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Pedersen

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(54) **PROFILE RESPONSIVE ELECTRONIC MESSAGE MANAGEMENT SYSTEM**

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(52) **U.S. Cl.** **709/206**; 707/104.1
(58) **Field of Search** 709/201, 206, 709/217; 713/184; 707/10, 104.1; 379/93.24

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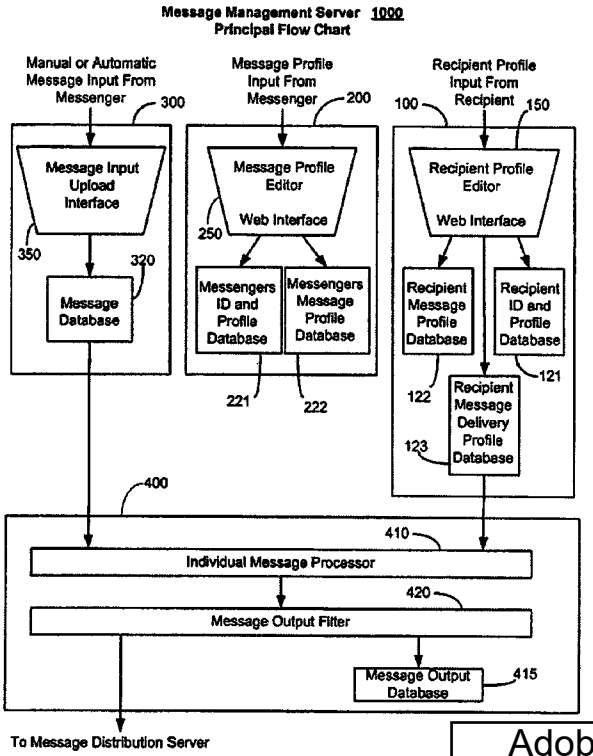
(57) **ABSTRACT**

A system and method for the central specification and management of how messages are distributed to recipients with the steps of: a recipient profile system for entering and storing rules about how to distribute specific types of messages and content from specific messengers to individual recipients, a messenger profile system where messengers can enter, store and maintain his identification information and the types of message services he/she will offer to recipients, a message input system where messengers manually or automatically can enter messages or upload message files for distribution to recipients with a valid recipient profile, an individual message generator combining the data from recipient profile and the message from the message input system into a plurality of individual messages for recipients as specified by the messenger.

18 Claims, 8 Drawing Sheets



Adobe Inc. v. Pedersen
IPR2023-00986
Exhibit 1001

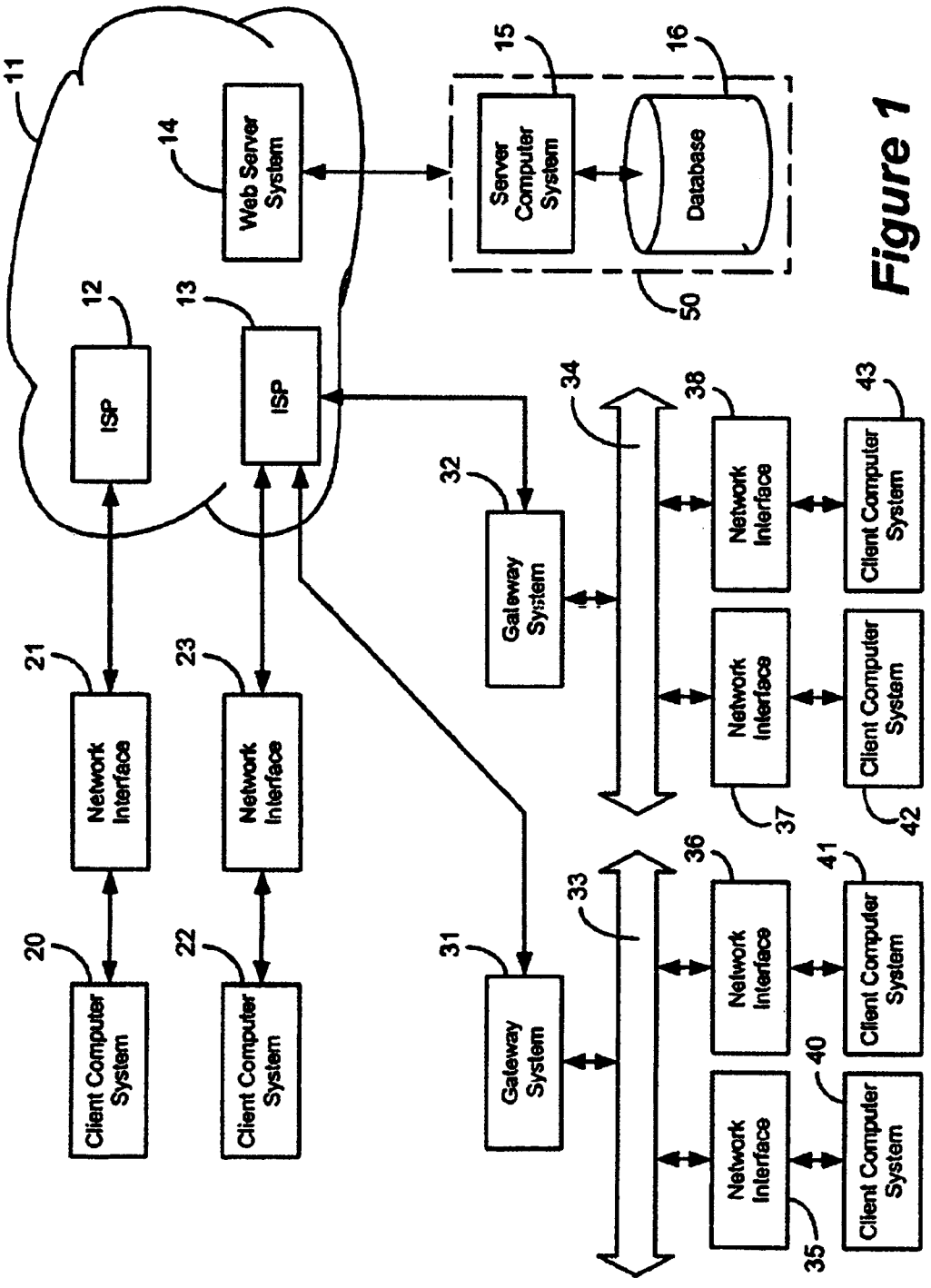

11
14
Web Server System
15
Server Computer System
16
Database
50
12
ISP
13
ISP
34
38
Network Interface
43
Client Computer System
32
Gateway System
21
Network Interface
23
Network Interface
37
42
20
Client Computer System
22
Client Computer System
31
Gateway System
33
36
Network Interface
41
Client Computer System
40
Network Interface
Client Computer System
35

