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(54) **COMMUNICATION TERMINALS, SYSTEMS, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR PUBLISHING, SHARING AND ACCESSING MEDIA FILES**

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H04L 29/08	(2006.01)

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CPC ***H04L 29/08*** (2013.01); ***H04L 29/08081*** (2013.01); ***H04L 67/04*** (2013.01); ***H04L 67/06*** (2013.01); ***H04L 67/16*** (2013.01)

(58) **Field of Classification Search**

CPC H04L 67/06; H04L 67/04; H04L 29/08; H04L 29/08081

(Continued)

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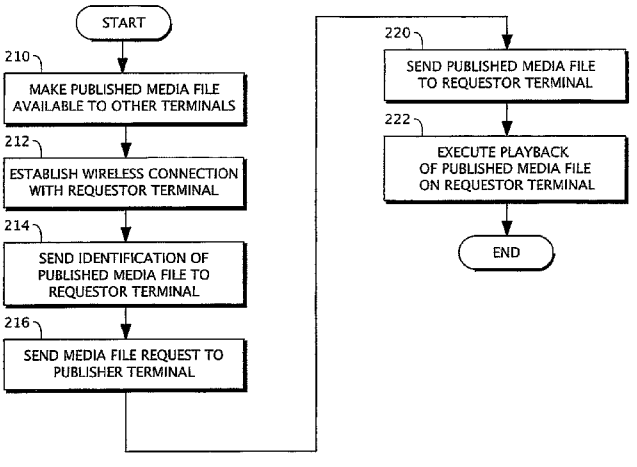
(57) **ABSTRACT**

A method for publishing and sharing media files includes: making a published media file available to other wireless communication terminals from a publisher wireless communication terminal; establishing a connection via a wireless communication module of the publisher wireless communication terminal with a requestor wireless communication terminal seeking published media files; sending an identification of the published media file from the publisher wireless communication terminal to the requestor wireless communication terminal; sending a media file request from the requestor wireless communication terminal to the publisher wireless communication terminal requesting the published media file; sending the published media file from the publisher wireless communication terminal to the requestor wireless communication terminal in response to the media file request; and executing playback of the published media file on the requestor wireless communication terminal.

55 Claims, 4 Drawing Sheets



Related U.S. Application Data

continuation of application No. 11/442,751, filed on May 30, 2006, now Pat. No. 7,925,244.

(58) **Field of Classification Search**

USPC 455/414.3, 41.2

See application file for complete search history.

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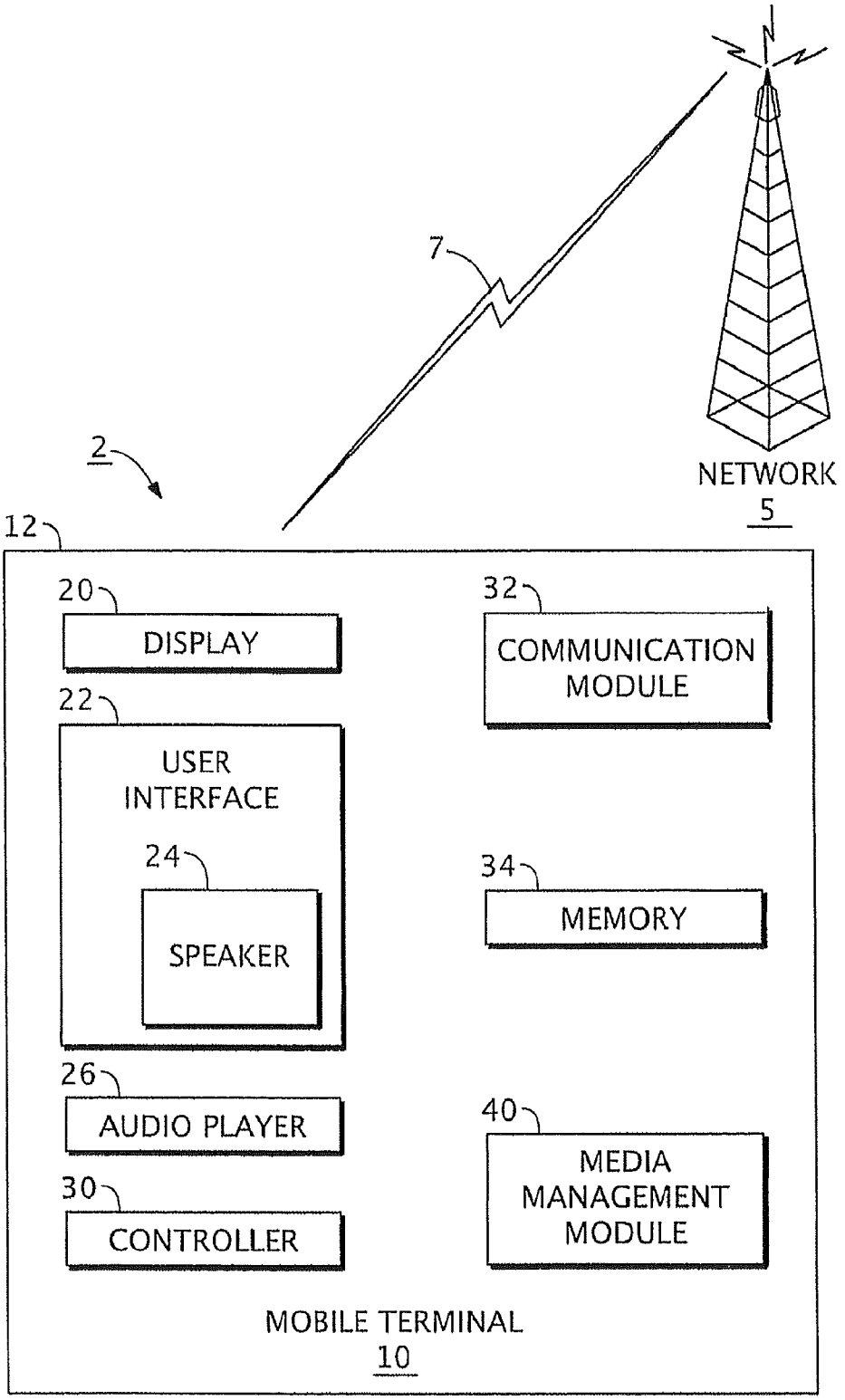
7
2
NETWORK
5
12
20
DISPLAY
22
USER
INTERFACE
24
SPEAKER
26
AUDIO PLAYER
30
CONTROLLER
32
COMMUNICATION
MODULE
34
MEMORY
40
MEDIA
MANAGEMENT
MODULE
MOBILE TERMINAL
10

FIG. 1

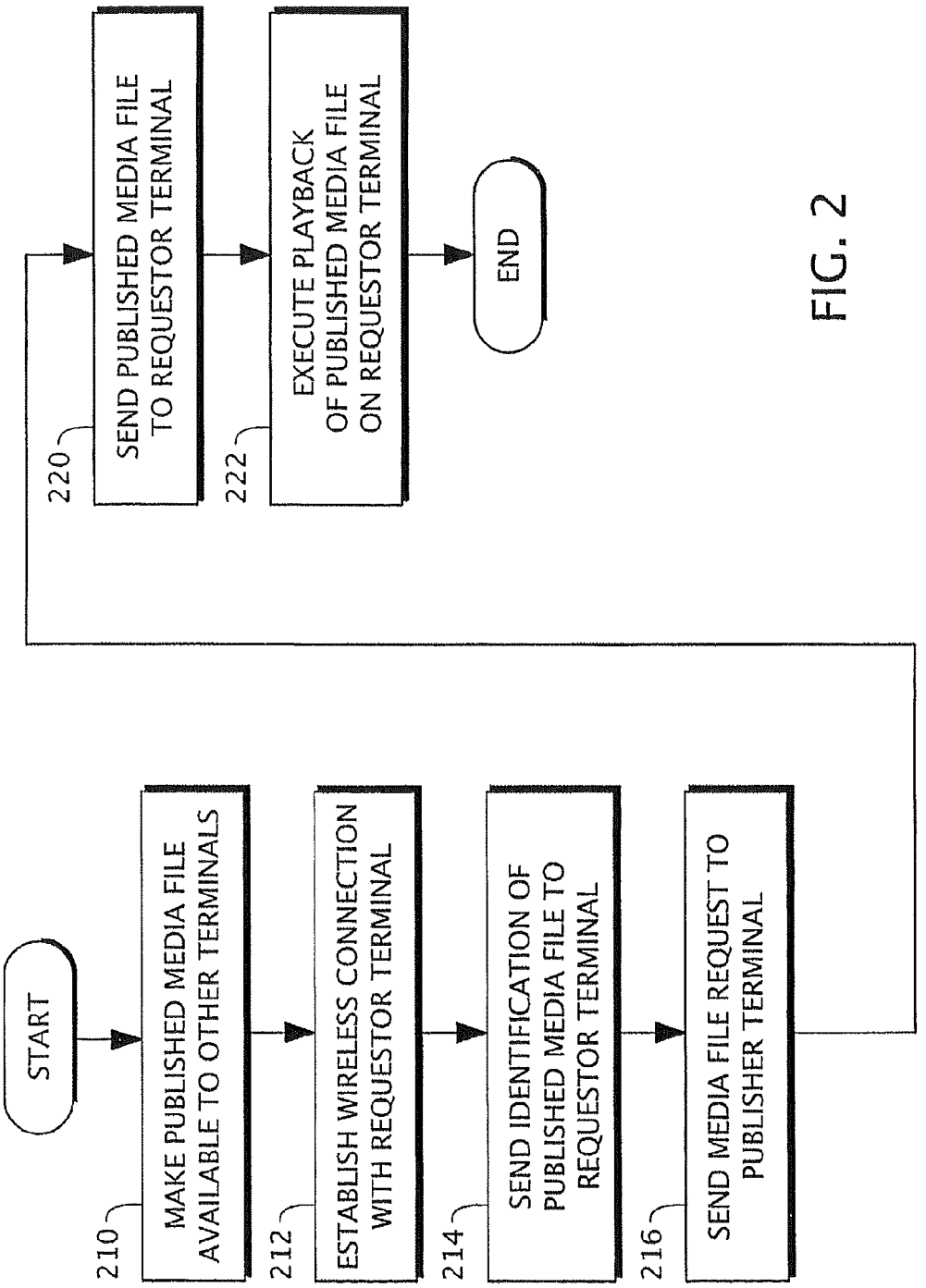
START
MAKE PUBLISHED MEDIA FILE AVAILABLE TO OTHER TERMINALS
ESTABLISH WIRELESS CONNECTION WITH REQUESTOR TERMINAL
SEND IDENTIFICATION OF PUBLISHED MEDIA FILE TO REQUESTOR TERMINAL
SEND MEDIA FILE REQUEST TO PUBLISHER TERMINAL
SEND PUBLISHED MEDIA FILE TO REQUESTOR TERMINAL
EXECUTE PLAYBACK OF PUBLISHED MEDIA FILE ON REQUESTOR TERMINAL
END
210
212
214
216
220
222

