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(54) **NAVIGATION OF MULTIMEDIA CONTENT**

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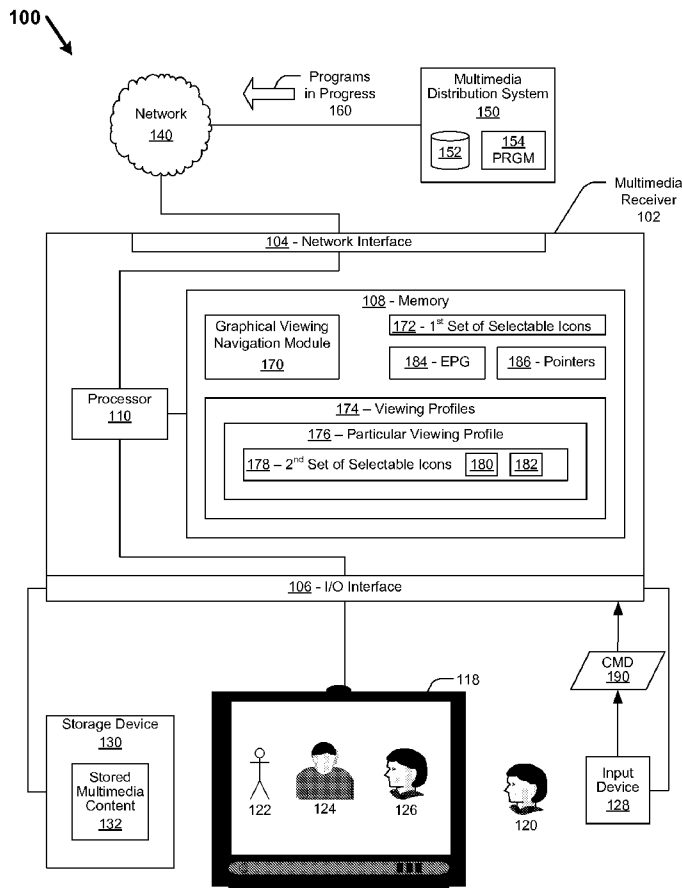
H04N 21/4722 (2006.01)

H04N 21/482 (2006.01)

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(57) **ABSTRACT**

Methods and systems for navigating multimedia content are disclosed. A first plurality of selectable icons is displayed. A selection of a particular selectable icon of the first plurality of selectable icons is received. The particular selectable icon represents multimedia content associated with a particular user. In response to receiving the selection of the particular selectable icon, a display of a second plurality of selectable icons is initiated. At least one of the second plurality of selectable icons represents a particular multimedia program that is associated with the particular user.



