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(75) Inventors/Applicants (for US only): **HAMBERG, Max** [FI/FI]; Kunnaankuja 9, FIN-01370 Vantaa (FI). **EINOLA, Heikki** [FI/FI]; Kaksoiskiventie 7-9 B 5, FIN-02760 Espoo (FI). **KUOPPAMÄKI, Liisa** [FI/FI]; Vallikuja 1 B 11, FIN-02600 Espoo (FI). **SOININEN, Jonne** [FI/FI]; Urheilukatu 32 a 11, FIN-00250 Helsinki (FI).

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(74) Agent: **KOLSTER OY AB**; Iso Roobertinkatu 23, P.O. Box 148, FIN-00121 Helsinki (FI).

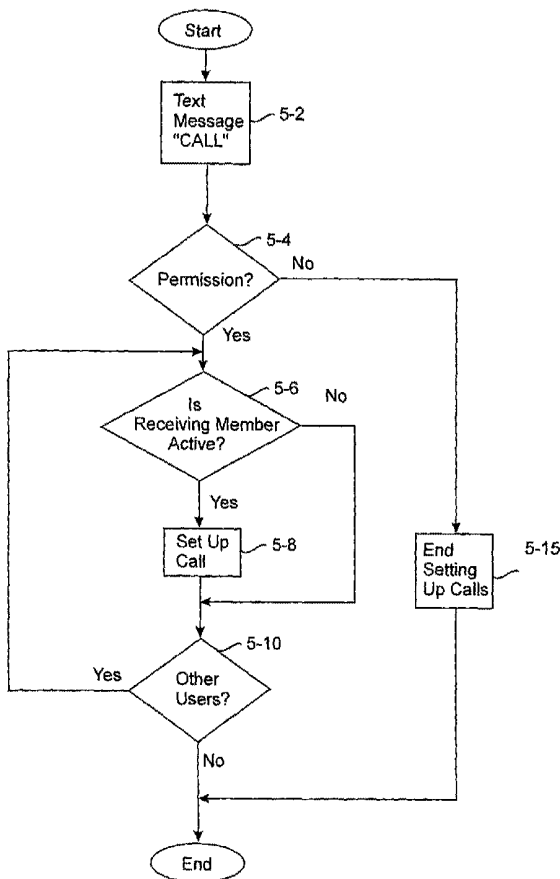
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(54) Title: SETTING UP A CONFERENCE CALL BETWEEN MEMBERS OF A CHAT GROUP



(57) Abstract: The invention relates to a method of setting up conference calling in a communications system. In the method, at least one subscriber group having two or more subscribers is established in a server connected to the communications system; subscribers registered in the set up group chat with each other by messages in such a manner that the server in the communications system receives a message of a subscriber participating in the message chat and transmits it on to other subscribers belonging to the group in question. In the method, it is also possible to move from message chatting to conference calling by one of the subscribers in the subscriber group sending a pre-defined message to the server, which message acts as a signal to the server to move the subscribers registered as active in the subscriber group in response to receiving said pre-defined message.

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Setting up a conference call between members  
of a chat group.

## BACKGROUND OF THE INVENTION

The invention relates to setting up a conference call especially in digital communications systems.

5 In message chatting, a chat group is formed in a communications server by subscribers registered into a certain group. After the server has received a message sent by one of the members in the group, it sends it on to all other active members in the group.

10 Conference calling refers to a teleconference based on telephony between three or more participants, in which several subscribers are connected to the same call. Such a call is often referred to as a conference call or a group call. Conference calling can be set up either by the operator or the user itself.

## BRIEF DESCRIPTION OF THE INVENTION

15 It is an object of the invention to add to a message chat group the option of also setting up a conference call between the members of the group.

This object and other advantages provided by the invention are achieved by a method as claimed in claim 1, a communications system as claimed in claim 5 and a messaging server as claimed in claim 9. Preferred  
20 embodiments of the invention are disclosed in the dependent claims.

