

Exhibit H



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Jeong

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(54) **MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL**

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(75) **Inventor:** Moon-Sang Jeong, Daegu (KR)

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(73) **Assignee:** Samsung Electronics Co., Ltd., Suwon-si (KR)

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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This patent is subject to a terminal disclaimer.

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(Continued)

(30) **Foreign Application Priority Data**

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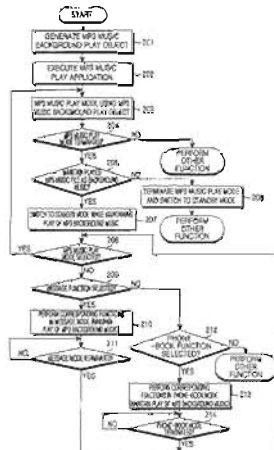
(57) **ABSTRACT**

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G06F 9/46 (2006.01)
G06F 3/00 (2006.01)
G06F 3/16 (2006.01)
H04M 1/00 (2006.01)
(52) **U.S. Cl.** 718/107; 715/716; 715/718;
715/727; 455/556.1; 455/556.2
(58) **Field of Classification Search** 718/1,
718/100-108; 455/1-899; 715/762-764,
715/716, 718, 727

An apparatus and method capable of performing multiple tasks in a portable terminal are provided, in which menu functions of the portable terminal can be implemented while continuing to play the music. The multi-tasking apparatus includes a controller for performing controlling to implement at least one menu function while playing a music file and a display unit for displaying an indication that the music file is being played during the implementation of the menu function.

See application file for complete search history.

20 Claims, 3 Drawing Sheets



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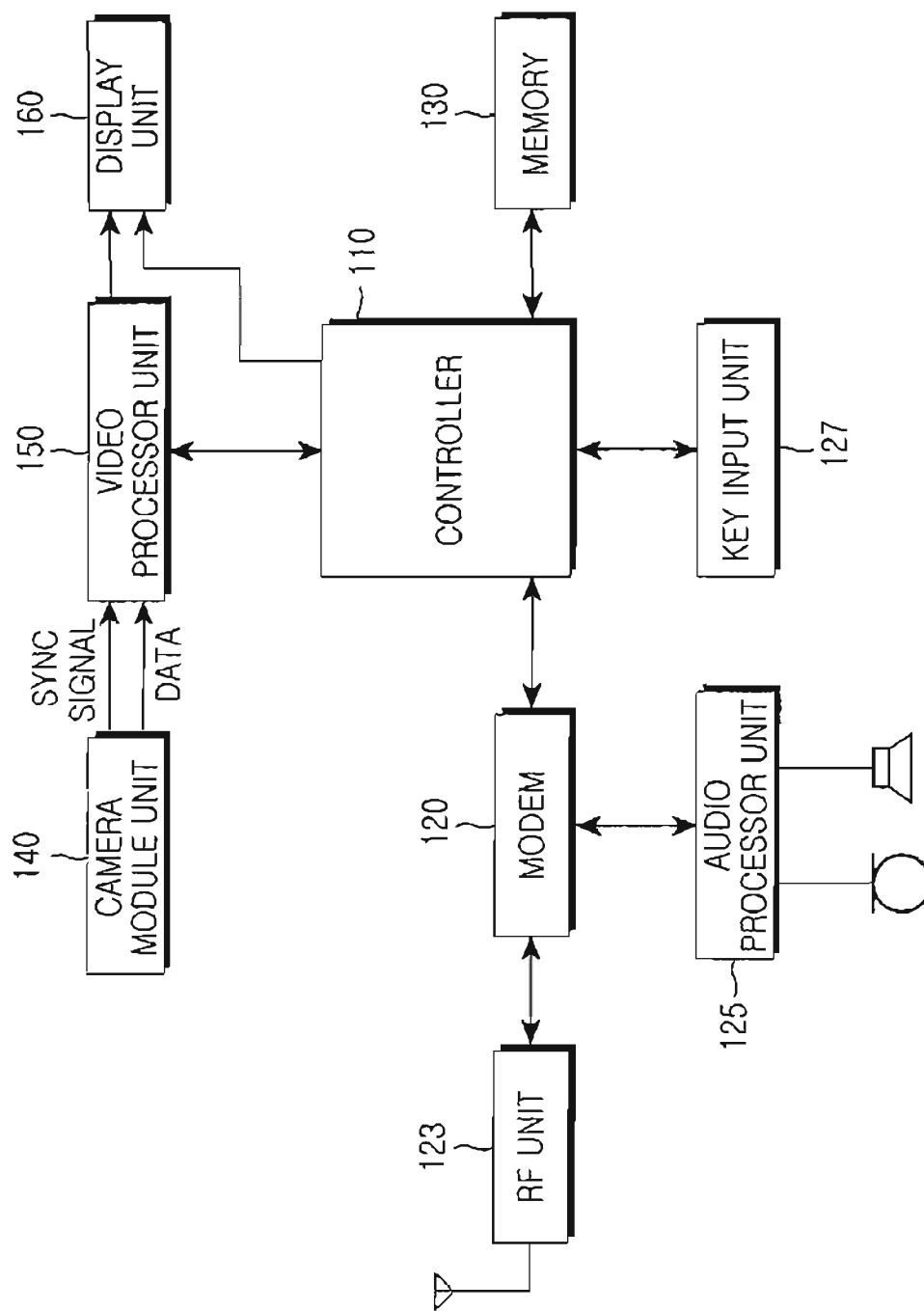


