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(54) **Title**: SOCIAL MEDIA QUEUE

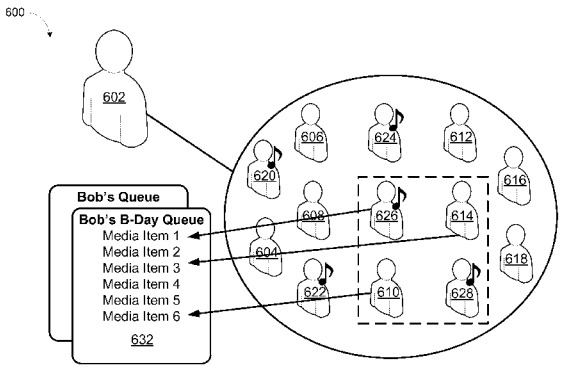

FIGURE 6C

(57) **Abstract**: Examples provided herein are directed to social-media playback queues. In one example, a computing system may be configured to (i) receive an identifier of a media playback system, (ii) link the identifier with a social-media account, (iii) based at least on linking the identifier with the social-media account, generate a social-media playback queue that is flllable with one or more media items playable by the media playback system, (iv) establish access permissions to the social-media playback queue, where the access permissions indicate at least one additional social media account that (a) is within a social- media network of the social-media account, and (b) has access to the social-media playback queue, (v) receive, from a computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the social-media playback queue, and (vi) add the media item to the social-media playback queue.

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Social Media Queue

CROSS REFERENCE TO RELATED APPLICATIONS

[1] This application claims priority to U.S. Patent Application No. 14/495,595, filed September 24, 2014, which is hereby incorporated by reference in its entirety. In addition, this application is related to the following applications filed on the same day as the present application, the contents of each are incorporated by reference herein: Attorney Docket No. 14-0905 (MBHB 14-1614), entitled "Playback Updates," U.S. Application No. 14/495,633 filed September 24, 2014; Attorney Docket No. 14-0906 (MBHB 14-1615), entitled "Indicating an Association Between a Social-Media Account and a Media Playback System," U.S. Application No. 14/495,706 filed September 24, 2014; Attorney Docket No. 14-0907 (MBHB 14-1616), entitled "Associating a Captured Image with a Media Item," U.S. Application No. 14/495,590 filed September 24, 2014; Attorney Docket No. 14-0908 (MBHB 14-1617), entitled "Media Item Context from Social Media," U.S. Application No. 14/495,659 filed September 24, 2014; and Attorney Docket No. 14-0909 (MBHB 14-1618), entitled "Social Media Connection Recommendations Based On Playback Information," U.S. Application No. 14/495,684 filed September 24, 2014.

FIELD OF THE DISCLOSURE

[2] The disclosure is related to consumer goods and, more particularly, to methods, systems, products, features, services, and other items directed to media playback or some aspect thereof.

BACKGROUND

[3] Options for accessing and listening to digital audio in an out-loud setting were severely limited until in 2003, when SONOS, Inc. filed for one of its first patent applications, entitled “Method for Synchronizing Audio Playback between Multiple Networked Devices,” and began offering a media playback system for sale in 2005. The Sonos Wireless HiFi System enables people to experience music from virtually unlimited sources via one or more networked playback devices. Through a software control application installed on a smartphone, tablet, or computer, one can play what he or she wants in any room that has a networked playback device. Additionally, using the controller, for example, different songs

can be streamed to each room with a playback device, rooms can be grouped together for synchronous playback, or the same song can be heard in all rooms synchronously.

[4] Given the ever growing interest in digital media, there continues to be a need to develop consumer-accessible technologies to further enhance the listening experience.

BRIEF DESCRIPTION OF THE DRAWINGS

[5] Features, aspects, and advantages of the presently disclosed technology may be better understood with regard to the following description, appended claims, and accompanying drawings where:

[6] Figure 1 shows an example network configuration in which certain embodiments may be practiced;

[7] Figure 2 shows an example media playback system configuration;

[8] Figure 3 shows a functional block diagram of an example playback device;

[9] Figure 4 shows a functional block diagram of an example control device;

[10] Figure 5 shows an example controller interface;

[11] Figure 6A is a conceptual illustration of a social-media account;

[12] Figure 6B is a conceptual illustration of a social-media playback queue populated with media items;

[13] Figure 6C is a conceptual illustration of a social-media-event playback queue;

[14] Figure 7 shows a flow diagram of an example method; and

[15] Figure 8 shows a flow diagram of another example method.

[16] The drawings are for the purpose of illustrating example embodiments, but it is understood that the inventions are not limited to the arrangements and instrumentality shown in the drawings.

DETAILED DESCRIPTION

I. Overview

[17] According to examples described herein, a social-media network may provide subscribers access to social-media playback queues. Such queues may be populated and modified by "friends" within the social-media network. Moreover, a media playback system that is linked to a social-media account within the social-media network may play back a social-media playback queue. In this way, social-media "friends" may contribute to and share in one another's media playback experiences.

[18] Today, social-media networks have become commonplace and may be accessed using any number of computing devices. Indeed, it is common for subscribers to be members of more than one social network. Social-media networks allow subscribers to share their life experiences and help friends and family to stay in touch. A subscriber may share as much or as little personal information that he or she desires.

[19] In examples, a computing device may be connected to (e.g., via a social-media application) a social-media server that hosts a social-media network, and the computing device may receive data indicating a media playback system. For example, when a subscriber first joins the social-media network, the subscriber may provide certain background information, which may include whether the subscriber has a particular type of media playback system. The computing device may detect inputs from the subscriber that identify a media playback system. The computing device may then provide to the social-media server an identifier of the media playback system.

[20] Alternatively, the media playback system may provide the identifier to the social-media server. For example, before the media playback system is operable, one or more setup procedures may first be performed. One such procedure may request that the user provide account information for a particular social-media service. The media playback system may receive an indication of account information for a social-media service and then transmit to the social-media server of that service an identifier of the media playback system.

[21] After the social-media server receives the identifier, the social-media server may link the identifier with a social-media account. For instance, continuing off of the above example, after the subscriber provides the background information that includes identification of the media playback system, the social-media server may then link the media playback system with the new social-media account. In this way, the media playback system is

associated with the social-media account and may be controlled by certain social-media activities, as discussed in further detail below.

[22] Based on linking the identifier with the social-media account, the social-media server may generate a social-media playback queue associated with the social-media account. The social-media playback queue may be fillable with media items that are playable by the media playback system that is linked with the social-media account. In examples, the subscriber may access the social-media playback queue through the social-media network (e.g., via a web browser or social-media application running on a computing device) or through the media playback system (e.g., via a controller of the media playback system).

[23] Moreover, other social-media subscribers may also access the social-media playback queue. In examples, after the social-media playback queue is generated, the social-media server may establish access permissions to the social-media playback queue. Access permissions may designate other subscribers that may access the social-media playback queue, such as "friends of the subscriber. Further, the access permissions may define what actions other subscribers may perform with the social-media playback queue. For example, an access permission may allow all social-media subscribers to view the social-media playback queue, another access permission may allow all "friends" of the subscriber to populate and modify the queue, and yet another access permission may allow "friends" that also have a linked media playback system to play back the queue. Other example access permissions are also possible.

[24] After the access permissions have been established, the other subscribers may access the social-media playback queue. In examples, other subscribers with the appropriate access permissions may view a representation of the social-media playback queue via the social network. For instance, the other subscribers may view the social-media playback queue through the subscriber's social-media profile, wall, or the like. Moreover, other subscribers with the appropriate access permissions may contribute to the social-media playback queue by adding, deleting, or rearranging the order of media items in the social-media playback queue.

[25] In some examples, one of the other subscribers may have a linked media playback system as well. This media playback system may receive an indication of the social-media playback queue. The one other subscriber may use his or her linked media playback system (e.g., a controller of that media playback system) to select a media item to be added to the social-media playback queue. The media playback system may receive data indicating the

media item and then transmit to the social-media server an indication of the media item to be added to the queue.

[26] The social-media server may receive this indication and then add the media item to the social-media playback queue. At this point, any subscriber with the appropriate access permissions may play back the media item in the social-media playback queue. Indeed, multiple subscribers may access the social-media playback queue and play back the media item at the same time, perhaps in synchrony. A given subscriber may play back the media item through a web browser or social-media application on a computing device or through a linked media playback system, provided the given subscriber has a linked playback system, among other examples.

[27] In one example, the one other subscriber may play back the media item through his or her linked media playback system. In particular, the media playback system may receive a playback prompt instructing the media playback system to play back the social-media playback queue. The media playback system may then obtain the media item for play back.

[28] Any given social-media subscriber may have multiple social-media playback queues. That is, a social-media account may be linked to multiple social-media playback queues. In some examples, a social-media playback queue may be generated when a social-media event is created by a subscriber with a linked media playback system. Access to such a queue may be limited to those "friends" that the subscriber invites to the event. In such examples, invited "friends" may add media items to the social-media playback queue prior to the event, and the social-media server may track which items a particular "friend" adds.

[29] At the event, a linked media playback system may play back the social-media playback queue that was generated in response to the social-media event being created. In some examples, before the linked media playback system plays a given media item from the social-media playback queue, the media playback system may first enable the media item for play back.

[30] Enabling a media item for play back may be performed in a number of manners. For example, when a "friend" arrives at the event, the "friend" may "check in" to the event through the social-media network (e.g., via the wall for the social-media event) using his or her smartphone. The media playback system may receive from the social-media server an indication of the "check in", and in turn, the media playback system may then enable any media items that the "friend" added to the social-media playback queue. In some examples, in addition to enabling the media items, the media playback system may move one or more

media items up in the playback queue so that one of the "friend's" added media items plays back relatively close to the time of the "check in." Other examples are also possible.

[31] As indicated above, examples provided herein are directed to social-media playback queues. In one aspect, a method is provided. The method involves (i) receiving, by a computing system, an identifier of a media playback system, (ii) linking the identifier with a social-media account such that the media playback system is associated with the social-media account, (iii) based at least on linking the identifier with the social-media account, generating a social-media playback queue that is fillable with one or more media items that are playable by the media playback system, (iv) establishing access permissions to the social-media playback queue, wherein the access permissions indicate at least one additional social-media account that (a) is within a social-media network of the social-media account and (b) has access to the social-media playback queue, (v) receiving, by the computing system from a computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the social-media playback queue, and (vi) adding the media item to the social-media playback queue.

[32] In another aspect, a computing system is provided. The computing system comprises a network interface, a processing unit, a non-transitory computer-readable medium, and program instructions stored on the non-transitory computer-readable medium. The program instructions are executable by the processing unit and when executed cause the computing system to (i) receive an identifier of a media playback system, (ii) link the identifier with a social-media account such that the media playback system is associated with the social-media account, (iii) based at least on linking the identifier with the social-media account, generate a social-media playback queue that is fillable with one or more media items that are playable by the media playback system, (iv) establish access permissions to the social-media playback queue, wherein the access permissions indicate at least one additional social-media account that (a) is within a social-media network of the social-media account and (b) has access to the social-media playback queue, (v) receive, from a computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the social-media playback queue, and (vi) add the media item to the social-media playback queue.

[33] In yet another aspect, a non-transitory computer-readable medium is provided. The non-transitory computer-readable medium having instructions stored thereon that are executable by a computing system to cause the computing system to (i) receive an identifier of a media playback system, (ii) link the identifier with a social-media account such that the

media playback system is associated with the social-media account, (iii) based at least on linking the identifier with the social-media account, generate a social-media playback queue that is fillable with one or more media items that are playable by the media playback system, (iv) establish access permissions to the social-media playback queue, wherein the access permissions indicate at least one additional social-media account that (a) is within a social-media network of the social-media account and (b) has access to the social-media playback queue, (v) receive, from a computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the social-media playback queue, and (vi) add the media item to the social-media playback queue.

[34] In an additional aspect, a method is provided. The method involves (i) transmitting, by a media playback device to a social-media computing system, an identifier of the media playback system to facilitate associating the media playback system with a first social-media account, (ii) receiving, by the media playback device from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account, wherein the second social-media account is within a social-media network of the first social-media account, (iii) receiving, by a media playback device, a playback prompt instructing the media playback device to play back the social-media playback queue, and (iv) obtaining, by the media playback device, one or more media items in the social-media playback queue for play back by the media playback device.

[35] In another aspect, a media playback device is provided. The media playback device comprises one or more media processing components, at least one processor, a non-transitory computer-readable medium and program instructions stored on the non-transitory computer-readable medium. The program instructions are executable by the at least one processor and when executed cause the media playback device to (i) transmit, to a social-media computing system, an identifier of the media playback system to facilitate associating the media playback system with a first social-media account, (ii) receive, from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account, wherein the second social-media account is within a social-media network of the first social-media account, (iii) receive a playback prompt instructing the media playback device to play back the social-media playback queue, and (iv) obtain one or more media items in the social-media playback queue for play back by the media playback device.

[36] In one other aspect, a non-transitory computer-readable medium is provided. The non-transitory computer-readable medium having instructions stored thereon that are

executable by a media playback system to cause the media playback system to (i) transmit, to a social-media computing system, an identifier of the media playback system to facilitate associating the media playback system with a first social-media account, (ii) receive, from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account, wherein the second social-media account is within a social-media network of the first social-media account, (iii) receive a playback prompt instructing the media playback device to play back the social-media playback queue, and (iv) obtain one or more media items in the social-media playback queue for play back by the media playback device.

[37] It will be understood by one of ordinary skill in the art that this disclosure includes numerous other embodiments.

II. Example Network Configuration

[38] Figure 1 shows an example network configuration 100 in which one or more embodiments disclosed herein may be practiced or implemented. As shown, the network configuration 100 includes a wide area network ("WAN") 110 that communicatively couples a media system server 120, a social-media server 130, one or more media playback systems 140 and 142, and one or more computing devices 150, 152, and 154. It should be understood that the network configuration 100 may include more or fewer of the depicted network elements and/or may include various other network elements not shown in Figure 1 (e.g. one or more media sources).

[39] In examples, the WAN 110 may include the Internet and/or one or more cellular networks, among other networks. Although the WAN 110 is shown as one network, it should be understood that the WAN 110 may include multiple, distinct WANs that are themselves communicatively linked. The WAN 110 may facilitate transferring data between one or more of the various network elements shown in Figure 1. In some examples, a given network element may communicate with another network element through yet another network element. For instance, the media playback systems 140 and 142 may communicate with the social-media server 130 through the media system server 120 and/or the computing devices 150-154 may communicate with the media system server 120 through the social-media server 130. Other examples are also possible.

[40] In some examples, certain network elements may be communicatively coupled to other network elements via means other than the WAN 110. In particular, certain network elements may be communicatively coupled via a local area network (e.g., via WiFi), a personal area network (e.g., via Bluetooth), and/or other connections (e.g., via a wired

connection). For example, the computing device 150 may communicate with the media playback system 140 via a local area network (e.g., WiFi or perhaps according to a proprietary protocol). The computing device 150 may do so while operating as part of the media playback system 140 (e.g., as a control device).

[41] The media system server 120 may include a network interface, a processing unit, and data storage, all of which may be communicatively linked together by a system bus, network, or other connection mechanism. The network interface may facilitate data flow over the WAN 110 between the media system server 120 and other network elements. The processing unit may include one or more general purpose processors and/or one or more special purpose processors and may be integrated in whole or in part with the network interface. The data storage may include a non-transitory computer-readable medium, such as optical, magnetic, or flash memory, and may be integrated in whole or in part with the processing unit. The data storage may also include program instructions that are executable by the processing unit to carry out various operations described herein.