FIG. 2

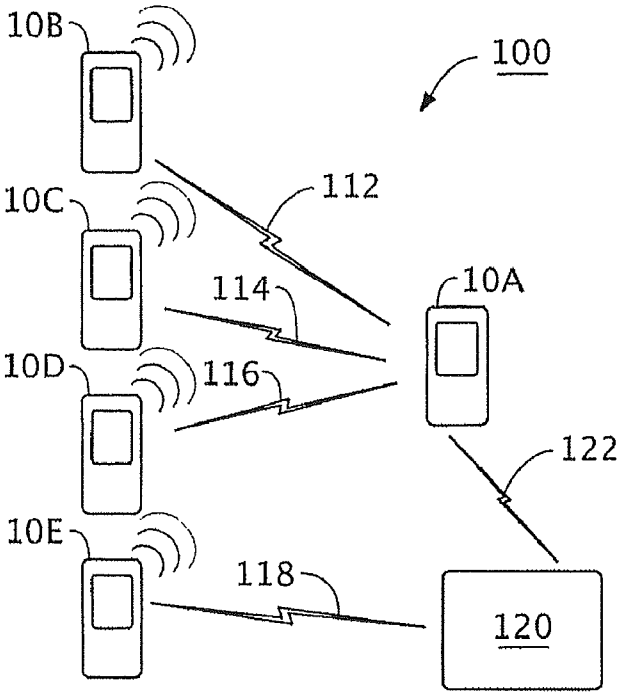
10B
100
112
10C
114
10A
10D
116
122
10E
118
120

FIG. 3

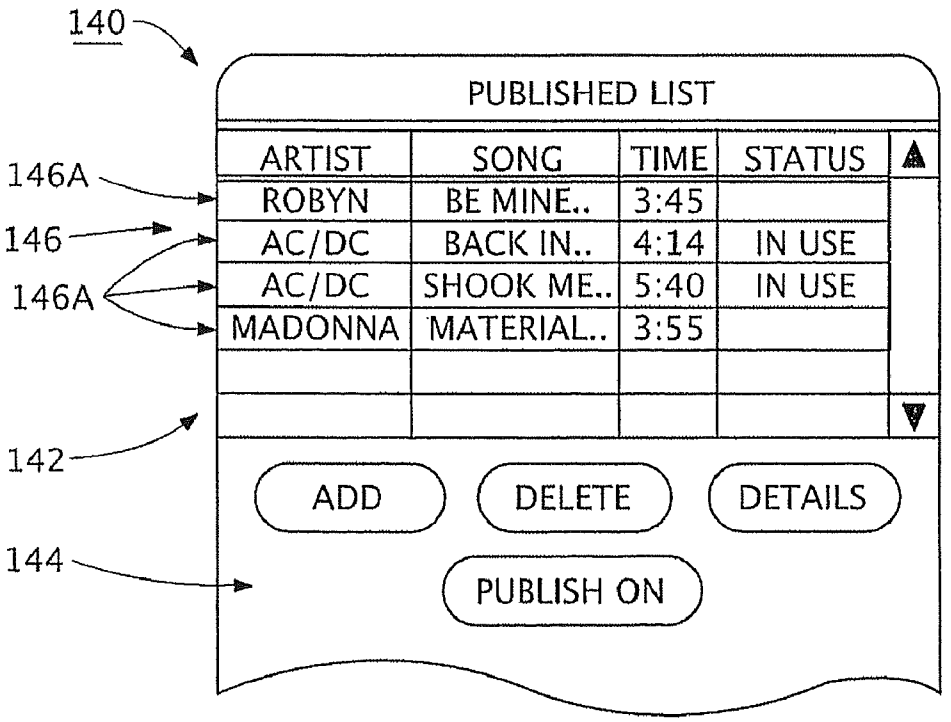
140
PUBLISHED LIST
ARTIST
SONG
TIME
STATUS
146A
ROBYN
BE MINE..
3:45
146
AC/DC
BACK IN..
4:14
IN USE
146A
AC/DC
SHOOK ME..
5:40
IN USE
MADONNA
MATERIAL..
3:55
142
ADD
DELETE
DETAILS
144
PUBLISH ON

FIG. 4

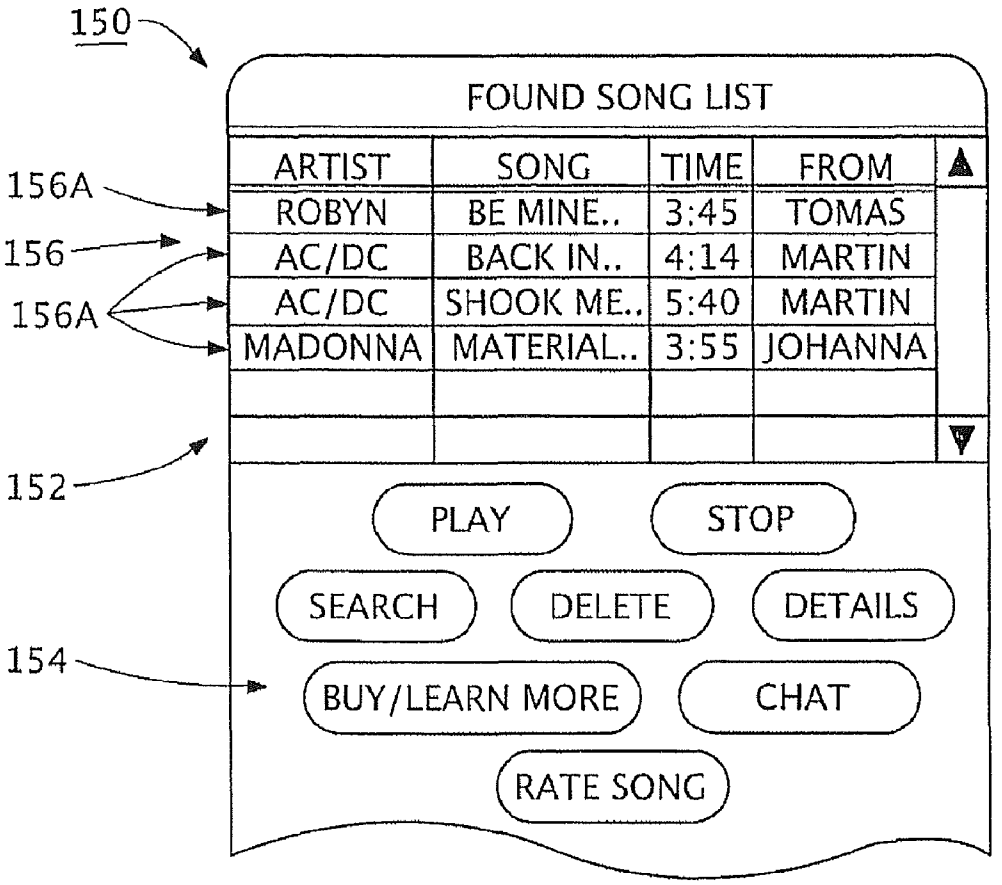
150
FOUND SONG LIST
ARTIST
SONG
TIME
FROM
156A
ROBYN
BE MINE..
3:45
TOMAS
156
AC/DC
BACK IN..
4:14
MARTIN
156A
AC/DC
SHOOK ME..
5:40
MARTIN
MADONNA
MATERIAL..
3:55
JOHANNA
152
PLAY
STOP
SEARCH
DELETE
DETAILS
154
BUY/LEARN MORE
CHAT
RATE SONG

FIG. 5

COMMUNICATION TERMINALS, SYSTEMS, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR PUBLISHING, SHARING AND ACCESSING MEDIA FILES

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue; a claim printed with strikethrough indicates that the claim was canceled, disclaimed, or held invalid by a prior post-patent action or proceeding.

