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(54) **METHOD AND SYSTEM FOR MUSIC PROGRAM SELECTION**

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(52) **U.S. Cl.** ..... **84/477 R**; 84/601; 84/602; 84/604; 84/615; 84/647; 84/653

(58) **Field of Classification Search** ..... 84/477 R
See application file for complete search history.

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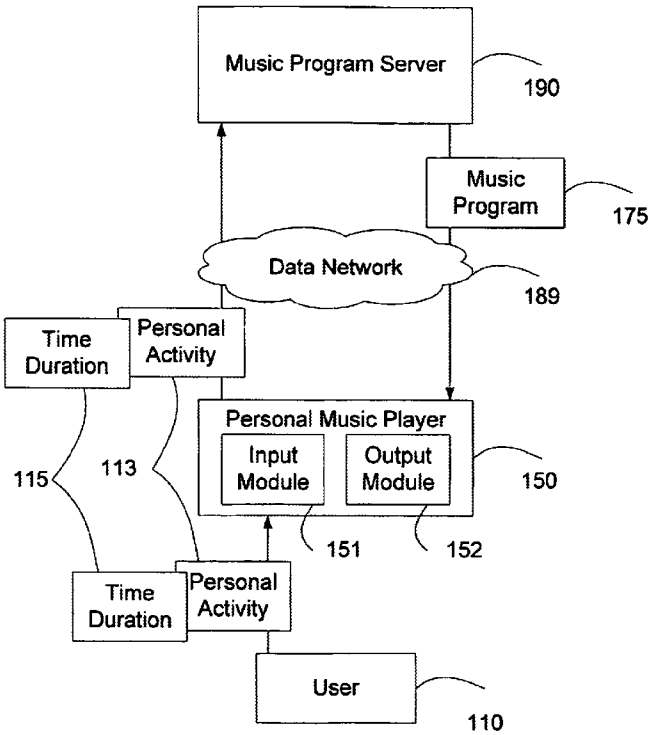
(57) **ABSTRACT**

In providing a music program, a personal music player displays personal activity choices. A user selects a personal activity and provides a time duration for the activity. The player sends a request to a music program server for a music program. The request includes the personal activity and the time duration. The music program server selects a music program record from a plurality of music program records that has an activity attribute which matches the personal activity and a program duration which matches or is less than the time duration. The server extracts location information for the music program from the program entry in the music program record, and sends this to the player. The player uses the location information to obtain the music program. In this manner, a music program is provided to a user based on the personal activity of the user.

30 Claims, 7 Drawing Sheets



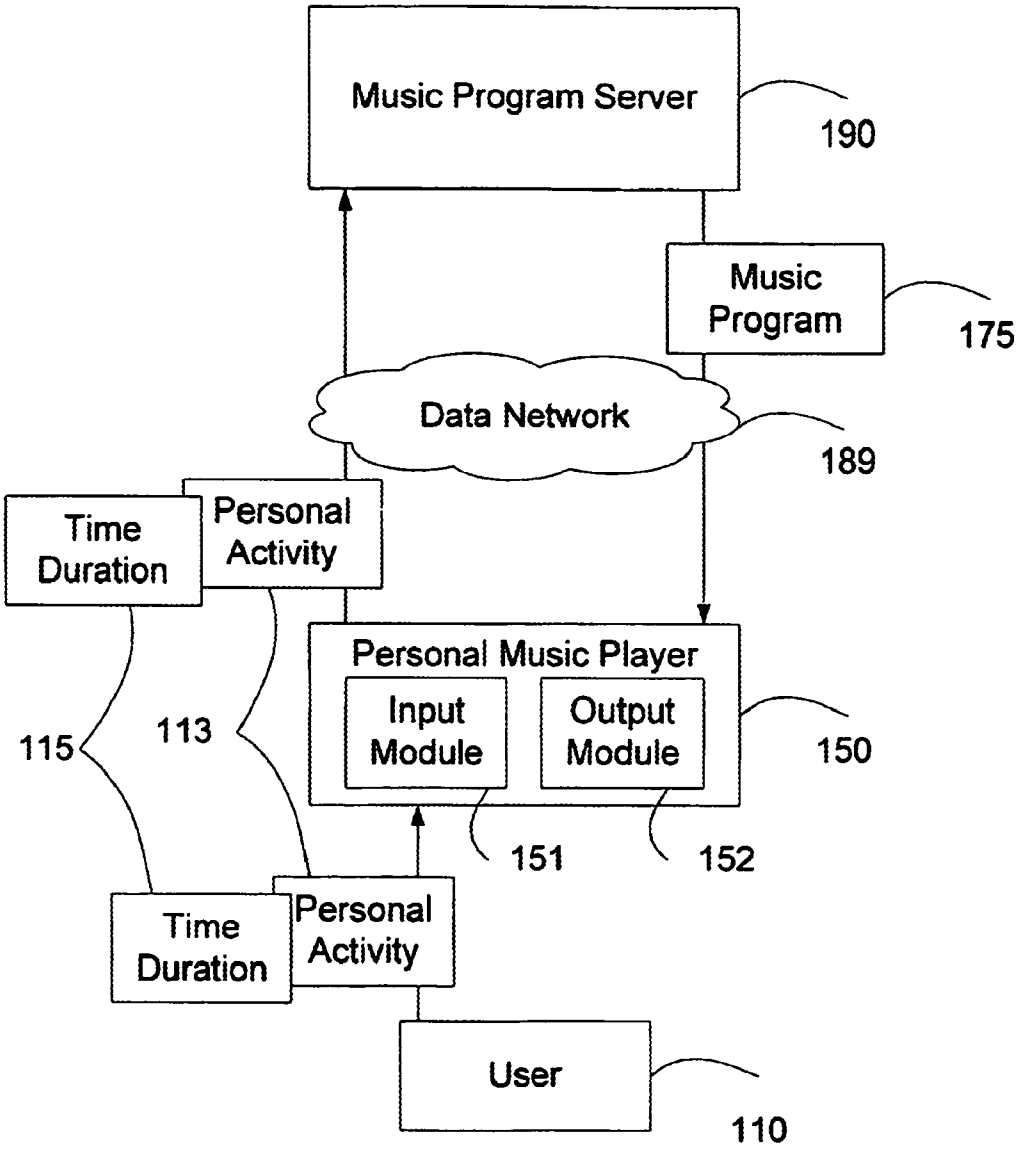

Music Program Server
190
Music Program
175
Data Network
189
Time Duration
Personal Activity
Personal Music Player
Input Module
Output Module
150
115
113
151
152
Time Duration
Personal Activity
User
110

