 76). The e-mail forwarding system 44 then preferably automatically forwards the e-mail message 82 (Fig. 7b) to the subscriber's determined e-mail forwarding address (e.g., Doug@aol.com) with the proper forwarding parameters as indicated in Fig. 8b (step 78). The subscriber then receives this forwarded e-mail message 82 at the prescribed e-mail forwarding address (e.g., Doug@aol.com).

It is to be appreciated that the e-mail forwarding system may be configured and operational to forward e-mail messages sent to a lifetime e-mail address to a plurality of forwarding addresses, as was discussed with reference to the look-up table of Fig. 6.

With reference now to Fig. 7b, in the event the subscriber desires to reply to the user (e.g., ChrisC@PB.com) who sent the e-mail message, the subscriber merely activates the "REPLY" feature native to the subscriber's e-mail browser and constructs the reply message 82 (Fig. 8c) (step 82). This reply e-mail message is then transmitted to the subscriber's lifetime e-mail address (e.g., doug@PBlifetime.com) having the proper e-mail REPLY parameters (e.g., doug@PBlifetime.com) as indicated in Fig. 8c. This reply message of Fig. 8c is automatically sent from the subscriber's e-mail forwarding address (e.g., Doug@aol.com) to it's lifetime e-mail address (e.g., doug@PBlifetime.com) because the subscriber actually directly received the e-mail message of Fig. 8b from the subscribers lifetime e-mail address (e.g., doug@PBlifetime.com) and not from the e-mail address of the original sender (e.g., ChrisC@PB.com).
The reply message of Fig. 8c is then received at the subscriber's lifetime e-mail address (e.g., doug@PBlifetime.com) in the e-mail forwarding system 44, via internet service provider 48 (step 86). The e-mail forwarding system 44 recognizes this e-mail message as a reply (preferably via its REPLY heading) and then automatically reconfigures the reply message of Fig. 8c to mask the subscriber's forwarding e-mail address (e.g., doug@aol.com) as shown in Fig. 8d (step 88), which serves to protect the anonymity of the subscriber's forwarding e-mail address. This reconfigured reply e-mail message of Fig. 8d is then transmitted from the e-mail forwarding system 44 to the original sender (e.g., ChrisC@PB.com) of the e-mail message of Fig. 8a.

Thus an advantage of the above described lifetime e-mail address feature of the present invention e-mail forwarding system is that it enables a subscriber to maintain and distribute a lifetime e-mail address while enabling the subscriber to utilize various e-mail services (each having differing e-mail address) over the indefinite periods of time. Another benefit is that it serves to protect the anonymity of the subscriber since the username assigned to the subscriber's lifetime e-mail address can of course be different than that of the subscriber's prescribed forwarding e-mail addresses.

In summary, an e-mail forwarding system having a dedicated e-mail address for automatically forwarding e-mail has been described. Although the present invention has been described with emphasis on particular embodiments, it should be understood that the figures are for illustration of the exemplary embodiment of the invention and should not be taken as limitations or thought to be the only means of carrying out the invention. Further, it is contemplated that many changes and modifications may be made to the invention without departing from the scope and spirit of the invention as disclosed.
What is claimed is:

1. A method for maintaining anonymity of a forwarding e-mail address as associated with a preferred e-mail address, the method comprising the steps of:
   prescribing a parameter of the preferred e-mail address in the remote e-mail forwarding computer;
   prescribing at least one forwarding e-mail address in association with the preferred e-mail address in the remote e-mail forwarding computer;
   sending from a user to the remote computer an e-mail message addressed to the preferred e-mail address of the subscriber;
   receiving at the remote computer the e-mail message addressed to the preferred e-mail address;
   parsing a parameter of the preferred e-mail address from the e-mail message in the remote computer to determine the associated forwarding e-mail address;
   sending the e-mail message from the remote computer to a computer associated with the forwarding e-mail address;
   sending a reply e-mail message from the computer associated with the forwarding e-mail address to the remote computer whereby the reply message includes at least the preferred e-mail address, the forwarding e-mail address and the user's e-mail address;
   reconfiguring the reply e-mail message in the remote computer to remove at least the forwarding e-mail address from the reply e-mail message; and
   sending the reconfigured reply e-mail message from the remote computer to a computer associated with the user's e-mail address.

2. A method as recited in claim 1 wherein the parsing step includes the step of comparing the parameter of the preferred e-mail address to a look-up table to determine a forwarding e-mail address in the look-up table.

3. A method as recited in claim 1 wherein the sending of the e-mail message from the remote computer step further includes the step of:
sending the e-mail message from the remote computer to a plurality of computers each having a forwarding address associated with the preferred e-mail address.
FIG. 2