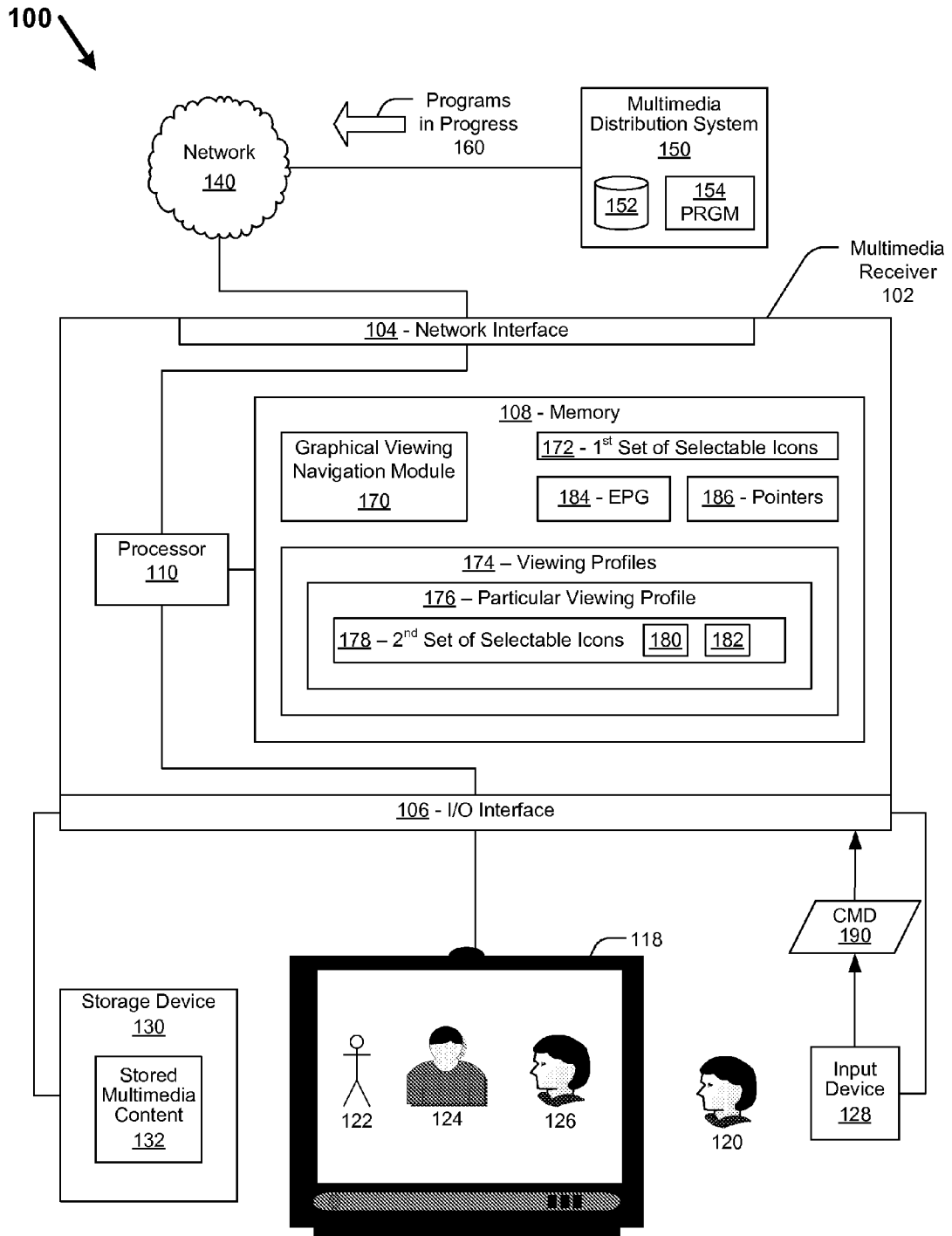


FIG. 1

200

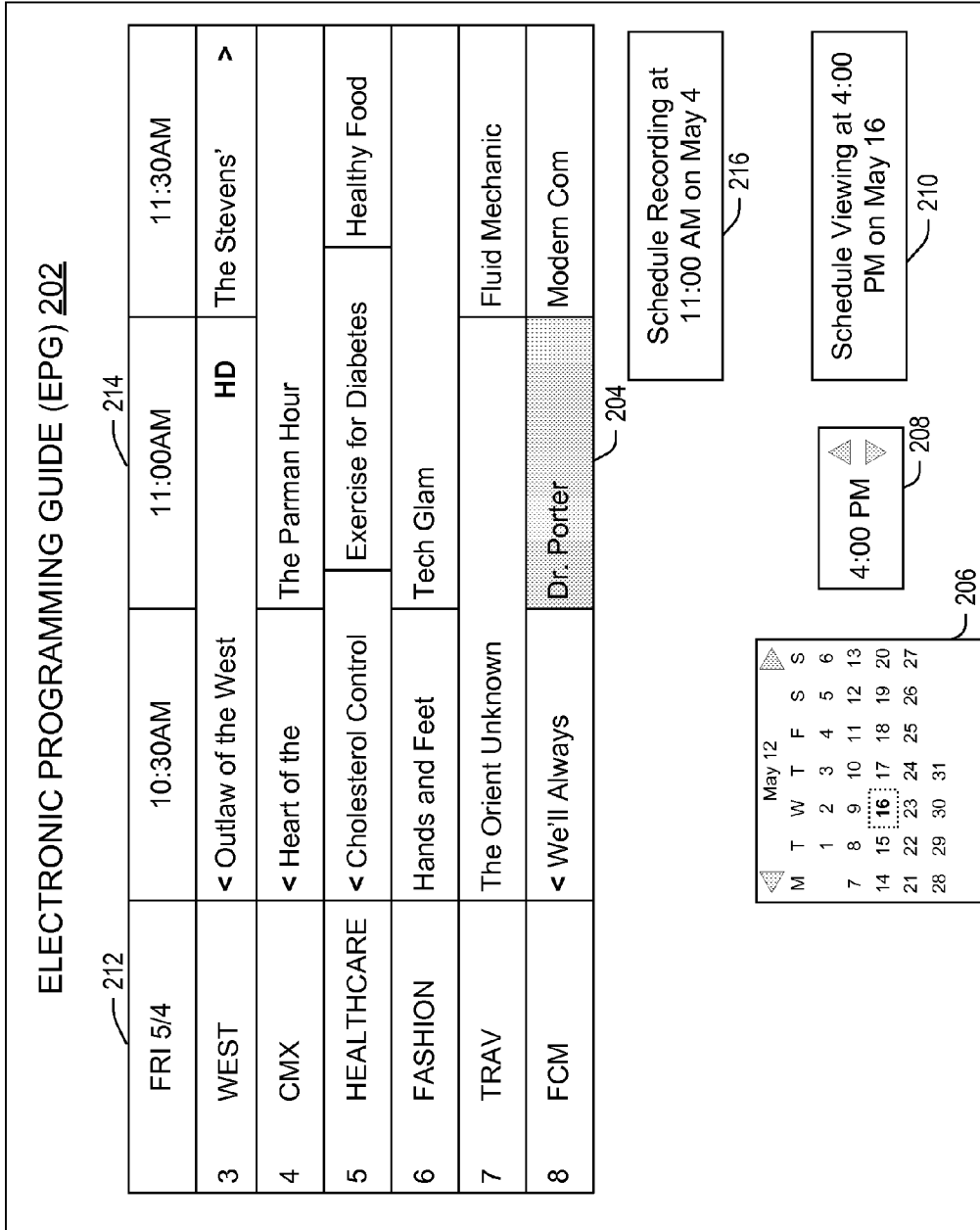


FIG. 2

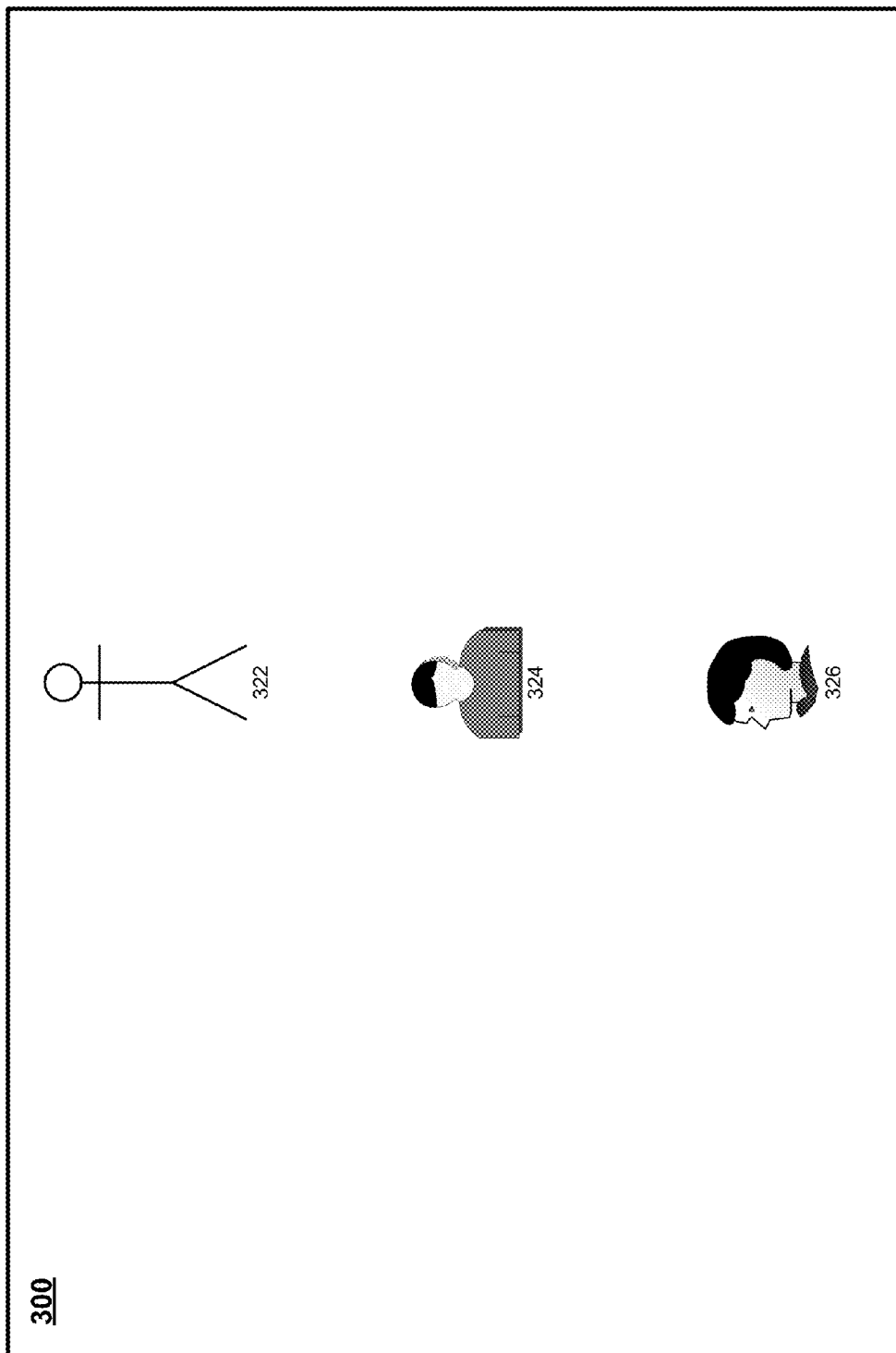


FIG. 3

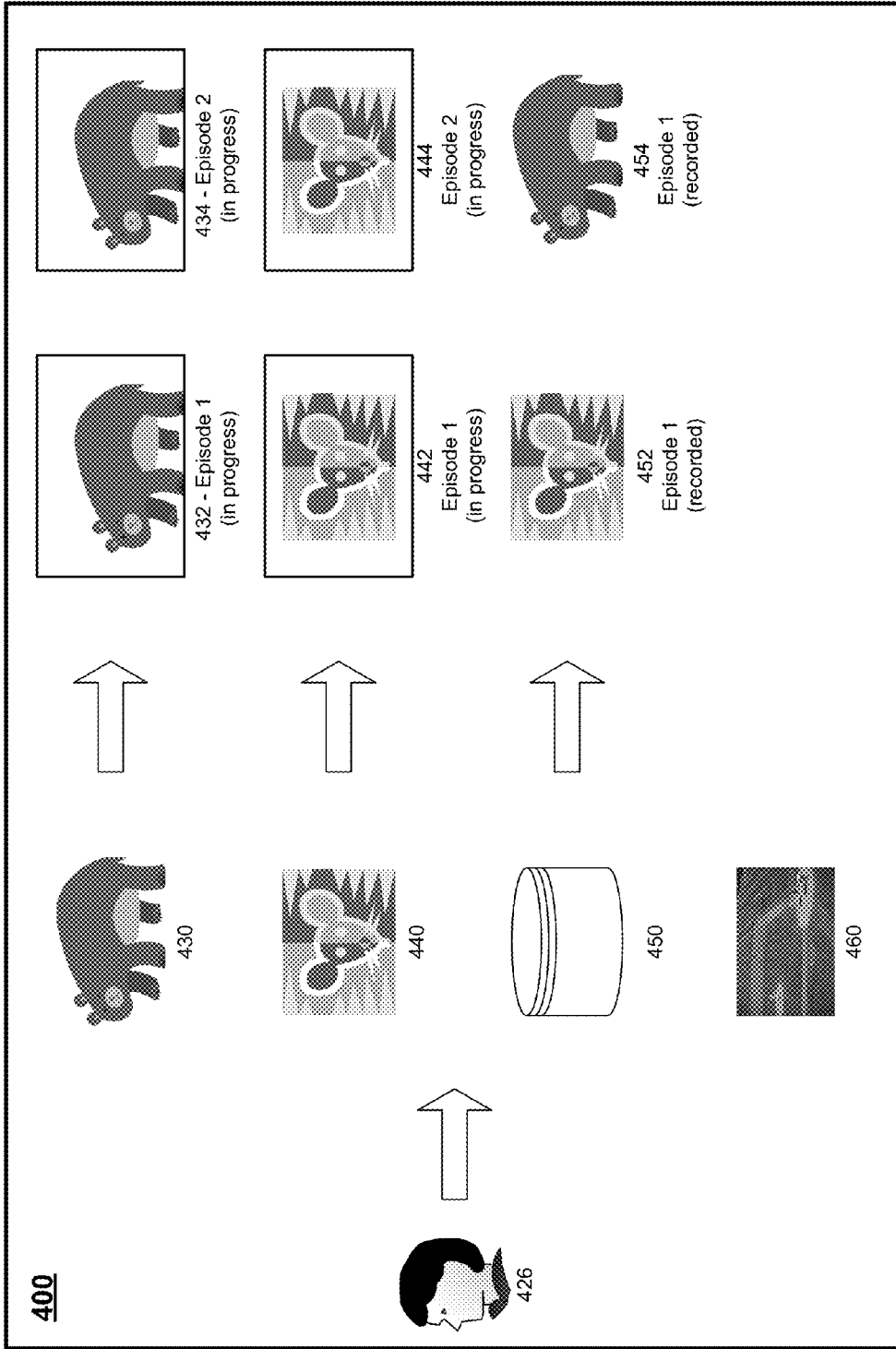


FIG. 4

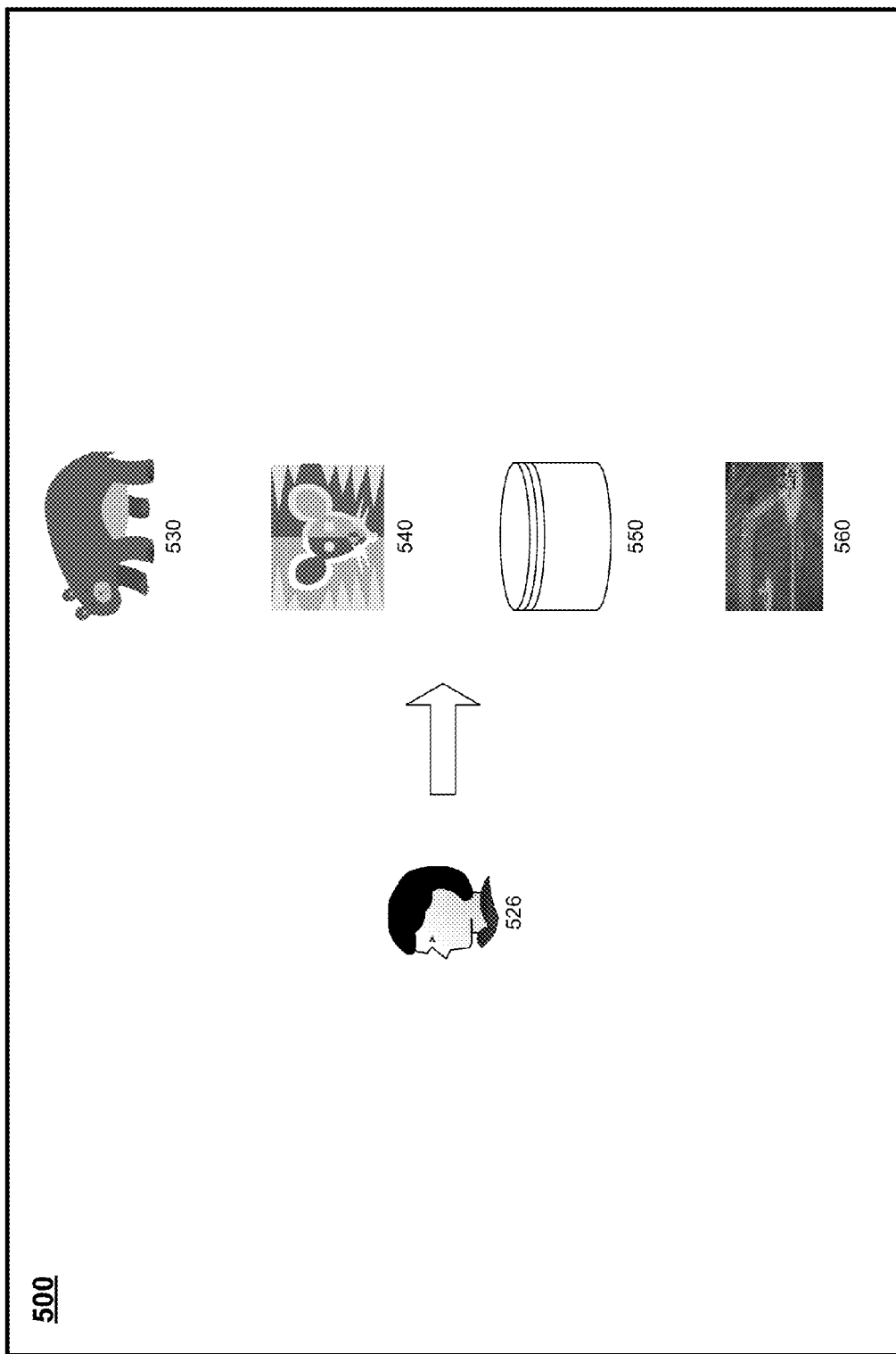


FIG. 5

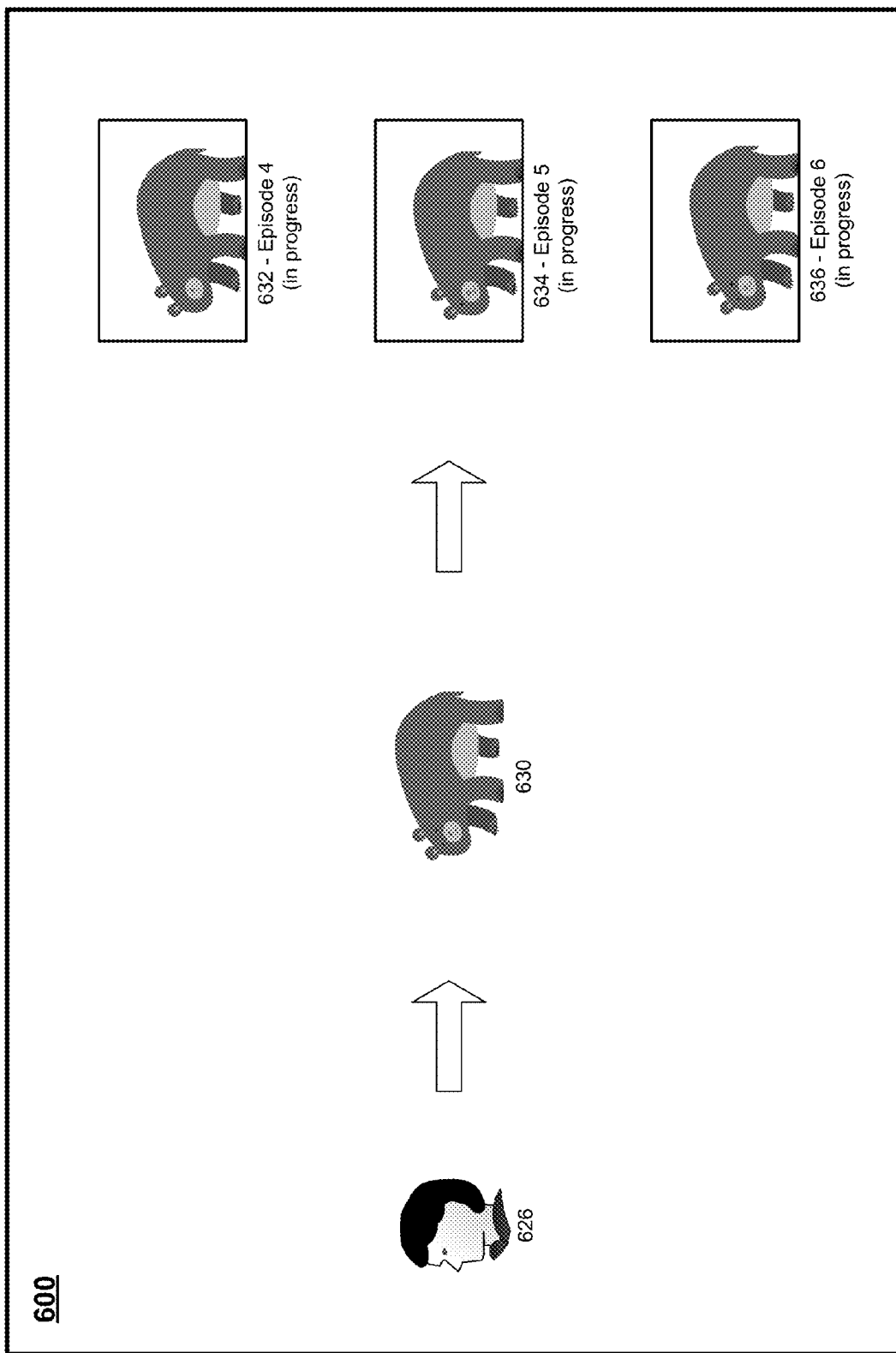


FIG. 6

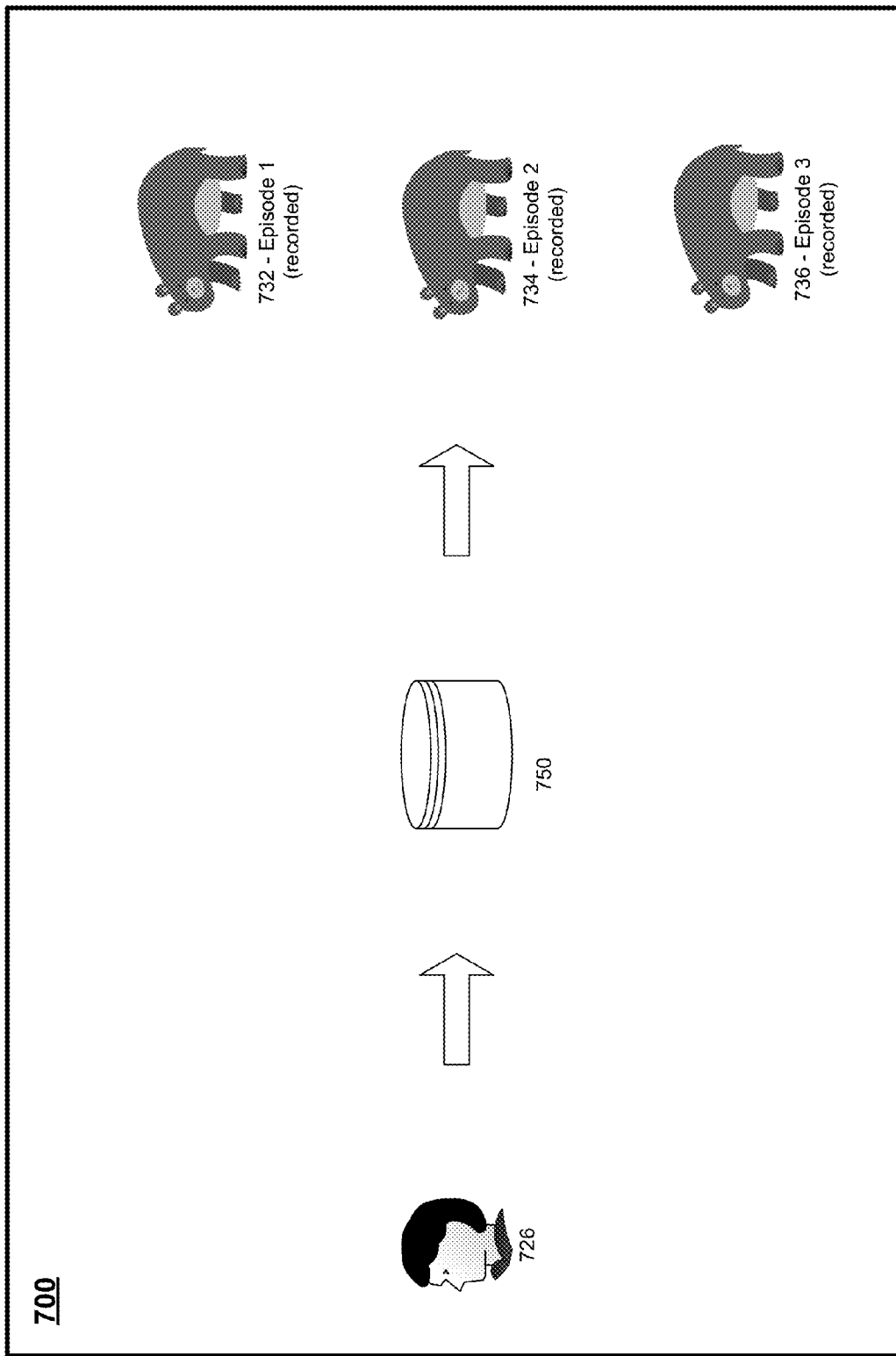


FIG. 7

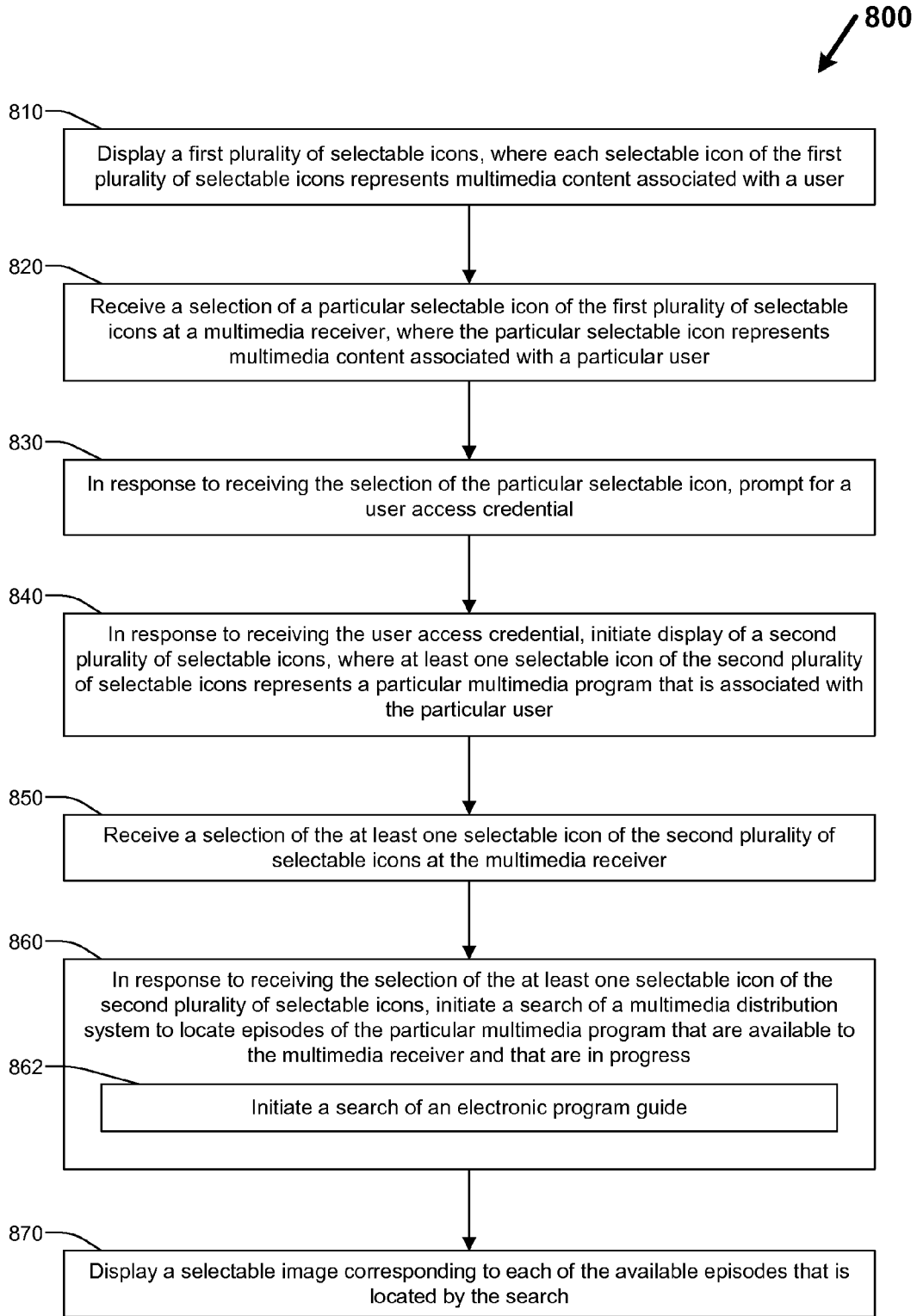


FIG. 8

900

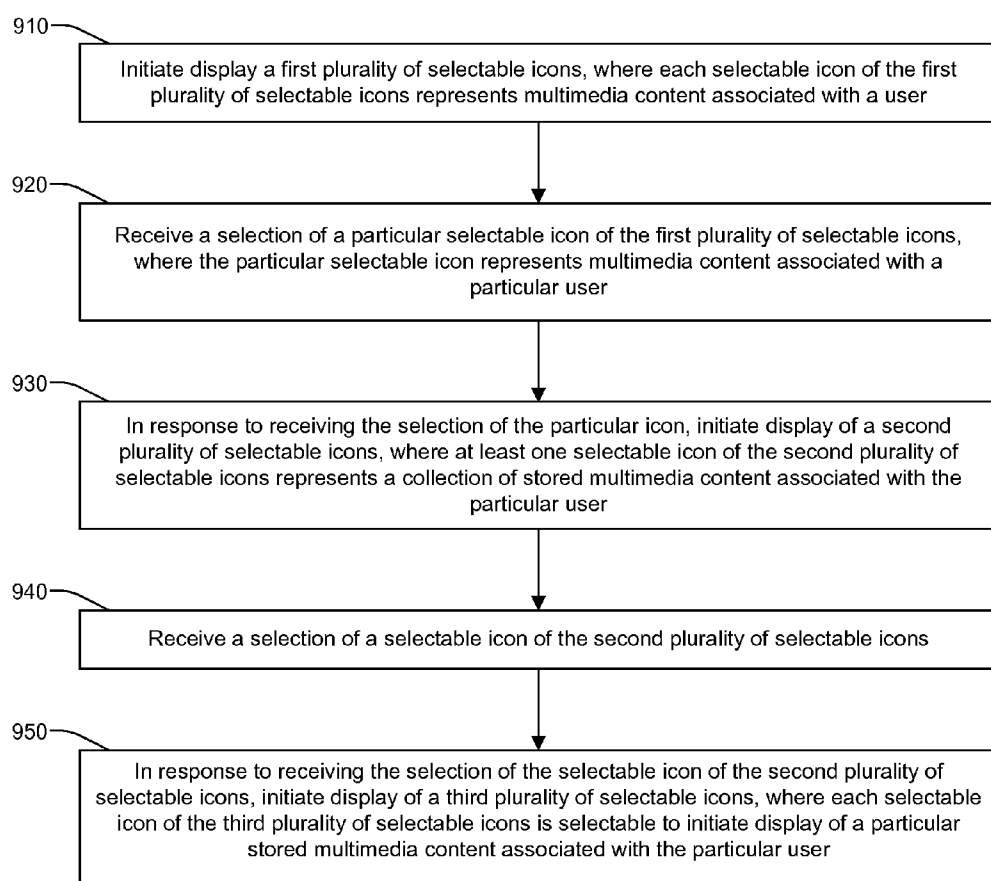


FIG. 9