Figure 1a

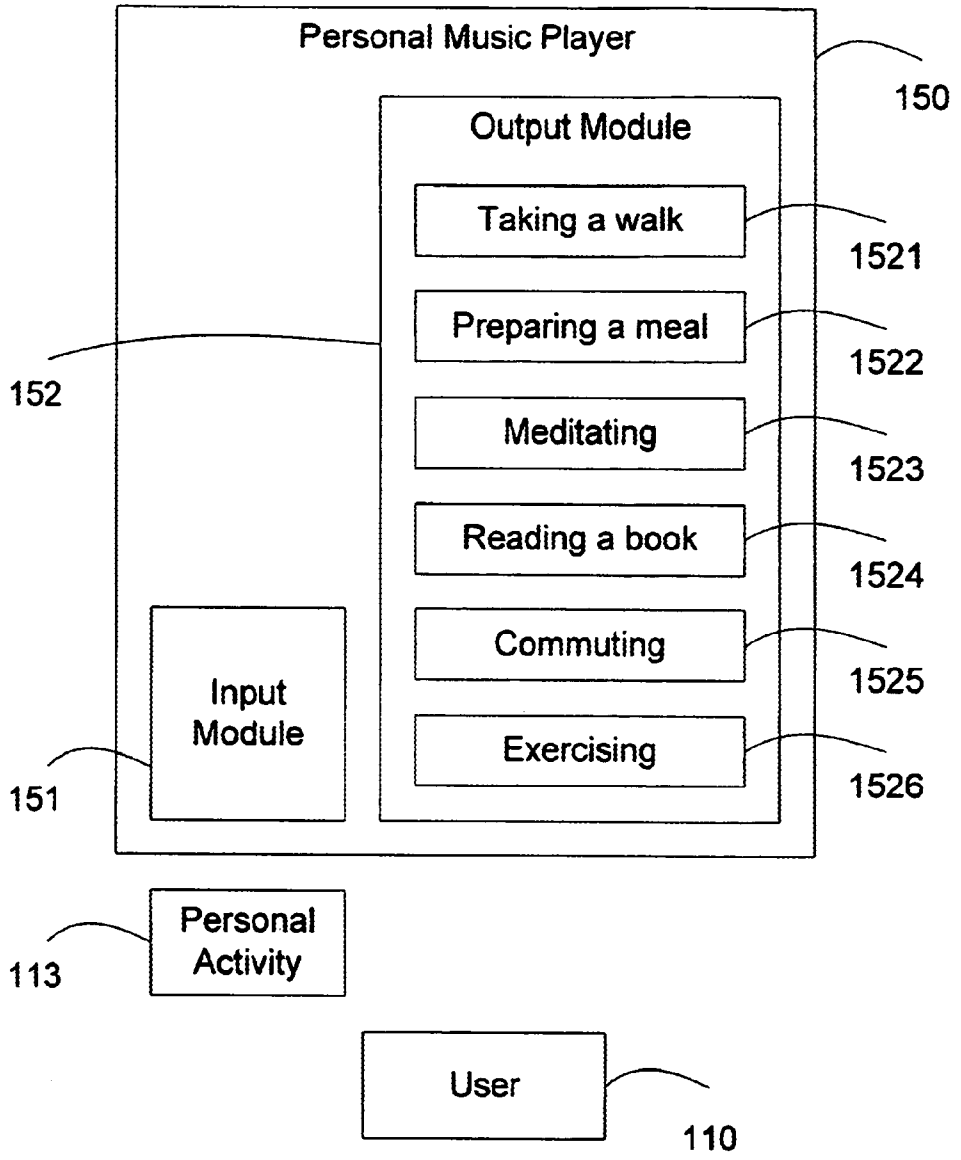

Personal Music Player
150
Output Module
Taking a walk
1521
Preparing a meal
1522
152
Meditating
1523
Reading a book
1524
Input Module
Commuting
1525
Exercising
1526
151
Personal Activity
113
User
110