RELATED APPLICATIONS

This is a continuation application of U.S. patent application Ser. No. 13/032,990, filed Feb. 23, 2011, now U.S. Pat. No. 8,090,360 which is a continuation application of U.S. patent application Ser. No. 11/442,751, filed May 30, 2006, now U.S. Pat. No. 7,925,244, the disclosures of which are incorporated herein in their entireties.

FIELD OF THE INVENTION

The present invention relates to electronic devices and, more particularly, to electronic devices, methods and computer program products for playing media files.

BACKGROUND OF THE INVENTION

Music listeners often wish to discuss and enjoy new music. Likewise, marketers and enthusiasts often wish to expose others to new music and artists. These goals are generally accomplished via personal contacts, music magazines, newspapers, record stores, and web sites.

SUMMARY OF THE INVENTION

According to embodiments of the present invention, a method for publishing and sharing media files includes: making a published media file available to other wireless communication terminals from a publisher wireless communication terminal; establishing a connection via a wireless communication module of the publisher wireless communication terminal with a requestor wireless communication terminal seeking published media files; sending an identification of the published media file from the publisher wireless communication terminal to the requestor wireless communication terminal; sending a media file request from the requestor wireless communication terminal to the publisher wireless communication terminal requesting the published media file; sending the published media file from the publisher wireless communication terminal to the requestor wireless communication terminal in response to the media file request; and executing playback of the published media file on the requestor wireless communication terminal.

According to some embodiments, the published media file is a song file.

The method may include: establishing a connection via a wireless communication module of the publisher wireless communication terminal with a plurality of requestor wireless communication terminals seeking published media files; sending identifications of published media files from the publisher wireless communication terminal to each of the requestor wireless communication terminals; sending a media file request from each of the requestor wireless communication terminals to the publisher wireless communication terminal requesting the published media files; sending published media files from the publisher wireless communication terminal to each of the requestor wireless communication terminals in response to the media file requests; and executing playback of the published media files on each of the requestor wireless communication terminals.

According to some embodiments, the method includes issuing a discovery request from the requestor wireless communication terminal seeking wireless communication terminals that are offering published media files, wherein the identification of the published media file is sent from the publisher wireless communication terminal to the requestor wireless communication terminal in response to the discovery request.

The method may further include generating and displaying on the requestor wireless communication terminal a published media file list including the published media file identification.

The method may include sending the published media file to the requestor wireless communication terminal in response to the media file request by streaming the published media file to the requestor wireless communication terminal. The published media file may be sent to the requestor wireless communication terminal in response to the media file request by streaming the published media file to the requestor wireless communication terminal at a rate less than a prescribed standard rate to prevent first quality reproduction during playback.

According to some embodiments, the method includes sending the published media file to the requestor wireless communication terminal in response to the media file request as a truncated sample of the published media file.

The published media file may be sent to the requestor wireless communication terminal in response to the media file request with a Digital Rights Management (DRM) scheme configured to limit access to the published media file.

The published media file may be sent to the requestor wireless communication terminal in response to the media file request with metadata including descriptive information regarding the published media file.

According to some embodiments, the method includes providing a chat/messaging service between the publisher wireless communication terminal and the requestor wireless communication terminal.

The method may include sending feedback regarding the published media file from the requestor wireless communication terminal to the publisher wireless communication terminal.

According to some embodiments, the method includes providing a connection between the requestor wireless communication terminal and an online store and/or informational website.

According to further embodiments of the present invention, a mobile wireless communication terminal includes a wireless communication terminal and a controller. The wireless communication module is configured to communicate with other communication terminals over a wireless interface. The controller is configured to make a published media file available to other wireless communication terminals, to establish a connection via the wireless communication module with a requestor wireless communication terminal seeking published media files, to send an identification of the published media file to the requestor wireless communication terminal, to receive a media file request from the

requestor wireless communication terminal requesting the published media file, and to send the published media file to the requestor wireless communication terminal in response to the media file request for playback.

According to some embodiments, the published media file is a song file.

According to some embodiments, the controller is configured to establish connections via the wireless communication module with a plurality of requestor wireless communication terminals seeking published media files, to send identifications of published media files to each of the requestor wireless communication terminals, to receive media file requests from the requestor wireless communication terminals requesting the published media files; and to send the published media file(s) to the requestor wireless communication terminals in response to the respective media file requests for playback.

The controller may be configured to receive a discovery request from the requestor wireless communication terminal seeking published media files, and to send the identification of the published media file to the requestor wireless communication terminal in response to the discovery request.

According to some embodiments, the controller is configured to send the published media file to the requestor wireless communication terminal in response to the media file request by streaming the published media file to the requestor wireless communication terminal.

The controller may be configured to send the published media file to the requestor wireless communication terminal in response to the media file request as a truncated sample of the published media file.

According to further embodiments, the controller is configured to send the published media file to the requestor wireless communication terminal in response to the media file request with a Digital Rights Management (DRM) scheme configured to limit access to the published media file.

According to some embodiments, the controller is configured to send the published media file to the requestor wireless communication terminal in response to the media file request with metadata including descriptive information regarding the published media file.

The controller may be configured to enable a chat/message service between the wireless communication terminal and the requestor wireless communication terminal.

According to some embodiments, the wireless communication module is configured to communicate with other communication terminals over a direct point-to-point wireless interface, and the controller is configured to establish the connection with the publisher wireless communication terminal via the wireless communication module, send the published media identification to the requestor wireless communication terminal, and send the published media file to the requestor wireless communication terminal for playback all via the direct point-to-point wireless interface.

According to some embodiments, the wireless communication module comprises a Bluetooth transmitter.

According to some embodiments, the wireless communication terminal includes a cellular telephone.

According to embodiments of the present invention, a mobile wireless communication terminal includes a wireless communication module and a controller. The wireless communication module is configured to communicate with other communication terminals over a wireless interface. The controller is configured to search for and locate at least one publisher wireless communication terminal that is offering published media files, to establish a connection with the at least one publisher wireless communication terminal via the wireless communication module, to receive from the at least one publisher wireless communication terminal at least one published media file identification, to generate and display a published media file list including the at least one published media file identification, to execute playback of a selected media file from the published media file list, including retrieving the selected media file from the publisher wireless communication terminal for playback.

According to some embodiments, the published media file is a song file.

The controller may be configured to issue a discovery request seeking wireless communication terminals that are offering published media files.

According to some embodiments, the wireless communication module is configured to communicate with other communication terminals over a direct point-to-point wireless interface, and the controller is configured to establish the connection with the publisher wireless communication terminal via the wireless communication module, receive the published media identification from the publisher wireless communication terminal, and retrieve the published media file from the publisher wireless communication terminal for playback all via the direct point-to-point wireless interface.

According to some embodiments, the wireless communication module comprises a Bluetooth transmitter.

According to some embodiments, the wireless communication terminal includes a cellular telephone.

Further features, advantages and details of the present invention will be appreciated by those of ordinary skill in the art from a reading of the figures and the detailed description of the preferred embodiments that follow, such description being merely illustrative of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic diagram of a mobile wireless communication terminal according to some embodiments of the present invention and an exemplary base station transceiver.

FIG. **2** is a flowchart illustrating methods in accordance with some embodiments of the present invention.

FIG. **3** is a schematic diagram of a media file publishing and playback system according to some embodiments of the present invention.

FIG. **4** is a schematic diagram illustrating a display of a mobile wireless communication module according to embodiments of the present invention in a publisher mode.

FIG. **5** is a schematic diagram illustrating a display of a mobile wireless communication module according to embodiments of the present invention in a requestor mode.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

The present invention now will be described more fully with reference to the accompanying drawings, in which embodiments of the invention are shown. However, this invention should not be construed as limited to the embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

As used herein, the term "comprising" or "comprises" is open-ended, and includes one or more stated features, inte-

gers, elements, steps, components or functions but does not preclude the presence or addition of one or more other features, integers, elements, steps, components, functions or groups thereof.