Figure 1

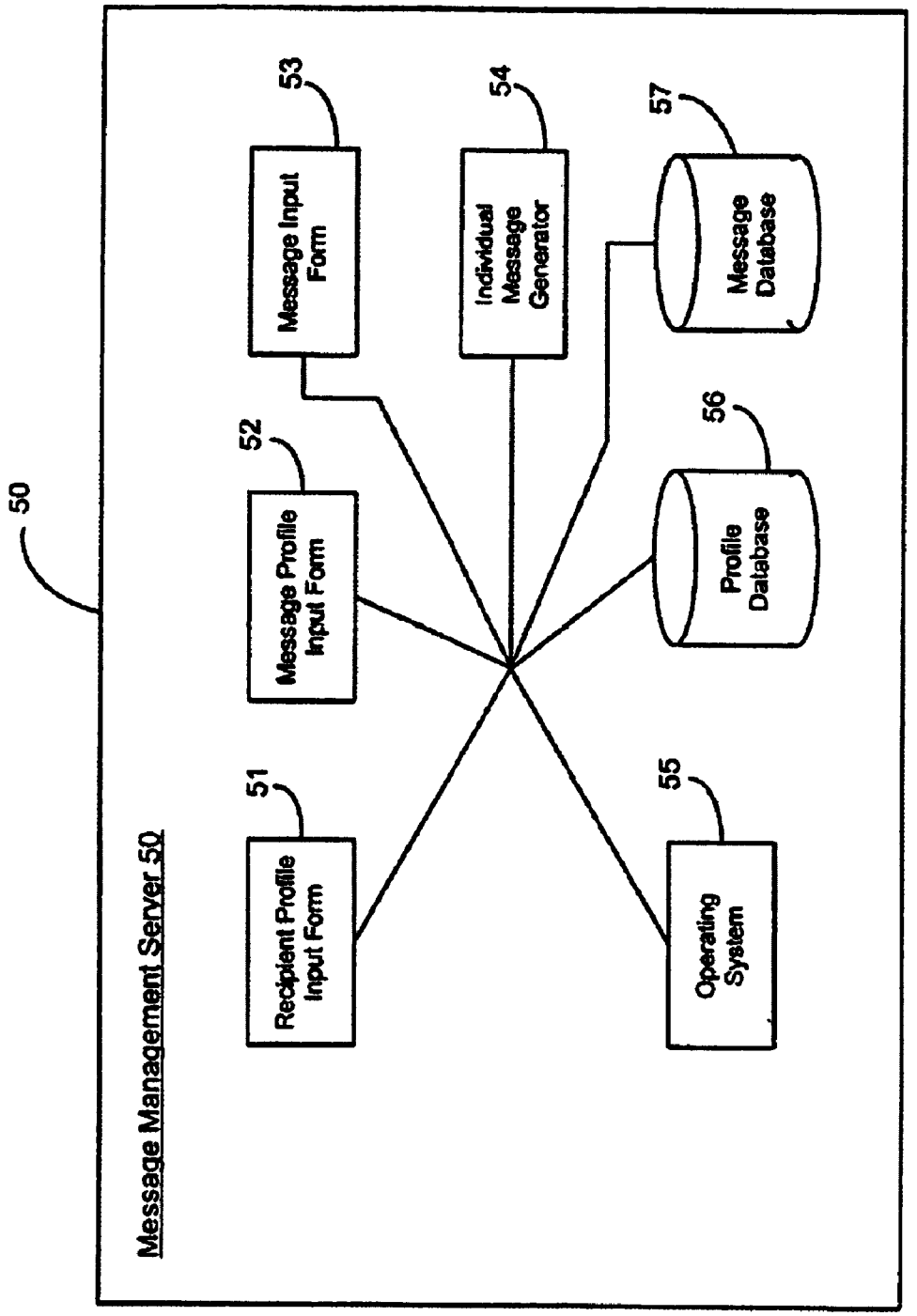

50
Message Management Server 50
51
Recipient Profile Input Form
52
Message Profile Input Form
53
Message Input Form
54
Individual Message Generator
55
Operating System
56
Profile Database
57
Message Database