[42] Moreover, the media system server 120 may be configured to store and/or access various data related to media items and/or media playback systems. In examples, the media system server 120 may be configured to store and/or access media items that are playable by a media playback system. In such examples, the media system server 120 may be configured to provide to a given media playback system media items (e.g., audio, video, and/or audio-visual files) or links, pointers, or other network location identifiers that are operable to locate the media items. Additionally, the media system server 120 may be configured to store and/or access a cross-service linking database that facilitates identifying a media item from a first media source based on media item information from a second media source.

[43] The media system server 120 may also be configured to provide one or more media applications to the media playback systems 140-142 and/or the computing devices 150-154. In some cases, a media application may be operable to allow a computing device to control one or more media playback systems. Additionally or alternatively, a media application may be operable to allow a media playback system to interface with the social-media server 130 and playback media items based on social-media data. Further still, a media application may be operable to provide functions similar to those provided by a social-media application, discussed in further detail below. Other example media applications are also possible.

[44] In examples, the media system server 120 may be configured to store and/or access account information corresponding to a particular media playback system. Such information, which may be collectively referred herein as a "playback system account", may include

system information (e.g., a household identifier (HHID) that is used to uniquely identify the particular media playback system, identifiers of the devices within the particular system, the software version currently installed on the particular media playback system, etc.) user information (e.g., name, date of birth, etc. of the user or users of the particular system), playback history information (e.g., media items previously played on the particular system and perhaps timestamps indicating when such media items were played), playback preference information (e.g., frequency at which a given media item is played, indications of media items that have been "liked" or "starred", etc.), and linked-account information (e.g., one or more social-media accounts that are linked to the particular media playback system). Other examples of information storable and accessible by the media system server 120 are also possible.

[45] In some examples, a playback system account may also include information regarding the media services that provide media to the particular media playback system. For example, the playback system account may include one or more identifiers of media services that provide media to the particular media playback system. Such information may be used by the media system server 120, or perhaps the social-media server 130, to recommend media services that a user might be interested in. Other examples are also possible.

[46] In practice, the media system server 120 may store some or all of the above-discussed information based on data received from media playback systems (e.g., the media playback systems 140 and 142), the social-media server 130, and/or the computing devices 150-154. In examples, such information may be provided to the media system server 120 when a media playback system is first setup, when a media playback system plays back media items, when a media playback system receives data indicating user feedback, and/or when a computing device runs a media application to control a media playback system, among other scenarios. In any event, the media system server 120 may be configured to provide an option to a user to "opt in" so that the aforementioned information is collected by the media system server 120.

[47] The media system server 120 may be further configured to use the above-discussed information to determine playback behaviors of users of media playback systems, among other operations. Based on user playback behaviors, the media system server 120 may perform a number of operations that may add to the users' playback experience. For example, such information may be used to identify a trending artist and then recommend that trending artist to a user whose playback history indicates he or she listens to other artists similar to the trending artist. Other examples are certainly possible.

[48] The social-media server 130 may include a network interface, a processing unit, and data storage, similar to those of the media system server 120 discussed above. The social-media server 130 may be configured to provide a social-media service to subscribers to the service. For example, the social-media server 130 may be configured to establish and/or maintain a social network. To this end, the social-media server 130 may be configured to host a social-media webpage accessible over the WAN 110 by subscribers utilizing any suitable computing device, such as the computing devices 150-154.

[49] In examples, the social-media server 130 may be configured to store subscriber account information, which may be collectively referred herein as a "social media account". Such information may include the name, gender, birthdate, email address, and/or residential address, among other information, for each subscriber. Moreover, the social-media server 130 may also be configured to link a given subscriber with a particular media playback system. For example, when a user first subscribes to the social-media service, the user may provide information, such as an HHID, of a media playback system used by the user, and the social-media server 130 may then store such information in the account of the subscriber.

[50] In addition to subscriber account information, the social-media server 130 may also be configured to store respective subscriber profiles for each subscriber. Broadly speaking, a subscriber profile may include information regarding a subscriber's life, such as relationship status, photos, videos, career information, education information, hobbies/interests, locations visited (e.g., "check-in" locations), sports teams that the subscriber is a fan of, and/or movies, books, artists, TV shows, and the like that the subscriber previously experienced and perhaps enjoyed. Such information may be presented on a subscriber profile in a number of manners, such as through subscriber posts, status updates, blogs, and other uploads.

[51] The social network provided by the social-media server 130 may be configured so that subscribers may readily share and exchange information, ideas, creations, and the like over a virtual community. The social-media service may provide to its subscribers, via a social-media webpage, respective social-media information that is determined to be relevant to a particular subscriber. Such information may be provided in several manners (e.g., as a "news feed", "timeline", or the like) and may be personalized to fit the preferences of a particular subscriber. In examples, this information may be continuously updated to reflect the most current information that may be relevant to a particular subscriber.

[52] A given subscriber may have certain "friends" that he/she chooses to associate with. After someone is deemed a "friend" with a given subscriber, the given subscriber may then receive social information that is uploaded, tagged, posted, or otherwise provided by the

"friend." For example, the given subscriber's news feed may show a photograph that a "friend" captured and subsequently posted to the social-media webpage. Moreover, a listing of a given subscriber's "friends" may also be provided and that listing may include various information in various forms reflecting a current "status" or the like for a given "friend." The given subscriber may at also be able to "de-friend" someone that was previously deemed a "friend."

[53] In practice, the social-media server 130 may be configured to collect and analyze the information that is shared and exchanged over the social-media service. The social-media server 130 may be configured to use this collected information, as well as subscriber account information, to determine for a particular subscriber other subscribers that the particular subscriber might want to become "friends" with. In this way, the social-media server 130 may be configured to determine the preferences and/or tastes of its subscribers and recommend other subscribers with similar tastes.

[54] Moreover, the social-media server 130 may be configured to provide one or more social-media applications that are operable to provide subscribers access to the social-media service in a manner different than through a web browser. Such an application may be installed on a computing device that is perhaps portable. In examples, a social-media application may further be operable to provide functions similar to those provided by a media application, as discussed above.

[55] Furthermore, a social-media application, and/or perhaps a media application, installed on a computing device may be operable to determine what, if any, other applications are also installed on the computing device. An application that is operable in such a manner may facilitate linking a playback system account with a social media account and *vice versa*. In examples, after a social-media application installed on a computing device is linked to a playback system account, the social-media application may be operable to affect playback of media at a media playback system identified by the playback system account.

[56] In examples, the network configuration 100 may also include one or more media service provider servers communicatively coupled to the WAN 110. In general, a given media service provider server may correspond to a media service provider that provides streaming media, such as Internet radio and/or "on-demand" media, to the media playback systems 140-142 and/or the computing devices 150-154. A user may subscribe to such a service and register media devices (e.g., a media playback system and/or one or more computing devices) that may at times be used to access the media service. A media service provider server may include similar components as the servers discussed above.

[57] Generally speaking, the media playback systems 140 and 142 may be any type of media playback system configured to receive and transmit data over a communication network and playback media items. In practice, each media playback system 140 and 142 may include one or more playback devices, as well as additional system devices (e.g., a controller device). An example media playback system is discussed in further detail below with reference to Figure 2. It should be understood that the media playback system 140 and the media playback system 142 may be configured similarly or differently and/or may include similar or different devices.

[58] In general, each computing device 150-154 may be any computing device configured to transfer data over a communication network. The computing devices 150-154 may each include at least one processor, memory, a graphical display, an input interface, and a network interface, among other components. In some instances, the graphical display and the input interface may be part of the same component (e.g., a touchscreen). The network interface may facilitate data flow between the computing device and another network element, for example, via the WAN 110. In some examples, one or more of the computing devices 150-154 may also include a camera configured to capture image and/or video data. Example computing devices include, but are not limited to, cellular phones, smartphones, PDAs, tablets, laptops, desktop computers, video game consoles, and smart TVs.

[59] Moreover, the computing devices 150-154 may be configured to download, install, and operate an application, such as a media or social-media application. In examples, a given computing device may include a media application provided by the media system server 120 and a social-media application provided by the social-media server 130, while another computing device may include one or the other application but not both.

[60] A computing device may be configured to run both applications at the same time or individually. In some examples, the computing devices 150-154 may provide to the media system server 120 and/or the social-media server 130 an indication of applications that are installed on a particular computing device. For instance, the computing device 150 may be configured to provide to the media system server 120 an indication that a social-media application is installed. Additionally or alternatively, the computing device 150 may be configured to provide to the social-media server 130 an indication that a media application is installed and/or active or otherwise currently running.

[61] Furthermore, a computing device may be configured to provide social media information and/or media playback information to the media system server 120 and/or the

social-media server 130. Such information may then be used by the media system server 120 and/or the social-media server 130 to help perform some of the operations disclosed in further detail below.

III. Example Media Playback System

[62] Figure 2 shows an example configuration of a media playback system 200. The media playback system 200 as shown is associated with an example home environment having several rooms and spaces, such as for example, a master bedroom, an office, a dining room, and a living room. As shown in the example of Figure 2, the media playback system 200 includes playback devices 202-224, control devices 226 and 228, and a wired or wireless network router 230.

[63] Further discussions relating to the different components of the example media playback system 200 and how the different components may interact to provide a user with a media experience may be found in the following sections. While discussions herein may generally refer to the example media playback system 200, technologies described herein are not limited to applications within, among other things, the home environment as shown in Figure 2. For instance, the technologies described herein may be useful in environments where multi-zone audio may be desired, such as, for example, a commercial setting like a restaurant, mall or airport, a vehicle like a sports utility vehicle (SUV), bus or car, a ship or boat, an airplane, and so on.

a. Example Playback Devices

[64] Figure 3 shows a functional block diagram of an example playback device 300 that may be configured to be one or more of the playback devices 202-224 of the media playback system 200 of Figure 2. The playback device 300 may include a processor 302, software components 304, memory 306, audio processing components 308, audio amplifier(s) 310, speaker(s) 312, and a network interface 314 including wireless interface(s) 316 and wired interface(s) 318. In one case, the playback device 300 may not include the speaker(s) 312, but rather a speaker interface for connecting the playback device 300 to external speakers. In another case, the playback device 300 may include neither the speaker(s) 312 nor the audio amplifier(s) 310, but rather an audio interface for connecting the playback device 300 to an external audio amplifier or audio-visual receiver.

[65] In one example, the processor 302 may be a clock-driven computing component configured to process input data according to instructions stored in the memory 306. The memory 306 may be a tangible computer-readable medium configured to store instructions executable by the processor 302. For instance, the memory 306 may be data storage that can

be loaded with one or more of the software components 304 executable by the processor 302 to achieve certain functions. In one example, the functions may involve the playback device 300 retrieving audio data from an audio source or another playback device. In another example, the functions may involve the playback device 300 sending audio data to another device or playback device on a network. In yet another example, the functions may involve pairing of the playback device 300 with one or more playback devices to create a multi-channel audio environment.

[66] Certain functions may involve the playback device 300 synchronizing playback of audio content with one or more other playback devices. During synchronous playback, a listener will preferably not be able to perceive time-delay differences between playback of the audio content by the playback device 300 and the one or more other playback devices. U.S. Patent No. 8,234,395 entitled, "System and method for synchronizing operations among a plurality of independently clocked digital data processing devices," which is hereby incorporated by reference, provides in more detail some examples for audio playback synchronization among playback devices.

[67] The memory 306 may further be configured to store data associated with the playback device 300, such as one or more zones and/or zone groups the playback device 300 is a part of, audio sources accessible by the playback device 300, or a playback queue that the playback device 300 (or some other playback device) may be associated with. The data may be stored as one or more state variables that are periodically updated and used to describe the state of the playback device 300. The memory 306 may also include the data associated with the state of the other devices of the media system, and shared from time to time among the devices so that one or more of the devices have the most recent data associated with the system. Other embodiments are also possible.

[68] The audio processing components 308 may include one or more digital-to-analog converters (DAC), an audio preprocessing component, an audio enhancement component or a digital signal processor (DSP), and so on. In one embodiment, one or more of the audio processing components 308 may be a subcomponent of the processor 302. In one example, audio content may be processed and/or intentionally altered by the audio processing components 308 to produce audio signals. The produced audio signals may then be provided to the audio amplifier(s) 310 for amplification and playback through speaker(s) 312. Particularly, the audio amplifier(s) 310 may include devices configured to amplify audio signals to a level for driving one or more of the speakers 312. The speaker(s) 312 may include an individual transducer (e.g., a "driver") or a complete speaker system involving an

enclosure with one or more drivers. A particular driver of the speaker(s) 312 may include, for example, a subwoofer (e.g., for low frequencies), a mid-range driver (e.g., for middle frequencies), and/or a tweeter (e.g., for high frequencies). In some cases, each transducer in the one or more speakers 312 may be driven by an individual corresponding audio amplifier of the audio amplifier(s) 310. In addition to producing analog signals for playback by the playback device 300, the audio processing components 308 may be configured to process audio content to be sent to one or more other playback devices for playback.

[69] Audio content to be processed and/or played back by the playback device 300 may be received from an external source, such as via an audio line-in input connection (e.g., an auto-detecting 3.5mm audio line-in connection) or the network interface 314.

[70] The network interface 314 may be configured to facilitate a data flow between the playback device 300 and one or more other devices on a data network. As such, the playback device 300 may be configured to receive audio content over the data network from one or more other playback devices in communication with the playback device 300, network devices within a local area network, or audio content sources over a wide area network such as the Internet. In one example, the audio content and other signals transmitted and received by the playback device 300 may be transmitted in the form of digital packet data containing an Internet Protocol (IP)-based source address and IP-based destination addresses. In such a case, the network interface 314 may be configured to parse the digital packet data such that the data destined for the playback device 300 is properly received and processed by the playback device 300.

[71] As shown, the network interface 314 may include wireless interface(s) 316 and wired interface(s) 318. The wireless interface(s) 316 may provide network interface functions for the playback device 300 to wirelessly communicate with other devices (e.g., other playback device(s), speaker(s), receiver(s), network device(s), control device(s), controller device(s) within a data network the playback device 300 is associated with) in accordance with a communication protocol (e.g., any wireless standard including IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.15, 4G mobile communication standard, and so on). The wired interface(s) 318 may provide network interface functions for the playback device 300 to communicate over a wired connection with other devices in accordance with a communication protocol (e.g., IEEE 802.3). While the network interface 314 shown in Figure 3 includes both wireless interface(s) 316 and wired interface(s) 318, the network interface 314 may in some embodiments include only wireless interface(s) or only wired interface(s).

[72] In one example, the playback device 300 and one other playback device may be paired to play two separate audio components of audio content. For instance, playback device 300 may be configured to play a left channel audio component, while the other playback device may be configured to play a right channel audio component, thereby producing or enhancing a stereo effect of the audio content. The paired playback devices (also referred to as "bonded playback devices") may further play audio content in synchrony with other playback devices.