Figure 1b

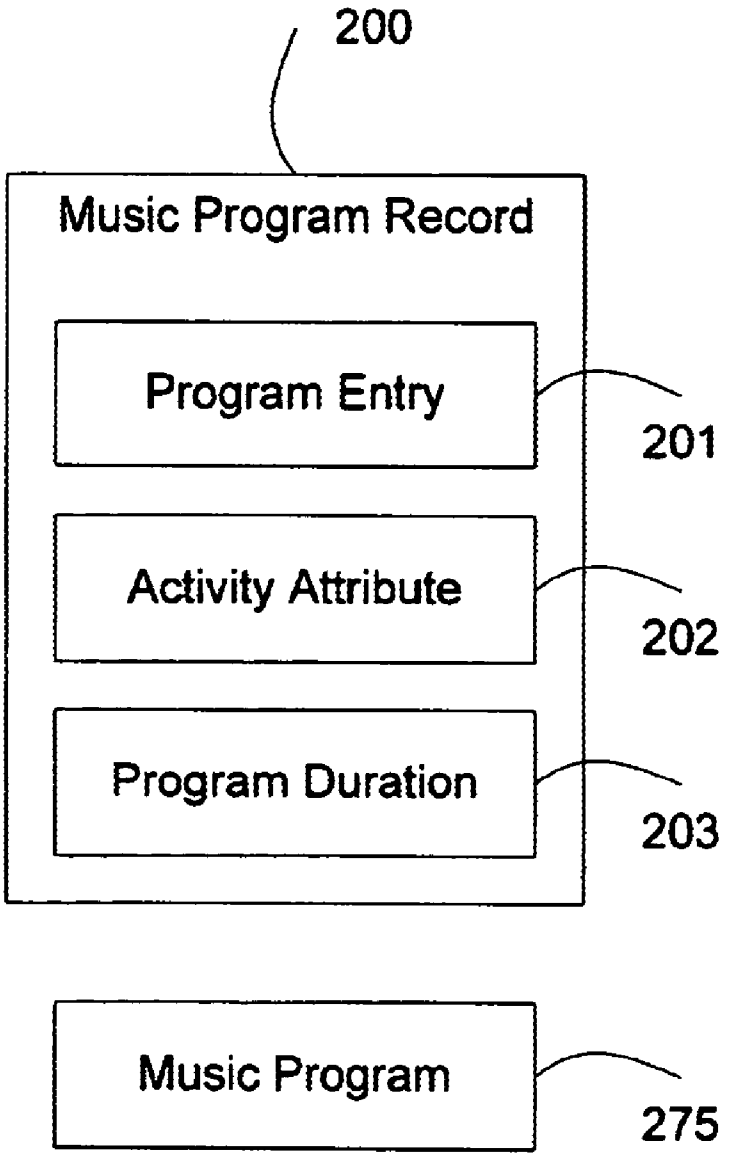

200
Music Program Record
Program Entry
201
Activity Attribute
202
Program Duration
203
Music Program
275

Figure 2

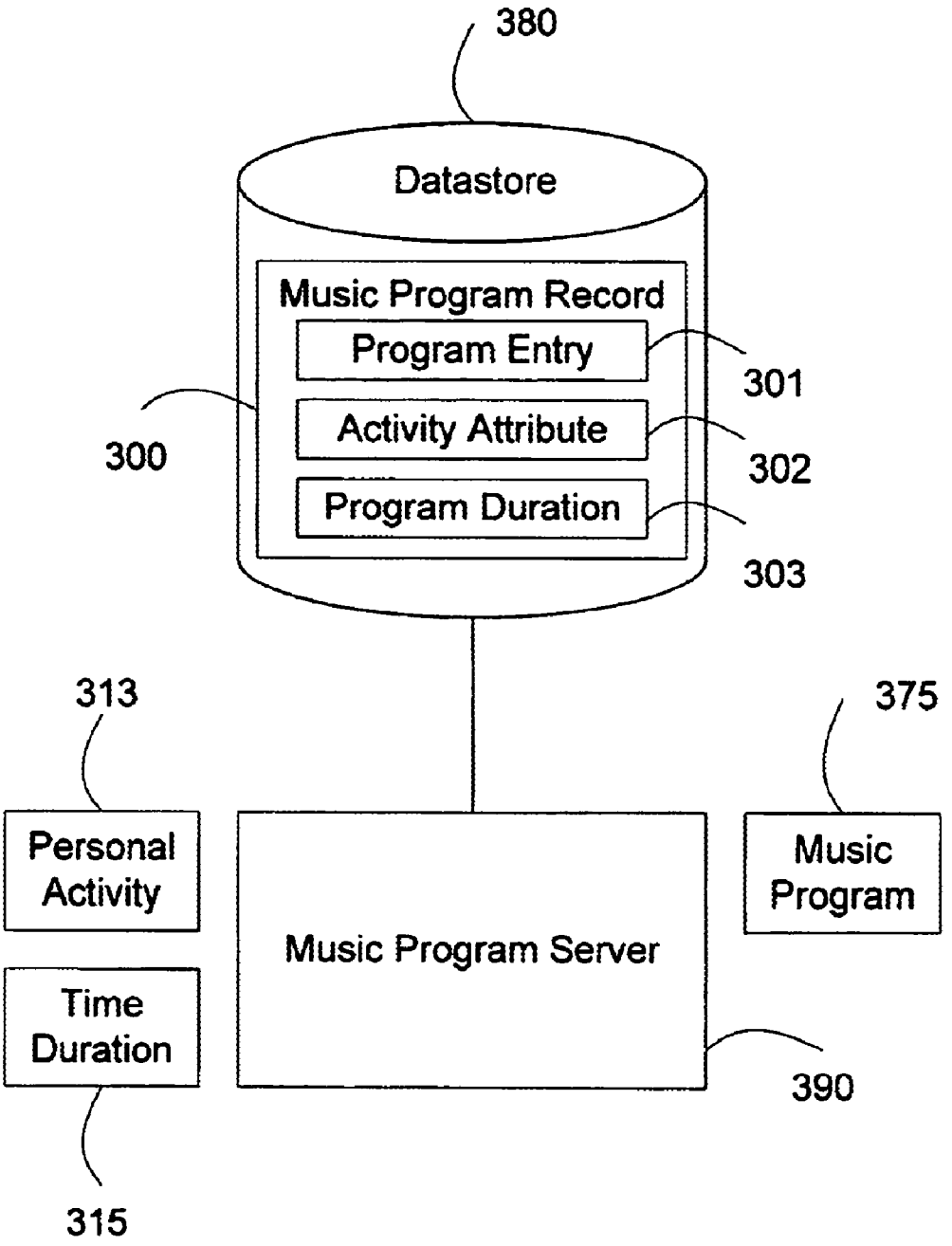

380
Datastore
Music Program Record
Program Entry
Activity Attribute
Program Duration
301
302
303
300
313
375
Personal Activity
Time Duration
Music Program Server
Music Program
390
315

Figure 3a

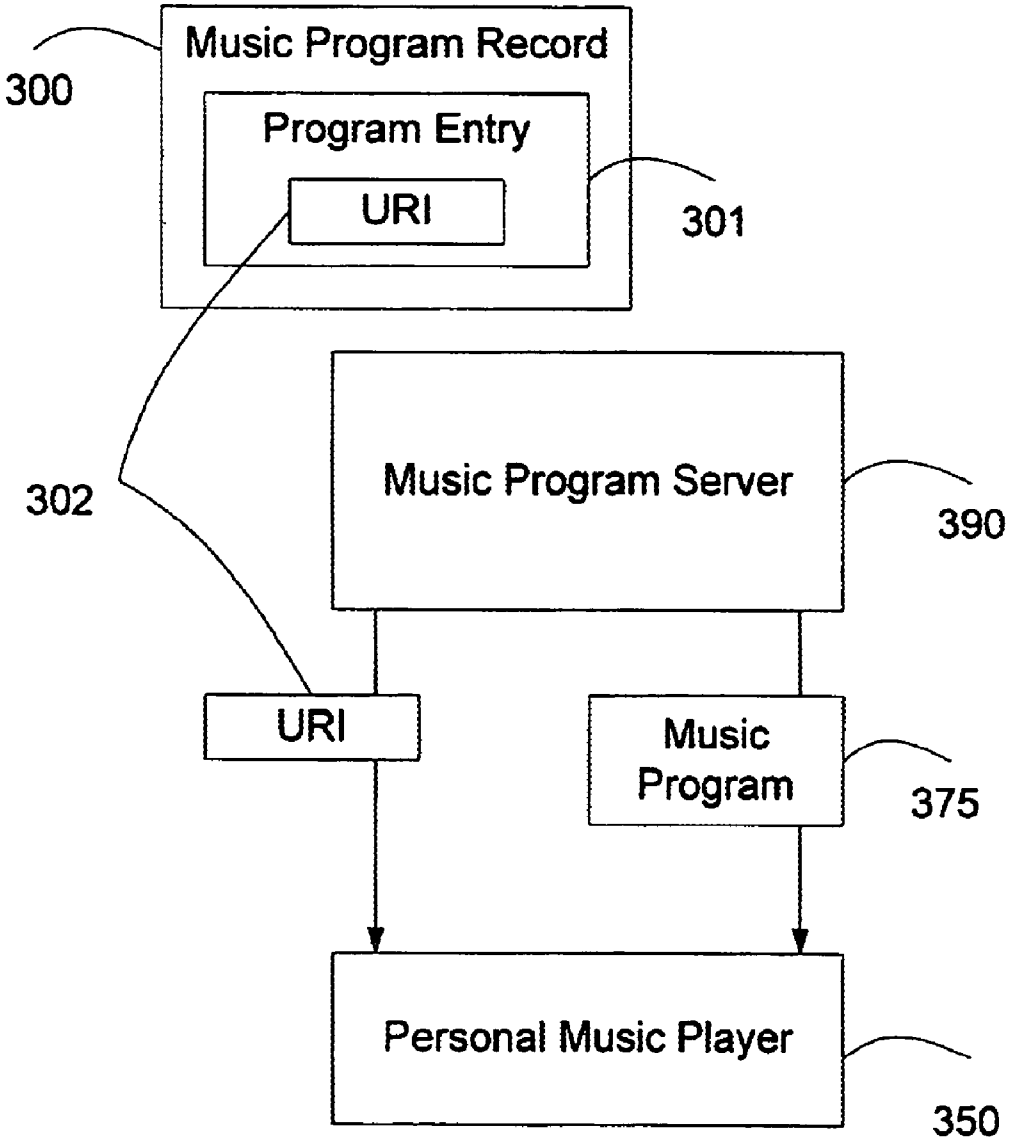

Music Program Record
300
Program Entry
URI
301
302
Music Program Server
390
URI
Music Program
375
Personal Music Player
350