Fig. 2

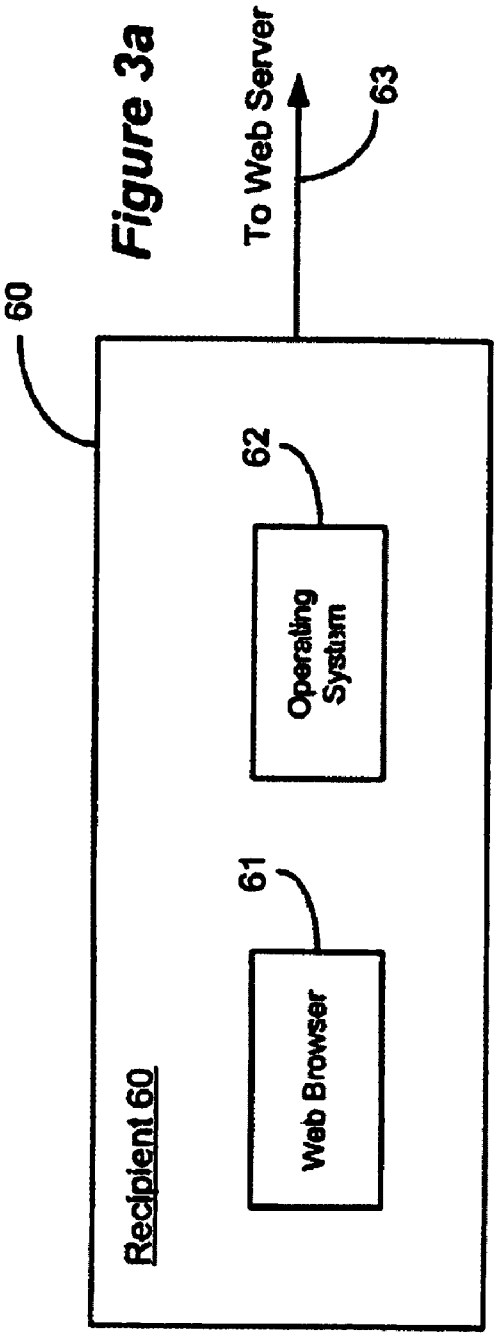


Figure 3a
To Web Server
63
60
62
Operating System
61
Web Browser
Recipient 60

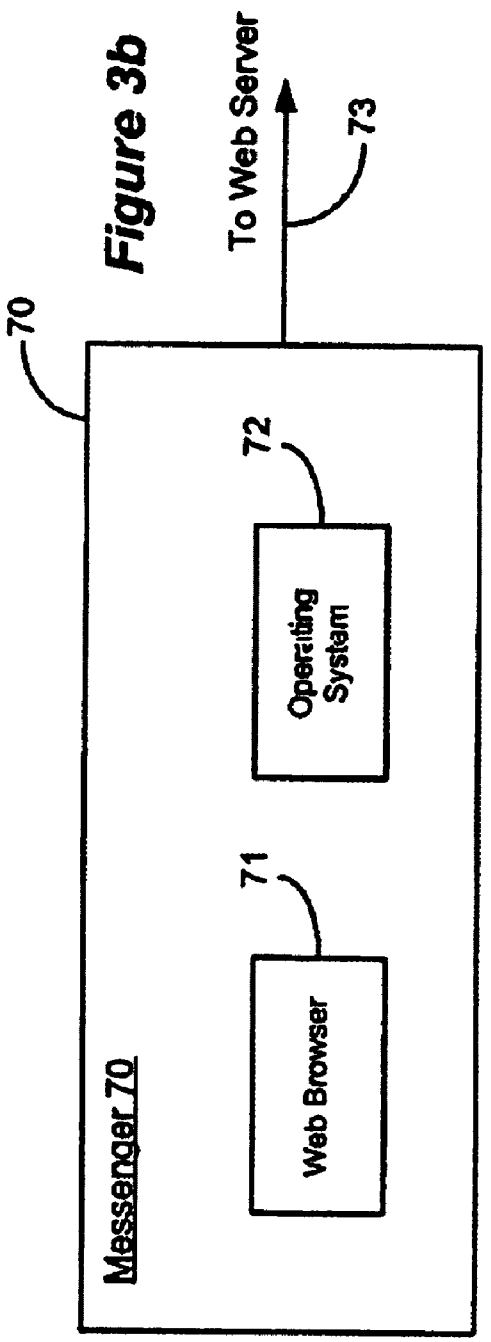


Figure 3b
To Web Server
73
70
72
Operating System
71
Web Browser
Messenger 70

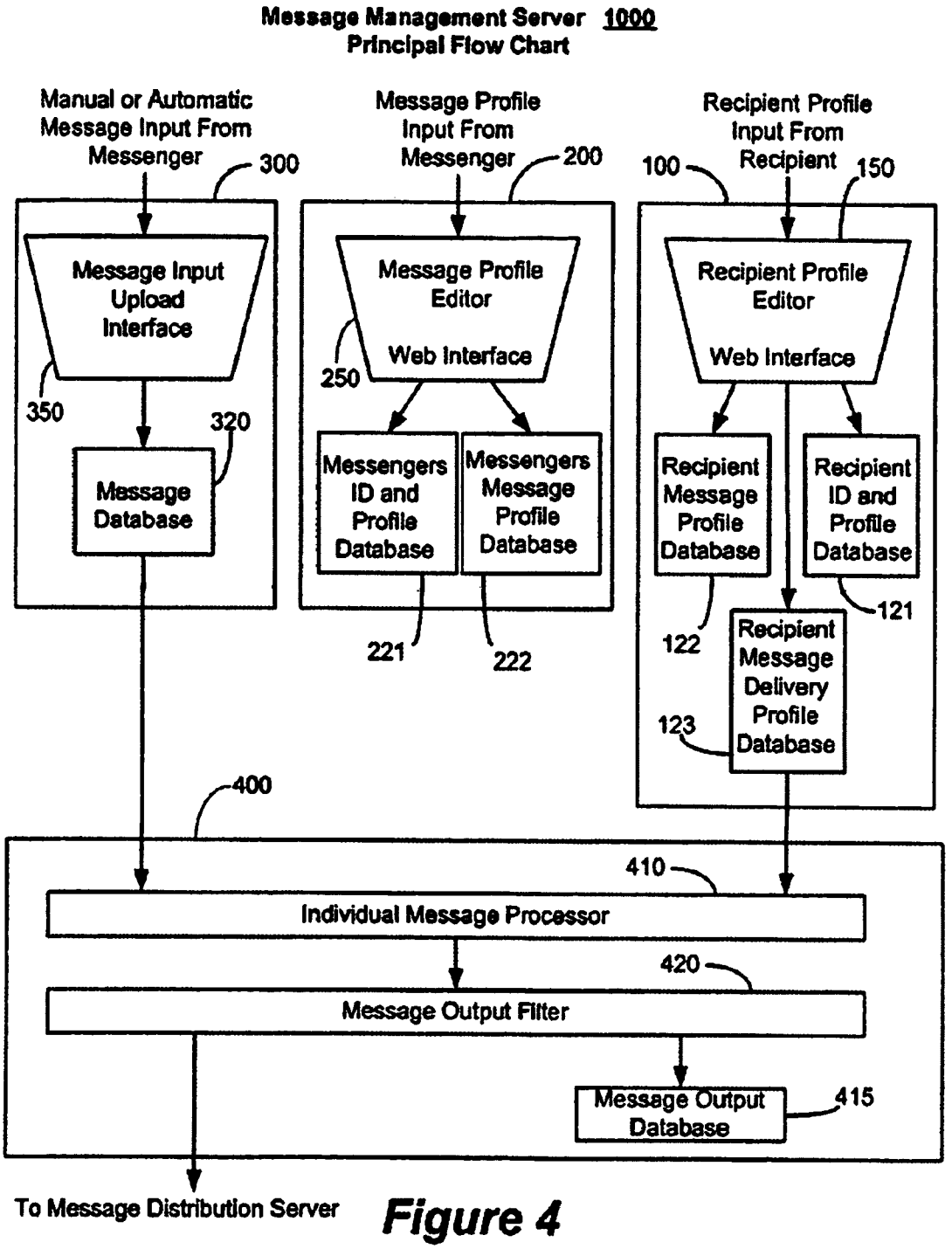

Message Management Server 1000
Principal Flow Chart
Manual or Automatic Message Input From Messenger
300
Message Input Upload Interface
350
320
Message Database
Message Profile Input From Messenger
200
Message Profile Editor
Web Interface
250
Messengers ID and Profile Database
Messengers Message Profile Database
221
222
Recipient Profile Input From Recipient
100
150
Recipient Profile Editor
Web Interface
Recipient Message Profile Database
Recipient ID and Profile Database
121
122
Recipient Message Delivery Profile Database
123
400
410
Individual Message Processor
420
Message Output Filter
Message Output Database
415
To Message Distribution Server

Figure 4

Figure 5

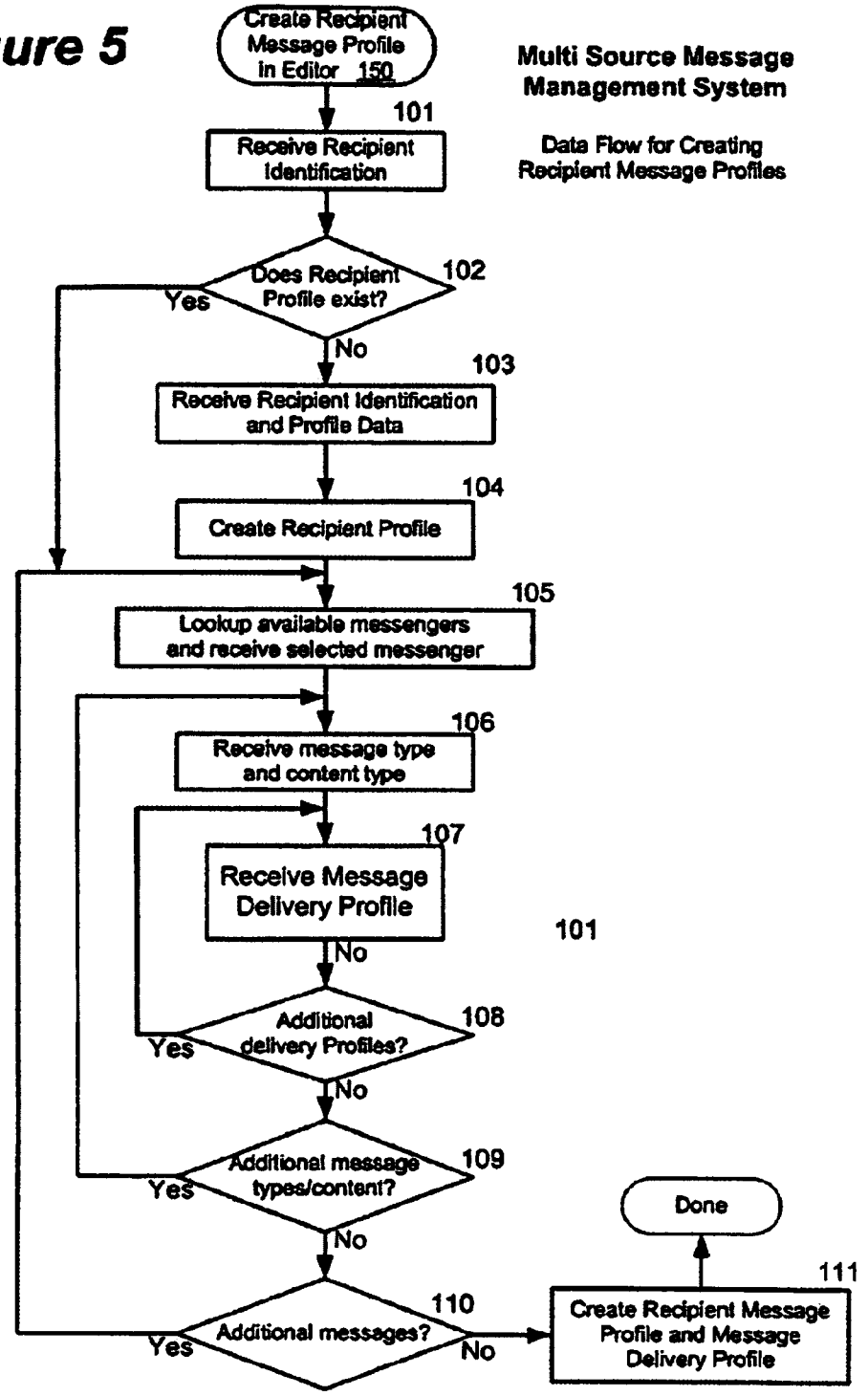
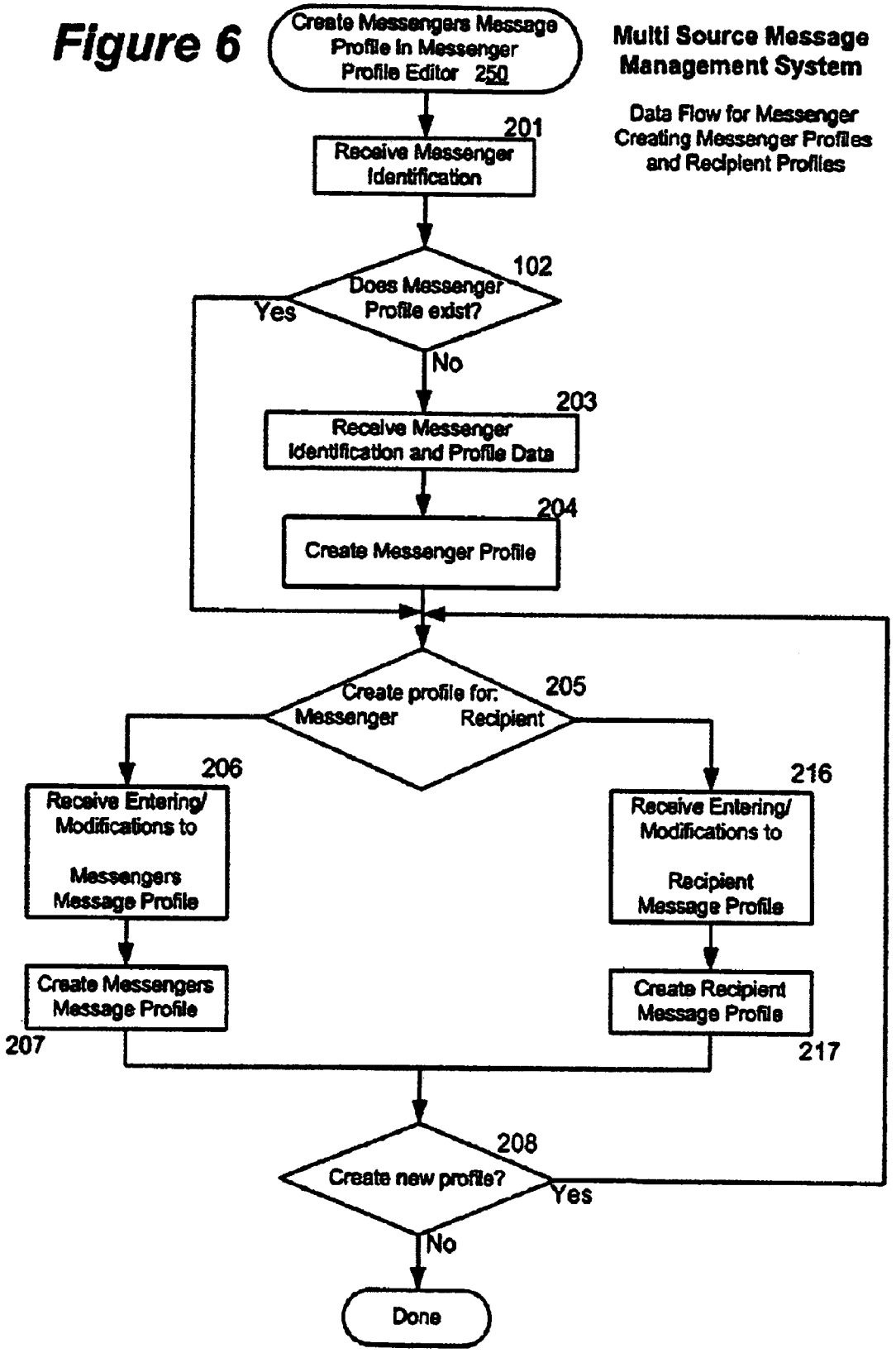