100. SENDER TRANSMENTS E-MAIL MESSAGE TO RECIPIENT

102. E-MAIL MESSAGE IS RECEIVED BY E-MAIL SERVER

104. IS THERE A VALID E-MAIL ACCOUNT?

106. YES

106. E-MAIL IS DELIVERED TO RECIPIENT

108. NO

108. INTENDED E-MAIL SERVER REJECTS E-MAIL

110. INTENDED E-MAIL SERVER TRANSMITS MESSAGE TO SENDER INDICATING E-MAIL IS UNDELIVERABLE

112. SENDER IS NOTIFIED THAT E-MAIL IS UNDELIVERABLE
FIG. 3

1. SENDER TRANSMITS E-MAIL TO E-MAIL FORWARDING SERVICE

2. E-MAIL FORWARDING SERVICE RECEIVES E-MAIL FROM SENDER

3. E-MAIL FORWARDING SERVICE EXTRACTS THE E-MAIL ADDRESS FOR THE INTENDED RECIPIENT

4. IS THERE A FORWARDING E-MAIL ADDRESS?
   - NO: TRANSMIT MESSAGE TO SENDER THAT THERE IS NO FORWARDING E-MAIL ADDRESS AVAILABLE
   - YES: SEND E-MAIL TO INTENDED RECIPIENT AT THE FORWARDING E-MAIL ADDRESS ASSOCIATED WITH THE E-MAIL ADDRESS OF THE INTENDED RECIPIENT

5. TRANSMIT MESSAGE TO SENDER INDICATING THAT E-MAIL HAS BEEN SENT TO THE INTENDED RECIPIENT AT A FORWARDING E-MAIL ADDRESS
Disfavored E-Mail Address | Forwarding E-mail Address

Subscriber@oldaccount.com | subscriber@newaccount.com

FIG. 4

Disfavored E-Mail Address | Forwarding E-mail Address

Doug@yahoo.com
Doug@hotmail.com
Doug@obsolete.com

Doug@obsolete.com

Doug@obsolete.com

Doug@yahoo.com
Doug@hotmail.com
Doug@obsolete.com

Doug@current.com
Doug@work.com
Doug@home.com
Doug@wireless.com
Doug@work.com
Doug@home.com
Doug@wireless.com

FIG. 6
TO: DQuine@luv-npi.com

RE: Hello

I have not communicated with you in a long time - how is everything?

FIG. 5A

Delivery Failure Report

Your document: Hello
was not delivered to: dquine@luv-npi.com because: The specified address contains a
host or domain name that could not be found by the
file.

TO: DQuine@luv-npi.com

RE: Hello

I have not communicated with you in a long time - how is everything?

FIG. 5B
SUBSCRIBER IS ASSIGNED A LIFETIME E-MAIL ADDRESS

SENDER TRANSMITS E-MAIL TO SUBSCRIBER AT LIFETIME.COM ADDRESS

E-MAIL FORWARDING SYSTEM RECEIVES E-MAIL

E-MAIL FORWARDING SYSTEM DETERMINES FORWARDING E-MAIL ADDRESS

E-MAIL FORWARDING SYSTEM TRANSMITS E-MAIL TO FORWARDING ADDRESS

E-MAIL IS RECEIVED AT FORWARDING ADDRESS

FIG. 7a
FIG. 7b
To: Doug@LifeTime.com  
From: ChrisC@PB.com  
Subject: Ballgame Tickets

Hi Doug,
    In view of your hard work would you like to go to the game tomorrow night? Great seats!

FIG. 8a

Reply To: Doug@LifeTime.com  
From: Doug@aol.com  
Subject: REPLY Lifetime Forwarded Mail

To: Doug@aol.com  
From: Doug@LifeTime.com  
Subject: Lifetime Forwarded Mail

From: ChrisC@PB.com  
Subject: Ballgame Tickets

Hi Doug,
    Would love to go - where should we meet?

FIG. 8c

To: ChrisC@PB.com  
From: Doug@LifeTime.com  
Subject: REPLY

Hi Chris,
    Would love to go - where should we meet?

FIG. 8d

Lifetime E-mail Address Look-up Table

<table>
<thead>
<tr>
<th>Username</th>
<th>Forwarding Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:Doug@aol.com">Doug@aol.com</a></td>
<td></td>
</tr>
</tbody>
</table>

FIG. 9
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06F 13/00  
US CL. : 709/206  
According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/200,202,203,206,207

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

NONE

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

Please See Extra Sheet.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>
| A        | US 6,088,720 A (BERKOWITZ et al.) 11 July 2000  
see Abstract, figures 1 and 2, col. 1 (line 63-et seq.). | 1-3                  |
| A        | US 5,937,161 A (MULLIGAN et al.) 10 August 1999  
see Abstract, figures 1 and 2, col. 2 (line 65-et seq.). | 1-3                  |
| A        | US 5,844,969 A (GOLDMAN et al.) 01 December 1998  
see Abstract, figures 1-3, col. 1 (line 53-et seq.). | 1-3                  |

☐ Further documents are listed in the continuation of Box C.  
☐ See patent family annex.

**Date of the actual completion of the international search**  
24 SEPTEMBER 2001

**Date of mailing of the international search report**  
06 NOV 2001

**Name and mailing address of the ISA/US Commissioner of Patents and Trademarks**  
Box PCT  
Washington, D.C. 20231

**Facsimile No.**  (703) 305-3220

**Authorized officer**  
ROBERT B. HARRELL  
Telephone No.  (703) 305-9692

Form PCT/ISA/210 (second sheet) (July 1998) •
B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

WEST
search terms: (email$ or "e-mail" or "e-mails" or e-mailing$ or "e-mailings" or "e-mailed" or (electronic adj1 (mail$ or message$)) near1 forward$