As used herein, the term "and/or" includes any and all combinations of one or more of the associated listed items.

As used herein, the common abbreviation "e.g.", which derives from the Latin phrase "exempli gratia," may be used to introduce or specify a general example or examples of a previously mentioned item, and is not intended to be limiting of such item. If used herein, the common abbreviation "i.e.", which derives from the Latin phrase "id est," may be used to specify a particular item from a more general recitation.

The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the singular forms "a", "an" and "the" are intended to include the plural forms as well, unless the context clearly indicates otherwise.

Unless otherwise defined, all terms (including technical and scientific terms) used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. It will be further understood that terms, such as those defined in commonly used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

It will be understood that when an element is referred to as being "coupled" or "connected" to another element, it can be directly coupled or connected to the other element or intervening elements may also be present. In contrast, when an element is referred to as being "directly coupled" or "directly connected" to another element, there are no intervening elements present. Furthermore, "coupled" or "connected" as used herein may include wirelessly coupled or connected.

Well-known functions or constructions may not be described in detail for brevity and/or clarity.

The present invention may be embodied as methods, electronic devices, and/or computer program products. Accordingly, the present invention may be embodied in hardware and/or in software (including firmware, resident software, micro-code, etc.), which may be generally referred to herein as a "circuit" or "module". Furthermore, the present invention may take the form of a computer program product on a computer-usable or computer-readable storage medium having computer-usable or computer-readable program code embodied in the medium for use by or in connection with an instruction execution system. In the context of this document, a computer-usable or computer-readable medium may be any medium that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device.

Embodiments according to the present invention are described with reference to block diagrams and/or operational illustrations of methods and communication terminals. In this regard, each block may represent a module, segment, or portion of code, which comprises one or more executable instructions for implementing the specified logical function (s). It is to be understood that each block of the block diagrams and/or operational illustrations, and combinations of blocks in the block diagrams and/or operational illustrations, can be implemented by radio frequency, analog and/or digital hardware, and/or program instructions. These program instructions may be provided to a controller, which may include one or more general purpose processors, special purpose processors, ASICs, and/or other programmable data processing apparatus, such that the instructions, which execute via the controller and/or other programmable data processing apparatus, create means for implementing the functions/acts specified in the block diagrams and/or operational block or blocks. In some alternate implementations, the functions/acts noted in the blocks may occur out of the order noted in the operational illustrations. For example, two blocks shown in succession may in fact be executed substantially concurrently or the blocks may sometimes be executed in the reverse order, depending upon the functionality/acts involved.

These computer program instructions may also be stored in a computer-usable or computer-readable memory that may direct a computer or other programmable data processing apparatus to function in a particular manner, such that the instructions stored in the computer usable or computer-readable memory produce an article of manufacture including instructions that implement the function specified in the flowchart and/or block diagram block or blocks.

The computer-usable or computer-readable medium may be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. More specific examples (a nonexhaustive list) of the computer-readable medium include the following: hard disks, optical storage devices, a transmission media such as those supporting the Internet or an intranet, magnetic storage devices, an electrical connection having one or more wires, a portable computer diskette, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or Flash memory), an optical fiber, and a compact disc read-only memory (CD-ROM).

Computer program code for carrying out operations of the present invention may be written in an object oriented programming language such as Java®, Smalltalk or C++. However, the computer program code for carrying out operations of the present invention may also be written in conventional procedural programming languages, such as the "C" programming language and/or a lower level assembler language. It will be further appreciated that the functionality of any or all of the program modules may also be implemented using discrete hardware components, one or more application specific integrated circuits (ASICs), or a programmed digital signal processor or microcontroller.

As used herein, "electronic component" means an active device as contrasted with a passive electrical connector or the like. An electronic component may include a processor.

As used herein, "streamed" or "streaming" means that a file, such as a media file (e.g., an audio or song file, a video file, or an image file), is continuously sent via a digital signal to a receiving device where the media file is concurrently played via a suitable receiving application. The digital signal is typically buffered.

As used herein, a "communication terminal" includes, but is not limited to, a terminal that is configured to receive/transmit communication signals via a wireline connection, such as via a public-switched telephone network (PSTN), digital subscriber line (DSL), digital cable, or another data connection/network, and/or via a wireless interface with, for example, a cellular network, a satellite network, a wireless local area network (WLAN), and/or another communication terminal.

When the communication terminal is configured to communicate over a wireless interface, it is referred to herein as a "wireless communication terminal" or a "wireless terminal." Examples of wireless terminals include, but are not

limited to, a cellular telephone, personal data assistant (PDA), pager, and/or a computer that is configured to communicate data over a wireless communication interface that can include a cellular telephone interface, a Bluetooth interface, a wireless local area network interface (e.g., 802.11), another RF communication interface, and/or an optical/infra-red communication interface.

As used herein, "mobile terminals" may be portable, transportable, installed in a vehicle (aeronautical, maritime, or land-based), or situated and/or configured to operate locally and/or in a distributed fashion at any other location(s) on earth and/or in space.

Some embodiments of the present invention will now be described below with respect to FIGS. **1-5**. Some embodiments of the present invention provide mobile wireless communication terminals capable of publishing one or more media files for playback on another wireless communication terminal, and/or capable of requesting and playing back media files published by another wireless communication terminal. Each media file may be an audio or song file, a video clip or video file, or a still image file. Methods, mobile wireless communication terminals, systems and computer program products in accordance with some embodiments of the present invention may be employed to market or expose music and artists or the like to new listeners and consumers.

Referring now to FIG. **1**, an exemplary mobile wireless communication terminal **10** in accordance with some embodiments of the present invention is illustrated. The wireless terminal **10** is configured to communicate data with one or more other wireless terminals over a direct wireless communication interface therebetween, over another wireless communication interface through one or more cellular base stations, and/or over another wireless communication interface through a wireless local area network (WLAN) router.

The wireless terminal **10** may be a mobile radiotelephone forming a part of a radiotelephone communication system **2** as illustrated in FIG. **1**. The system **2** includes the mobile wireless communication terminal **10** and a base station transceiver, which is part of a wireless communications network **5**. In some embodiments of the present invention, the network **5** includes a base station transceiver that includes the radio transceiver(s) that define an individual cell in a cellular network and communicates with the mobile terminal **10** (via an interface **7**) and other mobile terminals in the cell using a radio-link protocol. It will be understood that, in some embodiments of the present invention, many base station transceivers may be connected through, for example, a mobile switching center and other devices to define the wireless communications network **5**.

The mobile terminal **10** in the illustrated embodiments includes a portable housing assembly **12**, a display **20**, a user interface **22** (i.e., a man machine interface (MMI)) including a speaker **24** (i.e., a sound transducer), a media player **26**, a controller **30**, a communication module **32**, and a memory **34**. The foregoing components of the mobile terminal **10** may be included in many conventional mobile terminals and their functionality is generally known to those skilled in the art. The mobile terminal **10** further includes a media management module **40**, which may be stored in the memory **34**. The media player **26** is configured to playback the associated media file format(s) as described herein. Thus, for playback of audio or song files, the media player includes an audio player (e.g., an MP3 player), for playback of video files the media player **26** includes a video player, and for display of still images, the media player **26** includes a still image player.

The display **20** may be any suitable display screen assembly. For example, the display screen **28** may be a liquid crystal display (LCD) with or without auxiliary lighting (e.g., a lighting panel).

The user interface **22** may include any suitable input device (s) including, for example, a touch activated or touch sensitive device (e.g., a touch screen), a joystick, a keyboard/keypad, a dial, a directional key or keys, and/or a pointing device (such as a mouse, trackball, touch pad, etc.). The speaker **24** generates sound responsive to an input audio signal. The user interface **22** can also include a microphone coupled to an audio processor that is configured to generate an audio data stream responsive to sound incident on the microphone.

The controller **30** may support various functions of the mobile terminal **10**A. The controller **30** can be any commercially available or custom microprocessor, for example. In use, the controller **30** of the mobile terminal **10** generates a display image on the display **20**. The controller **30** may control the media player **26** and various other components of the mobile terminal **10**A.

The memory **34** is configured to store digital information signals and data such as digital media signals and/or digital media files (e.g., digital audio signals and/or digital audio files).

The communication module **32** is configured to communicate data over one or more wireless interfaces (e.g., wireless interfaces **7**, **112**, **114**, **116**, **118**, **122** as discussed herein (FIGS. **1** and **3**)) to another remote wireless terminal as discussed herein. The communication module **32** can include a cellular communication module, a direct point-to-point connection module, and/or a WLAN module.

With a cellular communication module, the wireless terminal **10** can communicate via the base station(s) of the network **5** using one or more cellular communication protocols such as, for example, Advanced Mobile Phone Service (AMPS), ANSI-136, Global Standard for Mobile (GSM) communication, General Packet Radio Service (GPRS), enhanced data rates for GSM evolution (EDGE), code division multiple access (CDMA), wideband-CDMA, CDMA2000, and Universal Mobile Telecommunications System (UMTS). The cellular base stations may be connected to a Mobile Telephone Switching Office (MTSO) wireless network, which, in turn, can be connected to a PSTN and/or another network.