FIG. 1

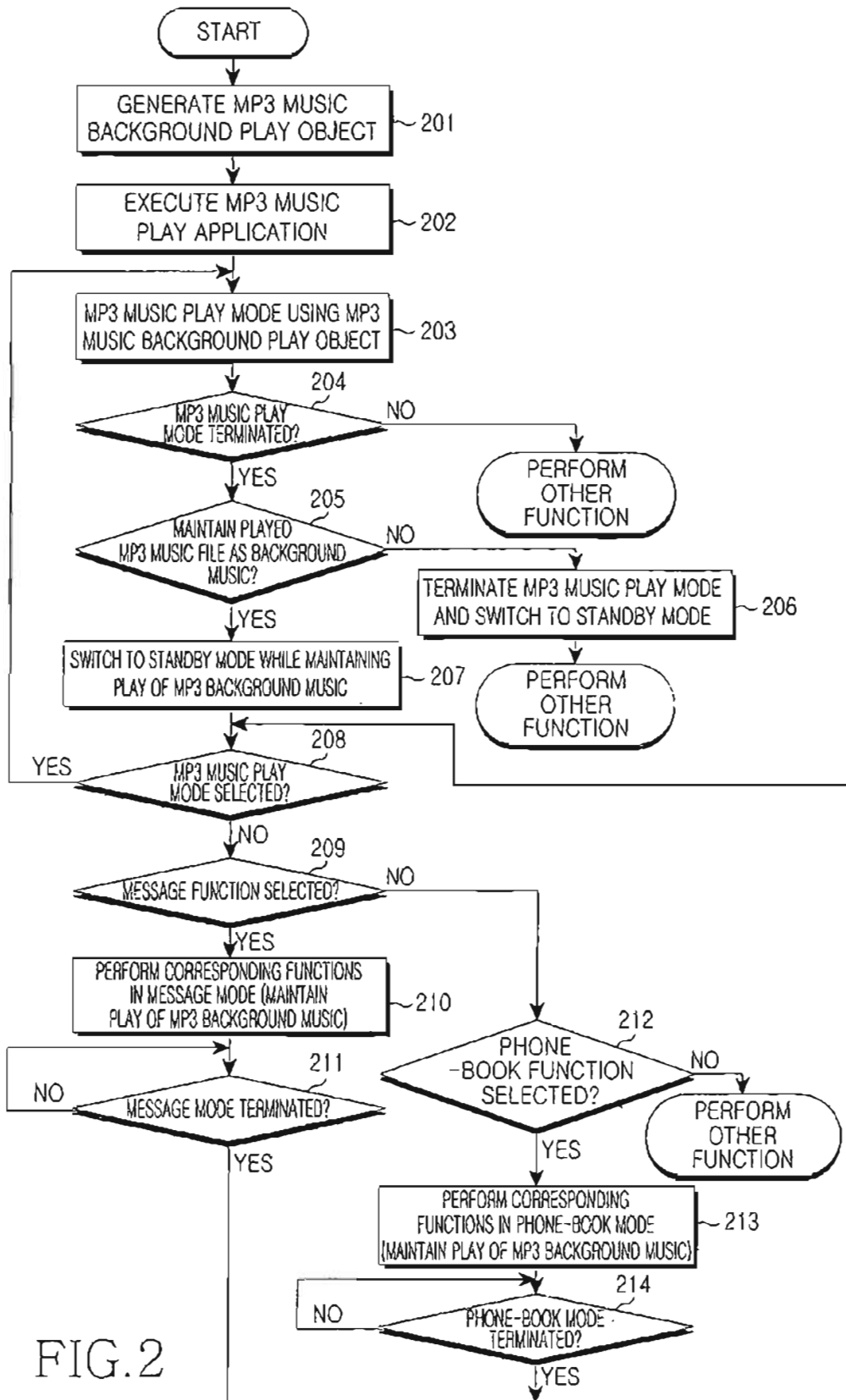


FIG. 2

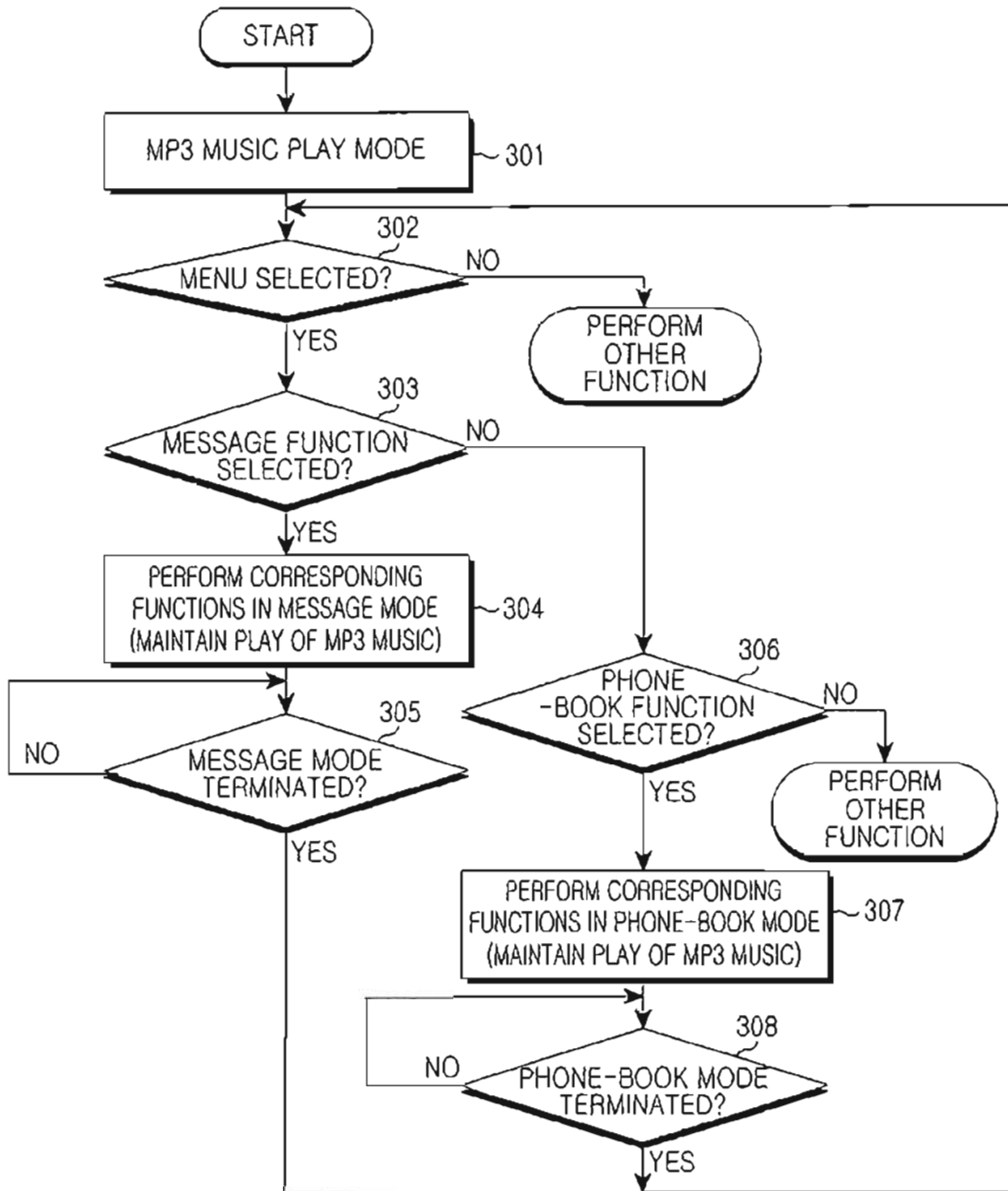


FIG. 3

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MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of prior application Ser. No. 11/390,338, filed on Mar. 28, 2006.

PRIORITY

This application claims the benefit under 35 U.S.C. § 119 (a) of Korean Patent Application filed in the Korean Intellectual Property Office on Aug. 30, 2005 and assigned Serial No. 2005-79921, the entire disclosure of which is hereby incorporated by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention generally relates to an apparatus and method for performing multiple tasks in a portable terminal. More particularly, the present invention relates to a multi-tasking apparatus and method in a portable terminal, where menu functions of the portable terminal can be implemented while continuing to play a music file.

2. Description of the Related Art

Portable terminals include various applications such as scheduling, game, and Short Message Service (SMS) applications. When integrated with digital devices, portable terminals include multimedia menus such as options for MP3 music play. Generally, a portable terminal having an MP3 music play function controls and plays an MP3 music file using a separate player. For example, a user may select an MP3 music play function from menus of a portable terminal for listening to the music. The user may also selectively use control-related functions such as play, pause, repeat, and terminate the MP3 music play function.

However, the user cannot simultaneously work on several menus of the portable terminal while listening to the music using the conventional MP3 music play function. In other words, the user cannot use the other functions of scheduling, picture viewing, or game menu among others while listening to the music.

To address this problem, a control processor is added to manage only MP3 music play, resulting in an increase in cost and an increase in the complexity of hardware and software configurations.

Accordingly, there is a need for an improved system and method to allow a user to simultaneously work on multiple menus of the portable terminal while listening to music.

SUMMARY OF THE INVENTION

An aspect of exemplary embodiments of the present invention is to address at least the above problems and/or disadvantages and to provide at least the advantages described below. Accordingly, an aspect of exemplary embodiments of the present invention is to provide a multi-tasking apparatus and method in a portable terminal, in which menu functions of the portable terminal can be implemented while continuing to play a music file.

According to one aspect of an exemplary embodiment of the present invention, a multi-tasking apparatus in a portable terminal is provided. The multi-tasking apparatus includes a controller for performing controlling to implement at least one menu function while playing a music file and a display

2

unit for displaying an indication that the music file is being played during the implementation of the menu function.

According to another aspect of an exemplary embodiment of the present invention, a multi-tasking method in a portable terminal is provided. Use of the multi-tasking method allows a music file to be played in the portable terminal and allows menu functions of the portable terminal to be implemented while continuing to play the music file.

According to another aspect of an exemplary embodiment of the present invention, a multi-tasking method in a portable terminal is provided. Where a music background play object is prevented in a standby mode. The music background play object acquires a task for music background play and provides a control interface for music play. The music file is played through multi-tasking in the standby mode using the music background play object upon selection of a music play mode in the portable terminal. The played music file is selected as background music during the play of the music file, switching to the standby mode while continuing to play the music as background music upon selection of the played music file as background music. The menu functions of the portable terminal are implemented in the standby mode so that the play of background music is maintained and the menu functions of the portable terminal are implemented while continuing to play background music.

According to another aspect of an exemplary embodiment of the present invention, a multi-tasking method in a portable terminal is provided. Where a music background play object is generated in a standby mode. The music background play object acquires a task for music background play and provides a control interface for music play. The music file is played through multi-tasking in the standby mode using the music background play object upon selection of a music play mode in the portable terminal. A menu function of the portable terminal in the music play mode is selected. The portable terminal switches to a mode of the selected menu of the portable terminal and implements a corresponding function while continuing to play the music upon selection of the menu function of the portable terminal. The portable terminal switches to the music play mode upon termination of the mode of the selected menu of the portable terminal.

BRIEF DESCRIPTION OF THE DRAWINGS

The above and other exemplary objects, features, and advantages of exemplary embodiments of the present invention will be more apparent from the following description taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a block diagram of a portable terminal according to an exemplary embodiment of the present invention;

FIG. 2 is a flowchart illustrating a process of implementing menu functions of a portable terminal while continuing to play a music file according to a first exemplary embodiment of the present invention; and

FIG. 3 is a flowchart illustrating a process of implementing menu functions of a portable terminal while continuing to play a music file according to a second exemplary embodiment of the present invention.

Throughout the drawings, the same drawing reference numerals will be understood to refer to the same elements, features, and structures.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

The matters defined in the description such as a detailed construction and elements are provided to assist in a compre-

hensive understanding of exemplary embodiments of the invention. Accordingly, those of ordinary skill in the art will recognize that various changes and modifications of the embodiments described herein can be made without departing from the scope and spirit of the invention. Also, descriptions of well-known functions and constructions are omitted for clarity and conciseness.

FIG. 1 is a block diagram of a portable terminal according to an exemplary embodiment of the present invention, in which an MP3 music control processor is not included. Application modules of the portable terminal include at least one applet and each of the application modules, that is each menu of the portable terminal, independently performs multi-tasking.

Referring to FIG. 1, a Radio Frequency (RF) unit 123 performs radio communication for the portable terminal. The RF unit 123 includes an RF transmitter (not shown) for up-converting a frequency of a transmission signal and amplifying the up-converted transmission signal and an RF receiver (not shown) for low-noise-amplifying a received signal and down-converting a frequency of the low-noise-amplified signal.

A modem 120 includes a transmitter for encoding and modulating the transmission signal and a receiver for decoding and demodulating the received signal.

An audio processor unit 125 may be a codec including a data codec for processing packet data and an audio codec for processing an audio signal. The audio processor unit 125 converts a digital audio signal received from the modem 120 into an analog signal through the audio codec for reproduction. Alternatively, the audio processor unit 125 converts a transmission analog audio signal generated by a microphone into a digital audio signal through the audio codec for transmission to the modem 120. The codec is included in the controller 110 or it is provided separately. According to an exemplary embodiment of the present invention, the audio processor unit 125 performs an MP3 music play function in a standby mode of the portable terminal. In addition, the audio processor unit 125 performs the MP3 music play function while implementing menu functions of the portable terminal according to an exemplary embodiment of the present invention.

A memory 130 is comprised of program memories and data memories. The program memories store programs for controlling general operations of the portable terminal and control programs for implementing various menu functions of the portable terminal while continuing to play an MP3 music file according to an exemplary embodiment of the present invention. The data memories temporarily store data generated during execution of the programs.

A controller 110 controls the overall operation of the portable terminal. The controller 110 includes the modem 120 and the codec. The controller 110 performs controlling to switch the portable terminal to the standby mode while continuing to play an MP3 music file according to an exemplary embodiment of the present invention. The controller 110 also implements menu functions of the portable terminal while continuing to play an MP3 music file according to an exemplary embodiment of the present invention.

A camera module unit 140 includes a camera sensor and a signal processor. The camera sensor photographs image data and converts a photographed optical signal into an electric signal. A signal processor converts an analog image signal photographed by the camera sensor into digital data. The camera sensor is assumed to be a charge-coupled device (CCD) sensor and the signal processor may be implemented

with a digital signal processor (DSP). The camera sensor and the signal processor may be integrated as one body or provided separately.

A video processor unit 150 generates screen data for displaying an image signal output from the camera module unit 140. The video processor unit 150 processes an image signal output from the camera module unit 140 by the frame unit and outputs frame image data suitable for the characteristic and the size of a display unit 160. The video processor unit 150 includes a video codec and compresses frame image data displayed on the display unit 160 according to a predetermined compression method or reconstructs compressed frame image data into original frame image data. The video codec may be JPEG codec, MPEG-4 codec, or Wavelet codec. The video processor unit 150 is assumed to have an On Screen Display (OSD) function and may output OSD data according to a screen size displayed under the control of the controller 110.