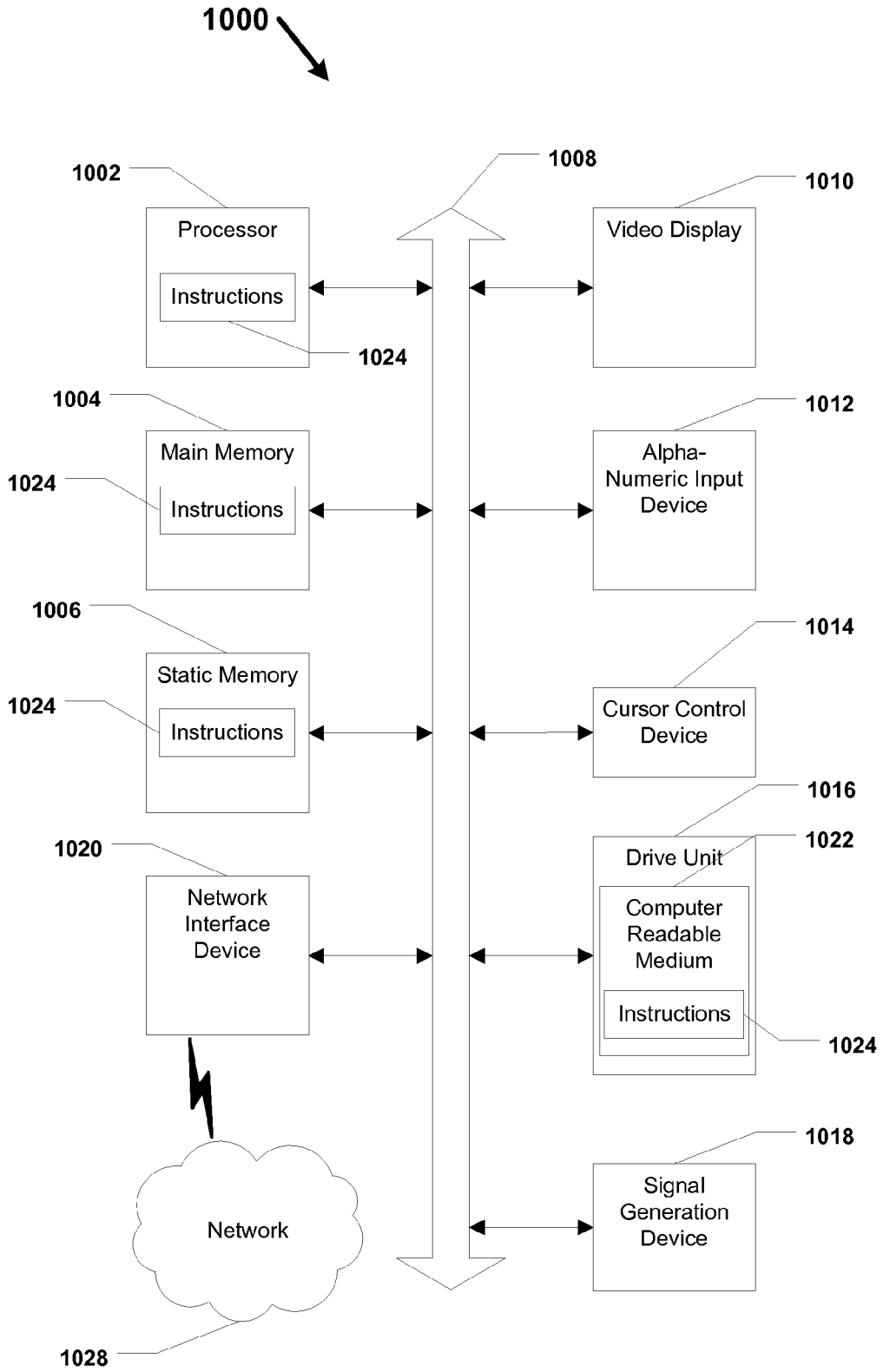


FIG. 10

NAVIGATION OF MULTIMEDIA CONTENT

DETAILED DESCRIPTION

CLAIM OF PRIORITY

[0001] The present application is a continuation of and claims priority from U.S. patent application Ser. No. 12/413, 253, filed on Mar. 27, 2009 and entitled "NAVIGATION OF MULTIMEDIA CONTENT," the contents of which are expressly incorporated herein by reference in their entirety.

FIELD OF THE DISCLOSURE

[0002] The present disclosure is generally related to navigation of multimedia content available via a multimedia distribution system.

BACKGROUND

[0003] Content providers continue to increase the amount of multimedia content available via multimedia distribution systems. For example, a high-definition television (HDTV) system may offer a subscriber hundreds of different channels where the subscriber may view multimedia content. Additionally, a subscriber may store recorded multimedia content on electronic devices that are communicatively coupled to a multimedia distribution system such as a digital video recorder (DVR) or a server accessible to the subscriber via a network. The subscriber may store multimedia content made available via the multimedia distribution system, such as episodes of a recorded television program, for example. The subscriber may also store multimedia content created by the subscriber, such as a video captured using a personal video camera or photos taken with a personal camera, for example.