Create Recipient Message Profile in Editor 150
Multi Source Message Management System
Data Flow for Creating Recipient Message Profiles
101
Receive Recipient Identification
Does Recipient Profile exist?
102
Yes
No
103
Receive Recipient Identification and Profile Data
104
Create Recipient Profile
105
Lookup available messengers and receive selected messenger
106
Receive message type and content type
107
Receive Message Delivery Profile
101
No
Additional delivery Profiles?
108
Yes
No
Additional message types/content?
109
Yes
No
Additional messages?
110
Yes
No
Done
111
Create Recipient Message Profile and Message Delivery Profile

Figure 6


Create Messengers Message Profile In Messenger Profile Editor 250
Multi Source Message Management System
Data Flow for Messenger Creating Messenger Profiles and Recipient Profiles
201
Receive Messenger Identification
102
Does Messenger Profile exist?
Yes
No
203
Receive Messenger Identification and Profile Data
204
Create Messenger Profile
205
Create profile for: Messenger Recipient
206
Receive Entering/ Modifications to Messengers Message Profile
216
Receive Entering/ Modifications to Recipient Message Profile
Create Messengers Message Profile
207
Create Recipient Message Profile
217
208
Create new profile?
Yes
No
Done

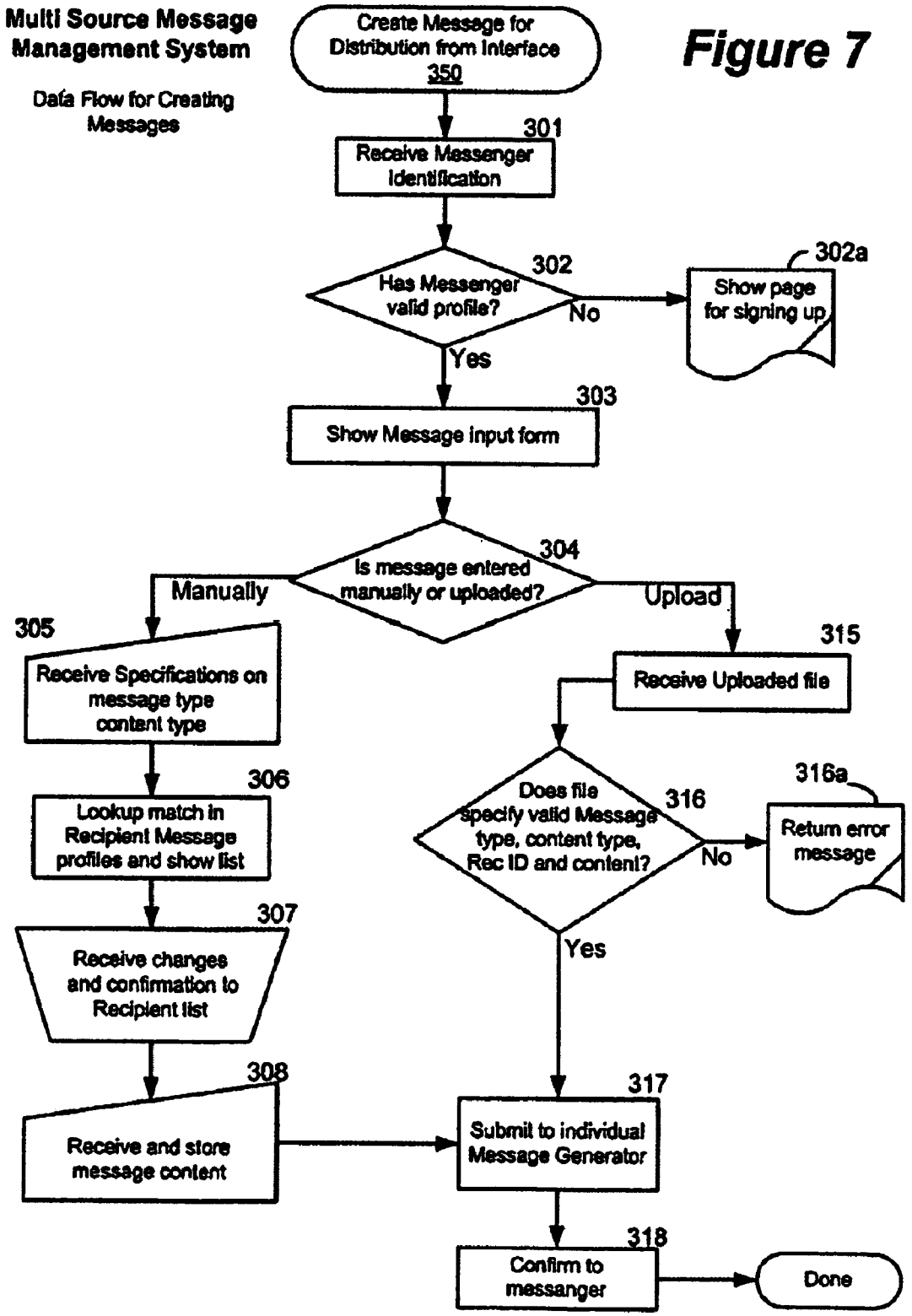

Multi Source Message Management System
Data Flow for Creating Messages
Create Message for Distribution from Interface 350
301
Receive Messenger Identification
302
Has Messenger valid profile?
No
302a
Show page for signing up
Yes
303
Show Message input form
304
Is message entered manually or uploaded?
Manually
Upload
305
Receive Specifications on message type content type
306
Lookup match in Recipient Message profiles and show list
307
Receive changes and confirmation to Recipient list
308
Receive and store message content
315
Receive Uploaded file
316
Does file specify valid Message type, content type, Rec ID and content?
No
316a
Return error message
Yes
317
Submit to individual Message Generator
318
Confirm to messanger
Done