[73] In another example, the playback device 300 may be sonically consolidated with one or more other playback devices to form a single, consolidated playback device. A consolidated playback device may be configured to process and reproduce sound differently than an unconsolidated playback device or playback devices that are paired, because a consolidated playback device may have additional speaker drivers through which audio content may be rendered. For instance, if the playback device 300 is a playback device designed to render low frequency range audio content (i.e. a subwoofer), the playback device 300 may be consolidated with a playback device designed to render full frequency range audio content. In such a case, the full frequency range playback device, when consolidated with the low frequency playback device 300, may be configured to render only the mid and high frequency components of audio content, while the low frequency range playback device 300 renders the low frequency component of the audio content. The consolidated playback device may further be paired with a single playback device or yet another consolidated playback device.

[74] By way of illustration, SONOS, Inc. presently offers (or has offered) for sale certain playback devices including a "PLAY:1," "PLAY:3," "PLAY:5," "PLAYBAR," "CONNECT:AMP," "CONNECT," and "SUB." Any other past, present, and/or future playback devices may additionally or alternatively be used to implement the playback devices of example embodiments disclosed herein. Additionally, it is understood that a playback device is not limited to the example illustrated in Figure 3 or to the SONOS product offerings. For example, a playback device may include a wired or wireless headphone. In another example, a playback device may include or interact with a docking station for personal mobile media playback devices. In yet another example, a playback device may be integral to another device or component such as a television, a lighting fixture, or some other device for indoor or outdoor use.

b. Example Playback Zone Configurations

[75] Referring back to the media playback system 200 of Figure 2, the environment may have one or more playback zones, each with one or more playback devices. The media playback system 200 may be established with one or more playback zones, after which one or more zones may be added, or removed to arrive at the example configuration shown in Figure 2. Each zone may be given a name according to a different room or space such as an office, bathroom, master bedroom, bedroom, kitchen, dining room, living room, and/or balcony. In one case, a single playback zone may include multiple rooms or spaces. In another case, a single room or space may include multiple playback zones.

[76] As shown in Figure 2, the balcony, dining room, kitchen, bathroom, office, and bedroom zones each have one playback device, while the living room and master bedroom zones each have multiple playback devices. In the living room zone, playback devices 204, 206, 208, and 210 may be configured to play audio content in synchrony as individual playback devices, as one or more bonded playback devices, as one or more consolidated playback devices, or any combination thereof. Similarly, in the case of the master bedroom, playback devices 222 and 224 may be configured to play audio content in synchrony as individual playback devices, as a bonded playback device, or as a consolidated playback device.

[77] In one example, one or more playback zones in the environment of Figure 2 may each be playing different audio content. For instance, the user may be grilling in the balcony zone and listening to hip hop music being played by the playback device 202 while another user may be preparing food in the kitchen zone and listening to classical music being played by the playback device 214. In another example, a playback zone may play the same audio content in synchrony with another playback zone. For instance, the user may be in the office zone where the playback device 218 is playing the same rock music that is being playing by playback device 202 in the balcony zone. In such a case, playback devices 202 and 218 may be playing the rock music in synchrony such that the user may seamlessly (or at least substantially seamlessly) enjoy the audio content that is being played out-loud while moving between different playback zones. Synchronization among playback zones may be achieved in a manner similar to that of synchronization among playback devices, as described in previously referenced U.S. Patent No. 8,234,395.

[78] As suggested above, the zone configurations of the media playback system 200 may be dynamically modified, and in some embodiments, the media playback system 100 supports numerous configurations. For instance, if a user physically moves one or more

playback devices to or from a zone, the media playback system 200 may be reconfigured to accommodate the change(s). For instance, if the user physically moves the playback device 202 from the balcony zone to the office zone, the office zone may now include both the playback device 218 and the playback device 202. The playback device 202 may be paired or grouped with the office zone and/or renamed if so desired via a control device such as the control devices 226 and 228. On the other hand, if the one or more playback devices are moved to a particular area in the home environment that is not already a playback zone, a new playback zone may be created for the particular area.

[79] Further, different playback zones of the media playback system 200 may be dynamically combined into zone groups or split up into individual playback zones. For instance, the dining room zone and the kitchen zone 214 may be combined into a zone group for a dinner party such that playback devices 212 and 214 may render audio content in synchrony. On the other hand, the living room zone may be split into a television zone including playback device 204, and a listening zone including playback devices 206, 208, and 210, if the user wishes to listen to music in the living room space while another user wishes to watch television.

c. Example Control Devices

[80] Figure 4 shows a functional block diagram of an example control device 400 that may be configured to be one or both of the control devices 226 and 228 of the media playback system 200. As shown, the control device 400 may include a processor 402, memory 404, a network interface 406, and a user interface 408. In one example, the control device 400 may be a dedicated controller for the media playback system 200.

[81] In another example, the control device 400 may be a network device on which media application software is installed, such as an iPhone™, iPad™ or any other smart phone, tablet or network device (e.g., a networked computer such as a PC or Mac™). In examples, the media application may take the form of a media playback system controller application operable to control a media playback system. In yet another example, the media application may be operable to cause the control device 400 to obtain media (e.g., from a given media service provider associated with the media application) independent from a media playback system and may also be operable as a control device of a media playback system.

[82] The processor 402 may be configured to perform functions relevant to facilitating user access, control, and configuration of the media playback system 200. The memory 404 may be configured to store instructions executable by the processor 402 to perform those

functions. The memory 404 may also be configured to store the media playback system controller application software and other data associated with the media playback system 200 and the user.

[83] In one example, the network interface 406 may be based on an industry standard (e.g., infrared, radio, wired standards including IEEE 802.3, wireless standards including IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.15, 4G mobile communication standard, and so on). The network interface 406 may provide a means for the control device 400 to communicate with other devices in the media playback system 200. In one example, data and information (e.g., such as a state variable) may be communicated between control device 400 and other devices via the network interface 406. For instance, playback zone and zone group configurations in the media playback system 200 may be received by the control device 400 from a playback device or another network device, or transmitted by the control device 400 to another playback device or network device via the network interface 406. In some cases, the other network device may be another control device.

[84] Playback device control commands such as volume control and audio playback control may also be communicated from the control device 400 to a playback device via the network interface 406. As suggested above, changes to configurations of the media playback system 200 may also be performed by a user using the control device 400. The configuration changes may include adding/removing one or more playback devices to/from a zone, adding/removing one or more zones to/from a zone group, forming a bonded or consolidated player, separating one or more playback devices from a bonded or consolidated player, among others. Accordingly, the control device 400 may sometimes be referred to as a controller, whether the control device 400 is a dedicated controller or a network device on which media playback system controller application software is installed.

[85] The user interface 408 of the control device 400 may be configured to facilitate user access and control of the media playback system 200, by providing a controller interface such as the controller interface 500 shown in Figure 5. The controller interface 500 includes a playback control region 510, a playback zone region 520, a playback status region 530, a playback queue region 540, and an audio content sources region 550. The user interface 500 as shown is just one example of a user interface that may be provided on a network device such as the control device 400 of Figure 4 (and/or the control devices 226 and 228 of Figure 2) and accessed by users to control a media playback system such as the media playback system 200. Other user interfaces of varying formats, styles, and interactive sequences may

alternatively be implemented on one or more network devices to provide comparable control access to a media playback system.

[86] The playback control region 510 may include selectable (e.g., by way of touch or by using a cursor) icons to cause playback devices in a selected playback zone or zone group to play or pause, fast forward, rewind, skip to next, skip to previous, enter/exit shuffle mode, enter/exit repeat mode, enter/exit cross fade mode. The playback control region 510 may also include selectable icons to modify equalization settings, and playback volume, among other possibilities.

[87] The playback zone region 520 may include representations of playback zones within the media playback system 200. In some embodiments, the graphical representations of playback zones may be selectable to bring up additional selectable icons to manage or configure the playback zones in the media playback system, such as a creation of bonded zones, creation of zone groups, separation of zone groups, and renaming of zone groups, among other possibilities.

[88] For example, as shown, a "group" icon may be provided within each of the graphical representations of playback zones. The "group" icon provided within a graphical representation of a particular zone may be selectable to bring up options to select one or more other zones in the media playback system to be grouped with the particular zone. Once grouped, playback devices in the zones that have been grouped with the particular zone will be configured to play audio content in synchrony with the playback device(s) in the particular zone. Analogously, a "group" icon may be provided within a graphical representation of a zone group. In this case, the "group" icon may be selectable to bring up options to deselect one or more zones in the zone group to be removed from the zone group. Other interactions and implementations for grouping and ungrouping zones via a user interface such as the user interface 500 are also possible. The representations of playback zones in the playback zone region 520 may be dynamically updated as playback zone or zone group configurations are modified.

[89] The playback status region 530 may include graphical representations of audio content that is presently being played, previously played, or scheduled to play next in the selected playback zone or zone group. The selected playback zone or zone group may be visually distinguished on the user interface, such as within the playback zone region 520 and/or the playback status region 530. The graphical representations may include track title, artist name, album name, album year, track length, and other relevant information that may

be useful for the user to know when controlling the media playback system via the user interface 500.

[90] The playback queue region 540 may include graphical representations of audio content in a playback queue associated with the selected playback zone or zone group. In some embodiments, each playback zone or zone group may be associated with a playback queue containing information corresponding to zero or more audio items for playback by the playback zone or zone group. For instance, each audio item in the playback queue may comprise a uniform resource identifier (URI), a uniform resource locator (URL) or some other identifier that may be used by a playback device in the playback zone or zone group to find and/or retrieve the audio item from a local audio content source or a networked audio content source, possibly for playback by the playback device.

[91] In one example, a playlist may be added to a playback queue, in which case information corresponding to each audio item in the playlist may be added to the playback queue. In another example, audio items in a playback queue may be saved as a playlist. In a further example, a playback queue may be empty, or populated but "not in use" when the playback zone or zone group is playing continuously streaming audio content, such as Internet radio that may continue to play until otherwise stopped, rather than discrete audio items that have playback durations. In an alternative embodiment, a playback queue can include Internet radio and/or other streaming audio content items and be "in use" when the playback zone or zone group is playing those items. Other examples are also possible.

[92] When playback zones or zone groups are "grouped" or "ungrouped," playback queues associated with the affected playback zones or zone groups may be cleared or re-associated. For example, if a first playback zone including a first playback queue is grouped with a second playback zone including a second playback queue, the established zone group may have an associated playback queue that is initially empty, that contains audio items from the first playback queue (such as if the second playback zone was added to the first playback zone), that contains audio items from the second playback queue (such as if the first playback zone was added to the second playback zone), or a combination of audio items from both the first and second playback queues. Subsequently, if the established zone group is ungrouped, the resulting first playback zone may be re-associated with the previous first playback queue, or be associated with a new playback queue that is empty or contains audio items from the playback queue associated with the established zone group before the established zone group was ungrouped. Similarly, the resulting second playback zone may be re-associated with the previous second playback queue, or be associated with a new playback queue that is empty,

or contains audio items from the playback queue associated with the established zone group before the established zone group was ungrouped. Other examples are also possible.

[93] Referring back to the user interface 500 of Figure 5, the graphical representations of audio content in the playback queue region 540 may include track titles, artist names, track lengths, and other relevant information associated with the audio content in the playback queue. In one example, graphical representations of audio content may be selectable to bring up additional selectable icons to manage and/or manipulate the playback queue and/or audio content represented in the playback queue. For instance, a represented audio content may be removed from the playback queue, moved to a different position within the playback queue, or selected to be played immediately, or after any currently playing audio content, among other possibilities. A playback queue associated with a playback zone or zone group may be stored in a memory on one or more playback devices in the playback zone or zone group, on a playback device that is not in the playback zone or zone group, and/or some other designated device.

[94] The audio content sources region 550 may include graphical representations of selectable audio content sources from which audio content may be retrieved and played by the selected playback zone or zone group. Discussions pertaining to audio content sources may be found in the following section.

d. Example Audio Content Sources

[95] As indicated previously, one or more playback devices in a zone or zone group may be configured to retrieve for playback audio content (e.g. according to a corresponding URI or URL for the audio content) from a variety of available audio content sources. In one example, audio content may be retrieved by a playback device directly from a corresponding audio content source (e.g., a line-in connection). In another example, audio content may be provided to a playback device over a network via one or more other playback devices or network devices.

[96] Example audio content sources may include a memory of one or more playback devices in a media playback system such as the media playback system 200 of Figure 2, local music libraries on one or more network devices (such as a control device, a network-enabled personal computer, or a networked-attached storage (NAS), for example), streaming audio services providing audio content via the Internet (e.g., the media service servers 135-145), or audio sources connected to the media playback system via a line-in input connection on a playback device or network devise, among other possibilities.

[97] In some embodiments, audio content sources may be regularly added or removed from a media playback system such as the media playback system 200 of Figure 2. In one example, an indexing of audio items may be performed whenever one or more audio content sources are added, removed or updated. Indexing of audio items may involve scanning for identifiable audio items in all folders/directory shared over a network accessible by playback devices in the media playback system, and generating or updating an audio content database containing metadata (e.g., title, artist, album, track length, among others) and other associated information, such as a URI or URL for each identifiable audio item found. Other examples for managing and maintaining audio content sources may also be possible.

[98] The above discussions relating to playback devices, controller devices, playback zone configurations, and media content sources provide only some examples of operating environments within which functions and methods described below may be implemented. Other operating environments and configurations of media playback systems, playback devices, and network devices not explicitly described herein may also be applicable and suitable for implementation of the functions and methods.

IV. Social Media Queues

[99] As discussed above, examples provided herein are directed to social-media playback queues. Operations related to social-media playback queues may be discussed herein with respect to a particular system or device. This however is for purposes of example and explanation only and should not be construed as limiting. Other systems and/or devices may perform all or part of the operations without departing from the scope of the present examples.

[100] A social-media computing system may be configured to receive an identifier of a media playback system. In examples, the social-media computing system may include the social-media server 130 of Figure 1. In general, the social-media computing system may include a single computing device or multiple networked computing devices configured to perform the operations of the social-media server 130 described herein.

[101] The identifier of a media playback system, such as the media playback system 140, may be any identifier that is operable to uniquely identify a particular media playback system. That is, the identifier may help to differentiate a particular media playback system from other media playback systems. In examples, the identifier may take the form of a household identifier (HHID) that may include a string of alphanumeric characters. The identifier may be computer-generated to ensure that it is indeed unique.

[102] In practice, the social-media server 130 may receive the identifier from a number of network elements. In some examples, a media playback system, such as the media playback system 140, may be configured to provide the identifier to the social-media server 130. The media playback system 140 may be configured to do so when a particular event occurs at the media playback system 140.

[103] For instance, before the media playback system 140 is operable, the media playback system 140 may be configured to perform one or more setup procedures. One such procedure may provide a number of prompts via a control device of the media playback system 140 to a user. The prompts may request that the user provide certain account information, such as credentials (e.g., login name and password), for a particular social-media service. The media playback system 140 may be configured to receive data indicating credentials associated with a social-media account, and based on the received credentials, the media playback system 140 may be configured to transmit the identifier to the social-media server 130.

[104] Additionally or alternatively, the media playback system 140 may be operable to provide the identifier independent from any setup procedures. For example, the control device of the media playback system 140 may be configured to receive data indicating login credentials for a particular social-media service at any point in time after the media playback system 140 is setup. In this way, a user may provide his or her social-media account login credentials sometime after originally setting up the media playback system 140.

[105] In other instances, after the media playback system 140 receives login credentials, the media playback system 140 may be configured to pass the credentials or an indication that credentials were received to the media system server 120. The media system server 120 may be configured to identify the identifier of the media playback system 140 and provide the identifier to the social-media server 130.