Figure 3b

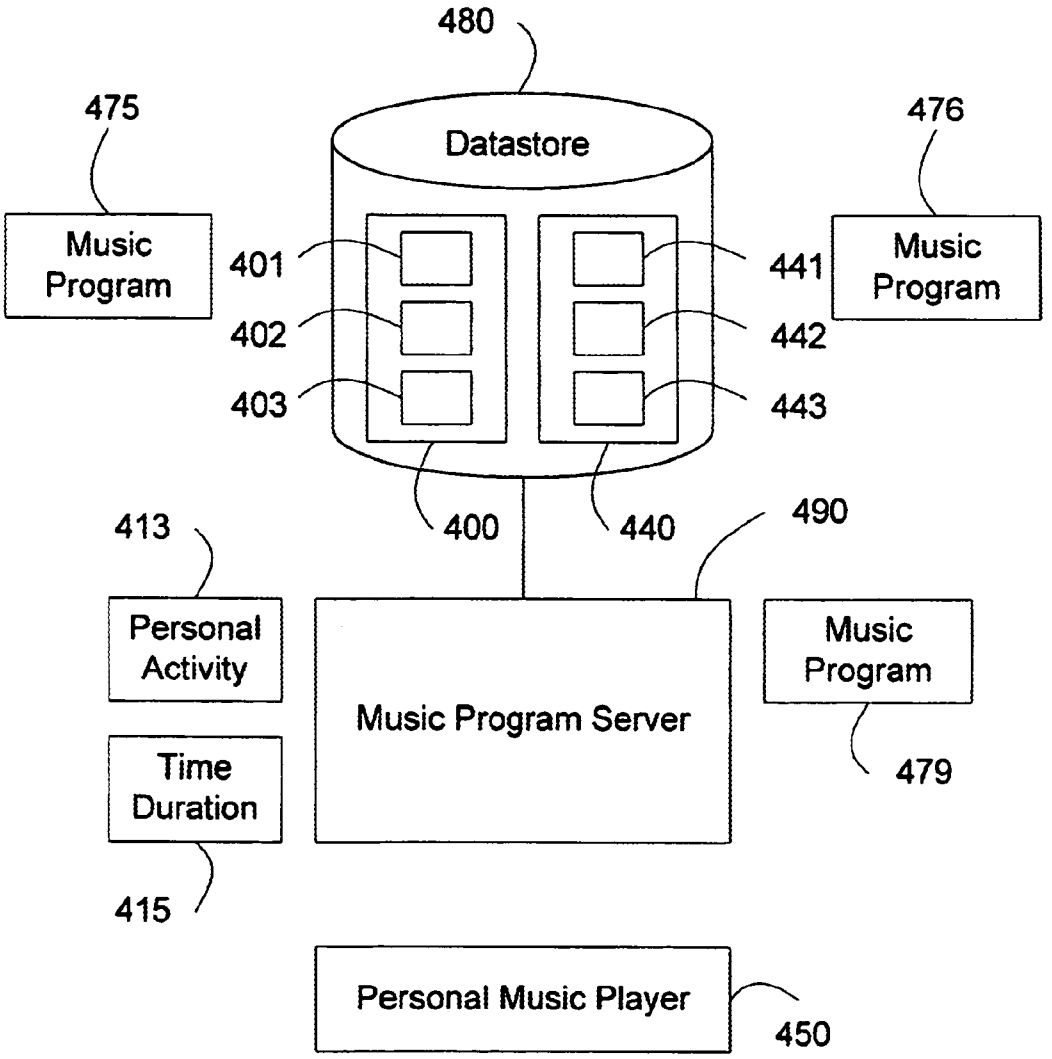

480
475
476
Datastore
Music Program
401
402
403
441
442
443
Music Program
400
440
413
490
Personal Activity
Time Duration
Music Program Server
Music Program
479
415
Personal Music Player
450