Figure 7

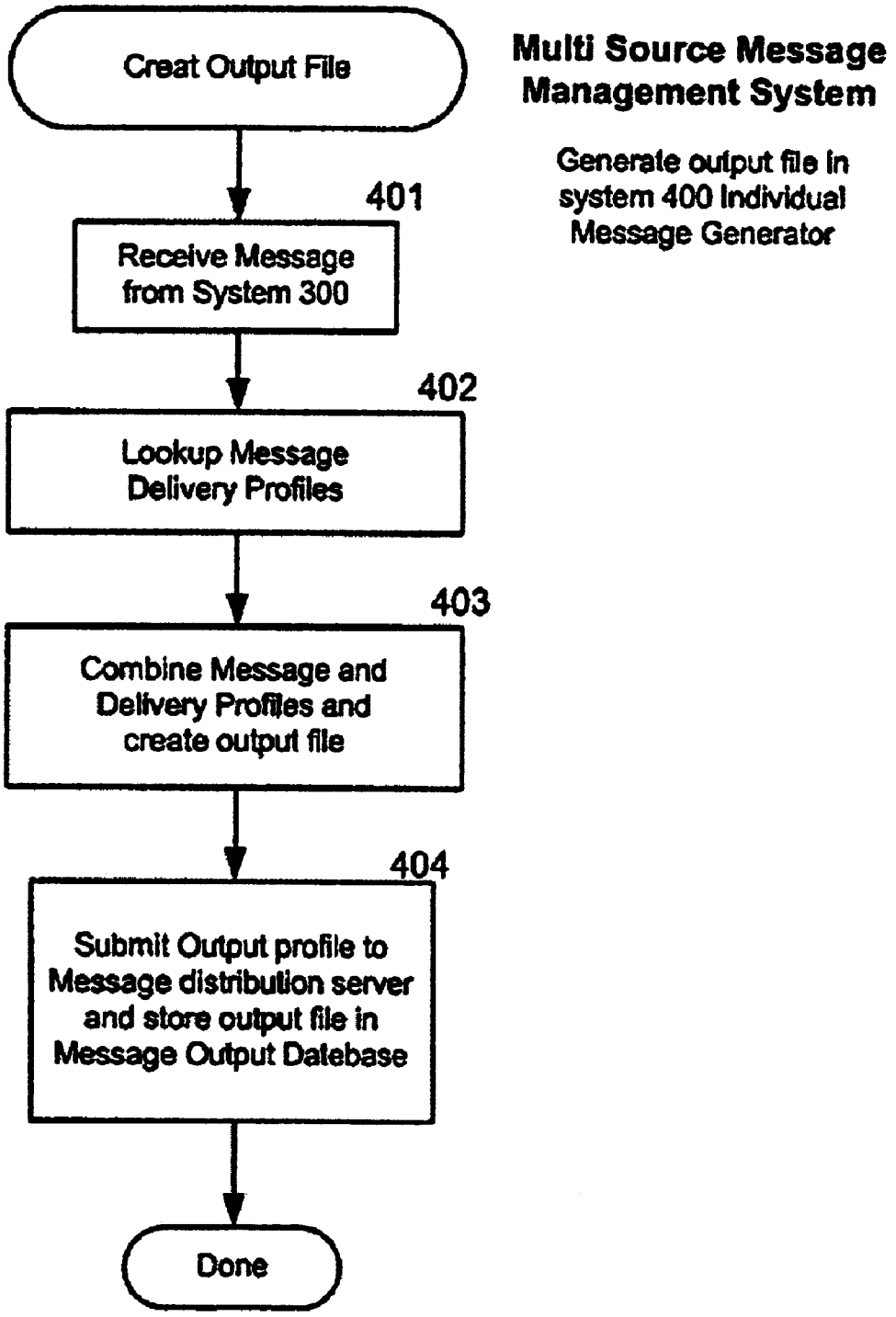

Creat Output File
401
Receive Message from System 300
402
Lookup Message Delivery Profiles
403
Combine Message and Delivery Profiles and create output file
404
Submit Output profile to Message distribution server and store output file in Message Output Datebase
Done
Multi Source Message Management System
Generate output file in system 400 Individual Message Generator

Figure 8

PROFILE RESPONSIVE ELECTRONIC MESSAGE MANAGEMENT SYSTEM

The present application claims the benefit of prior filed U.S. Provisional Patent Application Ser. No. 60/217,719, filed Jul. 12, 2000, to which the present application is a regular U.S. National Application.

FIELD OF THE INVENTION

The present invention is in the field of electronic computers and digital processing systems for filtered and targeted electronic message distribution. More specifically, the present invention relates to a system and method for the central filtering and distribution processing of messages from multiple messengers to selected individual recipients under filtering and distribution parameters in part established by each intended recipient.

BACKGROUND OF THE INVENTION

This invention relates generally to the field of messaging and more particularly to a process and method for central specification and management of how messages are distributed to recipients. The need for receiving messages in different media and through different devices is exploding. Physical (hardcopy) letters and faxes, and phone message means have been supplemented with e-email, SMS messages, WAP, voice messages, Extranet updates and more means to come.

Presently for organizations to keep customers and clients updated with the kind of information and messages that will assure goodwill and loyal behavior is a complex task requiring resources, focus and complex information technology (IT) solutions. Many organizations already have rule based Customer Relation Management IT systems. These systems are designed to handle message profiles based on rules for how each individual customer/client will receive information and messages.

Since customer information can be mission critical, Customer Relation Management (CRM) systems are most often for security reasons maintained by the customer service department inside the organization. Defining and changing message profile requires an interaction between each individual customer and the customer service department, to prevent unauthorized access to the CRM system by individuals. These message profiles must be entered and maintained in every single CRM system—in every single organization—for every single customer/client. The customers/clients will find it both time consuming and difficult to contact all his information suppliers to make them update his profile with e.g. a new e-mail address or phone number.

Due to the complexity, time consuming and resource demanding task in defining, operating and maintaining messages profiles on a one-to-one basis, only a few organizations today are able to keep customers/clients informed with respect to how, when and where the individual customer prefer to receive his message information. The inaccessibility of efficient message management means results in widespread use of inefficient mass communication means, such as spam e-mail, and household delivered promotion materials ("junk mail"). The massive use of Direct Mailings without relevance annoys the receiver by filling up his mailbox and ignoring his/her real interests. Additionally, the distribution to a potential customer of relevant information—but at the wrong time or in the wrong place may disappoint or frustrate a receiver who missed or was not able to use the information. These considerations may even dissuade companies from distributing any information at all, because it is too complex, costly and time consuming. This can leave customers motivated to exploit alternative companies, lowering customer loyalty, and lowering overall business effectiveness dramatically.

Particularly regarding electronic messaging, the field has recognized some of the existing disadvantages and has been motivated to address them. For example, Miloslavsky, U.S. Pat. No. 5,765,033, discloses a rule based electronic mail system for receiving messages, extracting information from the message, and then forwarding the extracted information to a particular recipient based on the content of a set of rules. However, the recipient of the information and the sender of the message do not have direct access to the rule set and the ability to redefine the sets parameters. Finney et al., U.S. Pat. No. 6,182,118, also disclose a rule based system for managing electronic messages. In the Finney system, a recipient can access the rule set and define in advance certain parameters controlling whether a message received by the system is forwarded to the recipient. However, the system of Finney does not provide for a sender of a message being able to define any parameters of the rules controlling the forwarding of its messages to a designated recipient or group of recipients.

Therefore, it would be beneficial to have an electronic message management system where each individual recipient could access a rule set and maintain the parameters of his/her own message profile, thus, enabling each recipient to designate specific or classes of messenger from whom they are willing to receive a message, and to specify how the information or messages are to be delivered. Additionally, it would be usefull for messengers to be able to submit not only message content, but also individual and group recipient profiles or identifications to the central message management system rule set, to enable message distribution and delivery to recipients according to individual recipient profiles. It would be further useful to have an electronic messaging system wherein individual recipients centrally can define a plurality of recipient profiles specifying how messages from messengers generally or from certain messengers specifically must be distributed to him/her.

SUMMARY OF THE INVENTION

The present invention is an electronic message management system and method for the central specification and management of how messages electronic messages received from a plurality of messengers or sources are distributed to individual recipients. The present message management system comprises an electronic computer system in operative communication with a global digital communications network, and a message management database in operative communication with the computer system. The computer system of the present message management system includes: a recipient profile application for receiving recipient profile data from recipients via the global network and storing the recipient data in the database; a messenger profile application for receiving messenger profile data from messengers via the global network and storing the messenger data in the database; a message input application for receiving message files from a messenger via the global network and storing the message files in the database; and an individual message generator in communication with the database and operative to access and utilize data and files from the database to generate an individual message to be sent via the global communications network to a recipient specified by a mes-

senger. A recipient is an individual or related group of individuals to whom a message is directed or sent. A messenger or messengers are the initiators of messages sent to the recipients.