BRIEF DESCRIPTION OF THE DRAWINGS

- [0004] FIG. 1 is an illustration of a first particular embodiment of a system to navigate multimedia content;
- [0005] FIG. 2 is an illustration of a second particular embodiment of a system to navigate multimedia content;
- [0006] FIG. 3 is an illustration of a display screen showing three selectable icons with each selectable icon corresponding to a user viewing profile;
- [0007] FIG. 4 is an illustration of a display screen as a display appears after a user has selected a particular selectable icon shown in FIG. 3 in accordance with particular embodiments of a system to navigate multimedia content;
- [0008] FIG. 5 is an illustration of a display screen showing four selectable icons corresponding to a particular user viewing profile displayed after a user has selected a particular selectable icon shown in FIG. 3 in accordance with particular embodiments of a system to navigate multimedia content;
- [0009] FIG. 6 is an illustration of a display screen as the display appears after a user has selected a first particular selectable icon shown in FIG. 5 in accordance with particular embodiments of a system to navigate multimedia content;
- [0010] FIG. 7 is an illustration of a display screen as the display appears after a user has selected a second particular selectable icon shown in FIG. 5 in accordance with particular embodiments of a system to navigate multimedia content;
- [0011] FIG. 8 is a flow chart of a first particular embodiment of a method of navigating multimedia content;
- [0012] FIG. 9 is a flow chart of a second particular embodiment of a method of navigating multimedia content; and
- [0013] FIG. 10 depicts an illustrative embodiment of a general computer system.

[0014] Systems and methods of navigating multimedia content are disclosed. In a first particular embodiment, a method of navigating multimedia content includes displaying a first plurality of selectable icons. Each selectable icon of the first plurality of selectable icons represents multimedia content associated with a user. The method also includes receiving a selection of a particular selectable icon of the first plurality of selectable icons, where the particular selectable icon represents multimedia content associated with a particular user. In response to receiving the selection of the particular selectable icon, the method initiates display of a second plurality of selectable icons, where at least one selectable icon of the second plurality of selectable icons represents a particular multimedia program that is associated with the particular user.

[0015] In a second particular embodiment, a set-top box for navigating multimedia content is disclosed. The set-top box includes a network interface component and a graphical viewing navigation module. The set-top box is configured to communicate with a multimedia distribution system such as an Internet Protocol television (IPTV) system. The graphical viewing navigation module is configured to initiate a display, at a display device, of a first plurality of selectable icons. Each selectable icon of the first plurality of selectable icons represents multimedia content associated with a particular user. The graphical viewing navigation module is also configured to receive a selection of a particular selectable icon of the first plurality of selectable icons. The particular selectable icon represents multimedia content associated with a particular user. The graphical viewing navigation module is further configured to respond to receiving the selection of the particular selectable icon. In response to receiving the selection of the particular selectable icon, the graphical viewing navigation module initiates display, at the display device, of a second plurality of selectable icons. The second plurality of selectable icons includes at least one selectable icon that represents a particular multimedia program that is associated with the particular user and further includes at least one selectable icon that represents a collection of stored multimedia content associated with the particular user. The at least one selectable icon that represents the particular multimedia program is selectable to initiate a search of the multimedia distribution system to locate episodes of the particular multimedia program that are available for display and that are in progress. The collection of stored multimedia content is stored at a storage device accessible to the set-top box device.

[0016] In a third particular embodiment, a computer-readable storage medium for navigating multimedia content is disclosed. The computer-readable storage medium includes computer-executable instructions that, when executed by a processor, enable the processor to initiate a display of a first plurality of selectable icons. Each selectable icon of the first plurality of selectable icons represents multimedia content associated with a user. The computer-executable instructions also enable the processor to receive a selection of a particular icon of the first plurality of selectable icons. The particular icon represents multimedia content associated with a particular user. The computer-executable instructions also enable the processor, in response to receiving the selection of the particular icon, to initiate a display of a second plurality of selectable icons. The second plurality of selectable icons includes at least one selectable icon that represents a particular multimedia program associated with the particular user

and further includes at least one selectable icon that represents a collection of stored multimedia content associated with the particular user. The at least one selectable icon that represents the particular multimedia program is selectable to cause a multimedia receiver to initiate a search of a multimedia distribution system to locate episodes of the particular programs that are available to the multimedia receiver and that are in progress.

[0017] Referring to FIG. 1, an illustrative embodiment of a system 100 to navigate multimedia content is disclosed. The system 100 includes a multimedia receiver 102 connected to a network 140. The network 140 provides the multimedia receiver 102 with access to a multimedia distribution system 150. The multimedia receiver 102 may include a set-top box or a personal computer, for example. The multimedia receiver 102 is also connected to a display device 118, an input device 128, and a storage device 130. The input device 128 may include a computer mouse or a controller such as a remote control used in conjunction with a television system, for example. The storage device 130 may include a digital video recorder (DVR), for example. The multimedia distribution system 130 may include an Internet Protocol television (IPTV) system or a Cable television (CATV) system, for example. The network 140 may include an IPTV access network or a CATV network 140, for example.

[0018] The multimedia receiver 102 includes a processor 110. The multimedia receiver 102 also includes a network interface 104 accessible to the processor 110, an input/output (I/O) interface 106 accessible to the processor 110, and a memory 108 accessible to the processor. The network interface 104 enables the multimedia receiver 102 to connect to the network 140, providing the multimedia receiver 102 with access to the multimedia distribution system 150. The I/O interface 106 enables the multimedia receiver 102 to connect to the display device 118, to the input device 128, and to the storage device 130.

[0019] The memory 108 includes a graphical viewing navigation module 170, a first plurality of selectable icons 172, viewing profiles 174, an electronic program guide (EPG) 184, and pointers 186 to multimedia content 132 stored at the storage device 130. The first plurality of selectable icons 172 correspond to the user viewing profiles 174. Each viewing profile of the user view profiles 174 corresponds to viewing preferences of a user. When displayed on the display device 118, each selectable icon of the first plurality of selectable icons 172 represents multimedia content associated with a user. The viewing profiles 174 include at least one particular viewing profile 176. In particular embodiments, the particular viewing profile includes information describing a particular user's viewing preferences. The information may include, for example, a list of the particular user's favorite television programs and a list of the particular user's favorite recorded multimedia content. The particular viewing profile 176 includes a second plurality of selectable icons 178 based on the particular viewing profile 176. When displayed on the display device 118, each selectable icon of the second plurality of selectable icons 178 represents multimedia content associated with the particular user. The second plurality of selectable icons 178 includes a first selectable icon 180 that represents a particular multimedia program that is associated with the particular user. For example, the first selectable icon may represent one of the particular user's favorite television programs. The second plurality of selectable icons 178 also includes a second selectable icon 182 that represents a col-

lection of stored multimedia content associated with the particular user. In particular embodiments, the second selectable icon 182 is associated with a particular pointer of the pointers 186 that point to multimedia content 132 stored at the storage device 130. In particular embodiments, the particular pointer includes information enabling the multimedia receiver 102 to locate the multimedia content 132. For example, the particular pointer may include a directory name and a file name.

[0020] During operation, the processor 110 may execute computer-readable instructions included in the graphical viewing navigation module 170 to enable the multimedia receiver 102 to perform methods disclosed herein. In particular embodiments, the graphical viewing navigation module 170 is configured to initiate a display, at the display device 118, of a first plurality of selectable icons 172 where each selectable icon of the first plurality of selectable icons 172 represents multimedia content associated with a user. The graphical viewing navigation module 170 may be configured to receive a selection of a particular selectable icon of the first plurality of selectable icons 172, where the particular selectable icon represents multimedia content associated with a particular user.

[0021] Additionally, the graphical viewing navigation module 170 may be configured to respond to receiving the selection of the particular selectable icon and, in response to receiving the selection of the particular selectable icon, initiate a display, at the display device 118, of a second plurality of selectable icons 178. The second plurality of selectable icons 178 includes at least one selectable icon 180 that represents a particular multimedia program that is associated with the particular user. The at least one selectable icon 180 that represents the particular multimedia program is selectable to initiate a search of the multimedia distribution system 150 to locate episodes of the particular multimedia program that are available for display and that are in progress. The second plurality of selectable icons 178 also includes at least one selectable icon 182 that represents a collection of stored multimedia content 132 associated with the particular user. The collection of stored multimedia content 132 is stored at a storage device accessible to the storage device 102.