Figure 4a

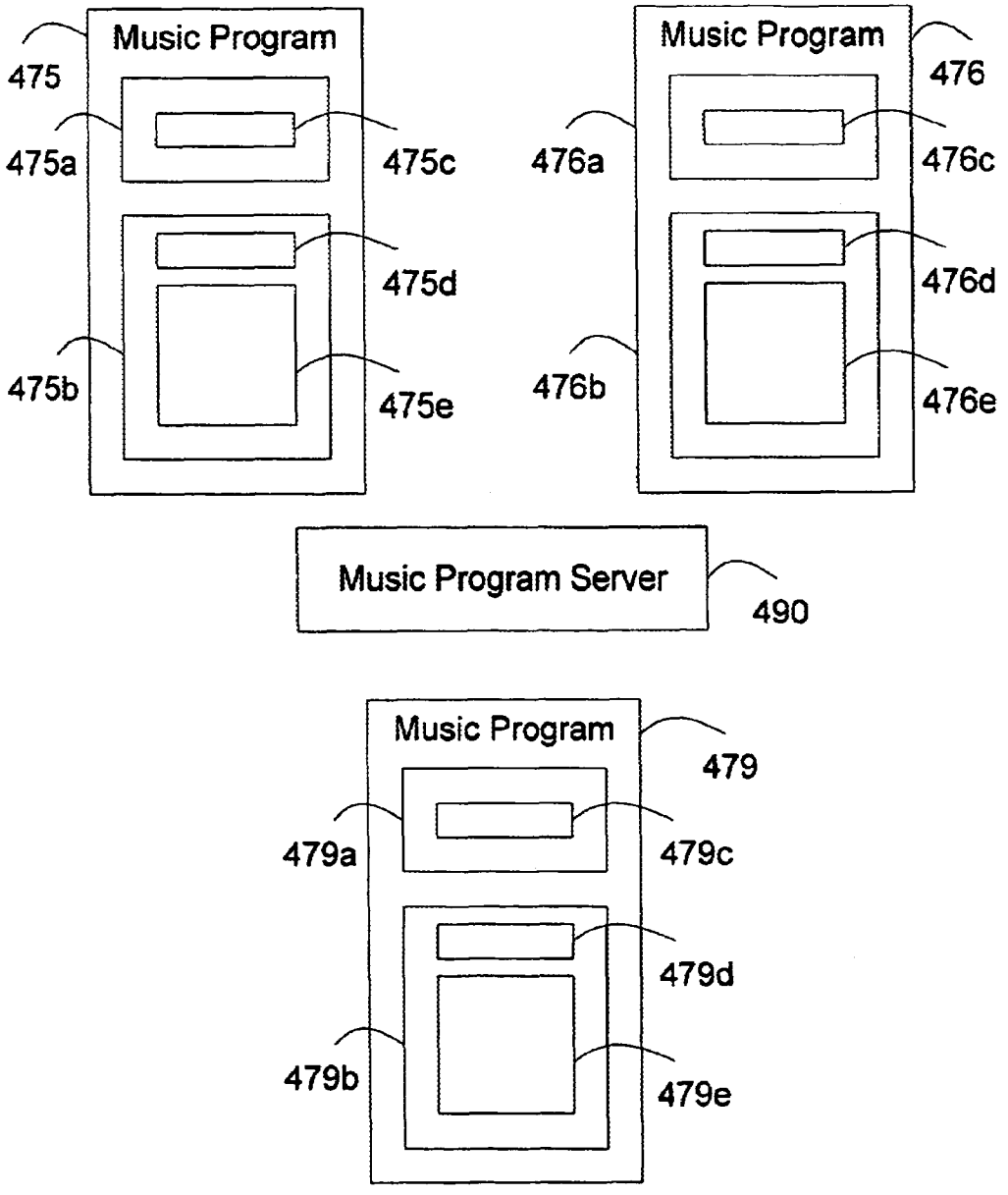

Music Program
475
475a
475c
475d
475b
475e
Music Program
476
476a
476c
476d
476b
476e
Music Program Server
490
Music Program
479
479a
479c
479d
479b
479e

Figure 4b

METHOD AND SYSTEM FOR MUSIC PROGRAM SELECTION

BACKGROUND

1. Field

This invention relates generally to audio media, particularly to method and system for selecting a music program for a personal activity.

2. Related Arts

Personal music listening experience is fundamentally enhanced with the introduction of MP3 players. The large storage capacity, the ease of song downloading from a network, and the sophisticated capabilities of an MP3 player provide unprecedented choices in music selection. Additionally, the prolonged play time enabled by better power utilization of a MP3 player liberates a user to undertake a wide range of personal activities while listening to music, from taking a walk in the neighborhood, cooking a meal, working out in a gym, taking a 4-hour nature hike, taking a bath, to spending a long lazy afternoon lying on a campus lawn.

Nevertheless, a user oftentimes finds the new listening experience less than satisfying.

In one example, Melinda goes to a gym for her 45-minute workout session in mid afternoon. She likes to listen to fast tempo and spirited music numbers that goes with her favorite high workout intensity. Using her MP3 player, Melinda tries to find a XM satellite channel that provides the same. Unfortunately, all she can find is a slow pace religious music program.

In another example, Andy enjoys music while engaging in a variety of personal activities. In order to play the kind of music that complements the activity, Andy has to spend time to put together several playlists from the vast music collection in his MP3 player. In one instant, after a long and stressful day at work, Andy wants to unwind in his sauna and listen to some ambient soulful music. However, after shuffling through the directory of his music collection for 5 minutes, Andy is able to find only half a dozen songs, not quite enough to last for an hour of relaxing moment that he has in mind.

In one more example, John is taking a commuter train to work in downtown New York. From his music collection in his MP3 player, he plays Simon and Garfunkel's 1981 "The Concert in Central Park" to start his day. Unfortunately, when he arrives at his office building, the concert is barely half way through. John reluctantly stops the music and greets his co-workers, feeling unsatisfied for the rest of the morning.

The above discussion demonstrates the need for a solution to provide a music program based on the personal activity of a user.

SUMMARY

In providing a music program, a personal music player displays personal activity choices. A user selects a personal activity and provides a time duration for the activity. The player sends a request to a music program server for a music program. The request includes the personal activity and the time duration. The music program server selects a music program record from a plurality of music program records that has an activity attribute which matches the personal activity and a program duration which matches or is less than the time duration. The server extracts location information for the music program from the program entry in the music program record, and sends this to the player. The player uses the location information to obtain the music program. In this manner, a music program is provided to a user based on the personal activity of the user.

BRIEF DESCRIPTION OF DRAWINGS

FIGS. **1***a*-**1***b* illustrate a personal music player playing a music program during a personal activity.

FIG. **2** illustrates a music program record.

FIG. **3***a* illustrates a process to determine a music program.

FIG. **3***b* illustrates a process to deliver a music program.

FIGS. **4***a*-**4***b* illustrate a process to determine and deliver two or more music programs.

DETAILED DESCRIPTION

FIG. **1** a illustrates a personal music player playing a music program during a personal activity.

A user **110** uses a personal music player **150** to play a music program **175** while undertaking a personal activity **113** for time duration **115**.

Music program **175** is encoded in an audio digital format, such as Moving Picture Experts Group 1 (MPEG-1 Level-3) also known as MP3 , Windows Media Audio (WMA), Advanced Audio Coding (AAC), Apple Lossless Audio Codec (ALAC) Pulse Code Modulation (PCM), or Adaptive PCM (ADPCM) digital format.

In one embodiment, music program **175** is a recorded music program presented by a host, such as the weekly radio program "MusicDeli" produced by the ABC Radio National, "Jazztrack with Mal Stanley", or "Blueprint" hosted by Kevin Lincoln. In one embodiment, music program is a movie soundtrack such as Disney's "Chicken Little", "Rocky Horror Picture Show" produced by John Goldstone, James Stewart's classic "It's A Wonderful Life", or Kander and Ebb's musical "Chicago". In one embodiment, music program **175** is a recorded concert performance such as Simon and Garfunkel's 1981 "The Concert in Central Park", Elvis Presley's last live performance at Market Square Arena on Jul. 16, 1977, and Peter, Paul & Mary' 1988 reunion special "A Holiday Concert" produced by Public Broadcasting Service (PBS).

In one embodiment, music program **175** includes a song, such as John Lennon's "When I'm Sixty Four", Jennifer Lopez's "Let's Get Loud", Bob Dylan's "Times They Are A-changing", or Paul Simon and Art Garfunkel's "The Boxer" performed in New York City's Central Park in September 1981. In one embodiment, music program **175** includes an instrumental, such as Kenny G's "Forever In Love", Chopin's "Concerto in F Minor" or Pink Floyd's "Comfortably Numb" performed by David Gilmour. In one embodiment, music program **175** includes comment or annotation by the host about an included song or instrumental, such as the background of the composer or performer, the occasion of the performance, or the musical characteristics. In one embodiment, the comment or annotation is before, after, or during an included song or instrumental.

Personal music player **150** is a mobile audio device for personal music listening. In one embodiment, user **110** carries personal music player **150** in a shirt pocket, a purse or a backpack. In one embodiment, user **110** wears personal music player **150** in an armband. In one embodiment, user **110** wears personal music player **150** as part of a headset. Personal music player **150** is capable of playing music program **175**.

In one embodiment, personal activity **113** is taking a walk during a break. In one embodiment, personal activity **113** is

cooking a dinner. In one embodiment, personal activity **113** is a work out session in a gym. In one embodiment, personal activity **113** is a meditating session after work. In one embodiment, personal activity **113** is morning commuting to work. In one embodiment, personal activity **113** is studying in a library after school. In one embodiment, personal activity **113** is reading before bedtime, knitting after supper, taking a shower, taking a bath, gardening, a 5-mile jog, or doing nothing for an hour.