The display unit 160 displays an image signal output from the video processor unit 150 on a screen and displays user data output from the controller 110. Preferably, the display unit 160 may be a liquid crystal display (LCD), and if so, the display unit 160 may include an LCD controller, a memory for storing image data, and an LCD device. When the LCD is implemented with a touch screen, the display unit 160 may also serve as an input unit. The display unit 160 displays MP3 music information in an MP3 music play mode according to an exemplary embodiment of the present invention. According to an exemplary embodiment of the present invention, the display unit 160 also displays information that an MP3 music file is being played in the standby mode of the portable terminal. The display unit 160 also displays information that the MP3 music file is being played during implementation of menu functions of the portable terminal.

A key input unit 127 includes alphanumeric keys for inputting number and character information and function keys for setting various functions. The key input unit 127 may also include a key for controlling MP3 music according to an exemplary embodiment of the present invention.

Hereinafter, a multi-tasking operation in the portable terminal will be described in detail with reference to FIGS. 2 and 3.

FIG. 2 is a flowchart illustrating a process of implementing menu functions of the portable terminal while continuing to play a music file according to a first exemplary embodiment of the present invention. In the first exemplary embodiment of the present invention, various menu functions such as message, phone-book, scheduling, game, and picture searching functions among others are simultaneously implemented.

The exemplary embodiments of the present invention will be described in detail with reference FIG. 1.

Referring to FIG. 2, the controller 110 of the portable terminal generates an MP3 music background play object in the standby mode in step 201 to play an MP3 music file as background music. The MP3 music background play object generated in step 201 internally acquires a task for MP3 music background play, returns to the standby mode, and provides a control interface to allow other applications to transmit commands for music play and control through the MP3 music background play object.

When an MP3 music play command is selected in the portable terminal, the controller 110 senses the selection and executes an MP3 music play application in step 202. The controller 110 transmits the MP3 music play command to the activated MP3 music background play object in the standby mode through an interface for an execution command provided by the MP3 music background play object. The MP3

music background play object switches to an MP3 music play mode by multi-tasking in step 203.

If termination of the MP3 music play mode is selected in the MP3 music play mode in step 204, the controller 110 senses the selection and displays a message asking whether to maintain the played MP3 music file as background music in step 205.

If the played MP3 music file is not selected as background music, the controller 110 terminates the MP3 music play mode and switches the portable terminal to the standby mode in step 206.

Alternatively, when the played MP3 music file is selected as background music, the controller 110 senses the selection and switches the portable terminal to the standby mode while maintaining the played MP3 music file as background music in step 207. If the played MP3 music file is to be maintained as background music, in step 205, the controller 110 switches the portable terminal to the standby mode while maintaining the play of the MP3 music file as background music in step 207. Since the MP3 music file is played through multi-tasking of the MP3 music background play object activated in the standby mode in step 207, the play of the MP3 music file can continue regardless of termination of the MP3 music play mode. In the standby mode of step 207, image data indicating information relating to the MP3 music file that is being played as background music, for example a title and a singer, may be overlaid on a background image of the portable terminal. The type of the MP3 music information displayed on a standby screen may be selectively displayed. An icon or a message indicating that the MP3 music file is being played may be displayed in the standby mode of step 207.

If the MP3 music play mode is selected in the standby mode maintaining the play of MP3 background music in step 208, the controller 110 senses the selection and switches the portable terminal to the MP3 music play mode of step 203.

If the message function is selected in the standby mode maintaining the play of MP3 background music in step 209, the controller 110 senses the selection and switches the portable terminal to a message mode in step 210. In the message mode of step 210, the controller 110 performs controlling to implement functions such as message transmission and message checking while continuing to play MP3 background music. In the message mode of step 210, an icon or a message indicating that the MP3 music file is being played is displayed.

If termination of the message mode maintaining the play of MP3 background music is selected in step 211, the controller 110 senses the selection and switches the portable terminal to the standby mode of step 207 maintaining the play of MP3 background music.

If the phone-book function is selected in the standby mode maintaining the play of MP3 background music in step 212, the controller 110 senses the selection and switches the portable terminal to a phone-book mode in step 213. In the phone-book mode of step 213, the controller 110 performs controlling to implement functions such as telephone number searching and registration while continuing to play MP3 background music. In the phone-book mode of step 213, an icon or a message indicating that the MP3 music file is being played is displayed.

If termination of the phone-book mode maintaining the play of MP3 background music is selected in step 214, the controller 110 senses the selection and switches the portable terminal to the standby mode of step 207 maintaining the play of MP3 background music.

As such, MP3 music files selected in the MP3 music play mode of step 203 are repetitively played in the standby mode, the message mode, and the phone-book mode.

FIG. 3 is a flowchart illustrating a process of implementing menu functions of the portable terminal while continuing to play a music file according to a second exemplary embodiment of the present invention. In the second exemplary embodiment of the present invention, a message function and a phone-book function such as message, phone-book, scheduling, game, and picture searching functions among others are simultaneously implemented.

The exemplary embodiments of the present invention will be described in detail with reference FIG. 3.

Referring to FIG. 3, if a menu is selected in step 302 where MP3 music files selected in an MP3 music play mode of the portable terminal of step 301 are being played, the controller 110 senses the selection and displays menus of the portable terminal that can be implemented in the MP3 music play mode.

If the message function is selected among the menu functions of the portable terminal in step 303, the controller 110 senses the selection and switches the portable terminal to the message mode. In the message mode of step 304, the controller 110 implements functions such as message transmission and message checking while continuing to play the MP3 music file that is being played in the MP3 music play mode in step 304. In the message mode of step 304, an icon or a message indicating that the MP3 music file is being played may be displayed.

If termination of the message mode maintaining the play of the MP3 music file is selected in step 305, the controller 110 senses the selection and switches the portable terminal to the MP3 music play mode of step 301.

If the phone-book function is selected in step 306, the controller 110 senses the selection and switches the portable terminal to the phone-book mode. In the phone-book mode of step 307, the controller 110 implements functions such as telephone number searching and registration while continuing to play MP3 background music. In the phone-book mode of step 307, an icon or a message indicating that the MP3 music file is being played may be displayed.

If termination of the phone-book mode maintaining the play of MP3 music is selected, the controller 110 senses the selection and switches the portable terminal to the MP3 music play mode of step 301.

As such, MP3 music files selected in the MP3 music play mode of step 301 are repetitively played in the standby mode, the message mode, and the phone-book mode.

As described above, according to the exemplary embodiments of the present invention, menu functions can be implemented while continuing to play music in a portable terminal. Therefore, various applications of the portable terminal can be simultaneously implemented during the play of music, thereby maximizing user convenience.

Moreover, a separate music control processor is not included in a portable terminal, thereby preventing cost increase in the portable terminal and complexity in hardware and software configurations. Furthermore, exemplary embodiments of the present invention can also be used for portable terminal applications to be developed without a requirement for separate processing.

While the present invention has been shown and described with reference to exemplary embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the appended claims.

What is claimed is:

1. A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:
 - generating a music background play object, wherein the music background play object includes an application module including at least one applet;
 - providing an interface for music play by the music background play object;
 - selecting an MP3 mode in the pocket-sized mobile communication device using the interface;
 - selecting and playing a music file in the pocket-sized mobile communication device in the MP3 mode;
 - switching the MP3 mode to a standby mode while the playing of the music file continues;
 - displaying an indication that the music file is being played in the standby mode;
 - selecting and performing at least one function of the pocket-sized mobile communication device from the standby mode while the playing of the music file continues; and
 - continuing to display the indication that the music file is being played while performing the selected function.
2. The multi-tasking method of claim 1, wherein the displaying of the indication comprises displaying an icon.
3. The multi-tasking method of claim 1, wherein the displaying of the indication comprises displaying information relating to the music file.
4. The multi-tasking method of claim 3, wherein the information comprises at least one of a music title, a musician and an album title.
5. The multi-tasking method of claim 3, wherein the displaying of the information comprises overlaying the information relating to the music file on a screen.
6. The multi-tasking method of claim 1, further comprising selecting to continue the playing of the music file.
7. The multi-tasking method of claim 1, wherein the function selected from the standby mode comprises a message function.
8. The multi-tasking method of claim 1, wherein the function selected from the standby mode comprises a phone-book function.
9. A multi-tasking apparatus in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking apparatus comprising:
 - a controller for generating a music background play object, wherein the music background play object includes an application module including at least one applet, for providing an interface for music play by the music background play object, for selecting an MP3 mode in the pocket-sized mobile communication device using the interface, for selecting and playing a music file in the pocket-sized mobile communication device in the MP3

- mode, for switching from the MP3 mode to a standby mode while the playing of the music file continues and for selecting and performing at least one function of the pocket-sized mobile communication device from the standby mode while the playing of the music file continues; and
- a display unit for displaying an indication that the music file is being played in the standby mode and for continuing to display the indication that the music file is being played while performing the selected function.
10. The multi-tasking apparatus of claim 9, wherein the indication comprises an icon.
11. The multi-tasking apparatus of claim 9, wherein the indication comprises information relating to the music file.
12. The multi-tasking apparatus of claim 11, wherein the information comprises at least one of a music title, a musician and an album title.
13. The multi-tasking apparatus of claim 11, wherein the display unit overlays the information relating to the music file on a screen.
14. The multi-tasking apparatus of claim 9, wherein the controller selects to continue the playing of the music file.
15. The multi-tasking apparatus of claim 9, wherein the function selected from the standby mode comprises a message function.
16. The multi-tasking apparatus of claim 9, wherein the function selected from the standby mode comprises a phone-book function.
17. A multi-tasking apparatus in a pocket-sized mobile communication device consisting of a single display unit and including an MP3 playing capability, the multi-tasking apparatus comprising:
 - a controller for generating a music background play object, wherein the music background play object includes an application module including at least one applet, for providing an interface for music play by the music background play object, for selecting an MP3 mode in the pocket-sized mobile communication device using the interface, for selecting and playing a music file in the pocket-sized mobile communication device in the MP3 mode, and for switching from the MP3 mode to a standby mode while the playing of the music file continues; and
 - a display unit for displaying an indication that the music file is being played in the standby mode.
18. The multi-tasking apparatus of claim 17, wherein the indication comprises an icon.
19. The multi-tasking apparatus of claim 17, wherein the indication comprises information relating to the music file.
20. The multi-tasking apparatus of claim 17, wherein the controller selects to continue the playing of the music file.