The computer system of the present message management system further comprises a message management server operating system, and the message management database further comprises recipient and messenger profile databases for storing recipient and messenger profile data respectively, and a message database for storing message data files. The recipient profile application includes a global network interactive recipient profile input form. The recipient profile input form is accessible to a recipient computer via a global communications network. The recipient profile application also includes a network interface and a recipient profile editor for receiving recipient profile data from a recipient computer via the global network interface, and for manipulating the recipient profile database to store the recipient profile data. The recipient profile application receives and stores a plurality of messenger specific profiles, each profile indicating delivery parameters for where, when and how specific types of messages from each messenger are to be delivered to the recipient.

The messenger profile application includes a global network interactive messenger profile input form, which is accessible to a messenger computer via the global communications network. The messenger profile application also includes a global network interface and a messenger profile editor for receiving messenger profile data from a messenger computer via the global network interface, and for manipulating the messenger profile database to store the messenger profile data. Messenger profile data can include: messenger identifying data, recipient identifications and recipient profiles, which messages to deliver to the recipients, and the profiles stored. The messenger profile application further includes receiving and storing recipient identification and recipient profiles for recipients who are to be prevented from receiving a message from the messenger.

The message input application includes an interactive global network message input form, the message input form being accessible to a messenger computer via the global communications network. The message input application further comprises a global network interface and a message data file editor for receiving a message file data from a messenger computer via the global network interface and for manipulating the message database to store the message data file.

The individual message generator of the message management system communicates with the databases to identify messages and messenger parameters that are compatible with a recipient profile and to generate individualized messages configured for delivery to the appropriate recipient. Once the individual message is generated, the message generator sends the individual message to the recipient via a means selected from the group consisting of: electronic mail, voice telephone, facsimile transmission, and digital transmission, or other means as specified by the recipient in the recipient's profile parameters.

In practice, the present the message management system is accessible from a client computer via a global communications network, to centrally manage the distribution and delivery format of messages from multiple messenger sources to multiple individual recipients. This is accomplished by providing client computers with access to the message management system via a global communications network, where the client computers are messenger and recipient computers. The message management system receives a connectivity request from a client computer for access to the message management system to input data. The message management system connects to the client computer via the global communication network, and prompts the client computer for the data to be inputted by providing a data input form to the client computer. The message management system accepts input data from the client computer via the input form, and enters the input data into a message management database of the message management system. Input forms practicable in the present message management system include: a recipient profile form, a messenger profile form, and a message input form. Other input forms or display forms may also be displayed by the message management system on a client computer system.

Accepting input data includes entering the input data into an electronic message management database, such as a recipient profile database, a messenger profile database, or a message database.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a block diagram for one embodiment of an operating environment for practicing the present invention.

FIG. **2** is a block diagram for one embodiment of a message management server suitable for use in the operating environment of FIG. **1**.

FIG. **3***a* is a block diagram of one embodiment of a message management user computer system.

FIG. **3***b* is a block diagram of one embodiment of a message management messenger computer system.

FIG. **4** shows an principal overall flow diagram of a message management server system **1000**—a exemplary embodiment of the present invention. The figure is illustrating the relationship between the various levels of the subsystems.

FIG. **5** shows the process related to Recipient Profile system **100** in FIG. **4** for creating and maintaining a recipient message profile and message delivery profiles for one or more messengers.

FIG. **6** shows the process related to messenger profile system **200** in FIG. **4** for creating a messengers message profile for the available message types and content type the messenger will offer and recipient message profiles for recipients who must receive specific message types and content types.

FIG. **7** shows the process related to message input system **300** in FIG. **4** for how the messenger can enter messages or upload message files manually or automated, to be distributed to the recipients.

FIG. **8** shows the process related to individual message generator system **400** in FIG. **4** for how the message uploaded or entered is combined with the message delivery profiles and how a output file with individual messages is generated and submitted for distribution.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, the details of preferred embodiments of the present invention are graphically and schematically illustrated. Like elements in the drawings are represented by like numbers, and any similar elements are represented by like numbers with a different lower case letter suffix. It is to be understood, however, that the present invention may be embodied in various forms. Therefore, specific details disclosed herein are not to be interpreted as limiting, but rather as a basis for the claims and as a

representative basis for teaching one skilled in the art to practice the present invention.

FIG. **1** is a block diagram exemplifying one embodiment of the present invention in a suitable operating environment. The following description of FIG. **1** provides an overview of computer hardware and other operating components suitable for implementing the present invention, but it is to be appreciated that the present invention is not limited to the configuration shown in FIG. **1**. FIG. **1** shows several computer systems **20**, **22**, **40–43** coupled together through a network **11**, such as a LAN, WAN or a global digital communications network, such as the World Wide Web or the Internet. The term "Internet" as used herein refers to a network of networks, which uses certain protocols, such as the TCP/IP protocol, and possibly other protocol such as the hypertext transfer protocol (HTTP) for a hypertext markup language (HTML) documents that make up the World Wide Web. The physical connectivity scheme of the Internet and the communication protocols and procedures of the Internet are well known in the art.

A client computer system **20**, **22**, and **40–43** typically obtains access to the Internet **11** through an Internet Service Provider (ISP) **12** & **13**. Access to the Internet **11** allows a user of a client computer systems **20**, **22**, and **40–43** to exchange information, receive and send e-mails and view documents such as documents prepared in the HTML format. These documents are provided by web servers **14**, which is considered to be "on" the Internet **11**. Often these web servers **14** are provided by ISPs. However, setting up a computer system to be directly connected to the Internet **11**, and serve as it own ISP is well-known in the art. A web server **14** is typically at least one computer system, which operates as a server computer system and is configured to operate with the protocols of the World Wide Web, and is coupled with the Internet **11**. Optionally, web server **14** can be part of an ISP **12** & **13** which provides access to the Internet **11** for client systems. FIG. **1** shows a web server **14** coupled to a server computer system **15** which itself is coupled to web content **16**, which is a form of a media database. It is to be appreciated that while two computer systems **14** and **15** are shown in FIG. **1**, web server **14** and server computer system **15** can be one computer system having different software components, one providing web server **14** functionality and another providing server **15** functionality.

With the appropriate web browsing software, a client computer systems **20**, **22** and **40–43** can view HTML pages provided by web server **14** via the Internet **11**. In one embodiment of the present invention, the web server **14** comprises a message management server. As shown in FIG. **1**, an ISP **12** provides Internet connectivity to a client computer system **20** through a modem or network interface **21**, which can be considered part of client computer system **20**. Client computer system **20** can be a personal computer system, a personal digital assistant, a network computer, a Web TV system, an Internet radio receiver, or other such computer systems.

Similarly, an ISP **13** provides Internet connectivity for other client computer systems **22** & **40–43**, although, as shown in FIG. **1**, the connections are not the same for all of these computer systems. Client computer system **22** is coupled through a network interface **23**, which may be a modem, while two computer systems **40** and **41** are part of one LAN **33** and two other computer systems **42** and **43** are part of another LAN **34**.

It is to be appreciated that a network interface can be practiced using any of a number of devices known to the ordinary skilled artisan, such as an analog modem, a ISDN modem, a cable modem, a satellite transmission interface (e.g., "Direct PC"), or another interface for coupling one computer system to other computer systems. Client computer systems **40–43** are coupled to LAN buses **33** and **34** through network interfaces **35–38**, which can be Ethernet network or other network interfaces. The LAN buses **33**, **34** are also coupled to gateway computer systems **31**, **32**, which can provide firewall and other Internet related services for the LANs **33**, **34**.

The gateway computer systems **31**, **32**, are coupled to the ISP **13** to provide Internet connectivity to the respective client computer systems **40–43**. The gateway computer systems **31**, **32** may be conventional server computer systems. Also, web server **14** may be a conventional server computer system.

FIG. **2** is a block diagram illustrating the components of an embodiment of the message management server **50** the present invention, and their interrelationships. In the embodiment illustrated, the message management server **50** is at least in party comprised of the server computer system **15** and database **16** of FIG. **1**. The message management server **50** includes a profile database **56** for centrally storing profile and other information received from messengers and recipients, and from other users, such as system administrators. The message management server **50** includes a message database **57** for centrally storing messages received from messenger client computer systems **40**, **41**, **42** & **43**. A computer system used to enter recipient profile data into the message management server **50** is a recipient computer system **20** & **22**.

The message management server **50** comprises a recipient profile software application which includes a recipient profile input form **51**. The recipient profile input form **51** include discrete information fields, as will be discussed below, and may be displayed at a recipient's client computer **20** & **22** as a web page, as described above. The recipient profile input form **51** receives information input through the recipient computer systems **20** & **22**, and the associated application processes the information into records to be stored in profile database **56**.