[106] In some instances, the media playback system 140 may be configured to automatically provide the identifier of the media playback system 140 to the social-media server 130. In particular, a playback or control device may determine that a social-media application is installed on another computing device of the media playback system 140 (e.g., the control device or perhaps the computing device 150 with an installed media application that is operable to control the media playback system). Based on this determination, the playback or control device may transmit the identifier of the media playback system 140 to the social-media server 130.

[107] In other examples, a computing device, such as the computing device 150, may be configured to provide the identifier to the social-media server 130. For instance, the

computing device 150 may be configured to provide the identifier when the computing device 150 first attempts to access the social-media network hosted by the social-media server 130.

[108] For example, the computing device 150 may be configured to run a web browser or a social-media application to access the social-media network, and when the computing device 150 first attempts to access the social-media network, the social-media server 130 may be configured to cause the computing device 150 to perform one or more account initiation procedures. Such procedures may require a subscriber to create a login name and password (e.g., login credentials) and to also provide certain background information, which may include whether the subscriber has a particular type of media playback system and/or a playback system account. The computing device 150 may be configured to receive data indicating responses to these initiation procedures.

[109] In the event the computing device 150 receives data indicating that the subscriber has a particular type of media playback system, the computing device 150 may be configured to obtain the identifier of the media playback system 140 or facilitate obtaining the identifier. For example, the computing device 150 may be configured to determine whether a media application used to control the media playback system 140 is installed on the computing device 150. If so, the computing device 150 may obtain the identifier from the media application and provide the identifier to the social-media server 130. In other examples, the computing device 150 may receive data indicating playback system account information that is linked with the media playback system 140. For example, the subscriber may enter, during the initiation procedures, login credentials to a playback system account that was previously created when the media playback system 140 was first setup. The computing device 150 may be configured to pass these login credentials to the social-media server 130, and then the social-media server 130 may be configured to communicate with the media system server 120 to obtain the identifier of the media playback system 140.

[110] Additionally or alternatively, the computing device 150 may be operable to provide the identifier independent from any initiation procedures. For example, the computing device 150 (e.g., via a web browser or social-media application) may be configured to receive the above-discussed data at any point in time after the account initiation procedures are completed. In this way, a subscriber may facilitate linking the media playback system 140 to the subscriber's social-media account some point in time after originally creating the social-media account (e.g., perhaps the subscriber purchased the media playback system 140 years after creating the social-media account).

[111] In yet other examples, the computing device 150 may be configured to automatically provide the identifier of the media playback system 140 to the social-media server 130. In particular, when the computing device 150 first installs a media application operable to control the media playback system 140, the computing device 150 may provide the identifier if the computing device 150 detects that a social-media application is also installed on the computing device 150. Similarly, when the computing device 150 first installs a social-media application, the computing device 150 may provide the identifier if the computing device 150 detects that a media application is also installed on the computing device 150 that is operable to control the media playback system 140.

[112] After the social-media server 130 receives the identifier of the media playback system 140, the social-media server 130 may link the identifier with a social-media account. In particular, the social-media server 130 may be configured to store in memory an association between the identifier and the social-media account.

[113] In examples, when the social-media server 130 receives the identifier, the social-media server 130 may also receive an indication of a social-media account to which the identifier of the media playback system 140 should be linked to. In other examples, the social-media server 130 may determine the social-media account to which the identifier should be linked to. For instance, in a scenario where the social-media server 130 received the identifier during initiation procedures, the social-media server 130 may determine that the appropriate social-media account is the newly created social-media account. Other examples are also possible.

[114] In any event, after the social-media server 130 links the identifier of the media playback system 140 with the social-media account, the media playback system 140 is then linked to the social-media account. In this way, the media playback system 140 is associated with the social-media account and may be controlled by certain social-media activities, as discussed in further detail below.

[115] Based at least on linking the identifier with the social-media account, the social-media server 130 may be configured to generate a social-media playback queue that is associated with the social-media account. The social-media playback queue may be fillable with media items that are playable by the media playback system 140. In examples, the media items may take the form of audio, video, and/or audiovisual media items and/or any media described herein. In some examples, a playlist of several media items or individual media items may be added to a social-media playback queue.

[116] A social-media playback queue may have a playback order that a media playback system may follow when playing back the social-media playback. In examples discussed below that involve adding a media item to a social-media playback queue, added media items may be placed at the bottom or top of the social-media playback queue. In some such examples, added media items may be placed in positions between the top and bottom of the queue. The position may be determined randomly, passed on default settings, or perhaps based on user inputs. Other examples are also possible.

[117] After the social-media server 130 generates a social-media playback queue the social-media playback queue may then be stored in such a manner that social-media subscribers utilizing computing devices and/or media playback systems may access the queue. In some examples, the social-media server 130 may be configured to store social-media playback queues. In other examples, the media system server 120 may be configured to store social-media playback queues. Other examples are also possible.

[118] To illustrate, Figure 6A is a conceptual illustration of a social-media account 600. In particular, the illustration depicts the social-media account 600 after the social-media server 130 links the media playback system 140 to the social-media account 600 and generates a social-media playback queue 630. As shown, the social-media account 600 of subscriber 602 ("Bob") is part of a social-media network that includes social-media accounts of subscribers 604-628. The subscribers 604-628 may be Bob's social-media "friends." As shown, some of Bob's "friends" have social-media accounts linked to respective media playback systems, as indicated by the musical note (e.g., subscribers 620-628). Moreover, the social-media playback queue 630 ("Bob's Queue") is shown as currently being empty.

[119] After the social-media server 130 generates the social-media playback queue 630, Bob 602 may access the social-media playback queue 630. For example, Bob 602 may access the queue 630 by using his social-media login credentials to access the social media network and his social-media profile. Once Bob 602 accesses the queue 630, Bob 602 may add media items to the queue 630, remove media items, modify a playback order, and the like. Further, Bob 602 may cause the social-media playback queue 630 to be played back (e.g., through a web browser on the computing device 150 or by the media playback system 140, among other possibilities).

[120] In practice, Bob 602 may utilize the computing device 150 (and/or other computing devices) to access the social-media playback queue 630 (e.g., via a web browser or a social-media application installed on the computing device 150). Additionally or

alternatively, Bob 602 may utilize the media playback system 140 (e.g., a control device of the media playback system 140) to access the social-media playback queue 630.

[121] Moreover, other social-media subscribers may also access the social-media playback queue 630. In examples, after the social-media playback queue 630 is generated, the social-media server 130 may be configured to establish access permissions to the social-media playback queue 630. Access permissions may designate other subscribers that may access the social-media playback queue 630, such as "friends" of Bob 602. Further, the access permissions may define what actions other subscribers may perform with the social-media playback queue 630.

[122] In practice, the social-media server 130 may be configured to implement "default" access permissions unless other access permissions are provided. For example, the social-media server 130 may be configured to establish, by default, that all social-media subscribers (e.g., even social-media subscribers outside of Bob's social network) may view the social-media playback queue 630, that "friends" of Bob 602 (e.g., subscribers 604-628) may contribute to the queue 630, and that "friends" that also have a linked media playback system (e.g., subscribers 620-628) may play back the queue 630 at their respective linked playback systems. Other "default" access permissions are also possible.

[123] In other cases, the social-media server 130 may be configured to receive access permission settings and may then establish the access permissions based on the received access permissions settings. A computing device (e.g., the computing device 150) or a media playback system (e.g., a controller of the media playback system 140) may be configured to provide the access permissions settings to the social-media server 130, which may occur in response to receiving data indicating Bob's preferences regarding access permissions.

[124] After the social-media server 130 establishes the access permissions, the social-media server 130 may be configured to apply the established access permissions to the social-media accounts of those subscribers with access to the social-media playback queue 630. Those subscribers with the appropriate access permissions may then access the social-media playback queue 630 using a computing device and/or media playback system (e.g., a control device of a media playback system). In particular, the social-media server 130 may provide to the computing device or media playback system the social-media playback queue 630. In some examples, the computing device or media playback system may then display a visual representation of the social-media playback queue 630, play back the queue 630, and/or facilitate contributing to the queue 630. In a particular example, other subscribers with the appropriate access permissions may view a representation of the social-media playback queue

630 via the social network. For instance, the other subscribers may view the social-media playback queue 630 through Bob's social-media profile, wall, or the like.

[125] In some examples, one of the other subscribers may have a linked media playback system as well. For instance, Bob's friend Jane 622 may have the media playback system 142 at her home and the media playback system 142 may be linked to her social-media account. After the social-media server 130 established the access permissions, the social-media server 130 may be configured to provide the media playback system 142 (e.g., a playback device of the media playback system 142) an indication of Bob's queue 630. In some cases, the media playback system 142 may have requested Bob's queue 630 based on a control device of the media playback system 142 receiving data indicating instructions to view Bob's queue 630.

[126] In examples, the indication may be of all of the media items in Bob's queue 630, while in other examples the indication may be of a portion of those media items. Moreover, in some examples, the indication may provide a textual representation of Bob's queue 630 (e.g., a listing of those media items contained within Bob's queue 630). In other examples, the indication may provide a pointer or other network location identifier that is operable to locate the data storage space that stores Bob's queue 630. In yet other examples, the indication may provide respective pointers or the like for some or all of the media items contained within Bob's queue 630.

[127] In any event, the media playback system 142 may receive the indication of the social-media playback queue 630 that corresponds to Bob's social-media account 600. In some examples, a playback device of the media playback system 142 may be configured to receive the indication and in turn, provide the indication to a control device of the media playback system 142. The control device may be configured to display Bob's queue 630 based on receiving the indication. The control device may display Bob's queue 630 by providing a visual representation of all or a portion of the media items currently contained in Bob's queue 630.

[128] Moreover, the control device may be configured to receive playback data indicating an instruction for the media playback system 142 to playback Bob's queue 630. The control device may then provide a playback prompt to the playback device of the media playback system 142. The playback device may be configured to receive the playback prompt and then obtain one or more media items identified by Bob's queue 630 for play back by the playback device. In practice, the playback device may be configured to obtain from the social-media server 130 a pointer or other network location identifier to the one or more media items. In some examples, the social-media server 130 may be configured to instruct the media system

server 120 to provide the playback device the media items or pointers to the one or more media items.

[129] In examples, a media playback system (e.g., either or both of the media playback systems 140 and 142) may be configured to assign a zone or zone group to the social-media playback queue 630. That is, a portion of the playback devices of a media playback system may be assigned to play back the media contained in the social-media playback queue 630, while another portion of media playback system may be assigned to play back other media. In some examples, a media playback system may include multiple zones or zone groups, each of which may be assigned to different social-media playback queues. Other examples are also possible.

[130] Moreover, in some examples, media items in a social-media playback queue may be identified by a unique identifier, such as a universal track identifier (UTID). In such examples, a media playback system may be configured to translate the UTID, perhaps utilizing a cross-service linking database or the like, to an identifier of a media service supported by the particular media playback system. In this way, the social-media server 130 may be configured to provide social-media playback queues in a manner such that any media playback system may access the media, regardless of the particular media services supported by the media playback system. Other examples are also possible.

[131] In some cases, Jane 622 may use her computing device 152 or the control device of the media playback system 142 to add a media item to Bob's queue 630. For example, Jane 622 may access the social network via the computing device 152 and may be perusing Bob's social-media profile. The social-media profile may provide a visualization of Bob's queue 630. For example, Bob's wall or the like may include a visual representation of Bob's queue 630. Jane 622 may then add a media item to Bob's queue 630 through Bob's wall or the like.

[132] In particular, a computing device affiliated with Jane's 622 social-media account (e.g., the computing device 152 or the control device of the media playback system 142 that was previously linked to Jane's social-media account) may be configured to receive media selection data indicating a media item to be added to Bob's social-media playback queue 630. In turn, the computing device may be configured to transmit to the social-media server 130 an indication of the media item. The social-media server 130 may then add the media item to Bob's queue 630.

[133] To illustrate, Figure 6B is a conceptual illustration of a social-media playback queue populated with media items. In particular, Figure 6B is the social-media account 600 from Figure 6A but with the social-media playback queue 630 populated with media items. As

shown, Bob's queue 630 now includes Media Items 1-4. In this example, Media Item 1 was added by John 608 who does not have a media playback system linked to his social-media account, possibly using a desktop computer accessing the social-media network via a web browser. Media Items 2-3 were added by Bob 602, possibly using the control device of the media playback system 140 and/or the computing device 150. Media Item 4 was added by Jane 622 in line with the above discussion.

[134] This update to Bob's queue 630 may be viewable and otherwise accessible to other subscribers with appropriate access permissions, perhaps in real-time. Indeed, multiple subscribers may access Bob's queue 630 and play back the added media items at the same time, perhaps in synchrony. A given subscriber may play back Bob's queue 630 through a web browser or social-media application on a computing device or through a linked media playback system, provided the given subscriber has a linked playback system, among other examples.

[135] In some cases, the contributions by a social-media "friend" to a social-media playback queue may be removed based on that social-media "friend" being "de-friended". For example, at some point in time, Bob 602 may determine that he no longer likes John 608 (perhaps because John 608 has bad musical taste), and Bob 602 may "de-friend" John 608. In practice, Bob 602 may do so by, for example, inputting a "de-friend" selection into the computing device 150. The computing device 150 may be configured to transmit data indicating an instruction remove the social-media account of John 608 from Bob's group of social-media "friends." Based on receiving such an instruction, the social-media server 130 may be configured to remove the "friend" association between John's and Bob's social-media accounts, modify access permissions such that John's social-media account no longer has access to Bob's queue, and/or remove from Bob's queue 630 any media items that John 608 added, such as Media Item 4. Other examples are also possible.

[136] In examples, a media playback system (e.g., a playback device of a media playback system) or computing device with access permissions to at least view a social-media playback queue may be configured to generate a playlist based on the social-media playback queue. For example, a playback device of the media playback system 140 may be configured to generate a playlist based on whatever media items are currently contained within Bob's queue 630. Then, at some other point in time, the playback device may be configured to generate another playlist based on whatever media items are then contained within Bob's queue 630. The second playlist may be different from the first playlist in the event that media

items from Bob's queue 630 had been added, removed, or reordered after the first playlist was generated. One or both of these playlists may be stored by the playback device in memory.

[137] The social-media server 130 may be configured to generate, store, and update more than one social-media playback queue for any given social-media account. That is, any given social-media subscriber may have multiple social-media playback queues.

[138] In some examples, a social-media playback queue may be generated when a social-media event is created by a subscriber with a linked media playback system. That is, the social-media server 130 may be configured to generate a social-media playback queue based at least on receiving an indication of a social-media event corresponding to a social-media account. Queues that are generated in this way may be referred herein as "social-media-event playback queues." Such queues are similar to the social-media playback queues described above; however, social-media-event playback queues are linked with a particular social-media event. In some examples, the social-media server 130 may automatically generate such a queue, or in other examples, the social-media server 130 may generate such a queue based on receiving data indicating an affirmative decision to have the queue generated.

[139] A social-media event may correspond to a real-world event that occurs at a particular time and place (e.g., a real-world location with identifiable GPS coordinates) where a particular media playback system will play back media. Examples of a social-media event may include birthday parties, weddings, graduation celebrations, and other occasions. Indeed, social-media events may be the similar in many respects to traditional social events but invitations to the social-media event are distributed via a social-media network, among other differences.

[140] Access permissions to a social-media-event playback queue may be limited to those "friends" that the subscriber invites to the social-media event. In such examples, invited "friends" may add media items to the social-media playback queue prior to the event, or even during the event, and the social-media server 130 may be configured to track which media items a particular "friend" adds.