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Exhibit I



UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 11/778,466 | 04/13/2010 | 7608711 | 0201-0055 | 1475 |

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ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(S) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Moon-Sang JEONG, Daegu, KOREA, REPUBLIC OF;

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address, and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

68103 7590 01/13/2010

Jefferson IP Law, LLP
 1130 Connecticut Ave., NW
 Suite 420
 Washington, DC 20036

Certificate of Mailing or Transmission
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (371) 273-2885, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11778.466 | 07/16/2007 | Moon-Sung JEONG | 0201-0055 | 1475 |

TITLE OF INVENTION: MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL

| APPLN TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 04/13/2010 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|----------------|----------|----------------|
| TO, JENNIFER N | 2195 | 718-107000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/17; Rev 01-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent from page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1. Jefferson IP Law, LLP

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2. _____

3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE Samsung Electronics Co., Ltd.

(B) RESIDENCE: (CITY and STATE OR COUNTRY) Suwon-si, Republic of Korea

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

Issue Fee

Publication Fee (No small entity discount permitted)

Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

A check is enclosed

Payment by credit card. Form PTO-2038 is attached

The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /George C. ECKERT/ Date March 16, 2010

Typed or printed name George C. Eckert Registration No. 58,892

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Patent Application Fee Transmittal

| | | | | |
|------------------------------------------------|---------------------------------------------------------|----------|--------|----------------------|
| Application Number: | 11778466 | | | |
| Filing Date: | 16-Jul-2007 | | | |
| Title of Invention: | MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL | | | |
| First Named Inventor/Applicant Name: | Moon-Sang JEONG | | | |
| Filer: | George Charles Ecker/Stephanie Bolger | | | |
| Attorney Docket Number: | 0201-0055 | | | |
| Filed as Large Entity | | | | |
| Utility under 35 USC 111(a) Filing Fees | | | | |
| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
| Basic Filing: | | | | |
| Pages: | | | | |
| Claims: | | | | |
| Miscellaneous-Filing: | | | | |
| Petition: | | | | |
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| Utility Appl Issue fee | 1501 | 1 | 1510 | 1510 |
| Publ. Fee- early, voluntary, or normal | 1504 | 1 | 300 | 300 |

SAMNDCA00007842

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--------------------|----------|----------|--------------------------|----------------------|
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| - | | | Total in USD (\$) | 1810 |

Electronic Acknowledgement Receipt

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|---------------------------------------------|---------------------------------------------------------|
| EFS ID: | 7218601 |
| Application Number: | 11778466 |
| International Application Number: | |
| Confirmation Number: | 1475 |
| Title of Invention: | MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL |
| First Named Inventor/Applicant Name: | Moon-Sang JEONG |
| Customer Number: | 68103 |
| Filer: | George Charles Eckert/Stephanie Bolger |
| Filer Authorized By: | George Charles Eckert |
| Attorney Docket Number: | 0201-0055 |
| Receipt Date: | 16-MAR-2010 |
| Filing Date: | 16-JUL-2007 |
| Time Stamp: | 14:49:43 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|------------------------------------------|------------------|
| Submitted with Payment | yes |
| Payment Type | Credit Card |
| Payment was successfully received in RAM | \$1810 |
| RAM confirmation Number | 1169 |
| Deposit Account | 504100 |
| Authorized User | ECKERT,GEORGE C. |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

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SAMNDCA00007844

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|-----------------------------|----------------------------------------|-----------------------------------------------------------------------|------------------|------------------|
| 1 | Issue Fee Payment (PTO-85B) | 0201-0055FeeTransmittalAsFile d.pdf | 141171 <small>30f0617e557613768865142d542821b427c cc28</small> | no | 1 |

Warnings:

Information:

| | | | | | |
|---|-------------------------|--------------|----------------------------------------------------------------------|----|---|
| 2 | Fee Worksheet (PTO-875) | fee-info.pdf | 32071 <small>3005312937e51305807c01b40b46c1c17e 9e22a</small> | no | 2 |
|---|-------------------------|--------------|----------------------------------------------------------------------|----|---|

Warnings:

Information:

Total Files Size (in bytes): 173242

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an International filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

68101 7590 01/13/2010
Jefferson IP Law, LLP
1130 Connecticut Ave., NW
Suite 420
Washington, DC 20036

EXAMINER
TO: JENNIFER N
ART UNIT PAPER NUMBER
2195
DATE MAILED: 01/13/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/778,466 07/16/2007 Moon-Sang JEONG 0201-0055 1475

TITLE OF INVENTION: MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE
nonprovisional NO \$1510 \$300 \$0 \$1810 04/13/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
 Commissioner for Patents
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 Alexandria, Virginia 22313-1450
 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

68101 7590 01/17/2010
 Jefferson IP Law, LLP
 1130 Connecticut Ave., NW
 Suite 420
 Washington, DC 20036

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/778,466 | 07/16/2007 | MOON-SANG JEONG | 0201-0055 | 1475 |

TITLE OF INVENTION: MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL

| APPLN TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|-------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 0-1/17/2010 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|----------------|----------|----------------|
| TD, JENNIFER N | 2195 | 718-107000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2
 _____ 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY AND STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:
 Issue Fee
 Publication Fee (No small entity discount permitted)
 Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
 A check is enclosed
 Payment by credit card. Form PTO-2036 is attached.
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(e)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
 Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 11/778,466 | 07/16/2007 | Moon-Sang JEONG | 0201-0055 | 1475 |
| 68103 | 7590 | 01/13/2010 | EXAMINER | |
| Jefferson IP Law, LLP 1130 Connecticut Ave., NW Suite 420 Washington, DC 20036 | | | TO, JENNIFER N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1195 | |
| DATE MAILED: 01/13/2010 | | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| | | | |
|-------------------------------|-----------------|------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 11/778,466 | JEONG, MOON-SANG | |
| | Examiner | Art Unit | |
| | JENNIFER N. TO | 2195 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to communication filed 12/08/2009.
2. The allowed claim(s) is/are 1-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

/Meng-Ai An/
 Supervisory Patent Examiner, Art Unit 2195

| | | | |
|-----------------------------------|--------------------------------------|----------------------------------------------------------------|-------------|
| Notice of References Cited | Application/Control No. 11778,466 | Applicant(s)/Patent Under Reexamination JEONG, MOON-SANG | |
| | Examiner JENNIFER N. TO | Art Unit 2195 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--------------------------------------------------|-----------------|-----------------|----------------|
| * | A | US-7,594,181 | 09-2009 | Rothwein et al. | 715/763 |
| * | B | US-2004/0021697 | 02-2004 | Beaton et al. | 345/810 |
| * | C | US-7,222,304 | 05-2007 | Beaton et al. | 715/744 |
| | D | US- | | | |
| | E | US- | | | |
| | F | US- | | | |
| | G | US- | | | |
| | H | US- | | | |
| | I | US- | | | |
| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |


FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Country | Name | Classification |
|---|---|--------------------------------------------------|-----------------|---------|------|----------------|
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| | S | | | | | |
| | T | | | | | |

NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|--------------------------------------------------------------------------------------------|
| | U | |
| | V | |
| | W | |
| | X | |

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

| | | |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------|
| Issue Classification  | Application/Control No. 11778466 | Applicant(s)/Patent Under Reexamination JEONG, MOON-SANG |
| | Examiner JENNIFER N TO | Art Unit 2195 |


| ORIGINAL | | | | INTERNATIONAL CLASSIFICATION | | | | | | | | | | |
|--------------------|-----------------------------------|----------|-----|------------------------------|---|---|---|-------------------|--|--|--|--|--|--|
| CLASS | | SUBCLASS | | CLAIMED | | | | NON-CLAIMED | | | | | | |
| 718 | | 107 | | G | 0 | 6 | F | 9/48 (2006.01.01) | | | | | | |
| CROSS REFERENCE(S) | | | | G | 0 | 6 | F | 3/00 (2006.01.01) | | | | | | |
| | | | | G | 0 | 8 | F | 3/16 (2006.01.01) | | | | | | |
| | | | | H | 0 | 4 | M | 1/00 (2006.01.01) | | | | | | |
| CLASS | SUBCLASS (ONE SUBCLASS PER BLOCK) | | | | | | | | | | | | | |
| 715 | 718 | 718 | 727 | | | | | | | | | | | |
| 456 | 656.1 | 656.2 | | | | | | | | | | | | |
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Claims renumbered in the same order as presented by applicant
 CPA
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 R.1.47

| Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original |
|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|
| | 1 | | 17 | | | | | | | | | | | | |
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|----------------------------------------------------------------------------------|----------------------|-----------------------------|------------------------|
| /JENNIFER N TO/ Examiner Art Unit 2195 (Assistant Examiner) | 01/07/2010 (Date) | Total Claims Allowed: 20 | |
| /Meng-Aj An/ Supervisory Patent Examiner, Art Unit 2195 (Primary Examiner) | 1/10/10 (Date) | O.G. Print Claim(s) 1 | O.G. Print Figure 2 |

SAMNDCA00007851

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|--------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------|
| Search Notes  | Application/Control No. | Applicant(s)/Patent Under Reexamination |
| | 11778466 | JEONG, MOON-SANG |
| | Examiner | Art Unit |
| | JENNIFER N TO | 2195 |

| SEARCHED | | | |
|----------|-------------|----------|----------|
| Class | Subclass | Date | Examiner |
| 718 | 107 | 1/5/2010 | JT |
| 455 | 556,1,556.2 | 1/5/2010 | JT |
| 715 | 716,718,727 | 1/7/2010 | JT |

| SEARCH NOTES | | |
|-----------------------------|----------|----------|
| Search Notes | Date | Examiner |
| EAST SEARCH | 1/5/2010 | JT |
| INVENTOR NAME SEARCH UPDATE | 1/4/2010 | JT |
| NPL SEARCH (GOOGLE SCHOLAR) | 1/7/2010 | JT |

| INTERFERENCE SEARCH | | | |
|---------------------|--------------|----------|----------|
| Class | Subclass | Date | Examiner |
| 718 | 107 | 1/7/2010 | JT |
| 455 | 556.1, 556.2 | 1/7/2010 | JT |
| 715 | 716,718,727 | 1/7/2010 | JT |