In one embodiment, time duration **115** of personal activity **113** is 40 minutes, 45 minutes, 2 hours, or 10 minutes.

Music program **175** lasts for a period of time close to time duration **115**. In one embodiment, music program **175** lasts for 15 minutes, 42 minutes, 60 minutes, 20 minutes or 4 minutes 32 seconds.

Personal music player **150** includes output module **152** for playing music program **175**. In one embodiment, output module **152** includes a wired headset. In one embodiment, output module **152** includes a wireless headset, such as a Bluetooth headset. In one embodiment, the wireless headset is based on other technologies such as Wi-Fi, Wibree, ZigBee or Frequency Modulation (FM) technology. In one embodiment, output module **152** includes a speaker.

Personal music player **150** includes input module **151** for user **110** to enter information about personal activity **113** and time duration **115**. In one embodiment, input module **151** includes a touch wheel, a touchscreen, a keypad, a keyboard or a stylus. In one embodiment, input module **151** includes a microphone and speech recognition capabilities.

In one embodiment, user **110** uses input module **151** to enter a phrase such as "weight lifting workout session" or "reading a book". Personal music player **150** determines personal activity **113** based on the entered information. In one more embodiment, user **110** speaks the phrase at the microphone in input module **151**.

In one embodiment, output module **152** includes a graphical display. Personal music player **150** displays a plurality of personal activity choices at output module **152**, allowing user **110** to select personal activity **113** from the list of choices using input module **151**. In one example, as illustrated in FIG. **1***b*, personal music player **150** displays personal activity choices of "taking a walk" **1521**, "preparing a meal" **1522**, "meditating" **1523**, "reading a book" **1524**", commuting "**1525**" and "exercising" **1526**. User **110** uses input module **151** to select one of the choices as personal activity **113**. In one embodiment, user **110** uses the stylus in input module **151** to select one of the choices.

In one embodiment, personal music player **150** displays a plurality of time duration choices at output module **152**, allowing user **110** to select time duration **115** from the list of choices. In one example, personal music player **150** displays time duration choices of "25 minutes", "45 minutes", "1 hour", and "1 hour 20 minutes". User **110** uses input module **151** to select one of the choices as time duration **115**.

In one embodiment, user **110** uses input module **151** to enter a time, such as "43 min" or "1 hour 10 minutes". Personal music player **150** determines time duration **115** based on the entered information.

Personal music player **150** connects to a music program server **190**. In one embodiment, personal music player **150** connects to music program service **190** over a data network **189**. In one embodiment, personal music player **150** includes music program server **190**.

In one embodiment, data network **189** includes the Internet. In one embodiment, data network **189** includes an Internet service provider network. In one embodiment, data network **189** includes a broadband network based on Digital Subscriber Line (DSL) or cable modem technology. In one embodiment, data network **189** includes a cellular based data network such as General Packet Radio Service (GPRS) network, CDMA2000 network, Wideband Code Division Multiple Access (W-CDMA) network, or third-generation (3G) network. In one embodiment, data network **189** includes a private network of a business entity, such as a fitness center, a hotel, a café, or an airport. In one embodiment, data network **189** includes a home network. In one embodiment, data network **189** includes a hotspot WiFi network.

Personal music player **150** requests music program server **190** for a music program. Personal music player **150** provides personal activity **113** and time duration **115** to music program server **190**. In one embodiment, personal music player **150** provides personal activity **113** and time duration **115** using a Hypertext Transfer Protocol (HTTP) message. In one embodiment, personal music player **150** provides personal activity **113** and time duration **115** in a Remote Method Innovation (RMI) message. In one embodiment, personal music player **150** provides personal activity **113** and time duration **115** over an Application Programming Interface (API).

Music program server **190** determines music program **175** based on personal activity **113** and time period **115**. Music program server **190** sends information for music program **175** to personal music player **150**. In one embodiment, music program server **190** sends music program **175** to personal music player **150**.

FIG. **2** illustrates a music program record.

A music program record **200** includes a program entry **201**, an activity attribute **202**, and a program duration **203**.

Program entry **201** includes location information for obtaining music program **275**. In one embodiment, the location information is a Web Universal Resource Identifier (URI), such as http://www.musicprogram.com/softrock/musicdeli/4352.mp3. In one embodiment, the location information includes an URI based on Real Time Streaming Protocol (RTSP), such as rtsp://emusic.com/8997A9Y82.sdp. In one embodiment, the location information is a file name.

Activity attribute **202** indicates a personal activity, such a "taking a walk", "cooking", "commuting", "taking a bath" or "jogging".

Program duration **203** is a time period of music program **275** such as 45 minutes, 60 minutes or 22 minutes.

FIG. **3***a* illustrates a process to determine a music program.

Music program server **390** determines music program **375** based on personal activity **313** and time duration **315**.

Music program server **390** connects to a datastore **380**. Datastore **380** stores a plurality of music program records that includes music program record **300**. In one embodiment, datastore **380** includes a hard disk, a flash memory. In one embodiment, datastore **380** includes a database. In one embodiment, music program server **390** includes datastore **380**.

Music program record **300** includes program entry **301**, activity attribute **302** and program duration **303**.

Music program server **390** selects music program record **300** wherein activity attribute **302** matches personal activity **313**, and program duration **303** matches time duration **315**.

In one embodiment, music program server **390** determines that activity attribute **302** matches personal activity **313** if activity attribute **302** relates to personal activity **313**. In one example, activity attribute **302** includes "cooking" and personal activity **313** is "cooking a dinner". In one example, activity attribute **302** is a synonym related to personal activity **313**. For example, activity attribute **302**. is "making a sandwich", "preparing a meal", or "home cooking".

In one embodiment, music program server **390** determines that program duration **303** matches time duration **315** if program duration **303** is smaller than time duration **315**. In one example, program duration **303** is 42 minutes and time duration **315** is 50 minutes. In another embodiment, music program server **390** determines that program duration **303** matches time duration **315** if the difference between program duration **303** and time duration **315** is less than a pre-determined value, such as 3 minutes, 5 minutes, or 6 minutes. In one example, program duration **303** is 63 minutes and time duration **315** is 60 minutes. In one embodiment, music program server **390** determines that program duration **303** matches time duration **315** if the difference between program duration **303** and time duration **315** is within 10%, 15%, or 20% of time duration **315**.

FIG. **3***b* illustrates a process to deliver a music program.

Music program server **390** extracts location information for music program **375** from program entry **301**. Music program server **390** sends the location information to personal music player **350**.

In one embodiment, the location information is URI **302**. Music program server **390** sends URI **302** to personal music player **350**. Personal music player **350** uses URI **302** to obtain music program **375**.

In one embodiment, URI **302** is an RTSP-based URL Personal music player **350** uses the RTSP-based URI to stream music program **375** from music program server **390**. In one embodiment, personal music player **350** streams music program **375** from a different server. Personal music player **350** plays music program **375** while streaming music program **375**.