A direct point-to-point connection module may include a direct RF communication module or a direct IR communication module. The direct RF communication module may include a Bluetooth module. With a Bluetooth module, the wireless terminal **10** can communicate via an ad-hoc network through a direct point-to-point interface.

With a WLAN module, the wireless terminal **10** can communicate through a WLAN (e.g., a router **120** (FIG. **3**)) using a communication protocol that may include, but is not limited to, 802.11a, 802.11b, 802.11e, 802.11g, and/or 802.11i.

The communication module **32** can include a transceiver typically having a transmitter circuit and a receiver circuit, which respectively transmit outgoing radio frequency signals (e.g., to the network **5**, a router or directly to another terminal) and receive incoming radio frequency signals (e.g., from the network **5**, a router or directly to another terminal), such as voice and data signals, via an antenna. The communication module **32** may include a short range transmitter and receiver, such as a Bluetooth transmitter and receiver. The antenna may be an embedded antenna, a retractable antenna or any antenna known to those having

skill in the art without departing from the scope of the present invention. The radio frequency signals transmitted between the mobile terminal **10** and the network **5**, router or other terminal may include both traffic and control signals (e.g., paging signals/messages for incoming calls), which are used to establish and maintain communication with another party or destination. The radio frequency signals may also include packet data information, such as, for example, cellular digital packet data (CDPD) information. In addition, the transceiver may include an infrared (IR) transceiver configured to transmit/receive infrared signals to/from other electronic devices via an IR port.

The mobile terminal **10** may also be configured to electrically couple with another terminal via a wireline or cable for the transmission of digital communication signals therebetween. The mobile terminal **10** may include further components such as a camera device configured to generate a still image and/or video data stream based on incident light.

According to some embodiments, the mobile terminal **10** is a handheld mobile terminal. By "handheld mobile terminal," it is meant that the outer dimensions of the mobile terminal are adapted and suitable for use by a typical operator using one hand. According to some embodiments, the total volume of the handheld mobile terminal **10** is less than about 200 cc. According to some embodiments, the total volume of the handheld terminal **10** is less than about 100 cc. According to some embodiments, the total volume of the handheld mobile terminal **10** is between about 50 and 100 cc. According to some embodiments, no dimension of the handheld mobile terminal **10** exceeds about 200 mm.

A method for publishing and playing back one or more media files using two or more wireless communication terminals (e.g., two or more of the mobile terminals **10**) according to some embodiments of the present invention will now be described with reference to the flowchart of FIG. **2**. The method includes making a published media file available to other wireless communication terminals from a publisher wireless communication terminal (Block **210**). A connection is established via a wireless communication module of the publisher wireless communication terminal with a requestor wireless communication terminal seeking published media files (Block **212**). An identification of the published media file is sent from the publisher wireless communication terminal to the requestor wireless communication terminal (Block **214**). A media file request is sent from the requestor wireless communication terminal to the publisher wireless communication terminal requesting the published media file (Block **216**). The published media file is sent from the publisher wireless communication terminal to the requestor wireless communication terminal in response to the media file request (Block **220**). Playback of the published media file is executed on the requestor wireless communication terminal (Block **222**).

According to some embodiments, the published media file is a song file. According to some embodiments, the published media file is a video file. According to some embodiments, the published media file is a still image file.

According to some embodiments, a discovery request is issued from the requestor wireless communication terminal seeking wireless communication terminals that are offering published media files, and identification of the published media file is sent from the publisher wireless communication terminal to the requestor wireless communication terminal in response to the discovery request.

According to some embodiments, connections are established between the publisher wireless communication terminal and a plurality of requestor wireless communication terminals, and the publisher wireless communication terminal receives a plurality of discovery requests from the plurality of requestor wireless communication terminals, sends identifications of published media files to the plurality of requestor wireless communication terminals, receives media file requests from the plurality of requestor wireless communication terminals, and sends published media files to the plurality of requestor wireless communication terminals.

According to some embodiments, communication between the publisher wireless communication terminal and the requestor wireless communication terminal(s) is accomplished via a direct point-to-point interface, such as a Bluetooth wireless RF connection. According to some embodiments, communication between the publisher wireless communication terminal and the requestor wireless communication terminal(s) is accomplished via an indirect interface, such as through a WLAN or cellular-based system. Further aspects and embodiments of the present invention will be apparent from the following descriptions of further embodiments.

With reference to FIG. **3**, an exemplary media file playback system **100** according to embodiments of the present invention is shown therein. The system **100** includes a plurality of the mobile wireless communication terminals **10**A-E. According to some embodiments, the mobile wireless communication terminals **10**A-E are each configured as described above with regard to the mobile wireless communication terminal **10** and include a wireless communication module **32** and a media management module **40** (e.g., software or firmware application). However, the respective media management modules **40** may be differently configured for each terminal **10**A-E depending on the intended functionality of the device. For example, one or more the terminals may have a publisher function and a requestor function, a publisher function but not a requestor function, or a requestor function but not a publisher function. For the purposes of illustration, each of the terminals **10**A-E has both publisher and requestor functionality. According to some embodiments, all or some of the terminals **10**A-E are handheld mobile wireless communication terminals.

The system **100** will now be described using an illustrative example of use wherein the system **100** is a song file playback system. However, the system **100** may alternatively or additionally be configured as a video and/or still image playback system. A plurality of users each have a respective one of the terminals **10**A-E. The media player **26** of each terminal **10**A-E includes an audio player. The media management modules **40** include song management modules. One or more song files are stored on the mobile terminal **10**A. The user of the terminal **10**A wishes to make available or share the songs stored on the terminal **10**A with the other users within a suitable range or area (i.e., the "neighborhood"). In order to do so, the user of the terminal **10**A places the terminal **10**A (which may be referred to herein as "the publisher terminal **10**A") in a publisher mode. The users of the other terminals **10**B-E wish to listen to song files made available by other wireless communication terminals in the neighborhood. In order to do so, the users of the terminals **10**B-E place the terminals **10**B-E (referred to herein as "the requestor terminals **10**B-E") in a requestor mode. The publisher and requestor modes may each be entered by selecting a corresponding button, soft key or the like on the respective terminal **10**A-E.

FIG. **4** is a schematic illustration of an exemplary display **140** as may be provided by the terminal **10**A when the

publisher function is selected. In the illustrated embodiment, the display **140** includes a published song list field **142** and control buttons **144** (e.g., soft keys). A published song file list **146** is displayed in the play list field **142**.

The published song file list **146** includes a row-by-row series of song identifications **146**A, each corresponding to a respective song file stored on the terminal **10**A. The published song file list **146** may be created by any suitable technique such as those commonly employed to create a song play list from songs stored on a mobile terminal. For example, the terminal **10**A may enable the user to search through existing song registries on the terminal **10**A and select songs from the registries for placement in the published song file list **146**. Various operations for creating and editing the published song file list **146** may be provided on the display **140** (e.g., a "DELETE" key for deleting songs from the list **146**, an "ADD" key to search for and add additional songs to the list, and a "DETAILS" key for displaying different levels of detail) or on other display pages. As illustrated, each song identification includes a song artist, a song name, and a song play time corresponding to the associated song file. It will be appreciated that more, less and/or different information may be provided as well.

The user of the terminal **10**A may then actuate the "PUBLISH ON" soft key on the display **140** to make the song files of the published song file list **146** available to the terminals **10**B-E. In response, the publisher terminal **10**A enters the publisher mode. According to some embodiments, when in the publisher mode, the terminal **10**A awaits a request message from a requestor terminal.

FIG. **5** is a schematic illustration of an exemplary display **150** as may be provided by each of the requestor terminals **10**B-E when the requestor function is selected on the respective requestor terminal **10**B-E. In the illustrated embodiment, the display **150** includes a found song list field **152** and control buttons **154** (e.g., soft keys). As discussed below, the song list field **152** will be populated by song files offered by publisher terminals (e.g., the publisher terminal **10**A) that are located by the respective one of the requestor terminals **10**B-E. For the purpose of explanation, the operation and interactions of the requestor terminal **10**B and the publisher terminal **10**A will be described below. However, it will be understood that the requestor terminals **10**C-E may operate in the same or similar manner as the requestor terminal **10**B.

In order to enter the requestor mode, the user of the requestor terminal **10**B actuates a "SEARCH" button. In response, the requestor terminal **10**B issues or broadcasts a discovery request signal to identify any wireless communication terminals, such as the publisher terminal **10**A, that are making song files available.