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EAST Search History

EAST Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|-----------------------------------------|--------------------------------------|------------------|---------|---------------------|
| L1 | 4725 | apple.as. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L2 | 516 | L1 and mp3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L3 | 3933 | panasonic.as. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L4 | 46 | L3 and (portable near2 communication) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L5 | 33 | L3 and (audio near2 player) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L6 | 1 | L3 and (digital adj audio near2 player) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L7 | 4725 | apple.as. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L8 | 70 | L7 and (digital adj audio near2 player) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L9 | 516 | L7 and mp3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L10 | 0 | L7 and mp3 and standy | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|-----|------|------------------------------------------------------|--------------------------------------|----|----|---------------------|
| L11 | 8 | L7 and mp3 and standby | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L12 | 35 | L7 and mp3 and (mode near2 switch\$3) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L13 | 31 | audio adj player with (mode near2 switch\$3) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L14 | 56 | audio adj player same (mode near2 switch\$3) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L15 | 25 | L14 not L13 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L16 | 2201 | sony adj ericsson.as. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L17 | 2268 | (cell adj1 phone) with mp3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L18 | 0 | (cell adj1 phone) with mp3 and (while near4 music) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L19 | 0 | (cell adj1 phone) with mp3 and (while near4 play\$3) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L20 | 0 | (cell adj1 phone) with mp3 and (while) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L21 | 0 | L16 and L17 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L22 | 104 | sony adj ericsson.as. and (cell near2 phone) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|-----|------|--------------------------------------------------------------------------------------------|--------------------------------------|----|----|---------------------|
| L23 | 93 | sony adj ericsson.as. and (audio near2 player) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L24 | 1402 | (creat\$3 generat\$3) with (icon object) with music | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L25 | 69 | (creat\$3 generat\$3) with (icon object) with music with background | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L26 | 12 | (creat\$3 generat\$3) with (icon object) with music with background same portable | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L27 | 24 | (creat\$3 generat\$3) with (icon object) with music with background and portable | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L28 | 12 | L27 not L26 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L29 | 230 | (creat\$3 generat\$3) with (icon object) near2 music | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L30 | 6 | (creat\$3 generat\$3) with (icon object) near2 music.ab | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L31 | 5 | (creat\$3 generat\$3) with (icon object) near2 music and multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L32 | 7 | (creat\$3 generat\$3) with (icon object) near2 music with background | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L33 | 5240 | (creat\$3 generat\$3) with (icon object) with background | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L34 | 0 | (creat\$3 generat\$3) with (icon object) with background same myllitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|-----|----|-------------------------------------------------------------------------------------|--------------------------------------|----|----|---------------------|
| L35 | 0 | (creat\$3 general\$3) with (icon object) with background same multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L36 | 32 | (creat\$3 general\$3) with (icon object) with background same portable | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L37 | 1 | "20050083642" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L38 | 1 | "20050054379" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L39 | 0 | MP3 near2 player with play near2 object | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L40 | 1 | MP3 near2 player with play near2 icon | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L41 | 2 | MP3 near2 player same play near2 icon | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L42 | 1 | "20060036569" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L43 | 1 | "5956029".pn. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L44 | 0 | edit\$3 near3 thumb near2 icon | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L45 | 9 | ((thumb near2 icon) with (creat\$3 edit\$3 general \$3) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L46 | 0 | "2002035595" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|-----|------|------------------------------------------------------------------------------------------|--------------------------------------|----|----|---------------------|
| L47 | 1 | "20020035595" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L48 | 1 | "20050097506" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L49 | 7278 | object adj interface | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L50 | 1 | object adj interface and L2 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L51 | 0 | object adj interface and L4 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L52 | 640 | object adj interface and mp3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L53 | 13 | object adj interface and mp3 and standby | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L54 | 0 | (thumb near2 icon) with (creat\$3 edit\$3 general \$3) same using adj4 icon | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L55 | 2 | (thumb near2 icon) with (creat\$3 edit\$3 general \$3) same icon with interface | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L56 | 47 | object adj interface and mp3 and "178" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L75 | 578 | icon with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L76 | 113 | icon with applet and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|-----|-----|------------------------------------------------------------|-----------------------------|----|----|------------------|
| L77 | 2 | icon with applet and "715".clas. and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L78 | 0 | icon with applet.ab. and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L79 | 23 | icon with applet and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L80 | 712 | (icon button) adj10 applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L81 | 135 | (icon button) adj10 applet and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L82 | 0 | (icon button) adj10 applet and portabale and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L83 | 23 | (icon button) adj10 applet and portable and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L84 | 1 | "20060246955" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L85 | 1 | "7123945".pn. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L86 | 1 | "20050083642".pn. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L87 | 34 | (generat\$3 creat\$3) near3 icon with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L88 | 1 | icon with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|------|-----|------------------------------------------------------------|--------------------------------------|----|----|---------------------|
| L89 | 0 | button with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L90 | 0 | buton with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L91 | 154 | application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L92 | 7 | application adj module with applet and "715". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L93 | 3 | menu with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L94 | 1 | "20020077156".PN. | US-PGPUB | OR | ON | 2010/01/07 09:31 |
| L95 | 3 | application adj module with applet with menu | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L96 | 1 | application adj module with applet with list | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L97 | 8 | application adj module with applet with display | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L98 | 154 | application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L99 | 0 | application adj module with applet same multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L100 | 4 | application adj module with applet and multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |

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|------|-----|---------------------------------------------------------------------------------|-----------------------------|----|----|------------------|
| L101 | 7 | application adj module with applet and multi \$1ask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L102 | 7 | application adj module with applet and "715". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L103 | 7 | application adj module with applet and "455". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:31 |
| L104 | 5 | ("20020067308" "20020077156" "20050054379" "20050083642" "7123945").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2010/01/07 09:31 |
| L105 | 1 | "20040221697" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:59 |
| L106 | 2 | "20040021697" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/07 09:59 |
| S402 | 574 | icon with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:52 |
| S403 | 112 | icon with applet and "715". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:52 |
| S404 | 2 | icon with applet and "715". clas. and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:53 |
| S405 | 0 | icon with applet ab. and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:54 |
| S406 | 23 | icon with applet and (portable adj device) | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:54 |

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|------|-----|----------------------------------------------------------------|--------------------------------------|----|----|---------------------|
| S407 | 702 | (icon button) adj10 applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:56 |
| S408 | 131 | (icon button) adj10 applet and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:56 |
| S409 | 0 | (icon button) adj10 applet and portabale and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:56 |
| S410 | 22 | (icon button) adj10 applet and portable and "715".clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 07:56 |
| S411 | 1 | "20060246955" | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:06 |
| S412 | 1 | "7123945".pn. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:07 |
| S413 | 1 | "20050083642".pn. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:07 |
| S414 | 33 | (generat\$3 creat\$3) near3 icon with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:08 |
| S415 | 1 | icon with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:20 |
| S416 | 0 | button with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:20 |
| S417 | 0 | bulon with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:20 |
| S418 | 154 | application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:21 |

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|------|-----|---------------------------------------------------------|-----------------------------|----|----|------------------|
| S419 | 7 | application adj module with applet and "715". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:21 |
| S420 | 3 | menu with application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:23 |
| S421 | 1 | "20020077156".PN. | US-PGPUB | OR | ON | 2010/01/05 08:24 |
| S422 | 3 | application adj module with applet with menu | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:24 |
| S423 | 1 | application adj module with applet with list | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:25 |
| S424 | 8 | application adj module with applet with display | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:25 |
| S425 | 154 | application adj module with applet | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:27 |
| S426 | 0 | application adj module with applet same multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:27 |
| S427 | 4 | application adj module with applet and multitask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:28 |
| S428 | 7 | application adj module with applet and multi \$11ask\$3 | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:28 |
| S429 | 7 | application adj module with applet and "715". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:29 |
| S430 | 7 | application adj module with applet and "455". clas. | US-PGPUB; USPAT; USOCR; EPO | OR | ON | 2010/01/05 08:29 |

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|------|---|--------------------------------------------------------------------------------------------|------------------------------|----|----|---------------------|
| S431 | 5 | ("20020067308" "20020077156" "20050054379" "20050083642" "7123945") PN | US-PGPUB; USPAT; USOCR | OR | ON | 2010/01/05 08:30 |
|------|---|--------------------------------------------------------------------------------------------|------------------------------|----|----|---------------------|

EAST Search History (Interference)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--------------------------------------------------------------------------------------------|----------------|------------------|---------|------------------|
| L57 | 3 | object adj interface and mp3 and standby | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L58 | 0 | (lthumb near2 icon) with (creat\$3 edit\$3 generat\$3) same icon with interface | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L59 | 3 | (creat\$3 generat\$3) with (icon object) near2 music with background | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L60 | 42 | touch adj screen with (phone mobile portable) .ab. and "455".clas. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L61 | 18 | (creat\$3 generat\$3) with (icon object) with background same portable | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L62 | 0 | (creat\$3 generat\$3) with (icon object) with background same portable and L60 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L63 | 0 | (creat\$3 generat\$3) with (icon object) with background same portable and L60 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L64 | 18 | (creat\$3 generat\$3) with (icon object) with background same portable | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L65 | 1379 | 455/556.1.ocls. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L66 | 0 | 455/556.1.ocls. and L57 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |

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|-----|------|--------------------------------------------------------------------------|----------------|----|----|------------------|
| L67 | 1 | 455/556.1.ccls. and L60 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L68 | 1995 | 715/716-727.ccls. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L69 | 0 | L61 and L68 - | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L70 | 665 | 718/107.CCLS. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L71 | 0 | 718/107 CCLS. and L60 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L72 | 0 | audio adj player same (mode near2 switch\$3) and 718/107.ccls. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L73 | 0 | multitask\$3 same (mode near2 switch \$3) and portable and 718/107.ccls. | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |
| L74 | 0 | multitask\$3 same (mode near2 switch \$3) and portable and L70 | USPAT; UPAD | OR | ON | 2010/01/07 09:31 |

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... and Apparatus for Automatic Near Field Communication Application Selection in ...

V Sitovsky, Y Bertrand, T Bunici - 2009 - freepatentsonline.com

... of a near field communication application without requiring the user to manually sill through lists of icons or menus. ... Allocation of applet into, Mobile Element ID ... 6, illustrated therein are the steps of one method for automatically selecting a near field communication application from ...