In one embodiment, URI **302** is an FTP-based URI. Personal music player **350** uses the FTP-based URI to obtain music program **375** in the form of an audio file, such as an MP3 file, a WMA file, and AAC file, an Audio Video Interleave (AVI) file, or a Waveform (WAV) file. In one embodiment, personal music player **350** plays music program **375** after obtaining music program **375** in the entirety.

In one embodiment, personal. music player **350** includes a storage. The storage stores music program **375**. In one embodiment, the storage is a flash drive, a hard disk drive, or a removable memory based on Universal Serial Bus (USB) or Secure Digital Card technology. In one embodiment, program entry **301** includes a title for music program **375**. Music program server **390** sends music program **375** title to personal music player **350**. Personal music player **350** retrieves music program **375** from the storage based on music program **375** title.

FIG. **4***a* illustrates a process to determine and deliver two or more music programs.

Music program server **490** determines music program **479** based on personal activity **413** and time duration **415**. Music program **479** includes a plurality of two or more music programs.

In one embodiment, music program **479** includes music program **475** and music program **476**. In one embodiment, music program server **490** connects to datastore **480**, and datastore **480** includes music program records **400** and **440**. Music program record **400** includes program entry **401**, activity attribute **402** and program duration **403**. Music program record **440** includes program entry **441**, activity attribute **442** and program duration **443**. Program entry **401** includes location information for music program **475** and program entry **441** includes location information for music program **476**.

Music program server **490** selects music program records **400** and **440** wherein both activity attributes **402** and **442** match personal activity **413**, and wherein the sum of program durations **403** and **443** match time duration **415**. In one embodiment, the sum of program durations **403** and **443** matches time duration **415** if the sum is shorter than time duration **415**. In another embodiment, the sum matches time duration **415** if the difference between the sum and time duration **415** is less than a pre-determined value; or if the difference between the sum and time duration **415** is within 10%, 15%, or 20% of time duration **415**.

In one embodiment, music program server **490** extracts first location information for music program **475** from program entry **401** and extracts second location information for music program **476** from program entry **441**. Music program **479** includes the first location information and the second location information.

In one embodiment, music program **479** is a Hypertext Markup Language (HTML) file that includes the first location information and the second location information. Music program server **490** generates music program **479**, and sends music program **479** to personal music player **450**. Personal music player **450** uses the first location information to obtain music program **475** and the second location information to obtain music program **476**. In one embodiment, personal music player **450** plays music program **476** after playing music program **475**.

In a different embodiment, music program server **490** generates music program **479** by combining music programs **475** and **476**. Music program server **490** sends location information for music program **479** as described in FIG. **3***b*.

In one embodiment, music programs **475** and **476** are audio files in a common audio digital format, such as Waveform Audio format (WAV) files with audio data encoded in uncompressed 16-bit mono Pulse Code Modulation (PCM) format at a sample rate of 44,100. As illustrated in FIG. **4***b*, music program **475** includes header **475***a* and data chunk **475***b*. Header **475***a* includes chunk size **475***c* and audio data format information. Data chunk **475***b* includes data chunk size **475***d* and audio data **475***e*. Likewise, music program **476** includes header **476***a*, chunk size **476***c*, data chunk **476***b*, data chunk size **476***d* and audio data **476***e*.

Music program server **490** combines data chunk **475***b* and data chunk **476***b* into data chunk **479***b* of music program **479**. Music program server **490** stores audio data **475***e* into audio data **479***e* of music program **479**, and then appends audio data **476***e* to audio data **479***e*. Music program server **490** computes data chunk size **479***d* of music program **479** as the sum of data chunk size **475***d* and data chunk Size **476***d*.

Header **475***a* and header **476***a* are similar with a possible difference in chunk size **475***c* and chunk size **476***c*. Music program server **490** copies header **475***a* into header **479***a* of music program **479**, and computes chunk size **479***c* of music program **479**. In one embodiment, music program server **490** computes chunk size **479***c* as the file size of music program **479**. In another embodiment, Music program server **490** computes chunk size **479***c* as the file size of music program **479** starting after the location of chunk size **479***c* in the file.

In one embodiment, music program server **490** inserts a plurality of audio data before appending audio data **476***e* in **479***e* of music program **479**. In one embodiment, the inserted audio data represents silence for a period of time, such as 3 seconds, 5 seconds, or 22 milli-seconds. In one embodiment, the inserted audio data include a music interlude. Music program server **490** computes data chunk size **479***d* and chunk size **479***c* accordingly.

In one embodiment, the audio digital formats of music programs **475** and **476** are different; music program server **490** converts music programs **475** and **476** to a common audio digital format before generating music program **479**.

Foregoing described embodiments of the invention are provided as illustrations and descriptions. They are not intended to limit the invention to precise form described. In particular, it is contemplated that functional implementation of invention described herein may be implemented equivalently in hardware, software, firmware, and/or other available functional components or building blocks, and that networks may be wired, wireless, or a combination of wired and wireless. Other variations and embodiments are possible in light of above teachings, and it is thus intended that the scope of invention not be limited by this Detailed Description, but rather by Claims following.

We claim:

1. A method for providing a music program to be played by a personal music player, comprising:

(a) determining a personal activity for a user and a time duration of the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player;

(b) sending a request for the music program to a music program server, wherein the request comprises the personal activity and the time duration, wherein the music program server:

(b1) selects at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of program time durations of the first and second music program records is equal to or less than the time duration of the personal activity,

(b2) combines the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combines comprises:

(b2i) combines the first data chunk and the second data chunk into a data chunk of the combined music program,

(b2ii) stores the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(b2iii) computes a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size; and

(c) receiving location information for the combined music program from the music program server.

2. The method of claim **1**, wherein the determining (a) comprises:

(a1) receiving an input of the personal activity from the user.

3. The method of claim **1**, wherein the determining (a) comprises:

(a1) displaying a plurality of personal activities; and

(a2) receiving a selection of the personal activity from the user.

4. The method of claim **1**, further comprising:

(d) obtaining the combined music program using the location information.

5. A personal music player, comprising:

an input module for receiving a personal activity for a user and a time duration of the personal activity, wherein a request for a music program is sent to a music program server, wherein the request comprises the personal activity and the time duration, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player, wherein the music program server:

selects at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of program time durations of the first and second music program records is equal to or less than the time duration of the personal activity,

combines the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combines comprises:

combines the first data chunk and the second data chunk into a data chunk of the combined music program,

stores the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

computes a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size,

wherein location information for the combined music program is received from the music program server.

6. The player of claim **5**, wherein the input module comprises means for receiving an input of the personal activity from the user.

7. The player of claim **5**, further comprising an output module for displaying a plurality of personal activities, wherein the input module receives a selection of the personal activity from the user.

8. The player of claim **5**, wherein the location information comprises information used in obtaining the combined music program.