[141] To illustrate, Figure 6C is a conceptual illustration of a social-media-event playback queue. In particular, the illustration depicts the social-media account 600 after the social-media server 130 generates a social-media-event playback queue 632. Here, Bob 602 may have created a social-media event to celebrate his birthday using a social-media application on his computing device 150. Bob 602 may have invited a subset of his social-media "friends" (e.g., the subscribers 610, 614, 626, and 628) to join in the celebration. After receiving event-detail information from the computing device 150, the social-media server

130 may have created the social-media event (e.g., generate an "event page" that may include an "event wall) and then generated the social-media-event playback queue 632. Moreover, the social-media server 130 may have established and applied access permission for the queue 632 such that only those subscribers invited to the social-media event may access the queue 632. Other examples are also possible.

[142] After receiving an indication of the social-media event (e.g., to celebrate Bob's birthday), the social-media server 130 may be configured to provide an indication of the social-media event to those subscribers invited by Bob 602. In examples, this indication may take the form of an invitation that may be provided to the invited subscriber via email, text message, social-media message, or the like. Moreover, the invitation may provide an indication or perhaps a link to Bob's birthday queue 632.

[143] In line with the above discussion, the invited subscribers 610, 614, 626, and 628 may use a computing device or control device of a media playback system to access and contribute to the social-media-event playback queue 632. As shown in Figure 6C, the subscribers 610, 614, and 626 added respective media items to Bob's birthday queue 632. The social-media server 130 may be configured to track which subscriber added each track to the social-media-event playback queue 632. In examples, the social-media server 130 may perform this operation by storing in memory a subscriber indicator or the like along with each added media item.

[144] After an invited subscriber indicates that he or she plans to attend the social-media event, the social-media server 130 may be configured to provide an indication of Bob's birthday queue 632 along with the invited subscriber's social-media account. For example, an indication of the queue 632 may be provided on the wall or timeline of the invited subscriber for others subscribers to view.

[145] Additionally, when an invited subscriber contributes to Bob's birthday queue 632, the social-media server 130 may be configured to provide an indication of the contribution. For example, after the subscriber 614 ("Kate") added Media Item 3 to Bob's birthday queue 632, an indication may be displayed on Kate's timeline indicating "Kate added Media Item 3 to Bob's Birthday Queue!" or the like.

[146] At the social-media event, the media playback system 140 may be configured to access and play back the social-media-event playback queue 632. In particular, the media playback system 140 may be configured to obtain from the social-media server 130 the media items or links to the media items contained in Bob's birthday queue 632. In some examples,

the media system server 120 may be configured to facilitate the media playback system 140 obtaining the media items.

[147] In some examples, the media playback system 140 may be configured to, before playing back a given media item from the social-media-event playback queue 632, enable the given media item for play back. Enabling a media item for play back may be performed in a number of manners.

[148] In one example, the media playback system 140 may be configured to receive an enable message indicating one or more media items to enable for play back, and based on the received enable message, enable the indicated media items for play back. In particular, when a "friend" arrives at the social-media event (e.g., Bob's birthday party located at a particular geographic location), the "friend" may use his or her computing device to "check in" to the social-event using a social-media application installed on the computing device. For instance, the "friend" may access the social-media wall for the social-media event and "check in" indicating that the "friend" is at the event.

[149] In practice, the computing device may be configured to transmit to the social-media server 130 an indication that the computing device (and by implication, the particular subscriber) is located at the event location of the social-media event. In some examples, the indication may identify the particular social-media event that the subscriber is at or perhaps it may identify the geographic location (e.g., via GPS coordinates) of the computing device at the time the "check in" occurred. In any event, the social-media server 130 may be configured to receive the indication and determine which media items, if any, the particular subscriber added to the social-media-event playback queue 632.

[150] The social-media server 130 may then provide to the media playback system 140 an enable message instructing the media playback system 140 to enable for play back the media items added by the particular subscriber. To illustrate, returning back to Figure 6C, when a computing device linked to the subscriber 610 provides to the social-media server 130 an indication that the subscriber 610 is at Bob's birthday party, the social-media server 130 may facilitate enabling Media Item 6 for play back.

[151] In some examples, the social-media server 130 and/or the media playback system 140 may be configured to modify the playback order of the social-media-event playback queue 632 based on an indication of a given subscriber arriving at the event. Modifying the playback order may involve moving, within the queue, one or more media items that the given subscriber added to the playback queue 632. In this way, the media playback system 140 may be configured to play a media item that the "friend" added to the social-media-event

playback queue 632 relatively close to the time that the "friend" arrived and "checked in" to the social-media event.

[152] For example, returning to Figure 6C, after the media playback system 140 enables Media Item 6 for play back, the media playback system 140 may also move that media item up in the playback order. For example, if the media playback system 140 were playing Bob's birthday queue 632 in order as it appears in Figure 6C and the current media item being played was Media Item 2, the media playback system 140 may move Media Item 6 to immediately follow Media Item 2. Other examples are also possible.

[153] In some examples, the social-media server 130 may be configured to receive one or more "check-in" indications from respective computing devices or the like, and based on the received indications, the social-media server 130 may be configured to curate a playlist to be added to a social-media playback queue, such as Bob's birthday queue 632. In particular, after receiving "check-in" indications, the social-media server 130 may be configured to determine the subscribers that have "checked-in" to a given social-media event. The social-media server 130 may be configured to access the social-media accounts of the "checked-in" subscribers to analyze captured life events, musical preferences, favorite artists or albums, trending tastes, and the like of those subscribers to curate a playlist.

[154] For example, the social-media server 130 may determine, based on the "checked-in" subscribers' social-media profiles, that the subscribers are all (or perhaps a predetermined threshold amount of) friends from high school from the 1990s. The social-media server 130 may then curate a 1990s based playlist. In another example, the social-media server 130 may determine that all (or a predetermined threshold amount of) the "checked-in" subscribers attended the same concert. The social-media server 130 may then curate a playlist based on that concert, perhaps using the set list from the concert. Other examples are also possible.

[155] Thereafter, the social-media server 130 may be configured to add the curated playlist to social-media playback queue. The media playback system 140 may then play back the curated playlist.

[156] One of ordinary skill in the art will appreciate that other social-media playback queues may be generated based on other social-media related activities and that the above-discussion of a social-media event is not meant to be limiting. Other examples are possible and contemplated herein.

[157] For methods 700 and 800 of Figures 7 and 8, respectively, and other processes and methods disclosed herein, the flowcharts show functionality and operation of one possible implementation of present embodiments. In this regard, each block may represent a module, a

segment, or a portion of program code, which includes one or more instructions executable by a processor for implementing specific logical functions or steps in the process. The program code may be stored on any type of computer-readable medium, for example, such as a storage device including a disk or hard drive. The computer-readable medium may include non-transitory computer-readable medium, for example, such as computer-readable media that stores data for short periods of time like register memory, processor cache and Random Access Memory (RAM). The computer-readable medium may also include non-transitory media, such as secondary or persistent long term storage, like read only memory (ROM), optical or magnetic disks, compact-disc read only memory (CD-ROM), for example. The computer-readable media may also be any other volatile or non-volatile storage systems. The computer-readable medium may be considered a computer-readable storage medium, for example, or a tangible storage device. In addition, for the methods 700 and 800, and other processes and methods disclosed herein, each block in the respective figure may represent circuitry that is wired to perform the specific logical functions in the process.

[158] Furthermore, although the blocks are illustrated in sequential order, these blocks may also be performed in parallel, and/or in a different order than those described herein. Also, the various blocks may be combined into fewer blocks, divided into additional blocks, and/or removed based upon the desired implementation.

[159] For clarity, the methods may be described herein with reference to Figures 1 and 6A-6C. It should be understood, however, that this is for purposes of example and explanation only and that the operations of the methods should not be limited by these figures.

[160] Method 700 shown in Figure 7 presents an embodiment of a method that may be implemented within an operating environment (e.g., the network configuration 100 of Figure 1) involving a computing system, such as the social-media server 130 of Figure 1. In some implementations, an additional computing system (e.g., the media system server 120) in communication with the social-media server 130 may perform aspects of the method 700. The method 700 may include one or more operations, functions, or actions as illustrated by one or more of blocks 702-712. These operations, functions, or actions may be performed in line with the above discussion. Moreover, other of the operations, functions, or actions discussed above may be performed with or in addition to the method 700.

[161] At block 702, the method 700 may involve the social-media server 130 receiving an identifier of a media playback system, such as the media playback system 140. At block 704, the method 700 may involve the social-media server 130 linking the identifier with a social-

media account such that the media playback system 140 is associated with the social-media account. Then, at block 706, the method 700 may involve, based at least on linking the identifier with the social-media account, the social-media server 130 generating a social-media playback queue that is fillable with one or more media items that are playable by the media playback system 140. At block 708, the method 700 may involve the social-media server 130 establishing access permissions to the social-media playback queue, where the access permissions indicate at least one additional social-media account that is within a social-media network of the social-media account that has access to the social-media playback queue. At block 710, the method 700 may involve the social-media server 130 receiving, from a computing device affiliated with the at least one additional social-media account (e.g., the computing device 150), an indication of a media item to be added to the social-media playback queue. At block 712, the method 700 may also involve the social-media server 130 adding the media item to the social-media playback queue.

[162] Method 800 shown in Figure 8 presents an embodiment of a method that may be implemented within an operating environment (e.g., the network configuration 100 of Figure 1) involving a computing system, such as the media playback system 142 of Figure 1. In particular, the method 800 may be implemented by a computing device, such as a media playback device (e.g., the playback device 300 of Figure 3) or media playback control device (e.g., the control device 400 of Figure 4), of a media playback system. In some implementations, an additional computing device (e.g., a playback or control device) in communication with the computing device may perform aspects of the method 800. The method 800 may include one or more operations, functions, or actions as illustrated by one or more of blocks 802-808. These operations, functions, or actions may be performed in line with the above discussion. Moreover, other of the operations, functions, or actions discussed above may be performed with or in addition to the method 800.

[163] At block 802, the method 800 may involve the playback device 300 (or a control device 400) transmitting, to a social-media computing system (e.g., the social-media server 130), an identifier of a media playback system (e.g., the media playback system 142 that includes the playback device 300 and/or control device 400) to facilitate associating the media playback system 142 with a first social-media account. At block 804, the method 800 may involve the playback device 300 receiving, from the social-media server 130, an indication of a social-media playback queue corresponding to a second social-media account, where the second social-media account is within a social-media network of the first social-media account. At block 806, the method 800 may involve the playback device 300

receiving a playback prompt (e.g., from the control device 400) instructing the playback device 300 to play back the social-media playback queue. Then, at block 808, the method 800 may involve the playback device 300 obtaining one or more media items in the social-media playback queue for play back by the playback device 300.

[164] Other example methods are also contemplated herein. In particular, any combination of the above-discussed operations, functions, or actions may be performed consecutively in accordance with an example method.

[165] While some examples described herein may refer to operations performed by given actors, such as "users", "subscribers", and/or other entities, it should be understood that this is for purposes of explanation only. The claims should not be interpreted to require action by any such actors unless explicitly required by the language of the claims themselves.

VI. Conclusion

[166] The description above discloses, among other things, various example systems, methods, apparatus, and articles of manufacture including, among other components, firmware and/or software executed on hardware. It is understood that such examples are merely illustrative and should not be considered as limiting. For example, it is contemplated that any or all of the firmware, hardware, and/or software aspects or components can be embodied exclusively in hardware, exclusively in software, exclusively in firmware, or in any combination of hardware, software, and/or firmware. Accordingly, the examples provided are not the only way(s) to implement such systems, methods, apparatus, and/or articles of manufacture.

[167] As indicated above, examples provided herein are directed to social-media playback queues.

[168] (Feature 1) A computing system comprising: i) a network interface; ii) at least one processor; iii) a non-transitory computer-readable medium; and iv) program instructions stored on the non-transitory computer-readable medium that are executable by the at least one processor to cause the computing system to: i) receive an identifier of a media playback system; ii) link the identifier with a social-media account such that the media playback system is associated with the social-media account; iii) based at least on linking the identifier with the social-media account, generate a social-media playback queue that is fillable with one or more media items that are playable by the media playback system; iv) establish access permissions to the social-media playback queue, wherein the access permissions indicate at least one additional social-media account that (a) is within a social-media network of the social-media account and (b) has access to the social-media playback queue; v) receive, from

a computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the social-media playback queue; and vi) add the media item to the social-media playback queue.

[169] (Feature 2) The computing system of feature 1, wherein the media playback system is a first media playback system, and wherein the program instructions are further executable to cause the computing system to: provide, to the first media playback system and a second media playback system, the social-media playback queue, wherein the second media playback system is linked with the at least one additional social-media account.

[170] (Feature 3) The computing system of feature 2, wherein the social-media playback queue comprises a plurality of media items, and wherein providing the social-media playback queue comprises providing a portion of the plurality of media items.

[171] (Feature 4) The computing system of feature 2, wherein the social-media playback queue comprises a plurality of media items, and wherein providing the social-media playback queue comprises providing the plurality of media items.

[172] (Feature 5) The computing system of any preceding feature, wherein the social-media playback queue is a first social-media playback queue, and wherein the program instructions are further executable to cause the computing system to: receive an indication of a social-media event corresponding to the social-media account; and based at least on the indication of the social-media event, generate a second social-media playback queue.

[173] (Feature 6) The computing system of any preceding feature in combination with feature 5, wherein the program instructions are further executable to cause the computing system to: receive, from the computing device affiliated with the at least one additional social-media account, an indication of a media item to be added to the second social-media playback queue; and add the media item to the second social-media playback queue.

[174] (Feature 7) The computing system of any preceding feature in combination with feature 6, wherein the social-media event corresponds with an event location, wherein the program instructions are further executable to cause the computing system to: receive, from the computing device affiliated with the at least one additional social-media account, an indication that the computing device is located at the event location; and based on the indication that the computing device is located at the event location, transmit, to the media playback system, an enable message instructing the media playback system to enable for play back the media item added to the second social-media playback queue.

[175] (Feature 8) The computing system of any preceding feature in combination with feature 7, wherein the second social-media playback queue comprises a playback order, and

wherein the program instructions are further executable to cause the computing system to: based on the indication that the computing device is located at the event location, modify the playback order of the second social-media playback queue.

[176] (Feature 9) The computing system of any preceding feature in combination with feature 8, wherein the playback order comprises the media item added to the second social-media playback queue at a first position, and wherein modifying the playback order of the second social-media playback queue comprises assigning to the media item added to the second social-media playback queue a second position, wherein the second position is before the first position.

[177] (Feature 10) The computing system of any preceding feature, wherein the program instructions are further executable to cause the computing system to: receive an instruction to remove the at least one additional social-media account from the social-media network of the social-media account; and based on the received instruction, remove the added media item from the social-media playback queue.

[178] (Feature 11) A media playback device comprising: i) a network interface configured to communicatively couple the media playback device to a media playback system; ii) one or more media processing components; iii) at least one processor; iv) a non-transitory computer-readable medium; and v) program instructions stored on the non-transitory computer-readable medium that are executable by the at least one processor to cause the media playback device to: a) transmit, to a social-media computing system, an identifier of the media playback system to facilitate associating the media playback system with a first social-media account; b) receive, from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account, wherein the second social-media account is within a social-media network of the first social-media account; c) receive a playback prompt instructing the media playback device to play back the social-media playback queue; and d) obtain one or more media items in the social-media playback queue for play back by the media playback device.