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Designing LoL@, a mobile tourist guide for UMTS

G Pospischil, M Umlauf, E Michlmayr - Lecture Notes in Computer Science, 2002 - Springer

... due to technical constraints: the screen size and resolution of currently (and in the near future) available ... Multi-modal interactions: Users can interact with LoL@ by clicking on icons, hypertext links ... does not provide all functionality that is required for the map viewer applet and the ...

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Infrastructure for mobile agents. Requirements and design

Y Aridor, M Coshima - Lecture notes in computer science, 1998 - Springer

... Future versions will have icons of itinerary objects (ie, objects encapsulating multiple locations and a scheme for routing between them) in ... controlled by the applet security manager ... They are likely to be more readily accepted by clients, at least in the near future, than stand-alone ...

[Cited by 78](#) - [Related articles](#) - [BL Direct](#) - [All 6 versions](#)

Controlling multimedia players using NFC enabled mobile phones

I Sánchez, M Cortés, J Riekkö - ... international conference on Mobile ..., 2007 - portal.acm.org

... Figure 5. HTTP Streaming algorithm In both cases the necessary applet objects and scripts are loaded in the browser when a display is registered. ... An RFID icon advertising the player would be placed near the display, and an RFID tag under the icon. ...

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[PDF] C-MAP: Building a context-aware mobile assistant for exhibition tours

[nagoya-u.ac.jp \[PDF\]](#)

Y Sumi, T Etani, S Fels, N Simonet, K ... - Lecture notes in ..., 1998 - mase.its.nagoya-u.ac.jp

... Guide character appearing in an exhibit ap- tions will be removed in the near future, we ... We applied the semantic map applet to graph social networks by representing exhibits with rectangular ... The

exhibit icons which are directly connected to the "USER-A" icon are the exhibits ...

[Cited by 87](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

Augment-able reality: Situated communication through physical and digital spaces

[psu.edu \(PDF\)](#)

J Rekimoto, Y Ayatsuka, K ... - Proceedings of the ..., 1998 - doi.ieee.computersociety.org
... Figure 9). The user can display or playback attached data simply by clicking a corresponding icon on the floor map. ... Figure 9: Accessing situated information from a Java applet ... Other possibilities include wireless tags[1], near field radio[7] and the global positioning system (GPS ...

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LoL@, a mobile tourist guide for UMTS

[psu.edu \(PDF\)](#)

M Umikaiti, G Pospischil, G Nikfield, E ... - ... Technology &# 38; ..., 2002 - ingentaconnect.com
... Clear icon design improves usability, especially for disabled (color blind) users or elderly far-sighted ... the future of wireless Web services; however, for products to be deployed in the near future ... Maps are displayed with a map viewer applet in the terminal (GfSquadrat, 2001). ...

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(PDF) ... offered functionality in the information society and a prediction of (Near) ...

[umassd.edu \(PDF\)](#)

B Hemans - First Monday, 1997 - umassd.edu
... Questions such as "how will agents be used in the near future?", "who will be offering agents (and why)?", and "which problems/needs can be ... see this WWW page: <http://wombat.doc.ic.ac.uk/?AI13> This is a discussion list (using e-mail as the means of communication) about the ...

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Estimating communication context through location information and schedule ...

[psu.edu \(PDF\)](#)

Y Nakanishi, N Kitaoka, K Hakozaeki, M ... - Conference on Human ..., 2002 - portal.com.org
... information to anyone, anywhere, in order to facilitate making contact among users in the mobile environment [1] ... which were home office workers, did not wish to share location names or use the mapping Java applet. ... If a user is at home, her icon is in the box; otherwise, it is out of ...

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(PDF) A mobile-aware city guide application

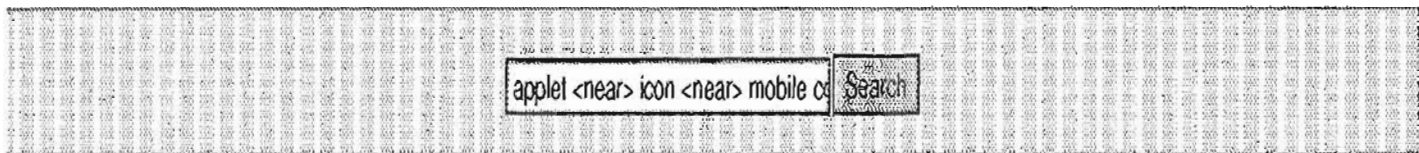
[iurb.br \(PDF\)](#)

B Kreffer, D Carrega, J Shankar, P Salmon, S ... - ... Mobile Communication ... - inf iurb) br
... in Figure 4. It consists of a simple dialog box with several icons to indicate ... Implementing the City Guide v1 as a JDK 1.0 Java applet was the main ... et al., 'Client/Server Architecture for Mobile Users: The ACTS OnTheMove Project, ACTS Mobile Communication Summit, Granada ...

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(PDF) Mac OS X: An Introduction for Support Providers

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OS Mac, C Multitasking, X Mac OS, F Multitasking, P ... - mit.edu

... The Java environment supports 100% Java 2 applications and applets. ... be opened, such that you can see the individual components of the directory, by option-clicking on its icon. ... a process in Mac OS X, Classic applications do enjoy the benefits of pre-emptive multitasking, ie, if ...

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(PDF) About, Application menu, 37 About This Mac box, Apple Menu. 35 Account ...

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A Monitor, AD Bus - media.johnwiley.com.au

... 324 using scripts, 308-313 AppleScript-Users mailing list, 322 AppleTalk, 151 applets, 309 Application ... Clean Install, 10-11 clean shutdown, 26 Cleanup, Icon view, 77 clicking mouse, 41 ... Universal Access, 72 Control key, 51 controls, windows, 46 cooperative multitasking, 4-5 ...

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... Interface to Distributed Services and Collaborative Applications on the Internet

V S Marta, I Florence, VS Marta - doi.ieee-computersociety.org

... A Java applet-based DVE (Distributed Virtual Environment), named VERSA (Virtual Environment for Remote Services) ... Nevertheless, if a program reference is neither present as an icon on the desktop or ... Multitasking is, again, a step toward the user, since man himself is able to ...

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Multitasking graphical user interface

BF Beaton, GD Smith - US Patent App. 10/629,558, 2003 - Google Patents

... 3884.0088-00), entitled CLID WITH LOCATION ICON; US patent application, Ser. ... manager 4100 controls the user friendly interface to provide a multitasking environment ... Applications manager 5300 provides a common application framework, application and applet security, and ...

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(PDF) Tuning the DOS/Windows Environment

[cmg.org \(PDF\)](#)

FA Chong - cmg.org

... No-one really understands why the applets create temporary files, so no more will be said about them ... The Windows virtual machine priority is set by selecting the 386 Enhanced icon in Control Panel and changing ... Find a CMG regional meeting near you at www.cmg.org/regions ...

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(CITATION) [Windows 200 Professional Bible](#)

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(PDF) [Where things are 26-33 Cool new things 34-43 Getting started 44-53 Basic ...](#)

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[Mac OS Finder - media.wiley.com](#)

... For details on your selected icon, go to File > Get Info (Command+I). An application's memory can be adjusted using Get Info. ... With Mac OS X pre-emptive multitasking, the system remains responsive, so you can do a whole bunch of other things while ... Pre-emptive multi-tasking ...

[View as HTML](#)

(CITATION) [The Winning Website Volume I](#)

[M Partners - MEAR Partners](#)

(PDF) [Educational improvements applying an MPLS network simulator: a technical ...](#)

[manoicadominquez.com](#) (PDF)

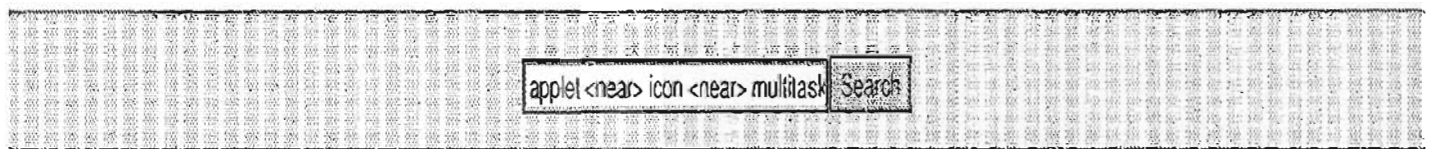
[M Domínguez-Dorado, FJ Rodríguez-Pérez, J ... - manoicadominquez.com](#)

... although of fact it is free-of-charge and easy to install (it is an runnable applet located at ... Finally, we can start the simulation by clicking the first icon that shows a gear ... Java has also allowed the implementation of the simulator as a multitask application (it is able to simulate more ...

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 11/778,466 | 07/16/2007 | Moon-Sang JEONG | 0201-0055 | 1475 |
| 68103 | 7590 | 12/16/2009 | EXAMINER | |
| Jefferson IP Law, LLP 1130 Connecticut Ave., NW Suite 420 Washington, DC 20036 | | | TO: JENNIFER N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2195 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 12/16/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|--------------------------|-----------------|------------------|--|
| <i>Interview Summary</i> | Application No. | Applicant(s) | |
| | 11/778,466 | JEONG, MOON-SANG | |
| | Examiner | Art Unit | |
| | JENNIFER N. TO | 2195 | |

All participants (applicant, applicant's representative, PTO personnel):

- | | |
|----------------------------|---------------------------|
| (1) <u>JENNIFER N. TO.</u> | (3) <u>GEORGE ECKERT.</u> |
| (2) <u>MENG-AI AN.</u> | (4) <u>MAENG-HO SHIN</u> |
| | (5) <u>SEOK-KYUN PARK</u> |
| | (6) <u>KI-SANG LEE.</u> |

Date of Interview: 08 December 2009.

Type: a) Telephonic b) Video Conference
c) Personal (copy given to: 1) applicant 2) applicant's representative)

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: 1.

Identification of prior art discussed: KOKUBO (U.S. PATENT NO. 7,123,945) & SENPUKU (U.S PUBLICATION 2005/0083642).