The publisher terminal **10**A receives the discovery request from the requestor terminal **10**B and, in response to the discovery request, sends an offer reply message to the requestor terminal **10**B and establishes a wireless connection (i.e., communicatively couples) with the requestor terminal **10**B. According to some embodiments, the offer reply message includes the identifications of the published song files. According to some embodiments, the terminals **10**A, **10**B establish the wireless connection automatically, without further intervention by the users of the terminals **10**A, **10**B. According to some embodiments, the terminal **10**A sends the offer reply message to the requestor terminal **10**B automatically, without further intervention by the user of the terminal **10**A. According to some embodiments the wireless connection is a direct wireless communication interface connection, according to some embodiments, a direct RF connection and, according to some embodiments, a Bluetooth connection. The connections may be established in known manner.

Once the connection is established between the publisher terminal **10**A and the requestor terminal **10**B, the publisher terminal **10**A sends published song identifications designating the published songs stored on the publisher terminal **10**A to the requestor terminal **10**B. The published song identifications may include metadata including descriptive information regarding the published song files. Such descriptive information may include a song artist, a song name, and a song play time corresponding to the associated song file. According to some embodiments, the terminal **10**A sends the published song identifications message to the requestor terminal **10**B automatically, without further intervention by the user of the terminal **10**A.

The requestor terminal **10**B receives the published song identifications from the publisher terminal **10**A. The song management module **40** of the requestor terminal **10**B creates and maintains a found song list **156** of these song identifications **156**A. The found song list **156** represents song files that are available for download from the publisher terminal **10**A to the requestor terminal **10**B for playback. As illustrated, each found song identification **156**A may include the descriptive information (e.g., a song artist, a song name, and a song play time corresponding to the associated song file) as well.

The requestor may selectively initiate and manage play of the published song files in the song list **156** using the control buttons **154**, for example. More particularly, the requestor may select a song file identification **156**A and actuate the "PLAY" button of the terminal **10**B to retrieve and play back the corresponding published song file. The "DELETE" button may be used to delete a song identification **156**A from the play list **156**. The "DETAILS" button may be used to display more or less detail (e.g., description) regarding a selected song file. The "STOP" button may be used to stop playback of a song file.

Responsive to the requestor actuating the "PLAY" button for a selected song identification **156**A, the requestor terminal **10**B will automatically send a song file request to the publisher terminal **10**A to retrieve the song file corresponding to the song identification. The publisher terminal **10**A will receive the song file request and, in response thereto, send a copy of the identified published song file (which is stored on the publisher terminal **10**A) to the requestor terminal **10**B.

The controller **30** of the requestor terminal **10**B then executes playback of the retrieved song file. For example, the song file may be played back through the speaker **24** of the requestor terminal **10**B and/or through a headset (e.g., in-ear stereo headset) operatively connected to the requestor terminal **10**B.

According to some embodiments, the publisher terminal **10**A sends the song file to the requestor terminal **10**B as a streaming song file which is played back as it is streamed. It may be preferable or necessary to stream the song file from the participant terminal to the host terminal if the allocated memory space on the requestor terminal **10**B is insufficient and/or storage of the song file on the requestor terminal **10**B is prevented or illegal.

According to some embodiments, the song file is transmitted at a transmission bit rate less than a prescribed intended or standard bit rate to prevent first quality reproduction. This technique may serve to ensure that a good quality copy cannot be made on the requestor terminal.

According to some embodiments, a copy of the song file is stored on the requestor terminal **10**B (e.g., in the memory **34**) and played back from the stored copy. This may allow the requestor to play back the song file even after the requestor terminal is out of transmission range of the publisher terminal or WLAN router.

According to some embodiments, the song file, whether streamed or stored in whole, will be automatically disabled or erased (i.e., without user intervention) from the requestor terminal **10**B during or after playback using a suitable Digital Rights Management (DRM) scheme or other suitable technique. For example, DRM-enabled song files may be provided with encryption and/or encoded limits that may be fully self-executing or cooperate with a Trusted Platform Module (TMP) of the terminal **10**B. According to some embodiments, the DRM scheme permits the song file to be played only a limited number of times and/or only on the requestor terminal that originally receives the song file from the publisher terminal **10**A.

According to some embodiments, the published song file as transmitted to the requestor terminal includes only a sample or truncated version of the full song file stored on the publisher terminal. For example, the published song file received by the requestor terminal may include only 30 seconds (e.g., the first 30 seconds) of the original song file stored on the publisher terminal. This truncation may occur automatically such that the publisher need only select and publish the songs, and the song management module **40** will modify the original file for transmission.

The terminals **10**C-E may likewise be placed in the requestor mode and search for, request and play back published song files as described for the terminal **10**B. As illustrated, the publisher terminal **10**A communicates with the requestor terminals **10**B, **10**C and **10**D via direct point-to-point wireless interfaces or links **112**, **114** and **116**, respectively, and with the requestor terminal **10**E via wireless interfaces or links **118**, **122** through a WLAN router **120**. It will be appreciated that, according to some embodiments, the interfaces may be various combinations of wireless interfaces that are direct (e.g., Bluetooth) or indirect (e.g., via a WLAN router or a cellular network **5**). According to some contemplated embodiments, all of the signals provided between the publisher terminal **10**A and the requestor terminals **10**B-E to execute the song sharing procedure are provided via direct point-to-point wireless interfaces. According to some contemplated embodiments, all of the signals provided between the publisher terminal **10**A and the requestor terminals to execute the song sharing procedure are provided via direct wireless radio frequency (RF) interfaces such as Bluetooth interfaces.

Moreover, more than one publisher terminal (i.e., wireless communication terminal in the publisher mode as described for the terminal **10**A) may be present in a local wireless network or neighborhood. For example, the terminal **10**C may be placed in the publisher mode and make song files thereof available to the other wireless communication terminals in the wireless neighborhood. Thus, when the requestor terminal **10**B broadcasts a discovery request signal, both the publisher terminal **10**A and the publisher terminal **10**C will respond as discussed above and published song file identifications from both publisher terminals **10**A, **10**C will populate the found song list **146** of the requestor terminal **10**B.

Each terminal **10**A-E may assume both the requestor mode and the publisher mode at the same time. For example, the terminal **10**C may be in the publisher mode as described above and also the requestor mode. As such, its song files are available and delivered to the terminals **10**A, **10**B, **10**D and **10**E as discussed, and its user may search for published song files from other terminals in publisher mode, such as the terminal **10**A. Because, in accordance with some embodiments of the invention, the response and delivery operations of the publisher mode are executed automatically (without requiring user action), the user of the terminal **10**C can search for and sample songs from other publisher terminals without having to tend to the publication operation.

Systems and wireless communication terminals, according to embodiments of the invention, may be provided with additional functionality to facilitate sharing and discussion of the published song files. According to some embodiments, the publisher and requestor terminals (e.g., the terminals **10**A and **10**B) cooperate to provide a messaging and/or chat service. For example, the terminals may establish (automatically or responsive to a user command) a chat or messaging link or forum between the terminals through which the requestor and the publisher can discuss the song, coordinate meeting to continue discussion, etc. The message/chat service may provide a forum for multiple requestors to discuss the song, etc. The message/chat service may be initiated by actuating a "CHAT" button on the display **150**, for example.

According to some embodiments, the requestor terminal can rate a downloaded published song file and send the rating as well as comments back to the publisher terminal using the requestor terminal. According to some embodiments, rating and/or comments are stored on the publisher terminal and associated or indexed with the subject published song file. In this way, the publisher may obtain a stored list of feedback on the song. The rating function may be initiated by actuating a "RATE SONG" button on the display **150**, for example.

According to some embodiments, the requestor and publisher terminals may cooperate to provide a connection from the requestor terminal to an online (e.g., Internet accessible) music store where the song file or related items (e.g., a music CD, a DVD of the artist, etc.) can be purchased. A button or the like may be provided on the display of the requestor terminal so that, upon actuation of the button, the connection between the requestor terminal and the online store or the like is automatically established. For example, a "BUY/LEARN MORE" button may be provided on the display **150** to automatically connect to an online store, advertisement website or fan website.

Methods, wireless communication terminals, and systems according to embodiments of the present invention can provide a convenient and enjoyable mechanism for sharing music or music samples between wireless enabled mobile communication terminals. A requestor can obtain and listen to songs from others (e.g., friends or strangers) in the neighborhood. The neighborhood may include a place where people with wireless communication terminals congregate such as a café, school, workplace, airport, train station, etc. A publisher may share song files with others (e.g., friends or strangers) in such venues. The publisher may thereby expose others to the music or musicians to share the enjoyment of the music and/or market the music. The publisher may also obtain feedback on the song files from others, which may be used for marketing analysis. Further, the publisher may direct the requestor to a place or places to purchase or learn more about the music and/or artist.

In the embodiments discussed above, the publisher terminal **10**A prepares itself to make the published song files available for downloads and then awaits a discovery request from a requestor terminal **10**B-E. Additionally or alterna-

tively, in accordance with some embodiments, the terminal **10**A issues or broadcasts periodic or continuous advertisement or offer signals indicating that published songs are available. The terminal **10**A may poll or send an invitation or advertisement to all or a selected group of potential requestor terminals (e.g., those within operational range of the publisher terminal's Bluetooth signal). The potential requestor terminals may then initiate the song identification and download process by replying with a discovery request or acceptance of the invitation.