[179] (Feature 12) The media playback device of feature 11, wherein the identifier comprises a household identifier of the media playback system, wherein the household identifier is unique to the media playback system.

[180] (Feature 13) The media playback device of any of features 11-12, wherein the program instructions are further executable to cause the media playback device to: after receiving the indication of the social-media playback queue corresponding to the second

social-media account, transmit, to a media playback control device, the indication of the social-media playback queue.

[181] (Feature 14) The media playback device of any of features 11-13, wherein the social-media playback queue is a first social-media playback queue, and wherein the program instructions are further executable to cause the media playback device to: receive an indication of a second social-media playback queue corresponding to the first-social media account, wherein the second social-media playback queue comprises a plurality of media items.

[182] (Feature 15) The media playback device of any of features 11-13 in combination with feature 14, wherein the program instructions are further executable to cause the media playback device to: receive, from the social-media computing system, an enable message indicating one or more of the plurality of media items to enable for play back; and based on the received enable message, enable the one or more of the plurality of media items for play back.

[183] (Feature 16) The media playback device of any of features 11-13 or 14 in combination with feature 14, wherein the second social-media playback queue comprises a playback order, and wherein the program instructions are further executable to cause the media playback device to: based at least on the received enable message, modify the playback order of the second social-media playback queue.

[184] (Feature 17) The media playback device of any of features 11-16, wherein transmitting the identifier of the media playback system comprises transmitting the identifier based on receiving data indicating credentials associated with the first social-media account.

[185] (Feature 18) The media playback device of any of features 11-17, wherein transmitting the identifier of the media playback system comprises transmitting the identifier based on determining that a social-media application is installed on a computing device of the media playback system, wherein the social-media application corresponds with the social-media computing system.

[186] (Feature 19) The media playback device of any of features 11-18, wherein the program instructions are further executable to cause the media playback device to: after receiving the indication of the social-media playback queue, generate a playlist based on the social-media playback queue; and store the generated playlist in memory of the media playback device.

[187] (Feature 20) A method comprising: i) transmitting, by a media playback device to a social-media computing system, an identifier of the media playback system to facilitate

associating the media playback system with a first social-media account; ii) receiving, by the media playback device from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account, wherein the second social-media account is within a social-media network of the first social-media account; iii) receiving, by a media playback device, a playback prompt instructing the media playback device to play back the social-media playback queue; and iv) obtaining, by the media playback device, one or more media items in the social-media playback queue for play back by the media playback device.

[188] Additionally, references herein to "embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment can be included in at least one example embodiment of an invention. The appearances of this phrase in various places in the specification are not necessarily all referring to the same embodiment, nor are separate or alternative embodiments mutually exclusive of other embodiments. As such, the embodiments described herein, explicitly and implicitly understood by one skilled in the art, can be combined with other embodiments.

[189] The specification is presented largely in terms of illustrative environments, systems, procedures, steps, logic blocks, processing, and other symbolic representations that directly or indirectly resemble the operations of data processing devices coupled to networks. These process descriptions and representations are typically used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art. Numerous specific details are set forth to provide a thorough understanding of the present disclosure. However, it is understood to those skilled in the art that certain embodiments of the present disclosure can be practiced without certain, specific details. In other instances, well known methods, procedures, components, and circuitry have not been described in detail to avoid unnecessarily obscuring aspects of the embodiments. Accordingly, the scope of the present disclosure is defined by the appended claims rather than the forgoing description of embodiments.

[190] When any of the appended claims are read to cover a purely software and/or firmware implementation, at least one of the elements in at least one example is hereby expressly defined to include a tangible, non-transitory medium such as a memory, DVD, CD, Blu-ray, and so on, storing the software and/or firmware.

CLAIMS

We Claim:

1. A method comprising:

receiving an identifier of a media playback system;

linking the identifier of the media playback system with a first social-media account;

generating a social media playback queue to which one or more media items can be added;

determining at least one additional social media account that (a) is within a social-media network of the first social-media account and (b) has access to the social-media playback queue;

establishing access permissions to the social media playback queue for the at least one additional social-media account;

receiving, from a computing device affiliated with the at least one additional social media account, an indication of a media item to be added to the social-media playback queue; and

adding the media item to the social-media playback queue.

2. The method of claim 1, further comprising providing the social-media playback queue to the media playback system and at least one additional media playback system linked with a second social-media account.

3. The method of claim 2, wherein providing the social-media playback queue comprises providing at least a portion of a plurality of media items of the social-media playback queue.

4. The method of one of claims 1 to 3, further comprising:

receiving an indication of a social-media event corresponding to the first social-media account; and

generating a second social-media playback queue associated with the social-media event based on the received indication.

5. The method of claim 4, further comprising:

receiving an indication of a media item to be added to the second social-media playback queue from the computing device affiliated with the at least one additional social media account; and

adding the media item to the second social-media playback queue.

6. The method of claim 5, wherein:

the social-media event corresponds with an event location; and

the method further comprises:

receiving an indication that the computing device affiliated with the at least one additional social media account is located at the event location; and

transmitting an enable message instructing the media playback system to enable for playback the media item added to the second social-media playback queue to the media playback system based on the received indication that the computing device is located at the event location.

7. The method of claim 6, further comprising modifying a playback order of the second social-media playback queue based on the received indication that the computing device is located at the event location.

8. The method of claim 6 or 7, further comprising assigning a media item added by a computing device located at the event location an earlier playback position than at least one media item added by a computing device not located at the event location.

9. The method of any preceding claim, further comprising:

receiving an instruction to remove the at least one additional social-media account from the social-media network of the social-media account; and

removing media items added by the removed at least one additional social-media account from the social-media playback queue based on the received instruction.

10. A computing device configured to execute the method of any preceding claim.

11. A method for a media playback device, comprising:

transmitting an identifier of the media playback system to a social-media computing system to facilitate associating the media playback system with a first social-media account;

receiving, from the social-media computing system, an indication of a social-media playback queue corresponding to a second social-media account that is within a social-media network of the first social media account;

receiving a playback prompt instructing the media playback device to play back the social-media playback queue; and

obtaining one or more media items in the social-media playback queue for playback by the media playback device.

12. The method of claim 11, wherein the identifier comprises a household identifier that is unique to the media playback system.

13. The method of claim 11 or 12, further comprising, in response to receiving the indication of the social-media playback queue, transmitting to a media playback control device the indication of the social-media playback queue.

14. The method of one of claims 11 to 13, wherein:

the social-media playback queue is a first social-media playback queue, and the method further comprises receiving an indication of a second social-media playback queue corresponding to the first social media account.

15. The method of claim 14, further comprising:

receiving, from the social-media computing system, an enable message indicating one or more of a plurality of media items of the second social-media account to enable for play back; and

enabling the one or more of the plurality of media items for playback in response to the received enable message.

16. The method of claim 14 or 15, wherein:

the second social-media playback queue comprises a playback order, and the method further comprises causing the media playback device to modify the playback order of the second social-media playback queue based on at least the received enable message.

17. The method of one of claims 11 to 16, further comprising transmitting the identifier of the media playback system in response to receiving data indicating credentials associated with the first social-media account.

18. The method of one of claims 11 to 16, further comprising transmitting the identifier of the media playback system in response to determining that a social media application corresponding to the social-media computing system is installed on a computing device of the media playback system.

19. The method of one of claims 11 to 18, further comprising:

generating a playlist based on the social-media playback queue after receiving the indication of the social-media playback queue; and

storing the generated playlist in memory of the media playback device.

20. A media playback device comprising:

a network interface configured to communicatively couple the media playback device to a media playback system;

one or more media processing components; and

a processor configured to cause the media playback device to perform the method of one of claims 11 to 19.

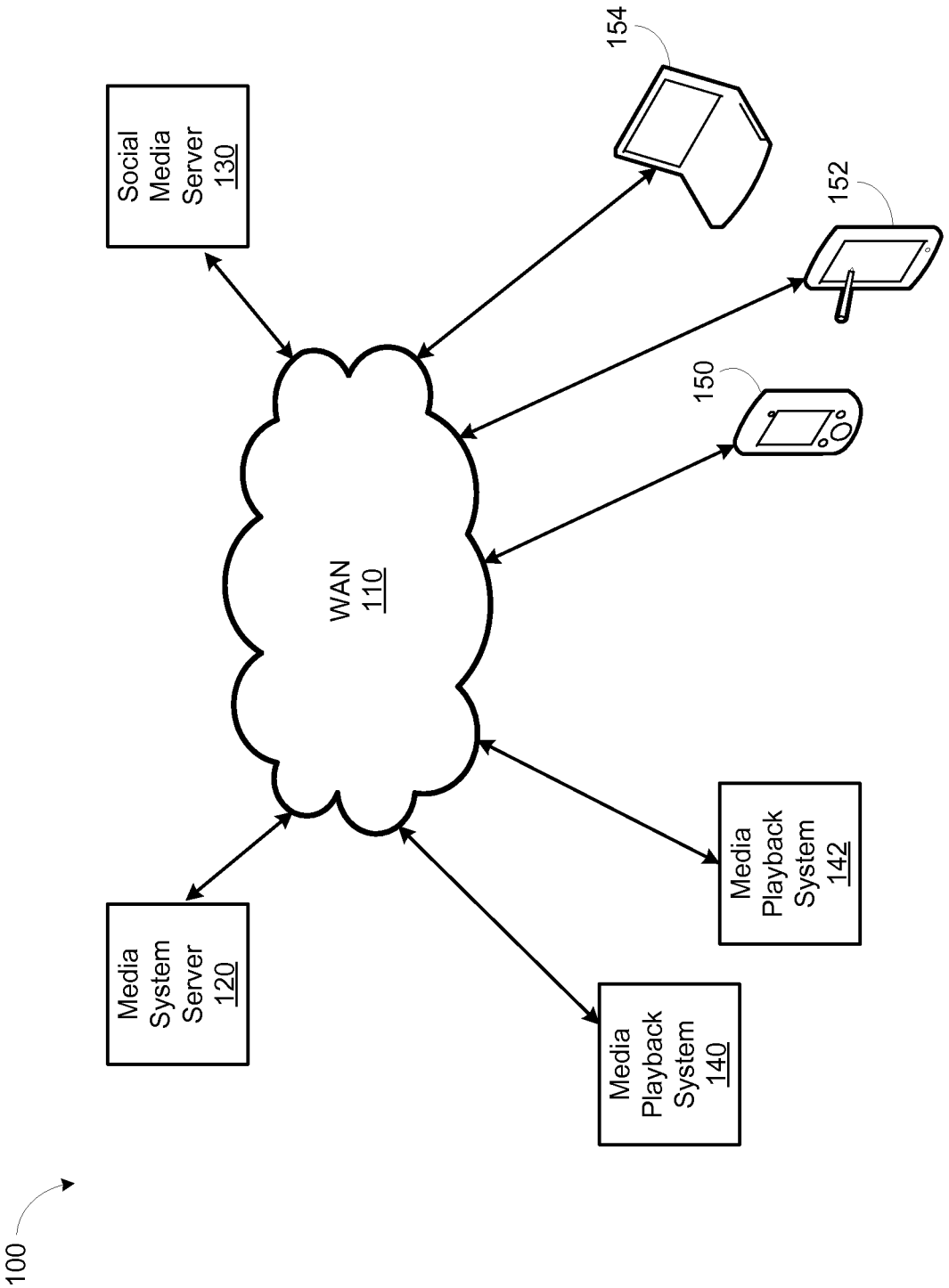
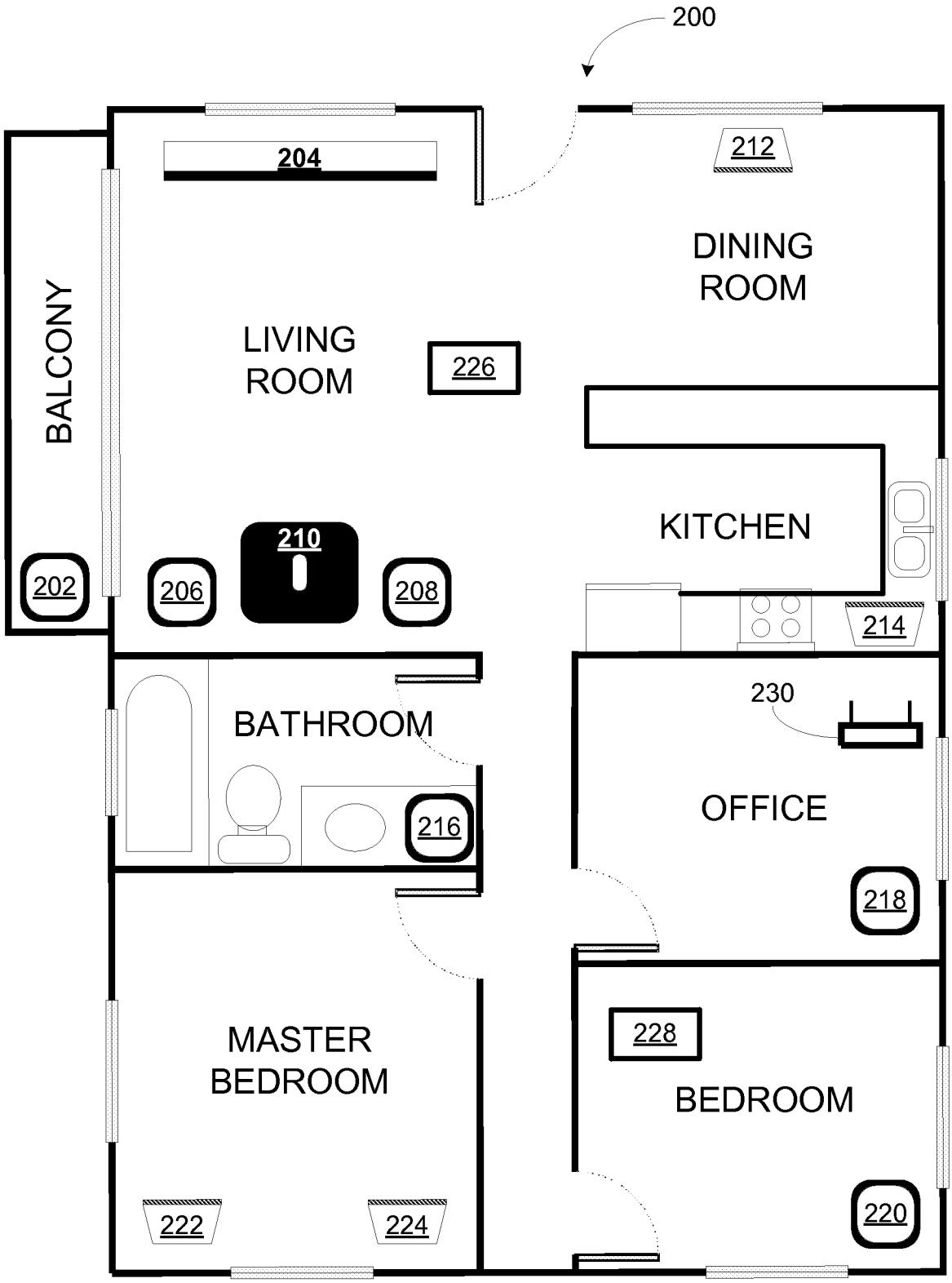

