MOBILE TERMINAL AND METHOD OF DISPLAYING STANDBY SCREEN THEREOF

CROSS-REFERENCE TO RELATED APPLICATION

[0001] Pursuant to 35 U.S.C. § 119(a), this non-provisional patent application claims the benefit of the earlier filing date and right of priority of Patent Application No. 10-2006-0120899 filed in Republic of Korea on Dec. 1, 2006, the entire contents of which are hereby incorporated by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to a mobile terminal, and more particularly, to a mobile terminal and a method of displaying a broadcast image on a standby screen.

DISCUSSION OF THE RELATED ART

[0003] A mobile terminal is a device which may be configured to perform various functions. For example, such functions may include data and voice communications, capturing images and video via a camera, recording audio, playing music files via a speaker system, and displaying images and video on a display. Some mobile terminals include additional functions which support playing games, while other terminals are configured as multimedia players. More recently, mobile terminals have been configured to receive broadcast and multicast signals which permit viewing video and television program content.

[0004] Efforts are ongoing to support and increase the functionality of mobile terminals. Such efforts include software and hardware improvements, as well as changes and improvements in the structural components which form the mobile terminal.

SUMMARY OF THE INVENTION

[0005] In accordance with an embodiment of the present invention, a standby mode screen display method for a mobile terminal capable of receiving and displaying a multimedia broadcast program includes detecting in a screen selection mode at least one search identifier associated with searching multimedia broadcast programs and a display mode identifier, comparing the search identifier with program guide information associated with multimedia broadcast programs to find a matching multimedia broadcast program received wirelessly from a remote location, and displaying, as a standby mode screen, the matching multimedia broadcast program on the mobile terminal in accordance with the display mode identifier.

[0006] It is contemplated that the at least one search identifier comprises at least one of channel, program title, search word, and broadcast time. It is further contemplated that the program guide information comprises electronic program guide broadcast with the multimedia broadcast programs.

[0007] It is contemplated that the display mode identifier is configured to display the matching multimedia broadcast program in at least one of still and moving images. It is further contemplated that the display mode identifier comprises displaying at least one still image that is periodically updated. Additionally, it is contemplated that when the display mode identifier comprises displaying moving images as the standby mode screen, then the moving image is displayed without sound.

[0008] It is contemplated that the standby mode screen display method further includes selecting a presently viewing multimedia broadcast program as the standby mode screen through a menu option. It is further contemplated that the step of displaying the matching multimedia broadcast program further comprises displaying at least part of the program guide information corresponding to the matching multimedia broadcast program.

[0009] It is contemplated that the standby mode screen display method further includes displaying in the standby mode screen an indicator representing that the standby mode screen is set to display the matching multimedia broadcast program.

[0010] In another embodiment of the present invention a mobile terminal includes a broadcast receiving module configured to receive a multimedia broadcast program, a user input unit configured to receive user input, wherein the user input comprises at least one search identifier associated with searching multimedia broadcast programs and a display mode identifier, a controller configured to compare the search identifier with program guide information associated with multimedia broadcast programs to find a matching multimedia broadcast program received wirelessly from a remote location, and a display configured to display, as a standby mode screen, the matching multimedia broadcast program in accordance with the display mode identifier.

[0011] Additional features and advantages of the invention will be set forth in the description which follows, and in part will be apparent from the description, or may be learned by practice of the invention. It is to be understood that both the foregoing general description and the following detailed description of the present invention are exemplary and explanatory and are intended to provide further explanation of the invention as claimed. These and other embodiments will also become readily apparent to those skilled in the art from the following detailed description of the embodiments having reference to the attached figures, the invention not being limited to any particular embodiments disclosed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The above and other aspects, features, and advantages of the present invention will become more apparent upon consideration of the following description of preferred embodiments, taken in conjunction with the accompanying drawing figures.

[0013] FIG. **1** is a block diagram of a mobile terminal in accordance with an embodiment of the present invention.

[0014] FIG. **2** illustrates a perspective view of a front side of a mobile terminal according to an embodiment of the present invention.

[0015] FIG. **3** illustrates a rear view of the mobile terminal shown in FIG. **2**.

[0016] FIG. **4** illustrates a block diagram of a CDMA wireless communication system operable with the mobile terminal of FIGS. **1-3**.

[0017] FIG. **5** is a flowchart illustrating a method of displaying a standby screen of a mobile terminal according to an embodiment of the present invention.

[0018] FIGS. **6A-6E** illustrate standby screens for setting a display function according to an embodiment of the present invention.

[0019] FIGS. **7A-7D** illustrate a standby screen displayed on a mobile terminal according to an embodiment of the present invention.