The invention is based on joining message chatting and conference calling operationally to each other in such a manner that it is possible to move from message chatting in a simple way to a conference call between the members of the group by transmitting to the messaging server a pre-defined  
25 message which functions as a conference call request. The server reacts to the conference call request by setting up a conference call between the active members of the group. When the call is ended, chat mode is re-established. The functionality of a conventional message chat group can be significantly expanded by means of the invention. The invention makes it possible to set up  
30 arbitrary chat groups which can easily change from message chatting to conference calling and back. Chat groups can be defined by the users or the service provider, thus making them independent of communications operators. A conference call is, however, established between a pre-defined group with one message without any complex conference call definitions at the beginning  
35 of the call. The server can, however, utilise the conference call solutions

existing in the communications network in the form of an intelligent network service, for instance, which the server triggers when receiving said message. The server can also itself act as a service switching point for the conference call, in which case it is completely independent of the communications network. One advantage provided by the invention is that it does not require  
5 any special terminal support, but works on all terminals capable of transmitting and/or receiving messages.

#### BRIEF DESCRIPTION OF THE FIGURES

In the following, the invention will be described by means of  
10 preferred embodiments, with reference to the attached drawings in which

Figure 1 illustrates a communications system to which the invention can be applied,

Figure 2 illustrates a database of the invention,

Figure 3 shows a flow chart of setting up a message chat,

15 Figure 4 shows a flow chart of message chatting, and

Figure 5 shows a flow chart of setting up a conference call.

#### DETAILED DESCRIPTION OF THE INVENTION

Figure 1 shows a general system chart of a communications system to which the invention can be applied. Five subscribers ANN (MS1, Mobile  
20 Station 1), HENRY (MS2), LISA (MS3), JOHN (MS4) and MAX (MS5) are connected to the communications system, in this case a digital mobile system, i.e. a GSM (Global System for Mobile Communications) system. The mobile stations MS1 to MS5 can be conventional mobile stations equipped with a short message service. Although in the following the invention will be  
25 described by means of a short message and a short message service, a message can comprise e.g. at least one of the following messages: a short message, an instant message, an e-mail message, a multimedia message, a unified messaging message, a WAP (Wireless Application Protocol) message or a SIP (Session Initiation Protocol) message. The mobile stations can also  
30 be mobile stations equipped with e.g. an instant message, an e-mail message, a multimedia message, a unified messaging message, a WAP (Wireless Application Protocol) message or a SIP (Session Initiation Protocol) message service.

The GSM system can be directly connected to the Internet. In  
35 addition, the GSM system is connected to a quick message server SERVER of

the invention. The quick message server SERVER is connected to the GSM network in the manner of an ordinary short message switching centre, but it is also possible to have speech channels connectable from the GSM network to the server SERVER for setting up a conference call as described. The quick message server can also be connected to an intelligent network, for instance to an intelligent network service control point SCP, in which case the quick message server can initiate a conference call in the GSM network as an intelligent network service. A work station (WS) represents an Internet work station, by means of which a user or a quick message service provider can through the Internet user interface of the server SERVER modify the group settings of the server or participate by means of an IP telephone (Internet Protocol, Voice over IP) in the operation of the group . A user can instead of the work station WS also use a conventional mobile station MS which has an Internet browser and the possibility to set up a data link to the Internet. A user can possibly also modify his or her user data by means of short messages instead of or as an alternative to the Internet user interface. A database DB represents a database residing in the quick message server, for instance.

Figure 2 shows an example of the more detailed structure of the database DB. Altogether five subscribers, their alias names being Henry, Lisa, John, Max and Ann, have registered into two short message chat groups G1 and G2. The user names, telephone numbers, status data and any possible notable matters (note) are stored for each group member in the database.

When the operator allows it, a subscriber can activate or generate a quick message group by means of a specific GENERATE message. According to an alternative mode of operation, the service provider can set up the group through his own user interface. This is usually done when one member of the group orders the service and gives the names of the other group members. For a flexible use of the service, it is, however, preferable that one or more group members are named as masters who are entitled to change group members and their rights. This can preferably be done in a fixed work station WS by means of an Internet browser by accessing the WWW (World Wide Web) site of the server SERVER. At this time, the access rights of the user are checked by requesting a user name and password, for instance. Correspondingly, the changes can be made through a mobile station with a browser and a possibility to access the Internet. The original registration of the group can have been made in the same manner through the Internet following

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