As discussed above, the published media files may be video files or still image files in addition to or instead of audio files. Accordingly, the features, processes, methods, systems and the like described herein with respect to the methods and systems for publishing, sharing and accessing song files can likewise be employed for publishing, sharing and accessing video files and still image files.

The application programs described herein, including the media management module **40**, are illustrative of programs that implement various features according to embodiments of the present invention. It will be appreciated that other and/or additional application programs may be employed in accordance with embodiments of the present invention.

Although FIG. **1** illustrates an exemplary hardware/software architecture that may be used in mobile terminals and/or other electronic devices for publication, retrieval and playback of media files, it will be understood that the present invention is not limited to such a configuration but is intended to encompass any configuration capable of carrying out operations described herein. For example, although the memory **34** is illustrated as separate from the controller **30**, the memory **34** or portions thereof may be considered as a part of the controller **30**. More generally, while particular functionalities are shown in particular blocks by way of illustration, functionalities of different blocks and/or portions thereof may be combined, divided, and/or eliminated. Moreover, the functionality of the hardware/software architecture of FIG. **1** may be implemented as a single processor system or a multi-processor system in accordance with various embodiments of the present invention.

Many alterations and modifications may be made by those having ordinary skill in the art, given the benefit of present disclosure, without departing from the spirit and scope of the invention. Therefore, it must be understood that the illustrated embodiments have been set forth only for the purposes of example, and that it should not be taken as limiting the invention as defined by the following claims. The following claims, therefore, are to be read to include not only the combination of elements which are literally set forth but all equivalent elements for performing substantially the same function in substantially the same way to obtain substantially the same result. The claims are thus to be understood to include what is specifically illustrated and described above, what is conceptually equivalent, and also what incorporates the essential idea of the invention.

That which is claimed is:

1. A method for publishing and sharing media files, the method comprising:

pre-selecting a media file from a collection of media files on a publisher communication terminal for publication; thereafter

making the selected media file a published media file available to other communication terminals from the publisher communication terminal; thereafter

receiving a discovery request issued from a requestor communication terminal seeking published media files;

automatically establishing a connection between the publisher communication terminal and the requestor communication terminal in response to the discovery request;

sending an identification of the published media file from the publisher communication terminal to the requestor communication terminal;

sending a media file request from the requestor communication terminal to the publisher communication terminal requesting the published media file;

automatically sending the published media file from the publisher communication terminal to the requestor communication terminal in response to the media file request;

executing playback of the published media file on the requestor communication terminal; and

prior to receiving the discovery request, placing the publisher communication terminal in a publisher mode and awaiting the discovery request from the requestor communication terminal.

2. The method of claim **1** including:

establishing a connection between the publisher communication terminal and a plurality of requestor communication terminals seeking published media files;

sending identifications of published media files from the publisher communication terminal to each of the requestor communications terminals;

sending a media file request from each of the requestor communication terminals to the publisher communication terminal requesting the published media files;

sending published media files from the publisher communication terminal to each of the requestor communication terminals in response to the media file requests; and

executing playback of the published media files on each of the requestor communication terminals.

3. The method of claim **1** including generating and displaying on the requestor communication terminal a published media file list including the published media file identification.

4. The method of claim **1** including sending the published media file to the requestor communication terminal in response to a media file request by streaming the published media file to the requestor communication terminal.

5. The method of claim **1** wherein the media file identification includes metadata including descriptive information regarding the published media file.

6. The method of claim **1** wherein the connection between the publisher communication terminal and the requestor communication terminal is a wireless connection.

7. The method of claim **1** wherein the published media file is a song file.

8. The method of claim **1** wherein the published media file is a video file.

9. The method of claim **1** wherein the published media file is a still image file.

10. A communication terminal comprising:

a communication module that is configured to communicate with other communication terminals; and

a controller that is configured to pre-select a media file from a collection of media files on the communication terminal for publication, to thereafter make the selected media file a published media file available to other communication terminals, to thereafter receive a discovery request issued from a requestor communication terminal seeking published media files, to automatically establish a connection between the communica-

tion terminal and the requestor communication terminal in response to the discovery request, to send an identification of the published media file to the requestor communication terminal, to receive a media file request from the requestor communication terminal requesting the published media file, to automatically send the published media file to the requestor communication terminal in response to the media file request, and to place the communication terminal in a publisher mode and await the discovery request from the requestor communication terminal prior to receiving the discovery request.

[11. A method for publishing and sharing media files, the method comprising:

pre-selecting a media file from a collection of media files on a publisher communication terminal for publication; thereafter

making the selected media file a published media file available to other communication terminals from the publisher communication terminal;

establishing a connection between the publisher communication terminal and a requestor wireless communication terminal seeking published media files;

sending an identification of the published media file from the publisher communication terminal to the requestor communication terminal;

generating and displaying on the requestor communication terminal a published media file list including the published media file identification;

ending a media file request from the requestor communication terminal to the publisher communication terminal requesting the published media file;

sending the published media file from the publisher communication terminal to the requestor communication terminal in response to the media file request; and

executing playback of the published media file on the requestor communication terminal.]

[12. The method of claim 11 including:

establishing a connection between the publisher communication terminal and a plurality of requestor communication terminals seeking published media files;

sending identifications of published media files from the publisher communication terminal to each of the requestor communication terminals;

generating and displaying on each of the requestor communication terminals a published media file list including the published media file identification;

sending a media file request from each of the requestor communication terminals to the publisher communication terminal requesting the published media files;

sending published media files from the publisher communication terminal to each of the requestor communication terminals in response to the media file requests; and

executing playback of the published media files on each of the requestor communication terminals.]

[13. The method of claim 11 including:

prior to establishing the connection, placing the publisher communication terminal in a publisher mode; and

automatically establishing the connection between the publisher communication terminal and the requestor communication terminal seeking published media files.]

[14. The method of claim 11 including sending the published media file to the requestor communication terminal in response to the media file request by streaming the published media file to the requestor communication terminal.]

[15. The method of claim 11 wherein the media file identification includes metadata including descriptive information regarding the published media file.]

[16. The method of claim 11 including:

receiving at the requestor communication terminal a selection of the published media file identification from the published media file list; and

automatically sending the media file request from the requestor communication terminal to the publisher communication terminal in response to the selection of the published media file identification.]

[17. The method of claim 11 including:

displaying at the publisher communication terminal a plurality of media file identifications corresponding to the collection of media files, each media file identification corresponding to a respective media file that is available to be published;

wherein pre-selecting the media file comprises selecting one of the displayed identifications.]

[18. The method of claim 11, including:

placing a requestor communication terminal in a requestor mode and thereafter:

establishing the connection between the publisher communication terminal and the requestor communication terminal seeking published media files; and

sending the identification of the published media file from the publisher communication terminal to the requestor communication terminal.]

[19. The method of claim 11 wherein the connection between the publisher communication terminal and the requestor communication terminal is a wireless connection.]

[20. The method of claim 11 wherein the published media file is at least one of a song file, a video file and a still image file.]

[21. The method of claim 11 including:

pre-selecting a plurality of media files from the collection of media files on the publisher communication terminal for publication; thereafter

making the selected media files a plurality of published media files available to other communication terminals from the publisher communication terminal;

sending an identification of each of the plurality of published media files from the publisher communication terminal to the requestor communication terminal;

generating and displaying on the requestor communication terminal the published media file list including the published media file identifications;

receiving at the requestor communication terminal a selection of at least one of the published media file identifications from the published media file list;

sending at least one media file request from the requestor communication terminal to the publisher communication terminal requesting the at least one published media file corresponding to the selected at least one of the published media file identifications;

sending the at least one published media file from the publisher communication terminal to the requestor communication terminal in response to the at least one media file request; and

executing playback of the at least one published media file on the requestor communication terminal.]

22. A communication device comprising:

a transceiver circuit configured to communicate with at least one of a wireless network, a wireless router, and one or more wireless communication terminals; and

a data processing circuit configured to:

receive a pre-selection of digital media data from among digital media data accessible to the communication device;

cause an identification of the pre-selected digital media data to be displayed; initiate playback of the pre-selected digital media data; and

place the communication device in at least one of a first mode or a second mode; wherein the data processing circuit is further configured to,

when the communication device is in the first mode, cause pre-selected digital media data to be sent to another a communication device, via the transceiver circuit, and,

when the communication device is in the second mode, cause pre-selected digital media data to be retrieved.

23. The communication device of claim 22, wherein the first mode is a publisher mode and the second mode is a requester mode.

24. The communication device of claim 22, wherein the data processing circuit is further configured to place the communication device in the first mode or the second mode with respect to the pre-selected digital media data prior to causing the identification of the pre-selected digital media data to be displayed.