[0022] For example, a user 120 may use the input device 128 to interact with the display device 118 and the multimedia receiver 102. As the user 120 interacts with the display device 118 and the multimedia receiver 102, the input device 128 may send one or more commands (CMD) 190 to the multimedia receiver 102 via the I/O interface 106. In a particular embodiment, the multimedia receiver 102 initiates display, at the display device 118, of the first plurality of selectable icons 172. The display device 118 illustrates an example of displaying a first plurality of selectable icons 172 including three selectable icons 122, 124, 126. One or more of the first plurality of selectable icons 172 may represent multimedia content associated with the user 120. In a particular embodiment, the selectable icon 126 represents multimedia content associated with the user 120. The user 120 may use the input device 128 to select a particular selectable icon of the first plurality of selectable icons 172. In response to receiving the selection of the particular selectable icon, the multimedia receiver 102 initiates a display of a second plurality of selectable icons. For example, the user 120 may use the input device 128 to select the particular selectable icon 126 representing multimedia content associated with the user 120. In response to receiving the selection of the particular icon 126, the multimedia receiver 102 may initiate a display of the second

plurality of selectable icons **178**. In particular embodiments, at least one selectable icon of the second plurality of selectable icons **178** represents a particular multimedia program **154** that is associated with the user **120**. For example, the particular multimedia program **154** may be a favorite television program of the user **120**.

[0023] In particular embodiments, the multimedia receiver **102** prompts the user **120** for a user access credential after the user **120** has selected a selectable icon of the first plurality of selectable icons **172**. In this manner, users can protect their viewing profile(s) from being accessed by unauthorized viewers. If the user **120** enters an appropriate user access credential in response to the prompt, the multimedia receiver **102** may initiate a display of a second plurality of selectable icons. In particular embodiments, a user that enters an appropriate user access credential may be given permission to modify the particular viewing profile corresponding to the particular selectable icon. In this manner, the user may modify (e.g., add to or remove) multimedia content from the viewing profile corresponding to the selected icon of the first plurality of selectable icons **172**.

[0024] In particular embodiments, at least one selectable icon of the first plurality of selectable icons **172** is modifiable by a user associated with a corresponding profile of the at least one selectable icon. In a particular embodiment, the selectable icon **126** corresponds to the viewing profile of the user **120**. The user **120** may wish to have the image of the selectable icon **126** representing multimedia content associated with her to be an image of herself. Alternately, the user **120** may wish the image of the selectable icon **126** representing multimedia content associated with the user **120** to be some other image, such as an image of the user's **120** favorite cartoon character or the user's favorite talk show host, for example. In particular embodiments, the user **120** may modify the selectable icon **126** representing multimedia content associated with the user **120** by retrieving an image from a storage device, such as the storage device **130**, for example. In particular embodiments, the user **120** may modify the selectable icon **126** representing multimedia content associated with the user **120** via the network **140** by retrieving an image from the data server **152** at the multimedia distribution system **150**.

[0025] In particular embodiments, at least one selectable icon of the second plurality of selectable icons **178** represents a particular multimedia program **154** that is associated with the particular viewing profile **176**. For example, the at least one selectable icon of the second plurality of selectable icons **178** may represent one of the user's **120** favorite television shows. The image of the at least one selectable icon may, for example, include a logo for the television show or an image of a star character in the television show.

[0026] The user **120** may use the input device **128** to select a particular selectable icon of the particular multimedia program **154**. In response to receiving the selection of the particular selectable icon, the multimedia receiver **102** may initiate a search of the multimedia distribution system **150** to locate episodes of the particular multimedia program **154** that are available to the multimedia receiver **102** and that are in progress. In particular embodiments, a program in progress includes programs that the multimedia distribution system **150** is currently providing to the network **140**, but the multimedia receiver **102** may not be currently receiving. In particular embodiments, the multimedia receiver **102**, such as a set-top box, may receive a program in progress by tuning the

multimedia receiver **102** to a channel on which the program in progress is being provided by the multimedia distribution system **150**. Thus, the located episodes of the particular multimedia program **154** may be included in programs in progress **160**. Each episode may be a different showing of the particular multimedia program, such as a rerun, or may be the same showing that is provided on a different channel. In particular embodiments, the search of the multimedia distribution system **150** may include a search of an electronic program guide, such as the electronic program guide **184** in the memory **108** of the multimedia receiver **102**.

[0027] In particular embodiments, at least one selectable icon of the second plurality of selectable icons **178** represents a collection of stored multimedia content **132** corresponding to the particular viewing profile **176** and associated with the selected particular icon **126**. Each of the at least one selectable icon of the second plurality of selectable icons **178** may be associated with one or more pointers **186** that provide the location(s) of the stored multimedia content **132** at the storage device **130**. Alternately, the stored multimedia content may be located at the data server **152** of the multimedia distribution system **150** and the one or more pointers **186** may provide the location(s) of the stored multimedia content at the data server **152** of the multimedia distribution system **150**.

[0028] The user **120** may use the input device **128** to select a particular selectable icon of the second plurality of selectable icons **178** representing a collection of stored multimedia content **132** associated with the user **120**. In response to receiving the selection of the particular selectable icon, the multimedia receiver **102** may initiate a display of a third plurality of selectable icons, where each selectable icon of the third plurality of selectable icons is selectable to initiate playback of particular stored multimedia content **132** associated with the user **120**. In particular embodiments, at least one selectable icon of the second plurality of selectable icons **178** is selectable to initiate playback of stored multimedia content **132** at the storage device **130** associated with the user **120**.

[0029] The system **100** provides a user a method for more easily navigating large amounts of multimedia content that a user has placed in a viewing profile. The multimedia content may be graphically represented on a display device. For example, a favorite television show of a younger viewer may be represented by a selectable icon having an image that looks like the younger viewer's favorite character in the television show. The user may use the system **100** to navigate both programs in progress and stored multimedia including programs that have been previously recorded.

[0030] Referring to FIG. 2, a second illustrative embodiment of a system **200** to navigate multimedia content is disclosed. The system **200** includes a set-top box **202** connected to an IPTV access network **240**. The IPTV access network **240** provides the set-top box **202** with access to an IPTV system **250**.

[0031] The set-top box **202** includes a processor **210**, a network interface **204**, and an I/O interface **206**. The network interface **204** and the I/O interface **206** are accessible to the processor **210**. The network interface **204** enables the set-top box **202** to connect to the IPTV access network **240**, providing the set-top box **202** with access to the IPTV system **250** and to a website **290**. The I/O interface **206** enables the set-top box **202** to connect to the display device **218** and to the digital video recorder (DVR) **230**. The display device **218** may include or may be similar to the display device **118** depicted in FIG. 1. The DVR **230** can be used to store multimedia

content 232. The I/O interface 206 also enables the set-top box 202 to communicate with the controller 228. The IPTV system 250 includes a graphical viewing navigation module 252, a profile server 254, a video server 260, and an electronic program guide (EPG) 262. The profile server includes viewing profiles 256 and icons 258. The website 290 includes icons 292.

[0032] During operation, a user 220 may use the controller 228 to interact with the display device 218 and with the set-top box 202. In particular embodiments, the user 220 may interact with the display device 218 and the set-top box 202 in the same or a similar manner that the user 120 interacts with the display device 118 and the multimedia receiver 102 depicted in FIG. 1.

[0033] As the user 220 interacts with the display device 218 and the set-top box 202, the controller 228 may send one or more commands, such as CMD 280, to the set-top box 202 via the I/O interface 206. Upon receiving the commands 280, the set-top box 202 may send one or more messages, such as MSG 282, to the graphical viewing navigation module 252 at the IPTV system 250 via the IPTV access network 240. The IPTV system 250 may execute computer-readable instructions included in the graphical viewing navigation module 252 to enable the system 200 to perform methods disclosed herein. In particular embodiments, the graphical viewing navigation module 252 is configured to initiate a display, at the display device 218, of a first plurality of selectable icons. Each selectable icon of the first plurality of selectable icons represents multimedia content associated with a user. The first plurality of selectable icons may include one or more icons from the icons 258 stored at the profile server 254. The first plurality of selectable icons may also include one or more icons from the icons 292 stored at the website 290. The graphical viewing navigation module 252 may be configured to receive a selection of a particular selectable icon of the first plurality of selectable icons. The particular selectable icon may correspond to a particular viewing profile. The particular viewing profile may be one of the viewing profiles 256 stored at the profile server 254. In particular embodiments the particular selectable icon represents multimedia content associated with a user.