100
Social Media Server 130
Media System Server 120
Media Playback System 140
Media Playback System 142
WAN 110
150
152
154

FIGURE 1


200
204
212
DINING ROOM
BALCONY
LIVING ROOM
226
KITCHEN
210
202
206
208
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BATHROOM
OFFICE
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218
MASTER BEDROOM
228
BEDROOM
222
224
220

FIGURE 2

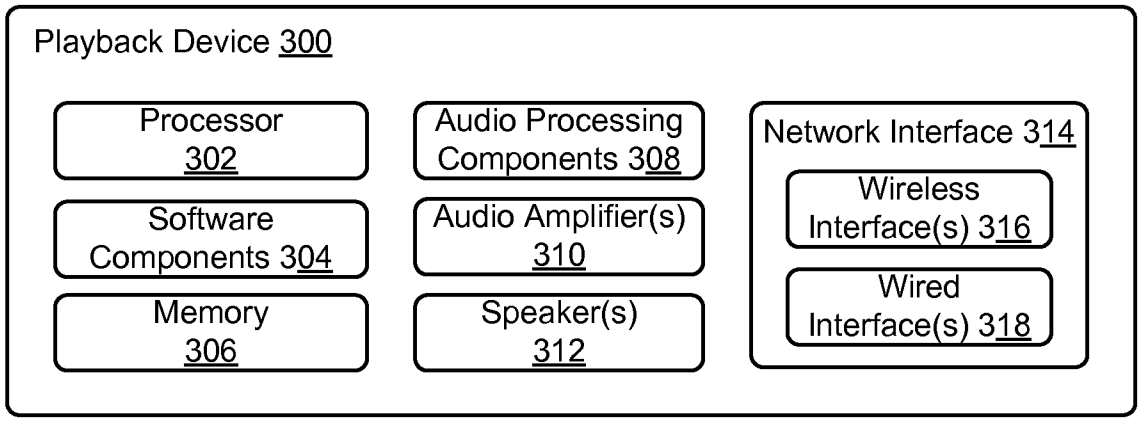


FIGURE 3

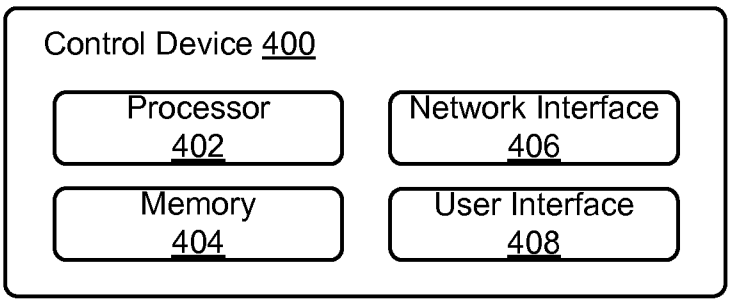


FIGURE 4

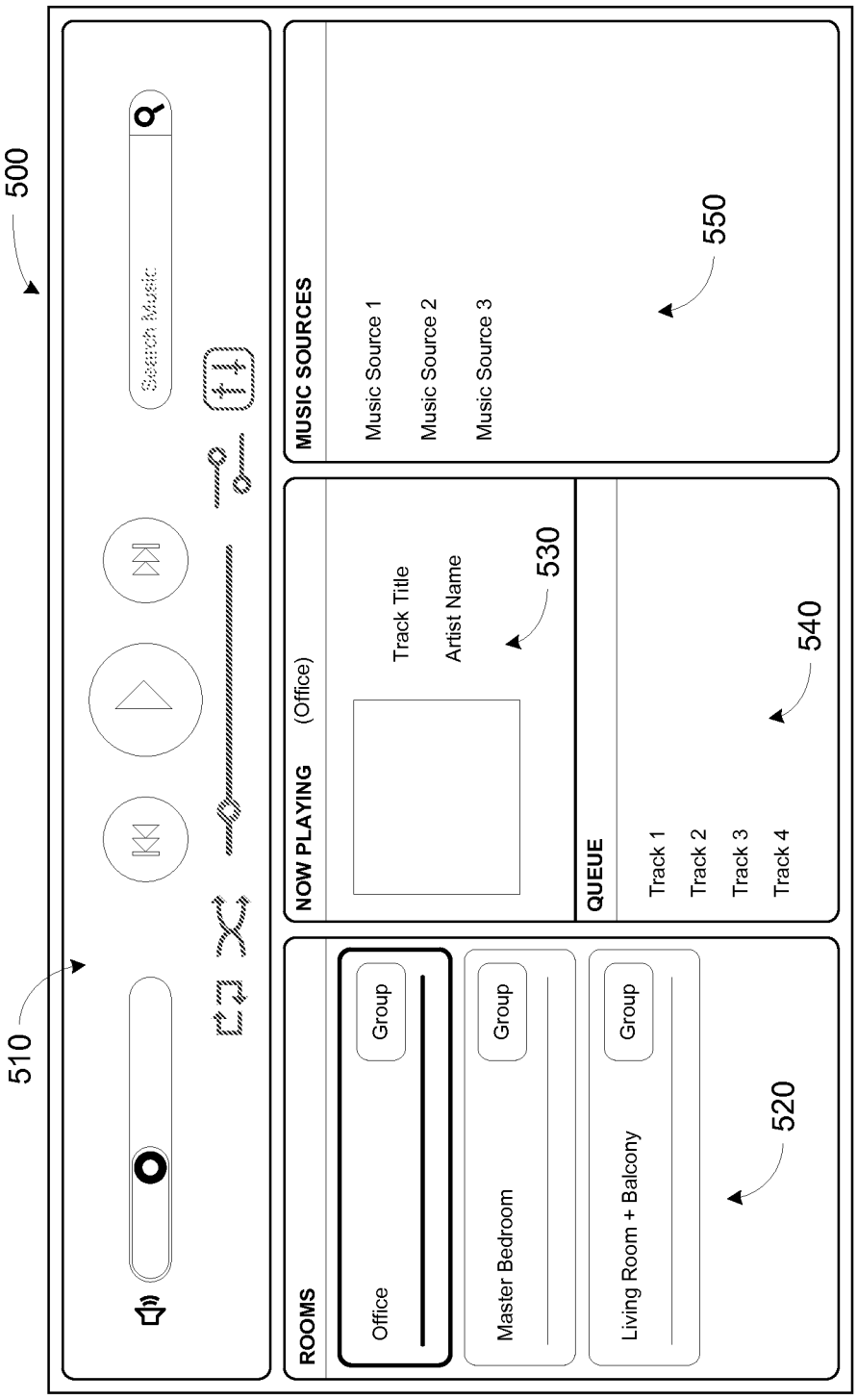

500
510
Search Music
ROOMS
Office
Group
Master Bedroom
Group
Living Room + Balcony
Group
520
NOW PLAYING
(Office)
Track Title
Artist Name
530
QUEUE
Track 1
Track 2
Track 3
Track 4
540
MUSIC SOURCES
Music Source 1
Music Source 2
Music Source 3
550

FIGURE 5

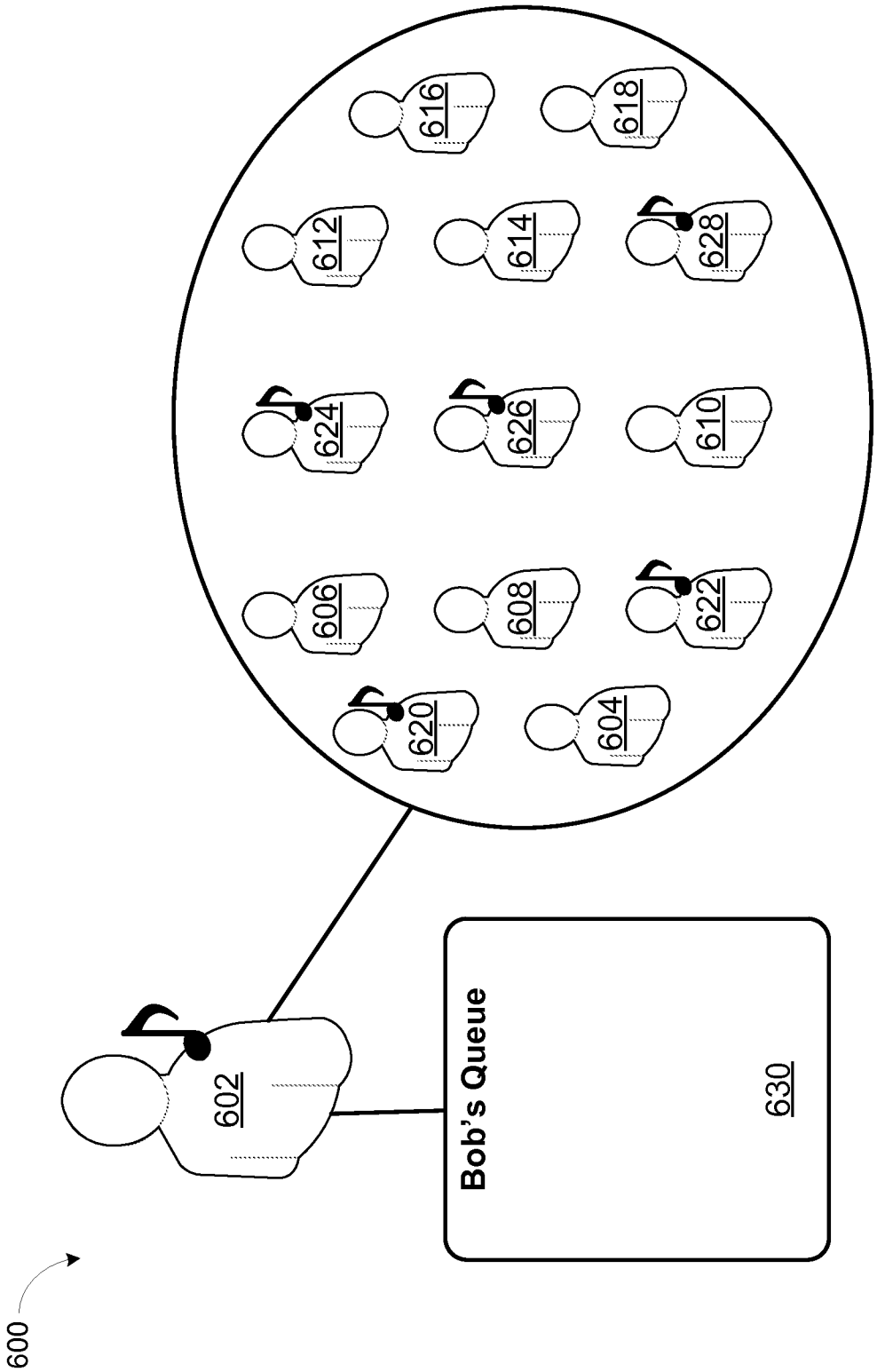
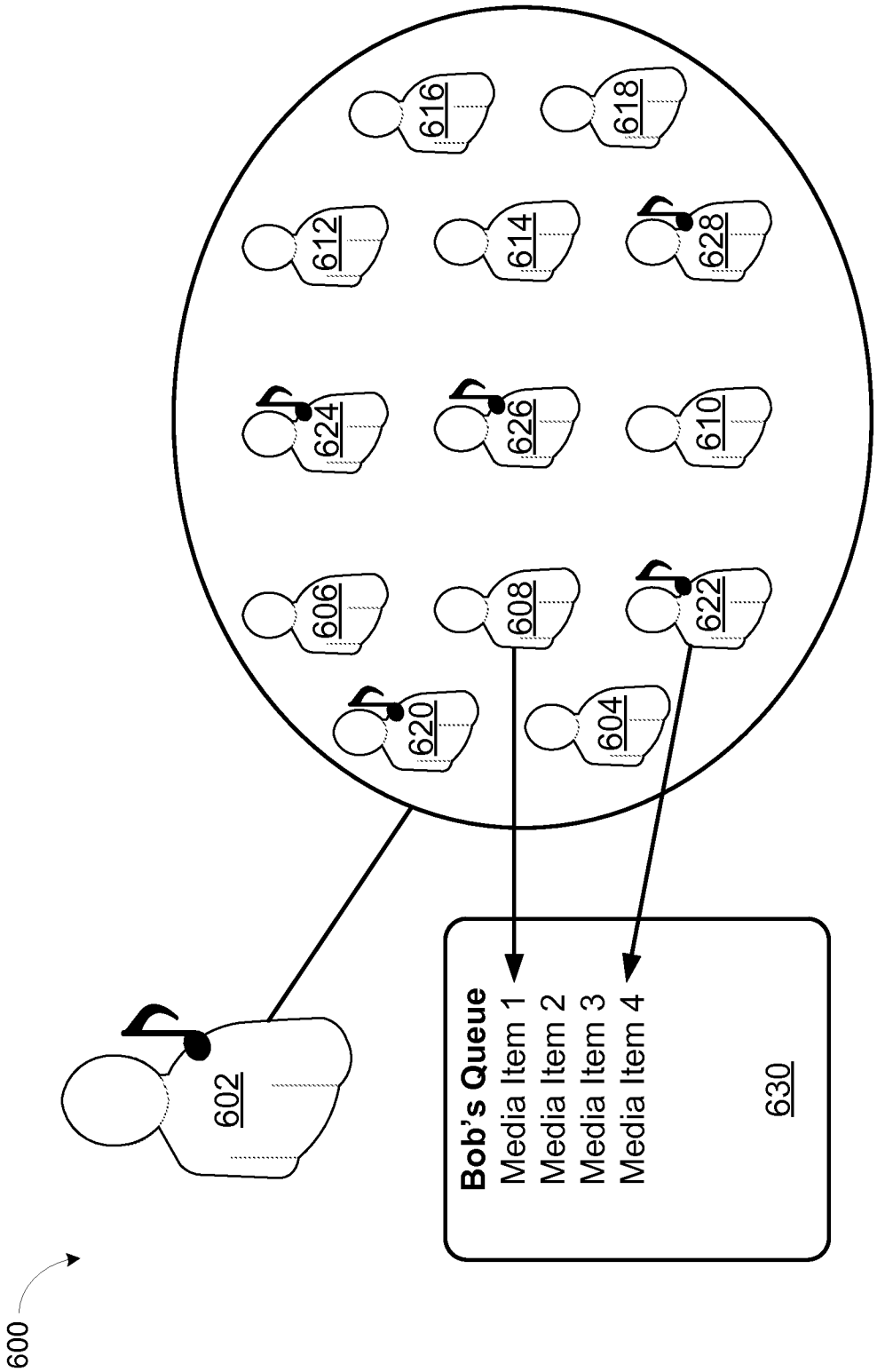

600
602
Bob's Queue
630
604
606
608
610
612
614
616
618
620
622
624
626
628

FIGURE 6A


600
602
Bob's Queue
Media Item 1
Media Item 2
Media Item 3
Media Item 4
630
604
606
608
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612
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618
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622
624
626
628