The message server **50** also comprises a messenger profile software application, which includes a messenger profile input form **52**. The messenger profile input form include discrete information fields, as will be discussed below, and may be displayed at a messenger's client computer **40**, **41**, **42** & **43** in the form of a web page, as described above. The messenger profile input form **52** receives information input through the messenger computer systems **40–43**, and the associated application processes the information into records to be stored in profile database **56**.

The message server **50** further comprises a message input software application, which includes a message input form **53**. The message input form **53** include discrete information fields, as will be discussed below, and may display at a messenger's client computer **40**, **41**, **42** & **43** in the form of a web page, as described above. The message input form **52** receives information input through the messenger computer systems **40–43**, and the associated software application processes the information into records to be stored in the message database **57**.

The individual message generator **54** obtains information from the database **57** and generates an individual messages for each recipient, based on the combination of recipient and messenger profile parameters and messages entered into the profile **56** and message **57** databases.

It is also to be appreciated that message management server **50** and its component applications are controlled by the operating system software **55** which includes a file management and disk operating system. Example of operating systems with associated file management software includes the Microsoftt Corporation (Redmond, Wash.) series of Windows® operating systems, including Windows Explorer®. The file management system is typically stored in mass memory and causes a processor to execute the various operations required by the operating system to input and output data and to store data in memory, including storing files on mass memory, as will be described below.

FIG. **3***a* is a block diagram exemplifying one embodiment of a client computer system **20** & **22**, wherein the user is a recipient. Recipients are users that are the targeted receivers of messages generated and sent via the individual message generator **54**. A recipient computer system **60** includes a web browser **61** for accessing the web server **14** and message management server **15** via a connection **63** to the Internet **11**. The recipient **60** also includes an operating system **62**, to run other programs on the recipient computer system **22**. The connection arrow **63** of FIG. **3***a* illustrates the connection of the recipient computer system **60** to an ISP **12** & **13** for interacting with other computer systems via the Internet **11**. It is understood that any or all of the modules **61** & **62** of the recipient computer system **60** may be included in hardware or software, on one system or on many systems.

FIG. **3***b* is a block diagram exemplifying an embodiment of a client computer system **40**, **41**, **42** & **43**, wherein the user is a messenger. The messenger computer system **70** includes a web browser **71** and an operating system **72**. The web browser **71** is used to interact via a network, like the Internet **11**, with the web server **14** and the message management server **15**. The operating system **72** runs programs on the messenger computer system **70**. The connection arrow **73** illustrates the direct or indirect connection of the messenger computer system **70** to an ISP **13** for interacting with other computer systems via the Internet **11**. It is understood that any or all of the modules **71** and **72** of messenger computer system **70** may be included in hardware or software, on one system or on many systems.

FIG. **4** is a block diagram illustrating the overall principle of an exemplary embodiment of the present message management server **1000**. The figure illustrates the relationship between the various subsystems **100**, **200**, **300** and **400** of the message management server **1000**.

The recipient profile system **100** is for entering, managing and storing rules about how the message management system server **1000** is to communicate with each individual recipient. From a recipient computer system **60**, as described in FIG. **3***a*, a recipient will access the message server **1000** through recipient profile editor/web interface **150**. The web interface feature of the profile editor/web interface **150** could be a Web site (HTML document) accessed by the recipient via a web browser or similar application.

A recipient will log on to the message management system server **1000** and enter his/her basic identification data. The identification data will be stored in the recipient ID and profile database **121**, a sub system of the profile database **56** of FIG. **2**. In addition, the recipient will enter one or more sets of message profile data, specifying one or more messengers, type of messages and type of content the recipient wishes to receive from each messenger. These data will be stored in the recipient message profile database **122**, a sub system of the profile database **56** in FIG. **2**. For each message profile entered, the recipient will specify one or more message delivery profiles with data about how messages must be distributed, where to receive the specified message and the type of message devices to transmit the messages. These data are stored in the message delivery profile database **123**, a subsystem of the profile database **56** in FIG. **2**.

The messengers profile system **200** allows a messenger to access the message management system server **1000** to enter and maintain his/her own basic identification information and messenger profile data from a messenger computer system **70**, as described in FIG. **3***b*. The messenger computer **70** accesses the message management server **1000** via the messenger profile editor/web interface **250**, using an Internet enabled application, such as a web browser. The messenger will log on to the message system server **1000** and enter his identification data. These data are stored in the messengers ID and profile database **221**, a subsystem of the profile database **56** of FIG. **2**.

Additionally, a messenger utilizes the messenger profile editor/web interface **250** to enter one or more sets of messenger profile data, specifying the types of messages and types of content the messenger is providing to recipients in general. This profile is stored the messengers message profile database **222**, a subsystem of the profile database **56** of FIG. **2**. Also, a messenger can specify a list of specific recipient ID's, each combined with a set of message types and content types that the identified must receive. The messengers message profiles entered by the messenger is stored in the recipient message profile database **122**, a subsystem of the profile database **56** of FIG. **2**.

The message input system **300** is used by messengers with a valid messenger profile to enter messages for the purpose of having them distributed to recipients according to their individual specified recipient message profiles. From a messenger computer system **70**, a messenger logs onto the message management system server **1000**. The messenger computer **70** accesses the message management server **1000** via the message input (upload) editor/web interface **350**, using an Internet enabled application, such as a web browser. Once connected, the messenger can manually or automatically enter the message data or upload messages files for distribution to recipients with an appropriate message profile. The message data will be stored in the message database **320**, a subsystem of the message database **57** of FIG. **2**.

The message processor **410** of the individual message generator **400** combines the data from the recipient message delivery profile database **123** with appropriate data from the message database **320**. From this combination of data, the message output filer **420** will generate individual messages for each Recipient as specified in the message database **57** and recipient message delivery profile database **123**. The generated messages are stored in the message output database **415** until they are further distributed. At the appropriate time, the message generator **400** will forward the generated messages to a message distribution server (not a part of this invention) from where the messages will be converted to the right device protocols and distributed to the devices and addresses as specified by the intended recipient.

FIG. **5** is block flow diagram of an exemplary process related to using the recipient profile system **100** of FIG. **4** to create and maintain recipient message profiles for a multiple set of messengers. To create or maintain (e.g., update or modify) a recipient message profile, the recipient will logon to the message management system server **1000** using the logon step or procedure **101** to access the recipient profile editor **150**. The recipient editor **150** will perform a check **102** to establish whether the recipient has a profile. If not, the

recipient is prompted **103** to provide basic identity and profile information. Then the recipient editor **150** creates **104** a recipient identity profile and store this in the recipient ID and profile database **121**.

Based on the existence of recipient identity profile data, procedure **105** will now perform a lookup in the messenger ID and message profile database **221**, and retrieve all messengers with a basic profile matching the recipient's basic profile parameters: e.g., country, city, gender, etc. A list of available messengers is presented to the recipient, and tile recipient selects a messenger. In step **106**, the recipient specifies the message types and content types to be received from the selected messenger. In step **107**, the recipient specifies one or more preferred delivery profiles: e.g., the message device, the delivery address, the delivery schedule, sequence of appearance, etc. for each message and content type specified in step **106**.

In step **108**, the recipient editor application **150** checks for additional delivery profiles. Step **107** is repeated until the recipient has specified all necessary delivery profiles and parameters for the chosen message and content type. In step **109**, the recipient editor **150** checks for additional message and content types. Step **106** is repeated until the recipient has specified all necessary message and content types for the chosen messenger. In step **110**, the recipient editor application **150** checks for additional messengers. Step **105** is repeated until the recipient has specified all the messengers for whom he/she wants to specify a message profile. In step **111**, the recipient editor application creates a recipient message profile for the recipient logged onto the system and stores the profile data in the recipient message profile database **122**. Step **111** also creates a recipient message delivery profile for the recipient logged onto the system and stores this data in the recipient message delivery profile database **123**.

FIG. **6** is block flow diagram of an exemplary process related to using the messenger profile input system **200** of FIG. **4** to create and maintain messengers message profiles for the available message types and content type the messenger wishes to offer, and to create and maintain a messenger's recipient message profile for recipients targeted to receive specific message types and content types. To create or maintain a messengers message profiles and/or a messenger's recipient message profiles, the messenger logs onto the message management system server **100** using the logon step or procedure **201** to access the messenger profile editor **250**. The messenger profile editor **250** will perform a check **202** to establish whether the messenger has a profile. If not, the messenger is prompted **203** to provide basic identity and profile information. Then the messenger editor **250** creates **204** a messenger identity profile and stores this in the messenger ID and profile database **221**.