25. The communication device of claim 22, wherein the data processing circuit is further configured to, while the communication device is in one of the first or second modes with respect to the pre-selected digital media data, place the communication device in the other of the first or second modes with respect to another media file.

26. The communication device of claim 22, wherein the data processing circuit is configured to initiate playback of the pre-selected digital media data, when in the first mode with respect to the pre-selected digital media data, by causing the pre-selected digital media data to be sent to another communication device for playback, and when in the second mode with respect to the pre-selected digital media data, by causing the pre-selected digital media data to be retrieved for playback.

27. The communication device of claim 22, wherein the data processing circuit is further configured to apply a digital rights management (DRM) scheme to the pre-selected digital media data, using a trusted module.

28. The communication device of claim 22, further comprising a memory communicatively coupled to the controller and configured to store the pre-selected digital media data.

29. The communication device of claim 22, wherein the data processing circuit is configured to receive pre-selected digital media data that is remotely accessible to the communication device.

30. The communication device of claim 22, wherein the data processing circuit is configured to initiate playback of the pre-selected digital media data, while in the first mode with respect to the pre-selected digital media data, by causing the pre-selected digital media data to be streamed to the other communication device.

31. The communication device of claim 22, wherein the data processing circuit is configured to cause the identification of the pre-selected digital media data to be displayed, while in the first mode with respect to the pre-selected digital media data, by sending information comprising the identification of the pre-selected digital media data via the wireless communication module.

32. The communication device of claim 22, wherein the transceiver circuit is configured to communicate via at least one of a direct communication interface and an indirect communication interface.

33. A method for digital media management by a communication device, comprising:

receiving a pre-selection of digital media data from among digital media data accessible to the communication device;

causing an identification of the pre-selected digital media data to be displayed; initiating playback of the pre-selected digital media data; and

selecting at least one of a first mode and a second mode of operation for the communication device,

the first mode being a mode in which pre-selected digital media data is sent to another communication device and the second mode being a mode in which pre-selected digital media data is retrieved by the communication device.

34. The method of claim 33, further comprising, while the communication device is in one of the first or second modes with respect to the pre-selected digital media data, placing the communication device in the other of the first or second modes with respect to another media file.

35. The method of claim 33, wherein initiating playback of the pre-selected digital media data comprises, when the communication device is in the first mode with respect to the pre-selected digital media data,

causing the pre-selected digital media data to be sent to another communication device for playback, and

wherein initiating playback of the pre-selected digital media comprises, when the communication device is in the second mode with respect to the pre-selected digital media data, causing the pre-selected digital media data to be retrieved for playback.

36. The method of claim 33, wherein initiating playback of the pre-selected digital media data comprises, when the communication device is in the first mode with respect to the pre-selected digital media data, causing the pre-selected digital media data to be streamed to the other communication device.

37. The method of claim 33, wherein causing the identification of the pre-selected digital media data to be displayed comprises, when the communication device is in the first mode with respect to the pre-selected digital media data, sending information comprising the identification of the pre-selected digital media data via the wireless communication module.

38. A non-transitory, computer-readable medium comprising program code that, when executed by at least one processor of a communication device, causes the at least one processor to perform a digital media management method that comprises:

receiving a pre-selection of digital media data from among an accessible collection of digital media data;

causing an identification of the pre-selected digital media data to be displayed; initiating playback of the pre-selected digital media data; and selecting at least one of a first mode and a second mode of operation for the communication device, the first mode being a mode in which pre-selected digital media data is sent by the communication device to another communication device, and the second mode being a mode in which pre-selected digital media data is retrieved by the communication device.

39. A communication device comprising:

transceiver circuitry configured to communicate over a plurality of wireless interfaces using a first protocol and a second protocol,

wherein the second protocol is a wireless local communication protocol and differs from the first protocol; and

a controller configured to:

select digital media data from a collection of one or more digital media data; initiate playback of the selected digital media data, responsive to input received from a user interface; and

initiate streaming of the selected digital media data to another communication device via the second protocol;

wherein the controller is further configured to:

responsive to user input, place the communication device in at least one of a first mode, in which the communication device is operable to stream the selected digital media data to another communication device, using the second protocol, and a second mode, in which the communication device is operable to request digital media data via a router, online, or from another communication device, using the first protocol.

40. The communication device of claim 39, wherein the transceiver circuitry comprises a cellular communication module and one or more of a wireless local-area network module, a direct radio-frequency (RF) communication module, and a direct infrared (IR) module.

41. The communication device of claim 39, wherein the first protocol is a cellular communication protocol.

42. The communication device of claim 39, wherein the communication device is configured so that the first protocol can be any one of the GPRS, EDGE, and wideband-CDMA protocols.

43. The communication device of claim 39, wherein the second protocol is a wireless local-area network (WLAN) protocol.

44. The communication device of claim 39, wherein the second protocol is a Bluetooth protocol.

45. The communication device of claim 39, wherein the plurality of wireless interfaces comprises a direct interface and an indirect interface.

46. The communication device of claim 39, wherein the plurality of wireless interfaces comprises a plurality of indirect interfaces.

47. The communication device of claim 39, further comprising a memory configured to store said collection of one or more digital media data.

48. The communication device of claim 39, wherein the controller is further configured to display a user interface component for controlling playback operation of the selected media data.

49. The communication device of claim 39, wherein the controller is further configured to display an identification of the selected digital media data and metadata associated with the selected digital media data.

50. The communication device of claim 49, wherein said metadata comprises an artist name.

51. The communication device of claim 39, wherein said communication device is configured to deliver said selected digital media data to said another communication device by streaming the selected digital media data from the communication device to said another communication device.

52. The communication device of claim 39, further comprising a camera module configured to generate a still image and/or video data stream based on incident light.

53. The communication device of claim 39, wherein the controller is configured to apply a digital rights management (DRM) scheme to the selected digital media data, using a trusted module.

54. The communication device of claim 39, wherein said controller is further configured to place the communication device in the first mode and the second mode at the same time.

55. The communication device of claim 39, wherein the selected digital media data comprises one or more of the following media types: audio, still image, and video.

56. The communication device of claim 39, wherein the selected digital media data comprises a digital media file.

57. A method for digital media management by a communication device comprising transceiver circuitry configured to communicate over a plurality of wireless interfaces using a first protocol and a second protocol, wherein the second protocol is a wireless local communication protocol and differs from the first protocol, the method comprising:

selecting digital media data from a collection of one or more digital media data: initiating playback of the selected digital media data, responsive to input received from a user interface; and

initiating streaming of the selected digital media data to another communication device via the second protocol; and

placing the communication device in at least one of a first mode and a second mode; wherein the method further comprises:

in the first mode, causing the selected digital media data to be streamed to another device; and

in the second mode, causing the selected digital media data to be retrieved.

58. The method of claim 57, wherein the first protocol is a cellular communication protocol.

59. The method of claim 57, wherein the second protocol is a wireless local-area network (WLAN) protocol.

60. The method of claim 57, wherein the second protocol is a Bluetooth protocol.

61. The method of claim 57, further comprising displaying a user interface component for controlling playback operation of the selected media data.

62. The method of claim 57, further comprising displaying an identification of the selected digital media data and metadata associated with the selected digital media data.

63. The communication device of claim 62, wherein said metadata comprises an artist name.

64. The method of claim 57, comprising delivering said selected digital media data to said another communication device by streaming the selected digital media data from the communication device to said another communication device.

65. A non-transitory, computer-readable medium comprising program code that, when executed by at least one processor in a communication device comprising transceiver circuitry configured to communicate over a plurality of wireless interfaces using a first protocol and a second protocol, wherein the second protocol is a wireless local communication protocol and differs from the first protocol, causes the at least one processor to perform a digital media management method that comprises:

selecting digital media data from a collection of one or more digital media data; initiating playback of the selected digital media data, responsive to input received from a user interface; and

initiating streaming of the selected digital media data to another communication device via the second protocol; and

placing the communication device in at least one of in at least one of a first mode, in which the communication device is operable to stream the selected digital media data to another communication device, using the second protocol, and a second mode, in which the communication device is operable to request digital media data via a router, online, or from another communication device, using the first protocol.

66. A controller circuit configured for use in a communication device having transceiver circuitry configured to communicate over a plurality of wireless interfaces using a first protocol and a second protocol, wherein the second protocol is a wireless local communication protocol and differs from the first protocol, wherein the controller circuit is further configured to: select digital media data from a collection of one or more digital media data: initiate playback of the selected digital media data, responsive to input received from a user interface; and

initiate streaming of the selected digital media data to another communication device via the second protocol: and wherein the controller is further configured to:

responsive to user input, place the communication device in at least one of a first mode, in which the communication device is operable to stream the selected digital media data to another communication device, using the second protocol, and a second mode, in which the communication device is operable to request digital media data via a router, online, or from another communication device, using the first protocol.

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