FIGURE 6B

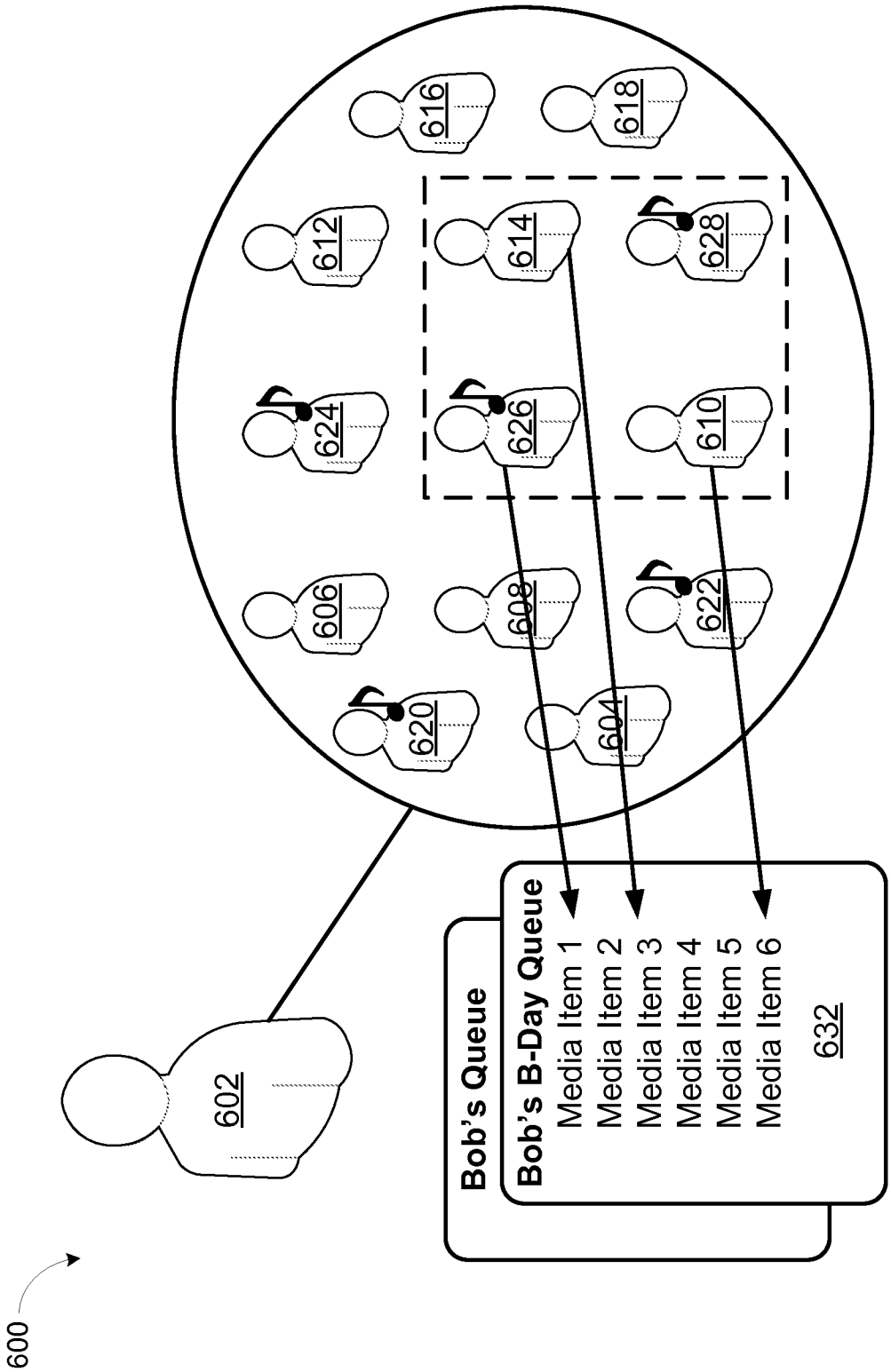
600
602
Bob's Queue
Bob's B-Day Queue
Media Item 1
Media Item 2
Media Item 3
Media Item 4
Media Item 5
Media Item 6
632
604
606
608
610
612
614
616
618
620
622
624
626
628

FIGURE 6C

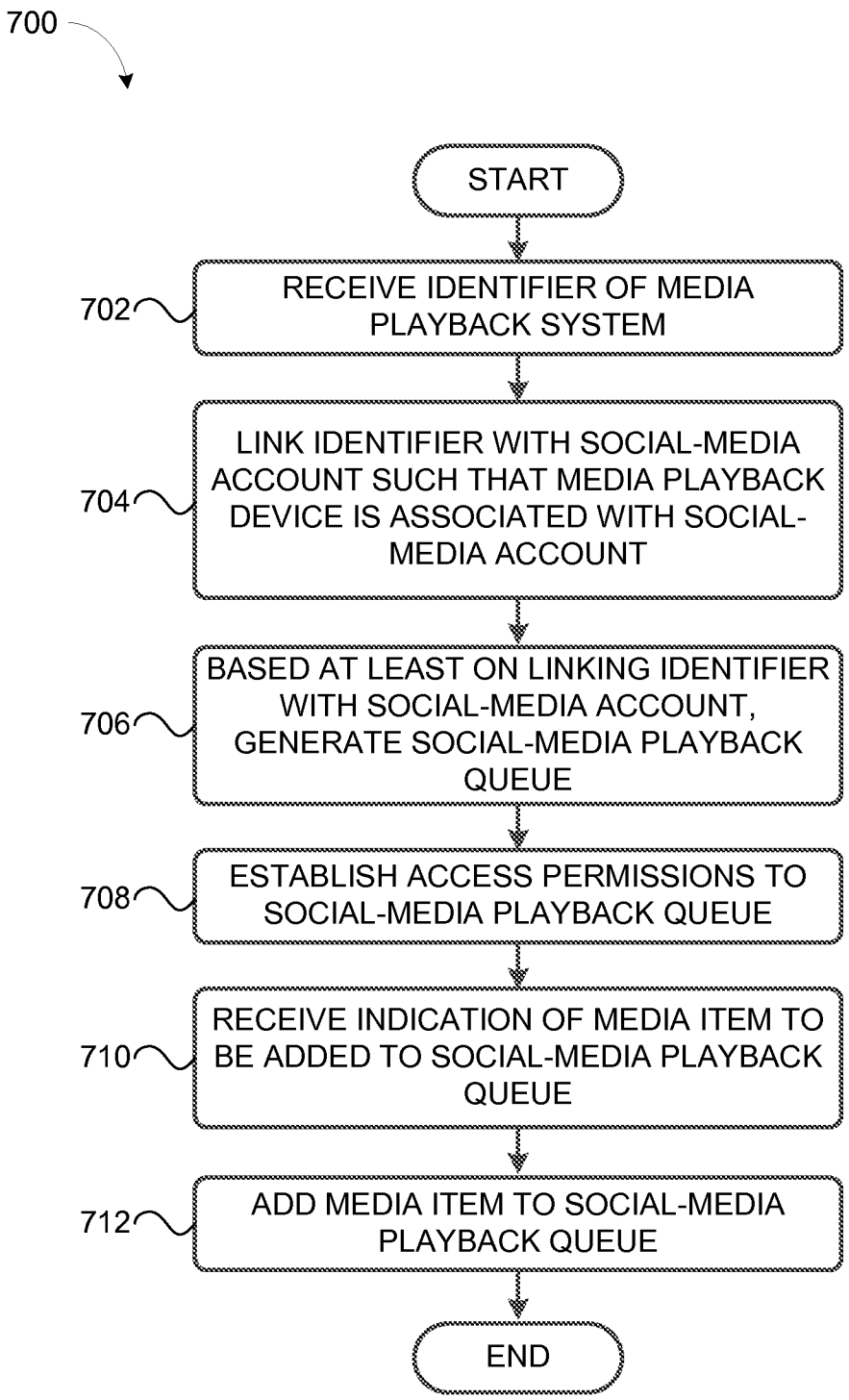
700
START
702
RECEIVE IDENTIFIER OF MEDIA PLAYBACK SYSTEM
704
LINK IDENTIFIER WITH SOCIAL-MEDIA ACCOUNT SUCH THAT MEDIA PLAYBACK DEVICE IS ASSOCIATED WITH SOCIAL-MEDIA ACCOUNT
706
BASED AT LEAST ON LINKING IDENTIFIER WITH SOCIAL-MEDIA ACCOUNT, GENERATE SOCIAL-MEDIA PLAYBACK QUEUE
708
ESTABLISH ACCESS PERMISSIONS TO SOCIAL-MEDIA PLAYBACK QUEUE
710
RECEIVE INDICATION OF MEDIA ITEM TO BE ADDED TO SOCIAL-MEDIA PLAYBACK QUEUE
712
ADD MEDIA ITEM TO SOCIAL-MEDIA PLAYBACK QUEUE
END

FIGURE 7

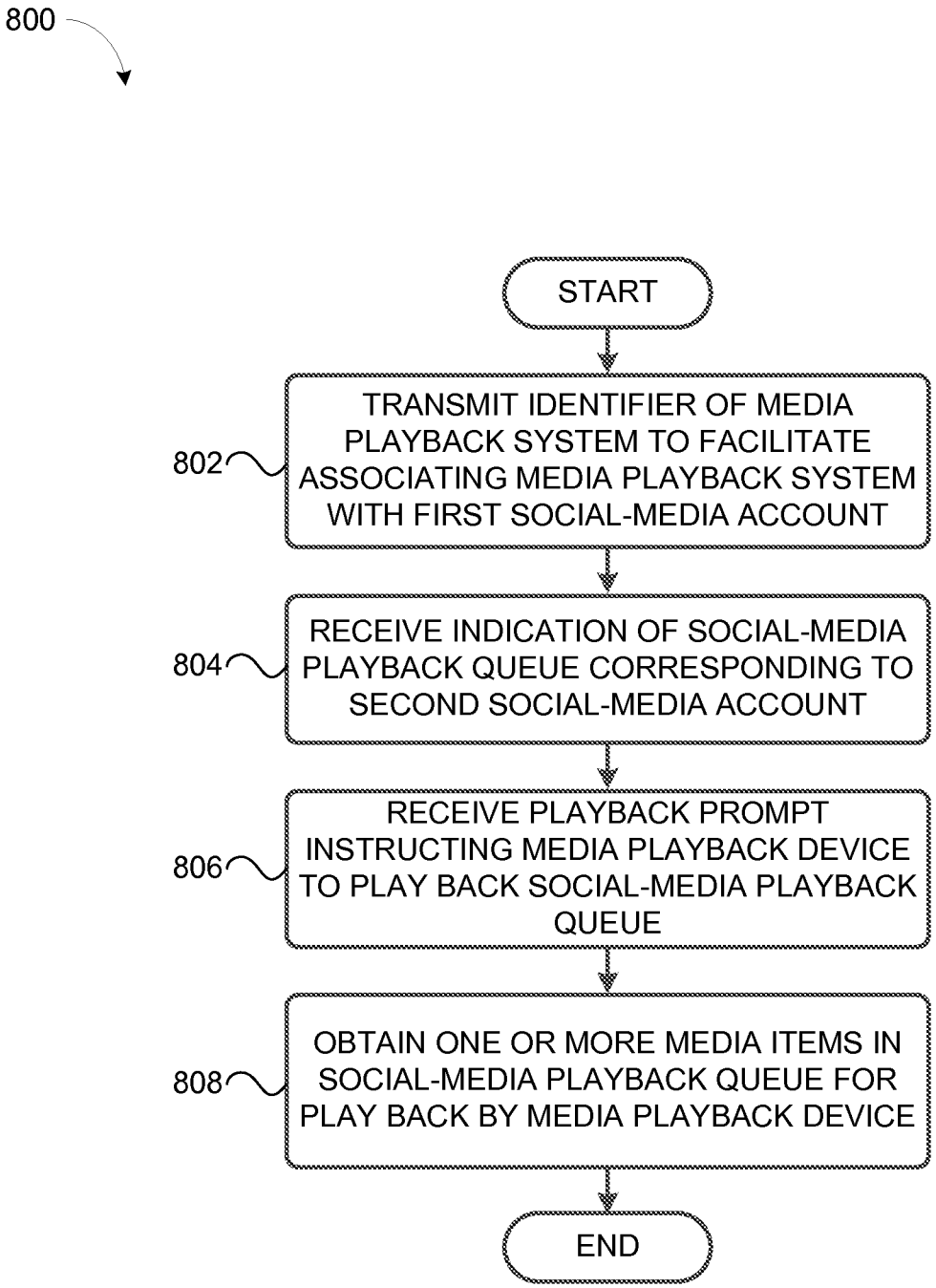
800
START
TRANSMIT IDENTIFIER OF MEDIA PLAYBACK SYSTEM TO FACILITATE ASSOCIATING MEDIA PLAYBACK SYSTEM WITH FIRST SOCIAL-MEDIA ACCOUNT
802
RECEIVE INDICATION OF SOCIAL-MEDIA PLAYBACK QUEUE CORRESPONDING TO SECOND SOCIAL-MEDIA ACCOUNT
804
RECEIVE PLAYBACK PROMPT INSTRUCTING MEDIA PLAYBACK DEVICE TO PLAY BACK SOCIAL-MEDIA PLAYBACK QUEUE
806
OBTAIN ONE OR MORE MEDIA ITEMS IN SOCIAL-MEDIA PLAYBACK QUEUE FOR PLAY BACK BY MEDIA PLAYBACK DEVICE
808
END

FIGURE 8

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2015/051968

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04N21/4788 H04N21/262 H04N21/258 H04N21/436 H04N21/442
G06Q50/00
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04N G06Q H04L G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2013/191454 A1 (OLIVER MICHAEL R [US] ET AL) 25 July 2013 (2013-07-25) figures 1, 2, 5, 7-9 paragraph [0013] - paragraph [0045] paragraph [0049] - paragraph [0063] paragraph [0071] - paragraph [0085] -----	1-14, 16-20 15
X A	US 2011/314388 A1 (WHEATLEY MARK DAVID [GB]) 22 December 2011 (2011-12-22) figures 1-3, 6 paragraph [0022] - paragraph [0029] paragraph [0036] - paragraph [0045] paragraph [0053] - paragraph [0054] -----	1-4, 10-12, 14,15,20 19
	-/--	

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 November 2015	07/12/2015

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Döttling, Martin

2

Form PCT/ISA/210 (second sheet) (April 2005)

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2013/254663 A1 (BATES PAUL [US] ET AL) 26 September 2013 (2013-09-26) figure 7 paragraph [0065] - paragraph [0092]	1-11,17, 20
X	US 2010/228740 A1 (CANNISTRARO ALAN [US] ET AL) 9 September 2010 (2010-09-09)	1-10
A	figures 2-6, 9 paragraph [0029] - paragraph [0043] paragraph [0050] - paragraph [0073] paragraph [0081] - paragraph [0095]	11,17-20
X	US 2013/343567 A1 (TRIPLETT MARK [US] ET AL) 26 December 2013 (2013-12-26)	1-4, 10-14, 17-20
Y	paragraph [0035] - paragraph [0037]; figures 7, 8 paragraph [0054] - paragraph [0058] paragraph [0076] - paragraph [0121]	15

2

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2015/051968

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2013191454 A1	25-07-2013	NONE	
US 2011314388 A1	22-12-2011	CN 102947827 A	27-02-2013
		EP 2583199 A1	24-04-2013
		US 2011314388 A1	22-12-2011
		WO 2011157891 A1	22-12-2011
US 2013254663 A1	26-09-2013	NONE	
US 2010228740 A1	09-09-2010	NONE	
US 2013343567 A1	26-12-2013	CN 104520890 A	15-04-2015
		EP 2864955 A1	29-04-2015
		JP 2015528127 A	24-09-2015
		US 2013343567 A1	26-12-2013
		WO 2014004181 A1	03-01-2014