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- (71) Applicant (for all designated States except US): ECALL INC. [US/US]; 33-41 Newark Street, Hoboken, NJ 07030 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ZYDNEY, Herbert [US/US]; 3080 Grand Bay Boulevard, Longboat Key, FL 34228 (US). WOLMAN, T., Barton [US/US]; 27 East 13 Street, New York, NY 10003 (US). TYDEMAN, F., Donald [US/US]; 10 Princeton Road, Menlo Park, CA 94025 (US). RUMMER, L., Steven [US/US]; 1027 Park Avenue, Sellersville, PA 18960 (US).

- (74) Agent: COX, J., Donald, Jr.; Gibbons, Del Deo, Dolan, Griffinger & Vecchione, P.C., One Riverfront Plaza, Newark, NJ 07102 (US).
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(54) Title: METHOD AND SYSTEM FOR VOICE EXCHANGE AND VOICE DISTRIBUTION

(57) Abstract: A method for voice exchange and voice distribution between users of computer networks comprises the following steps: creating a message in a voice container; contacting a central server to locate a recipient of the message; forwarding the message to the recipient if the recipient is available; storing the message at the central server when the recipient is not available for forwarding when the recipient is available. The method also allows the control of the origination, distribution and listening to these messages, and also offers the options of ringing a pre-configured phone number at the recipient's request for the delivery of the message or



METHOD AND SYSTEM FOR VOICE EXCHANGE AND VOICE DISTRIBUTION

FIELD OF THE INVENTION

This invention relates to the field of packet communications, and more particularly to voice packet communication systems.

BACKGROUND OF THE INVENTION

Many users of on-line services utilize text-based communication systems for the exchange of messages. Two well known text-based communication systems techniques are e-mail, wherein text messages are placed in a central file associated with a destination address, to be downloaded at a later time when the recipient "logs in" and instant messaging, where text is typed and exchanged between computers when a "buddy" address (or group address) is present in an address field. Although it is possible to attach files to the text file for the transfer of non-text formats, including graphic and audio files, this technique is greatly limited. When an audio file is attached, the technique lacks a method for convenient recording, storing, exchanging, responding and listening to voices between one or more parties, independent of whether or not they are logged in to their network.

SUMMARY OF THE INVENTION

The present invention is a system and method for voice exchange and voice distribution utilizing a voice container. Based on states, rules and type of devices provided, voice containers can be stored, transcoded and routed to the appropriate recipients instantaneously or stored for later delivery. The present invention system



and method for voice exchange and voice distribution allows a software agent with a user interface in conjunction with a central server to send, receive and store messages using voice containers. In addition, the present invention for voice exchange and voice distribution provides the ability to store messages both locally and centrally at the server whenever the recipient is not available for a prescribed period of time. Additionally, the present invention allows manual or pre-programmed control of the origination, distribution and listening to these messages, and also offers the options of ringing a pre-configured phone number at the recipient's request for the delivery of the message or forwarding the message to another Internet or voice container enabled device.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present invention may be obtained from consideration of the following description in conjunction with the drawings in which:

- FIG. 1 is a high level functional block diagram of the system for voice exchange and voice distribution;
- FIG. 1A is the high level functional block diagram of FIG. 1 including a voice format detection and translation system;
 - FIG. 2 is a high level overview of the system architecture;
 - FIG. 3 is an exemplary embodiment of the voice container structure;
- FIG. 4 is a high level flow chart for PC to PC and PC to network communications utilizing the system for voice exchange and voice distribution;



FIG. 5 is a high level flow chart for dial in emulation from a telephone utilizing the system for voice exchange and voice distribution;

- FIG. 6 is a high level flow chart for spot calling utilizing the method and system for voice exchange and voice distribution;
- FIG. 7 is a flow chart of an exemplary embodiment illustrating the method and system with respect to the originator;
- FIG. 8 is a flow chart of an exemplary embodiment illustrating the method and system with respect to the central server;
- FIG. 9 is a flow chart of an exemplary embodiment illustrating the method and system with respect to the recipient;
- FIG. 10 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the originator of a voice spot;
- FIG. 11 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the central server for a voice spot;
- FIG. 12 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the recipient of a voice spot;
- FIG. 13 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the originator and recipient for an anonymous voice communication;



FIG. 14 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the central server for an anonymous voice communication;

- FIG. 15 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the central server for emulation through a telephone system;
- FIG. 16 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the originator of a voice container with multimedia attachments;
- FIG. 17 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the central server for a voice container with multimedia attachments;
- FIG. 18 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to the recipient of a voice container with multimedia attachments;
- FIG. 19 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to preparing a voice container without a PC; and,
- FIG. 20 is a flow chart of an exemplary embodiment illustrating the method and system for voice exchange and voice distribution with respect to playing a voice container on a non-PC based appliance.



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