The messenger editor **250** now asks **205** if the messenger will create or update a messenger message profile or a messenger's recipient message profile. If in step **205**, the messenger elects to create or update a messengers message profile, the messenger editor **250** displays **206** an input screen from which the messenger can specify multiple sets of message types and content types to be offered to recipients. In step **207**, the messenger editor **250** then creates a messengers message profile for the messenger logged on and store this in the messengers message profile database.

Alternatively, if in step **205**, the messenger elects to create or update a messengers recipient message profile, the messengers editor **250** displays **216** an input screen from which the messenger can specify a list of recipient IDs together with multiple sets of message types and content types that each specified recipient is to receive. Then in step **217**, the messengers editor **250** creates a recipient message profile for the specified recipient and messenger logged on to the server **1000** and store this in the recipient message profile database **122**.

Then in step **208**, the messengers editor **250** requests if additional profiles are to be created, and if the messenger elects "yes," step **205** is repeated. If the messenger elects "no," then the procedure is done.

FIG. **7** is block flow diagram of an exemplary process related to using the message input system **300** of FIG. **4** to manually or automatically input and/or upload messages from a messenger into the present message management system server **1000**. To input or upload a message for distribution, the messenger logs onto the message management server **1000** using the logon step **301** to access the message input editor. The message input editor application **350** performs a check **302** to establish if messenger has a valid profile and account for distributing messages. If not, the messenger is shown information **302***a* for how to open an account, directed elsewhere or exited from the server **1000**. If the messenger has a valid profile and account, the message input editor **350** displays **303** a message input form **53**, and allows the messenger to elect **304** to enter a message manually or by up loading a message file.

If uploading **315** a message file is elected, the messenger attaches the file to the input form **53**, and submits the file to the message management system server **1000**. The message input editor **350** validates **316** that the submitted file is correctly formatted, and has valid message type, content type, recipient IDs, message content etc., according to messengers message profile stored in the messengers message profile database **222**. If message file is not valid, an error message is returned **316***a* to the messenger logged on. If message file is valid, the message input editor **350** submits **316** the message to the individual message generator **400** and to the message database **320**.

If manually entering **305** the message information is elected, the input form **53** prompts the messenger to enter specifications of message type and content type. The message input editor **350** then looks for match **306** between the messenger, message type, content type and the recipient message profiles in the recipient message profile database **122**, and a list of matching recipient IDs is presented to the messenger. The message input editor **350** receives **307** any amendments (additions, deletions, modification) to the recipient ID list, and finally confirm the Recipient ID's list. In step **308**, the message input editor **350** allows the messenger to enter the actual message content through an Internet enabled message component of the message input form **53**. After a message has been entered and confirmed, the message input editor **350** submits **317** the message and the confirmed recipient ID list to the individual message generator **400** and to message database **320**.

Then the input editor **350** confirms **318** for messenger logged on that the message has been submitted for message generation.

FIG. **8** is a block flow diagram of an exemplary process for utilizing the individual message generator **400** of the message management system server **1000**. According to the process, the individual message processor **410** receives **401** a message notification from message input system **300**. On receipt of the notification, the processor **410** looks up **402** the message in the message database **320**, and also looks up the recipient message profiles and delivery profiles in the recipient message profile database **122** and the recipient message delivery profile database **123**. Further in this step,

the individual message processor **410** matches the recipient, and type and content criteria for the message. In the next step **403**, the message output filer **420** of the individual message generator **400** combines the message with the delivery profile data for all recipients matching the profile, and creates a total output file. The message output filer **420** then submits **404** the message output file to a message distributions server (not a part of this invention) and to the message output database **415** for storage.

While the above description contains many specifics, these should not be construed as limitations on the scope of the invention, but rather as exemplifications of one or another preferred embodiment thereof. Many other variations are possible, which would be obvious to one skilled in the art. Accordingly, the scope of the invention should be determined by the scope of the appended claims and their equivalents, and not just by the embodiments.

What is claimed is:

1. An electronic message management system comprising:

an electronic computer system in operative communication with a global digital communications network, and an electronic message management database in operative communication with the computer system; the electronic computer system having

a recipient profile application for receiving recipient profile data from recipients via the global network and storing the recipient data in the database, the profile data including delivery parameters specified by a recipient of where, when and how specific types of messages from specific messengers are delivered to the recipient,

a messenger profile application for receiving messenger profile data from messengers via the global network and storing the messenger data in the database, including messenger identifying data,

a message input application for receiving message files from a messenger via the global network and storing the message files in the database, and

an individual message generator in communication with the database and operative to access and utilize data and files from the database to generate an individual message to be sent to the recipient specified by the messenger via the global communications network according to the delivery parameters, and a message management server operating system; and

the message management database including recipient and messenger profile databases for storing recipient and messenger profile data respectively, and a message database for storing message data files.

2. The electronic message management system of claim **1**, wherein the recipient profile application includes a global network interactive recipient profile input form, the recipient profile input form being accessible to a recipient computer via the global digital communications network.

3. The electronic message management system of claim **1**, wherein the messenger profile application includes a global network interactive messenger profile input form, the messenger profile input form being accessible to a messenger computer via the global digital communications network.

4. The electronic message management system of claim **1**, wherein the message input application includes an interactive global network message input form, the message input form being accessible to a messenger computer via the global communications network.

5. The electronic message management system of claim **1**, wherein the recipient profile application further comprises a network interface and a recipient profile editor for receiving recipient profile data from a recipient computer via the global network interface and for manipulating the recipient profile database to store the recipient profile data.

6. The electronic message management system of claim **1**, wherein the messenger profile application further comprises a global network interface and a messenger profile editor for receiving messenger profile data from a messenger computer via the global network interface and for manipulating the messenger profile database to store the messenger profile data.

7. The electronic message management system of claim **1**, wherein the message input application further comprises a global network interface and a message data file editor for receiving a message file data from a messenger computer via the global network interface and for manipulating the message database to store the message data file.

8. A method of inputting data into the message management system of claim **1** from client computers via a global communications network, to centrally manage the distribution and delivery format of electronic messages from multiple messenger sources to multiple individual recipients, comprising the steps of:

providing the client computers with access to the message management system via a global communications network, where the client computers are messenger and recipient computers;

receiving a connectivity request from a client computer for access to the message management system to input data;

connecting the client computer to the message management system via the global communication network;

prompting the client computer for the data to be input by providing a data input form to the client computer; and

accepting input data from the client computer and entering the input data into an electronic message management database of the message management system.

9. The method of claim **8**, wherein the prompting step includes providing an input form to the client computer.

10. The method of claim **8**, wherein the prompting step includes providing an input form to the client computer, the input form being at least one input form selected from the group consisting of a recipient profile form, a messenger profile form, and a message input form.

11. The method of claim **8**, wherein the accepting step includes entering the input data into an electronic message management database comprising a recipient profile database, a messenger profile database, and a message database.

12. The electronic message management system of claim **1**, wherein the messenger profile application receives and stores messenger profile data, including recipient identifications and recipient profiles, which messages to deliver to the recipients and profiles stored.

13. The messenger profile application of claim **12**, further comprising recipient identification and recipient profiles for recipients who are prevented from receiving a message from the messenger.

14. The electronic message management system of claim **1**, wherein the individual message generator communicates with the database to identify messages and messenger parameters that are compatible with a recipient profile, and to configure the messages for delivery to the recipient.

15. The electronic message management system of claim **1**, wherein the individual message generator generates and sends the individual message via a means selected from the group consisting of; electronic mail, voice telephone, facsimile transmission, and digital transmission.

16. The electronic message management system of claim 1, wherein the individual message generator generates the individual message and sends the individual message via a means selected from the group consisting of an electronic means and a hardcopy means.

17. The electronic message generator system of claim 16, wherein the individual message generator generates the individual message and sends the individual message via an electronic means selected from the group consisting of electronic mail, voice telephone, facsimile transmission, digital transmission, computer network, voice mail, SMS, telex, and wireless transmission.

18. The electronic message generator system of claim 16, wherein the individual message generator generates the individual message and sends the individual message via a hardcopy means selected from the group consisting of paper media. magnetic media, and optical media.

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