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

| | |
|--|------------------------------------------------------------|
| | /Meng-Ai An/ Supervisory Patent Examiner, Art Unit 2195 |
|--|------------------------------------------------------------|

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiner's Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbal or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: (1) The details discussion between examiners and applicants with regarding mapping "music background play object" as recited in claim 1 with the teaching of "music icon" as taught in KOKUBO. Examiner suggested to further include the definition of "a music background play object" as "wherein the music background play objects including an application module includes at least one applet" as argued during the interview to distinct from the icon as taught by KOKUBO. (2) The teaching of switching from the MP3 mode to a stanby mode while the playing of the music file continue by KOKUBO and SENPUKU was discussed. Examiners point out that KOKUBO teaching of switching from the MP3 mode to another mode while the playing of the music file continues, and SENPUKU teaching of switching from an active mode to a standby mode. (3) The obvious type doucble patenting over U.S. Patent 7,526,558 was discussed. Examiners agreed to re-introduce the obvious type double patenting rejection as previously indicated in the office action mail dated 05/27/2009 to explain the obvious reasons in view of the claims filed 10/30/2009 to make the records clear. In additon, applicants also mentioned to re-introduce the limitation of "generating a music backgroud play object in a standby mode" as an alternated way of overcome the prior arts of record.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | | |
|--------------|-----------------------------------------------------------------|------------------|------------------|
| Appl. No. | : 11/778,466 | Confirmation No. | : 1475 |
| Applicant(s) | : Moon-Sang JEONG | TC/A.U. | : 2195 |
| Filed | : July 16, 2007 | Examiner | : Jennifer N. To |
| Title | : Multi-Tasking Apparatus and Method in Portable Terminal | Docket No. | : 0201-0055 |

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Amendment in Response to Non-Final Office Action

Sir:

In response to the Office Action dated November 09, 2009, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in the application.

1. (Currently Amended) A multi-tasking method in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking method comprising:

generating a music background play object, wherein the music background play object includes an application module including at least one applet;

providing an interface for music play by the music background play object;

selecting an MP3 mode in the pocket-sized mobile communication device using the interface;

selecting and playing a music file in the pocket-sized mobile communication device in the MP3 mode;

switching from the MP3 mode to a standby mode while the playing of the music file continues;

displaying an indication that the music file is being played in the standby mode;

selecting and performing at least one function of the pocket-sized mobile communication device from the standby mode while the playing of the music file continues; and

continuing to display the indication that the music file is being played while performing the selected function.

2. (Original) The multi-tasking method of claim 1, wherein the displaying of the indication comprises displaying an icon.

3. (Original) The multi-tasking method of claim 1, wherein the displaying of the indication comprises displaying information relating to the music file.

4. (Original) The multi-tasking method of claim 3, wherein the information comprises at least one of a music title, a musician and an album title.

5. (Original) The multi-tasking method of claim 3, wherein the displaying of the information comprises overlaying the information relating to the music file on a screen.

6. (Original) The multi-tasking method of claim 1, further comprising selecting to continue the playing of the music file.

7. (Original) The multi-tasking method of claim 1, wherein the function selected from the standby mode comprises a message function.

8. (Original) The multi-tasking method of claim 1, wherein the function selected from the standby mode comprises a phone-book function.

9. (Currently Amended) A multi-tasking apparatus in a pocket-sized mobile communication device including an MP3 playing capability, the multi-tasking apparatus comprising:

a controller for generating a music background play object, wherein the music background play object includes an application module including at least one applet, for providing an interface for music play by the music background play object, for selecting an MP3 mode in the pocket-sized mobile communication device using the interface, for selecting and playing a music file in the pocket-sized mobile communication device in the MP3 mode, for switching from the MP3 mode to a standby mode while the playing of the music file continues and for selecting and performing at least one function of the pocket-sized mobile communication device from the standby mode while the playing of the music file continues; and

a display unit for displaying an indication that the music file is being played in the standby mode and for continuing to display the indication that the music file is being played while performing the selected function.

10. (Original) The multi-tasking apparatus of claim 9, wherein the indication comprises an icon.

11. (Original) The multi-tasking apparatus of claim 9, wherein the indication comprises information relating to the music file.
12. (Original) The multi-tasking apparatus of claim 11, wherein the information comprises at least one of a music title, a musician and an album title.
13. (Original) The multi-tasking apparatus of claim 11, wherein the display unit overlays the information relating to the music file on a screen.
14. (Original) The multi-tasking apparatus of claim 9, wherein the controller selects to continue the playing of the music file.
15. (Original) The multi-tasking apparatus of claim 9, wherein the function selected from the standby mode comprises a message function.
16. (Original) The multi-tasking apparatus of claim 9, wherein the function selected from the standby mode comprises a phone-book function.
17. (Currently Amended) A multi-tasking apparatus in a pocket-sized mobile communication device consisting of a single display unit and including an MP3 playing capability, the multi-tasking apparatus comprising:
 - a controller for generating a music background play object, wherein the music background play object includes an application module including at least one applet, for providing an interface for music play by the music background play object, for selecting an MP3 mode in the pocket-sized mobile communication device using the interface, for selecting and playing a music file in the pocket-sized mobile communication device in the MP3 mode, and for switching from the MP3 mode to a standby mode while the playing of the music file continues; and
 - the single display unit for displaying an indication that the music file is being played in the standby mode.
18. (Original) The multi-tasking apparatus of claim 17, wherein the indication comprises an icon.

19. (Original) The multi-tasking apparatus of claim 17, wherein the indication comprises information relating to the music file.

20. (Original) The multi-tasking apparatus of claim 17, wherein the controller selects to continue the playing of the music file.

REMARKS/ARGUMENTS

I. Status of Claims

Claims 1-20 are pending, wherein claims 1, 9 and 17 are independent. The application was previously allowed as indicated by the Notice of Allowance dated August 12, 2009. The Applicant wishes to thank the Examiner for allowing the application. However, after review of the subject matter covered by the previously allowed claims, it was believed that the scope of the allowed claims was unduly narrow. Accordingly, Applicant filed a Request for Continued Examination (RCE) which included an amendment to each of independent claims 1, 9 and 17 to delete reference to being in a standby mode of a device when generating a music background play object. In response, the Office has rejected independent claims 1, 9 and 17 as obvious over Kokubo in view of Senpuku, which references have been used in several previous rejections. An Applicant initiated interview, which is summarized below, was held with the Examiner and Supervisory Primary Examiner (SPE). Applicant wishes to thank the Examiner and SPE for granting the interview and for the candid discussion held therein. As a result of the interview, Applicant has amended each of the independent claims to better define Applicant's invention. Applicant believes that the amended claims distinguish over the prior art and thus respectfully requests withdrawal of the rejections and allowance of the application.

II. Interview Summary

On December 8, 2009, a personal interview was held between the Examiner and her SPE, Mr. Gisang Lee and Mr. David Park representing the assignee, and Applicant's representatives Mr. Maeng-Ho Shin and Mr. George Eckert. All representatives of the Applicant and assignee wish to thank the Examiner and SPE for granting the interview and the candid discussion held therein. The purpose of the interview was to discuss the outstanding rejection and especially to better understand the Office's position regarding the interpretation of Kokubo.

During the interview, discussion focused on the limitation of a music background play object. It is Applicant's position that a background play object is not disclosed by Kokubo. However, it is the Office's position that the icon 10 of Kokubo does disclose a music background play object, especially in light of the disclosure by Kokubo in column 2, beginning at line 10. The Office did suggest however, that the

inclusion of a limitation further defining the music background play object would distinguish over the art of record, though not necessarily be allowable depending on the results of a further search. Specifically, the Office suggested including a limitation indicating that the music background play object includes an application module including at least one applet. Applicant appreciates the Office's suggestion and has amended the independent claims as suggested.

Discussion was also held during the interview regarding the alleged disclosure by Senpuku of a standby mode and regarding the double patenting rejection. As discussed below, it is Applicant's position that Senpuku does not disclose a standby mode and that the double patenting rejection must be clarified in light of the claim amendments made with the filing of the RCE. Regarding Senpuku, the Office maintained the position that, because Kokubo discloses switching between various modes and Senpuku discloses a standby mode, their combination makes obvious the switching to a standby mode in the disclosure of Kokubo. Regarding the double patenting rejection, the Office indicated that they would consider the propriety of the double patenting rejection in light of the claim amendments as well as the status of the terminal disclaimer. At the conclusion of the interview, the Office indicated that, once submitted, the arguments and amendments would be considered based on the discussion. Accordingly, an agreement was not reached.

III. Applicant's Invention as Claimed

The present invention is drawn to a mobile communication terminal that is capable of playing an MP3 file in the background while other applications are running on the terminal.

As discussed in the originally filed specification, portable communication terminals of the prior art allowed a user to play an MP3 file by including a separate player in the terminal. *See para. [0003]*. However, when using the separate player to play an MP3 file, the user could not simultaneously use any of the other functions provided by the terminal. *See para. [0004]*. One proposed solution was to include a control processor for the playing of MP3 files. That is, a dedicated MP3 processor would be added to manage and control only the MP3 files. *See para. [0005]*. However, the addition of a dedicated processor increased both the cost and complexity of the terminal. *Id.*

The presently claimed invention addresses these issues. That is, the claimed invention provides for independently playing a music file in the background while allowing a user to execute other menu functions of the device. The present invention achieves this ability by including application modules that include at least one applet such that each application module independently performs multi-tasking. *See para. [0018]*. For the specific invention as claimed, a music background play object, wherein the music background play object includes an application module including at least one applet, is included such that an MP3 file can be played in the background while other menu tasks can be executed by the user.

Independent claims 1, 9 and 17 recite these unique features. Specifically, each of independent claims 1, 9 and 17 recite the specific method or function that allows for a terminal to play a music file in the background while allowing a user to concurrently use other functions of the terminal. Specifically, the claims recite the limitations of:

generating a music background play object, wherein the music background play object includes an application module including at least one applet;
providing an interface for music play by the music background play object; and
selecting an MP3 mode ... using the interface.

By use of the music background play object, which is an application module including at least one applet as discussed with reference to para. [0018], the terminal is able to perform multi-tasking. That is, by generating the application module of the music background play object, the music background play object provides an interface for the playing of music, specifically the selecting of an MP3 mode. At the same time, the user is able to execute other menu functions of the device and thus multi-task using the device.

It is Applicant's contention that independent claims 1, 9 and 17 are allowable based on the unique use of the music background play object, wherein the music background play object includes an application module including at least one applet, alone, and not based on the use of the music background play object in a standby or any other mode. That is, none of the prior art discloses a music background play object, wherein the music background play object includes an application module including at least one applet in any mode of a device. Accordingly, Applicant believes that the claims are in condition for immediate allowance.