9. A computer readable storage medium with program instructions for providing a music program to be played by a personal music player, wherein when the program instructions are executed by a computer, causes the computer to:

(a) determine a personal activity for a user and a time duration of the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player;

(b) send a request for the music program to a music program server, wherein the request comprises the personal activity and the time duration, wherein the music program server:

(b1) selects at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of program time durations of the first and second music program records is equal to or less than the time duration of the personal activity,

(b2) combines the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combines comprises:

(b2i) combines the first data chunk and the second data chunk into a data chunk of the combined music program,

(b2ii) stores the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(b2iii) computes a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size; and

(c) receive location information for the combined music program from the music program server.

10. A method for providing a music program to be played by a personal music player, comprising:

(a) receiving a request from the personal music player for the music program, wherein the request comprises a personal activity for a user and a time duration for the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player;

(b) selecting at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of the program time durations of the first and second music program records are less than or equal to the time duration of the personal activity;

(c) combining the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data_ wherein the combining comprises:

(c1) combining the first data chunk and the second data chunk into a data chunk of the combined music program,

(c2) storing the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(c3) computing a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size; and

(ed) sending location information for the combined music program to the personal music player.

11. The method of claim **10**, wherein the personal music player obtains the combined music program using the location information.

12. The method of claim **10**, wherein the selecting (b) comprises:

(b1) connecting to a datastore, wherein the datastore comprises a plurality of music program records corresponding to a plurality of music programs, wherein each record comprises a program entry comprising the location information for obtaining the corresponding music program, an activity attribute, and a program time duration.

13. The method of claim **12**, wherein the combining (c) further comprises:

(c4) extracting a first location information for the first music program from a program entry of the first music program record;

(c5) extracting a second location information for the second music program from a program entry of the second music program record; and

(c6) generating the location information for the combined music program, wherein the location information comprises the first location information and the second location information.

14. The method of claim **13**, wherein the personal music player obtains the combined music program using the first location information and the second location information.

15. A system, comprising:

a datastore comprising a plurality of music program records corresponding to a plurality of music programs, wherein each record comprises a program entry comprising location information for obtaining a corresponding music program, an activity attribute, and a program time duration; and

a music program server, wherein the music program server:

receives a request from a personal music player for the music program, wherein the request comprises a personal activity for a user and a time duration of the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player,

selects at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein the activity attributes of the first and second music program records are synonyms of the personal activity and a sum of the program time durations of the first and second music program records are equal to or less than the time duration of the personal activity,

combines the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first

header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the music server:

combines the first data chunk and the second data chunk into a data chunk of the combined music program,

stores the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

computes a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size.

16. A computer readable storage medium with program instructions for providing a music program to be played by a personal music player, wherein when the program instructions are executed by a computer, causes the computer to:

(a) receive a request from the personal music player for the music program, wherein the request comprises a personal activity for a user and a time duration of the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player;

(b) select at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of the program time durations of the first and second music program records are less than or equal to the time duration of the personal activity;

(c) combine the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combine comprises:

(c1) combine the first data chunk and the second data chunk into a data chunk of the combined music program,

(c2) store the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(c3) compute a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size; and

(ed) send location information for the combined music program to the personal music player.

17. The method of claim **1**, wherein the time duration is a length of time the user will be engaged in the personal activity.

18. The player of claim **5**, wherein the time duration is a length of time the user will be engaged in the personal activity.

19. The method of claim **10**, wherein the time duration is a length of time the user will be engaged in the personal activity.

20. The system of claim **15**, wherein the time duration is a length of time the user will be engaged in the personal activity.

21. The method of claim **1**, wherein the personal activity comprises a physical exercise activity in which the user will be engaged in the future concurrently with listening to the music program, wherein the physical exercise activity does not pertain to the user interaction with any personal music player.

22. The method of claim **1**, wherein the personal activity comprises a cooking activity in which the user will be engaged in the future concurrently with listening to the music program.

23. The method of claim **1**, wherein the personal activity comprises a commuting activity in which the user will be engaged in the future concurrently with listening to the music program.

24. The method of claim **1**, wherein the personal activity comprises a reading activity in which the user will be engaged in the future concurrently with listening to the music program.

25. The method of claim **1**, wherein the personal activity comprises a meditation activity in which the user will be engaged in the future concurrently with listening to the music program.

26. The method of claim **1**, wherein the personal activity comprises a hobby activity in which the user will be engaged in the future concurrently with listening to the music program, wherein the hobby activity is unrelated to the user interaction with any personal music player.

27. The method of claim **1**, wherein the personal activity comprises a personal grooming activity in which the user will be engaged in the future concurrently with listening to the music program.

28. The method of claim **1**, wherein the personal activity comprises a relaxation activity in which the user will be engaged in the future concurrently with listening to the music program, wherein the relaxation activity is unrelated to the user interaction with the personal music player.

29. A method for providing a music program to be played by a personal music player, comprising:

(a) determining a personal activity for a user and a time duration of the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player, wherein the personal activity comprises at least one of the following: a physical exercise activity, a cooking activity, a commuting activity, a reading activity, a meditation activity, a hobby activity, a personal grooming activity, and a relaxation activity;

(b) sending a request for the music program to a music program server, wherein the request comprises the personal activity and the time duration, wherein the music program server:

(b1) selects at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein activity attributes of the first and second music program records are synonyms of the personal activity and a sum of program time durations of the first and second music program records is equal to or less than the time duration of the personal activity,

(b2) combines the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combines comprises:

(b2i) combines the first data chunk and the second data chunk into a data chunk of the combined music program,

(b2ii) stores the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(b2iii) computes a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size; and

(c) receiving location information for the combined music program from the music program server.

30. A method for providing a music program to be played by a personal music player, comprising:

(a) receiving a request from the personal music player for the music program, wherein the request comprises a personal activity for a user and a time duration for the personal activity, wherein the personal activity comprises an activity in which the user will be engaged in a future concurrently with listening to the music program, wherein the personal activity is unrelated to user interaction with any personal music player;

(b) connecting to a datastore, wherein the datastore comprises a plurality of music program records corresponding to a plurality of music programs, wherein each record comprises a program entry comprising location information for obtaining the corresponding music program, an activity attribute, and a program time duration;

(c) selecting at least a first music program record corresponding to a first music program and a second music program record corresponding to a second music program, wherein the activity attributes of the first and second music program records are synonyms of the personal activity and a sum of the program time durations of the first and second music program records is equal to or less than the time duration of the personal activity; and

(d) combining the first music program and the second music program into a separate combined music program, wherein the first music program comprises a first header comprising a first chunk size and a first audio data format information, and a first data chunk comprising a first data chunk size and a first audio data,

wherein the second music program comprises a second header comprising a second chunk size and a second audio data format information, and a second data chunk comprising a second data chunk size and a second audio data, wherein the combining comprises:

(d1) combining the first data chunk and the second data chunk into a data chunk of the combined music program,

(d2) storing the first audio data into an audio data of the combined music program and appending the second audio data to the audio data of the combined music program, and

(d3) computing a combined data chunk size of the combined music program as a sum of the first data chunk size and the second data chunk size.

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