

network transmission, media format, streaming protocol, and DRM (Digital Rights Management) based on UPnP (Universal Plug and Play) technology, and supports a network system between home electronic instruments based on IP (Internet Protocol).

[0041] Home electronic instruments connected to a DLNA networked system share various contents (for example, multimedia files) stored in the instruments by using IP addresses allocated by the DLNA networked system.

[0042] Referring to FIG. 1, the DLNA networked system includes a DLNA home networked system **100** and a mobile terminal **300** connected to the DLNA home networked system **100**.

[0043] The DLNA home networked system **100** includes a digital media server (hereinafter, DMS) **110**, such as a personal computer, for providing multimedia contents, and a plurality of digital media players (hereinafter, DMP) **120** and **130**, such as AV (audio and video) instruments, for executing the multimedia contents provided by the DMS **110**. The DMS **110** and DMPs **120** and **130** perform wired or wireless communication. In the case of wired communication, the DMS **110** and DMPs **120** and **130** perform communication through IEEE 1394 or Ethernet. In the case of wireless communication, the DMS **110** and DMPs **120** and **130** preferably perform communication through Bluetooth, IEEE 802.11, or Ultra Wide Band. The DMS **110** may include a function of a home gateway in the home networked system, and the DMPs **120** and **130** may include a function of a control point.

[0044] Communication between the DLNA home networked system **100** and the Internet **200** is performed by using IPv4 and IPv6 protocols, HTTP, and VPN, and the mobile terminal **300** is connected to the DLNA home networked system **100**.

[0045] Information including digital contents may be shared between various instruments connected to the DLNA home networked system **100**. For example, an AV content stored in the DMS **110** may freely be played by the DMP **120** or DMP **130**, and information obtained by the DMS **110** through the Internet may be shared by various instruments connected to the DLNA home networked system **100**. For this, the DLNA home networked system **100** requires a content management apparatus for managing content stored in various instruments, and the DMS **110** generally performs the function of the content management apparatus.

[0046] Accordingly, the mobile terminal **300** may access the information stored in the DLNA home networked system through the DMS **110**, and may generate a multimedia message by using the accessed information.

[0047] As described above, the present invention provides an apparatus and a method for generating and transmitting a multimedia message by using access information (for example, DLNA network address) through a DLNA networked system, and for executing a multimedia file included in the multimedia message.

[0048] FIG. 2 is a view showing a system configuration for providing a multimedia messaging service according to an exemplary embodiment of the present invention. FIG. 2 illustrates a system configuration for transmitting a multimedia message between different DLNA networks (i.e. between a first DLNA network and a second DLNA network) connected through an IP network.

[0049] Referring to FIG. 2, a mobile terminal **300** connected to the first DLNA network receives information on

multimedia contents from a DMS **10** (i.e. personal computer) accessible through the first DLNA network. For example, the mobile terminal **300** receives multimedia files stored in a first AV instrument **120** and a second AV instrument **130** from the DMS **110**, and DLNA network addresses of the AV instruments **120** and **130**. The mobile terminal **300** then generates a multimedia message by using the DLNA network addresses and multimedia files, and transmits the multimedia message to the DMS **110**.

[0050] The DMS **110** transmits the multimedia message to a DMS **210** of the second DLNA network through the Internet **200**. That is, the DMS **110** converts the multimedia message to a web page, and transmits the web page to the DMS **210** as an e-mail.

[0051] The DMS **210**, having received the e-mail, transmits the web page to a mobile terminal **400** (i.e. receiver's mobile terminal), and, in response to a request for execution of a multimedia file from the mobile terminal **400**, requests execution of the multimedia file to the corresponding instrument (i.e. first AV instrument **120** or second AV instrument **130**) through the Internet **200** and DMS **110**.

[0052] As described above, the present invention enables free selection of a multimedia file to be included in a multimedia message while preparing the multimedia message.

[0053] FIG. 3A to 3B are flow charts showing a method for providing a multimedia messaging service by using a DLNA networked system according to an exemplary embodiment of the present invention. FIG. 3A to 3B illustrate a process of transmitting a multimedia message in a synchronizing system between the DLNA network and IP network having the configuration shown in FIG. 2. A mobile terminal **300** connected to a first DLNA network generates a multimedia message including a multimedia file stored in a first AV instrument **120**, and transmits the multimedia message to a mobile terminal **400** connected to a second DLNA network.

[0054] Referring to FIG. 3A to 3B, a method of transmitting and receiving a multimedia message according to an exemplary embodiment of the present invention is described as follows.

[0055] Firstly, when preparation of a multimedia message is requested (S102), the mobile terminal **300** collects multimedia contents accessible through a network in response to the request. For this, the mobile terminal **300** requests multimedia contents to a DMS **10** to which the mobile terminal **300** and a first DLNA network are connected (S104), and receives the multimedia contents from the DMS **110** (S106). The mobile terminal **300** receives multimedia contents including access information (for example, DLNA network address) through the first DLNA network.

[0056] The mobile terminal **300**, having received the multimedia contents, selects a multimedia file to be added to a multimedia message from the multimedia contents, and generates a multimedia message including access information on the multimedia file (S808). For this, the mobile terminal **300** selects at least one multimedia file to be added to the multimedia message from the multimedia files included in the received multimedia contents according to external selection information (for example, user's selection information), and extracts the address of the first DLNA network, in which an instrument storing the selected multimedia file is installed. The mobile terminal **300** preferably generates a multimedia message including the address