

DLNA network, the control unit **530** preferably requests execution of multimedia contents included in the multimedia message to the DLNA network in response to the user's request, and controls execution of received multimedia contents.

[0071] The wireless communication interface unit **540** performs the wireless communication by transmitting and receiving data through a mobile communication network, which is an essential function of the mobile terminal **500**.

[0072] The DLNA interface unit **550** stores a DLNA protocol, and performs data communication through a DLNA network. When the mobile terminal **500** prepares a multimedia message for transmission, the DLNA interface unit **550** requests multimedia contents accessible through the DLNA network corresponding to a user command for preparing the multimedia message, and receives a response through the DLNA network.

[0073] When the mobile terminal **500** receives a multimedia message generated by the above method through a DLNA network, the DLNA interface unit **550** receives a notifying signal of reception of the multimedia message through the DLNA network, and transmits a signal for viewing the multimedia message to the DLNA network. The DLNA interface unit **550** receives a multimedia message in an XML format in response to the request for viewing the multimedia message, and transmits a signal for execution of a multimedia file included in the multimedia message to the DLNA network.

[0074] The display unit **560** is controlled by the control unit **530**, and displays various kinds of information related to the operation status of the mobile terminal **500** and time information. Preferably, the display unit **560** displays a message of notifying reception of a multimedia message and the result of execution of multimedia contents included in the received multimedia message.

[0075] The speaker **570** is controlled by the control unit **530**, and outputs sounds (for example, a dial tone) related to the operation of the mobile terminal **500**. The speaker **570** preferably outputs a sound of notifying reception of a multimedia message during the reception of the multimedia message.

[0076] The microphone **580** collects sound signals from the surroundings, and transmits the signals to the control unit **530**.

[0077] The mobile terminal **500** transmits only access information on multimedia files to be added to a multimedia message during the preparation of the multimedia message. If a multimedia message is received, the mobile terminal **500** accesses the corresponding multimedia file and executes the multimedia file in response to a request for execution of the multimedia file.

[0078] Therefore, multimedia files to be added to a multimedia message may more freely be selected while preparing the multimedia message.

[0079] FIG. 5 is a schematic block diagram of a content management apparatus **600** for providing a multimedia messaging service and integrally managing content(s) of instruments connected to a DLNA network, according to an exemplary embodiment of the present invention.

[0080] Referring to FIG. 5, the content management apparatus **600** includes a multimedia content storage unit **610**, input unit **620**, control unit **630**, web communication interface unit **640**, DLNA interface unit **650**, and document conversion unit **660**.

[0081] The multimedia content storage unit **610** preferably stores multimedia content(s), which includes multimedia files accessible through the DLNA network and a DLNA network address of an instrument storing the multimedia files.

[0082] The input unit **620** inputs a user's signal for operation control of the content management apparatus **600**, and transmits the signal to the control unit **630**.

[0083] The control unit **630** controls the operation of the content management apparatus **600** according to a signal input through the input unit **620** or pre-stored operating programs. If a signal of requesting multimedia contents is received through the DLNA interface unit **650**, the control unit **630** controls the DLNA interface unit **640** to transmit the multimedia contents stored in the multimedia content storage unit **610** in response to the signal. Control unit **630** may be a processor suitable for executing computer instructions to perform the exemplary processing described herein. The computer instructions may be stored in a memory (not shown) in communication with the processor. Alternatively, control unit **630** may comprise hardware and/or software elements that are programmed to execute the processing described herein.

[0084] Preferably, the control unit **630** extracts corresponding access information (for example, location information) on a multimedia file in response to a signal for requesting execution of a multimedia file input by the mobile terminal that received a multimedia message, and controls the execution of the multimedia file by using the access information. The access information on the multimedia file is preferably a DLNA network address of an instrument storing the multimedia file in a DLNA network to which the sender's mobile terminal of the multimedia message is connected.

[0085] The web communication interface unit **640** controls web communication, and transmits a web page generated by the document conversion unit **660** as an Internet mail. If the content management apparatus **600** receives a multimedia message for transmission from the sender's mobile terminal, the web communication interface unit **640** receives, from the document conversion unit **660**, a web page converted in an HTML format from the multimedia message, and transmits the web page through the Internet.

[0086] The DLNA interface unit **650** loads a DLNA protocol, and controls communication through the DLNA network. In the case that the content management apparatus **600** performs communication with the sender's mobile terminal, the DLNA interface unit **650** transmits a notifying signal of reception of a multimedia message to the receiver's mobile terminal in response to reception of an e-mail including the multimedia message in a web page format. In the case that the content management apparatus **600** performs communication with the receiver's mobile terminal, the DLNA interface unit **650** transmits a multimedia message converted to a web page in an XML format to the receiver's mobile terminal in response to a request for viewing the multimedia message sent by the receiver's mobile terminal, receives a signal for requesting execution of a multimedia file included in the multimedia message from the receiver's mobile terminal, and transmits the signal to the control unit **630**.

[0087] The document conversion unit **660** converts a multimedia message into a format executable in a mobile terminal or into a format transmittable through the Internet. That is, the document conversion unit **660** converts a mul-