IV. Kokubo Does Not Disclose a Music Background Play Object, Wherein the Music Background Play Object Includes an Application Module Including at Least One Applet, as Claimed

As amended, each of independent claims 1, 9 and 17 now recites “generating a music background play object, wherein the music background play object includes an application module including at least one applet,” support for which can be found in the originally filed application, at least in paragraph [0018]. The independent claims also recite “providing an interface for music play *by the music background play object*,” and “selecting an MP3 mode...*using the interface*.” (*emphasis added*). Applicant submits that Kokubo does not disclose any, let alone, all of these limitations.

First, Kokubo does not disclose “generating a music background play object, wherein the music background play object includes an application module including at least one applet”. In the outstanding rejection, the Office asserts that Kokubo’s disclosure of an icon reads on Applicant’s background music play object. Specifically, the Office cites to lines 9-10 of the abstract (“an icon associated with a task displayed on a first display region is generated”), lines 34-39 of col. 2 (“an icon corresponding to a task (application software) displayed in a first region is generated”), lines 2-3 of col. 3 (an icon generating means for generating icons corresponding to tasks”), and lines 8-10 of col. 13 (“and a manually or automatically generated [music note symbol] icon 10f is displayed”) as disclosing a music background play object.

Although it is not conceded that the icon of Kokubo is a disclosure of a music background play object, Applicant has amended the independent claims to further clarify that the music background play object includes an application module including at least one applet. As suggested by the Office during the interview, this clarifying limitation is not disclosed, taught or suggested by Kokubo. Rather, as acknowledged by the Office in the outstanding rejection, Kokubo merely discloses the generating of “an icon corresponding to a task (application software)” *col. 2, lines 34-39*; see also col. 13, lines 8-10 (“manually or automatically generated [music note symbol] icon 10f is displayed.” The generating of the icon by Kokubo is not a disclosure of generating a music background play object, wherein the music background play object includes an application module including at least one applet.

That is, Kokubo makes no disclosure that the icon includes an application module, or that the application module includes at least one applet as instantly claimed.

Given that icon 10 is not a music background play object, wherein the music background play object includes an application module including at least one applet, it is self-evident that the icon 10 cannot be considered as a music background play object that *provides* an interface for music play, or that an MP3 mode may be selected using the interface. Considering that Kokubo does not disclose the amended limitations, Applicant respectfully requests that the rejection be withdrawn.

V. **Senpuku Does Not Cure the Deficiencies of Kokubo and Fails to Disclose the Switching to a Standby Mode as Claimed.**

As discussed above, Kokubo does not disclose a music background play object, wherein the music background play object includes an application module including at least one applet, or the related limitations as instantly claimed. And, although Senpuku was not cited for disclosing a music background play object, a review of Senpuku indicates that it fails to disclose the limitation as well. Accordingly, for at least the reasons stated above, it is respectively requested that the rejection be withdrawn.

Senpuku was cited for allegedly disclosing the switching to a standby mode. However, while Senpuku discloses several methods regarding the use of a main display and a sub-display, including the automatic display of an execution step, the automatic display of a help screen, and the automatic display of an already running execution, Senpuku does not disclose, teach or suggest a method wherein, when the sub-display is opened, an application executing on the main display is moved to the sub-display, leaving a standby screen displayed on the main display. First, in the methods of Senpuku wherein applications are switched between the main display and sub-display, there is no discussion of a standby mode or screen. Specifically, Senpuku discloses that *images* may be switched from the sub-display to a part of the main display if the sub-display is closed (see again FIGs. 11 and 12) when the user is executing a video telephone call. Senpuku discloses in another method that, if a *plurality* of applications are being executed, when the sub-display is opened one of the applications may be displayed on the sub-display. In yet another method, Senpuku discloses that if a *plurality* of application are being executed, when the sub-display is closed, the application on the "active" screen will continue to be displayed on the

main display. However, nowhere in any of these examples does Senpuku disclose, teach or suggest that a standby screen is displayed when an application is moved from one display to the other.

Second, and in direct contrast to the assertions in the outstanding rejection, in the *only* description by Senpuku of a standby screen (FIG. 18 and para. [0110]), there is no disclosure of the moving of an application to a sub-display from a main display when the sub-display is opened. Rather, as explicitly disclosed by Senpuku, in a state in which a standby screen is *already* displayed on the main display, *and then* the sub-display is opened, a pre-registered second application may be automatically executed and displayed on the sub-display. The disclosure of Senpuku does not support the assertions made in the outstanding rejection and does not supply the element missing from Kokubo.

Senpuku does not disclose, teach or suggest the “switching from the MP3 mode to a standby mode while the playing of the music file continues.” For this reason, Applicant believes that the rejection is in error and respectfully requests withdrawal of the same.

VI. The Double Patenting Rejection in Light of the Claim Amendments

The double patenting rejection made in the Office action mailed May 27, 2009 was based on limitations that are no longer present in independent claims 1, 9 and 17. Specifically, independent claims 1, 9 and 17 were amended (with the filing of the RCE) to delete the limitation regarding generating a music background play object “in a standby mode.” However, in light of this amendment, the double patenting rejection was not asserted in the outstanding Office action, presumably because a terminal disclaimer was previously filed. However, given the previous claim amendments as well as the amendments in the present response, Applicant respectfully requests that the Office elaborate on its position regarding the propriety of the double patenting rejection.

VII. Conclusion

In view of the above, it is believed that the application is now in condition for allowance and notice to that effect is respectfully requested. If there are questions, the Examiner is encouraged to contact the undersigned at the indicated telephone number.

Respectfully submitted,

Date: December 08, 2009

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Electronic Acknowledgement Receipt

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|---------------------------------------------|---------------------------------------------------------|
| EFS ID: | 6597386 |
| Application Number: | 11778465 |
| International Application Number: | |
| Confirmation Number: | 1475 |
| Title of Invention: | MULTI-TASKING APPARATUS AND METHOD IN PORTABLE TERMINAL |
| First Named Inventor/Applicant Name: | Moon-Sang JEONG |
| Customer Number: | 68103 |
| Filer: | George Charles Eckert |
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| Attorney Docket Number: | 0201-0055 |
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| Application Type: | Utility under 35 USC 111(a) |

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File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part / .zip | Pages (if appl.) |
|-----------------|----------------------|---------------------------------------------|----------------------------------------------------------------------|-------------------|------------------|
| 1 | | 0201-0055AmendmentAsFiled 12-08-2009.pdf | 143619 <small>41ed19088117246c6f0011b019466f5477 6525</small> | yes | 12 |

| Multipart Description/PDF files in .zip description | | |
|-------------------------------------------------------|-------|-----|
| Document Description | Start | End |
| Amendment/Req. Reconsideration-After Non-Final Reject | 1 | 1 |
| Claims | 2 | 5 |
| Applicant Arguments/Remarks Made in an Amendment | 6 | 12 |

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New International Application Filed with the USPTO as a Receiving Office

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| PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875 | Application or Docket Number 11/778,466 | Filing Date 07/16/2007 | <input type="checkbox"/> To be Mailed |
|-----------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------|---------------------------------------|

| APPLICATION AS FILED - PART I | | | | OTHER THAN SMALL ENTITY | | | |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|------------------------------------------|----|--------------|----------|
| (Column 1) | | (Column 2) | | SMALL ENTITY <input type="checkbox"/> OR | | SMALL ENTITY | |
| FOR | NUMBER FILED | - NUMBER EXTRA | RATE (\$) | FEE (\$) | OR | RATE (\$) | FEE (\$) |
| <input type="checkbox"/> BASIC FEE (37 CFR 1.18(a), (b), or (c)) | N/A | N/A | N/A | | | N/A | |
| <input type="checkbox"/> SEARCH FEE (37 CFR 1.16(a), (i), or (m)) | N/A | N/A | N/A | | | N/A | |
| <input type="checkbox"/> EXAMINATION FEE (37 CFR 1.18(e), (p), or (q)) | N/A | N/A | N/A | | | N/A | |
| TOTAL CLAIMS (37 CFR 1.18(i)) | minus 20 = | * | X \$ = | | | X \$ = | |
| INDEPENDENT CLAIMS (37 CFR 1.18(h)) | minus 3 = | * | X \$ = | | | X \$ = | |
| <input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s)) | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s) | | | | | | |
| <input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.18(j)) | | | | | | | |
| * If the difference in column 1 is less than zero, enter "0" in column 2. | | | TOTAL | | | TOTAL | |

| APPLICATION AS AMENDED - PART II | | | | | OTHER THAN SMALL ENTITY | | | | |
|------------------------------------------------------------------------------------------|------------|----------------------------------|--------------------------------------|---------------|-------------------------|---------------------|----|-----------------|---------------------|
| (Column 1) | | (Column 2) | | (Column 3) | SMALL ENTITY | | OR | | SMALL ENTITY |
| AMENDMENT | 12/08/2009 | CLAIMS REMAINING AFTER AMENDMENT | - HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$) | ADDITIONAL FEE (\$) | OR | RATE (\$) | ADDITIONAL FEE (\$) |
| Total (37 CFR 1.16(i)) | 20 | Minus | 20 | = 0 | X \$ = | | | X \$ = | 0 |
| Independent (37 CFR 1.16(h)) | 3 | Minus | 3 | = 0 | X \$ = | | | X \$ = | 0 |
| <input type="checkbox"/> Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| <input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.18(j)) | | | | | | | | | |
| | | | | | TOTAL ADD'L FEE | | | TOTAL ADD'L FEE | 0 |

| APPLICATION AS AMENDED - PART II | | | | | OTHER THAN SMALL ENTITY | | | | |
|------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------|---------------|------------|-------------------------|----|-----------|---------------------|--------------|
| (Column 1) | | (Column 2) | | (Column 3) | SMALL ENTITY | | OR | | SMALL ENTITY |
| AMENDMENT | CLAIMS REMAINING AFTER AMENDMENT | - HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$) | ADDITIONAL FEE (\$) | OR | RATE (\$) | ADDITIONAL FEE (\$) | |
| Total (37 CFR 1.16(i)) | - | Minus | - | = | X \$ = | | | X \$ = | |
| Independent (37 CFR 1.16(h)) | - | Minus | - | = | X \$ = | | | X \$ = | |
| <input type="checkbox"/> Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | |
| <input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.18(j)) | | | | | | | | | |
| | | | | | TOTAL ADD'L FEE | | | TOTAL ADD'L FEE | |

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
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Legal Instrument Examiner:
 /MARQUITA D. JONES/

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