[0034] Additionally, the graphical viewing navigation module 252 may be configured to respond to receiving the selection of the particular selectable icon and, in response to receiving the selection of the particular selectable icon, initiate a display, at the display device 218, of a second plurality of selectable icons corresponding to the particular viewing profile. The second plurality of selectable icons includes at least one selectable icon that represents a particular multimedia program that is associated with a particular user. The at least one selectable icon that represents the particular multimedia program is selectable to initiate a search of the IPTV system 250 to locate episodes of the particular multimedia program that are available for display and that are in progress, such as multimedia programs provided by the video server 260. The second plurality of selectable icons further includes at least one selectable icon that represents a collection of stored multimedia content associated with the particular user. The collection of stored multimedia content may be stored at a storage device accessible to the set-top box 202, such as the multimedia content 232 stored at the DVR 230, for example.

[0035] The system 200 provides a user a method for more easily navigating large amounts of multimedia content. The multimedia content may include multimedia programs in

progress provided by the IPTV system 250. The multimedia content may also include store multimedia content that has been previously recorded.

[0036] Referring to FIG. 3, a display screen 300 shows three illustrative selectable icons 322, 324, 326, and each of the selectable icons represents multimedia content associated with a user. The display screen may be a display screen of the display device 118 depicted in FIG. 1 or the display screen of the display device 218 depicted in FIG. 2, for example. The three selectable icons 322, 324, 326 may comprise the first plurality of selectable icons 172 described in relation to FIG. 1 or the first plurality of selectable icons described in relation to FIG. 2. Thus, a user may select a particular selectable icon of the three selectable icons 322, 324, 326 to select further viewing options corresponding to the user's viewing profile.

[0037] Referring to FIG. 4, a display screen 400 is disclosed as a display appears after a user has selected a particular selectable icon 326 shown in FIG. 3 in accordance with particular embodiments of a system to navigate multimedia content. Displayed on the display screen 400 is an image 426 of the particular selectable icon 326 selected. Also displayed on the display screen 400 are four icons 430, 440, 450, 460 associated with the viewing profile corresponding to the particular selectable icon 326 selected. A first icon 430 represents a first particular multimedia program and the image of the first icon 430 may indicate to the user the particular multimedia program that the first icon 430 represents. The first icon 430 is associated with two selectable icons 432, 434. Each selectable icon 432, 434 may, for example, include a picture-in-a-picture (PIP) window displaying an episode of the first particular multimedia program that is in progress. The two selectable icons 432, 434 may represent different episodes of the first particular multimedia program or may represent the same episode of the first particular multimedia program provided on two different channels. In particular embodiments, the user may select one of the selectable icons 432, 434 to cause a multimedia receiver, such as a set-top box, to tune to a channel on which the corresponding episode is in progress and may present the episode to the display screen 400. A second icon 440 represents a second particular multimedia program and the image of the second icon 440 may indicate to the user the particular multimedia program that the second icon 440 represents. The second icon 440 is associated with two selectable icons 442, 444. Each selectable icon 442, 444 may, for example, include a picture-in-a-picture (PIP) window displaying an episode of the second particular multimedia program that is in progress. The user may select one of the selectable icons 442, 444 to cause a multimedia receiver, such as a set-top box, to tune to a channel on which the corresponding episode of the second particular multimedia program is in progress and present the episode to the display screen 400. A third icon 450 represents a collection of stored multimedia content. The stored multimedia content may include the stored multimedia content 132 depicted in FIG. 1 or the stored multimedia content 232 depicted in FIG. 2. The image of the third icon 450 may indicate to the user that the third icon 450 represents a collection of stored multimedia content. The third icon 450 is associated with two selectable icons 452, 454 with each icon representing distinct stored multimedia content. For example, a user may have previously recorded a particular episode of a particular multimedia program or may have previously recorded a particular sporting event. The user may wish to view the previously recorded multimedia content. By selecting one of the two selectable

icons **452**, **454**, the user may cause a multimedia receiver, such as a set-top box, to initiate playback of the particular stored multimedia content represented by the selected icon. A fourth icon **460** is a selectable icon that represents particular stored multimedia content. By selecting the fourth icon **460**, the user may cause a multimedia receiver, such as a set-top box, to initiate playback of the particular stored multimedia content represented by the fourth icon **460**.

[0038] Referring to FIG. 5, a display screen **500** is disclosed as the display appears after a user has selected a particular selectable icon **326** shown in FIG. 3 in accordance with particular embodiments of a system to navigate multimedia content. Displayed on the display screen **500** is an image **526** of the particular selectable icon **326** selected. Also displayed on the display screen **500** are four representative selectable icons **530**, **540**, **550**, **560** associated with the viewing profile corresponding to the particular selectable icon **326**. In a first particular embodiment, the four selectable icons **530**, **540**, **550**, **560** comprise the second plurality of selectable icons described in relation to FIG. 1. In a second particular embodiment, the four selectable icons **530**, **540**, **550**, **560** comprise the second plurality of selectable icons described in relation to FIG. 2.

[0039] A first selectable icon **530** represents a first particular multimedia program and the image of the first icon **530** may indicate to the user the particular multimedia program that the first selectable icon **530** represents. The user may select the first selectable icon **530** to determine if any episodes of the first particular program are currently available and in progress. A second selectable icon **540** represents a second particular multimedia program, and the image of the second icon **540** may indicate to the user the particular multimedia program that the second selectable icon **540** represents. The user may select the second selectable icon **540** to determine if any episodes of the second particular program are currently available and in progress. A third selectable icon **550** represents a collection of stored multimedia content. The stored multimedia content may include the stored multimedia content **132** depicted in FIG. 1 or the stored multimedia content **232** depicted in FIG. 2. The image of the third selectable icon **550** may indicate to the user that the third selectable icon **550** represents a collection of stored multimedia content. The user may select the third selectable icon **550** to determine the contents of the collection of stored multimedia content. A fourth selectable icon **560** represents particular stored multimedia content. By selecting the fourth selectable icon **560**, the user may cause a multimedia receiver, such as a set-top box, to initiate playback of the particular stored multimedia content represented by the fourth selectable icon **560**.

[0040] Referring to FIG. 6, a display screen **600** is disclosed as the display appears after a user has selected a particular selectable icon **530** shown in FIG. 5 in accordance with particular embodiments of a system to navigate multimedia content. Displayed on the display screen **600** is an image **630** of the particular selectable icon **530** selected. Also displayed on the display screen **600** are three selectable icons **632**, **634**, **636**. In a particular embodiment, the three selectable icons **632**, **634**, **636** comprise the third plurality of selectable icons described in relation to FIG. 1. Each selectable icon **632**, **634**, **636** may, for example, include a picture-in-a-picture (PIP) window displaying an in-progress episode of the particular multimedia program represented by the selectable icon **530** selected. The three selectable icons **632**, **634**, **636** may represent different episodes of the particular multimedia pro-

gram or may represent the same episode of the particular multimedia program being provided on different channels. In particular embodiments, the user may select one of the selectable icons **632**, **634**, **636** to cause a multimedia receiver, such as a set-top box, to tune to a channel on which the corresponding episode is in progress to present the episode to the display screen **600**.

[0041] Referring to FIG. 7, a display screen **700** is disclosed as the display appears after a user has selected a particular selectable icon **550** shown in FIG. 5 in accordance with particular embodiments of a system to navigate multimedia content. Displayed on the display screen **700** is an image **750** of the particular selectable icon **550** selected. Also displayed on the display screen **700** are three selectable icons **732**, **734**, **736**. Each of the three selectable icons **732**, **734**, **736** represents particular stored multimedia content. By selecting one of the three selectable icons **732**, **734**, **736** the user may cause a multimedia receiver, such as a set-top box, to initiate playback of the particular stored multimedia content represented by the selected icon.

[0042] Referring to FIG. 8, a flow chart **800** of a first particular embodiment of a method of navigating multimedia content is disclosed. The method includes displaying a first plurality of selectable icons, where each selectable icon of the first plurality of selectable icons represents multimedia content associated with a user, at **810**. For example, the first plurality of selectable icons may include the first plurality of selectable icons **172** described in relation to FIG. 1, the first plurality of selectable icons described in relation to FIG. 2, or the selectable icons **322**, **324**, **326** described in relation to FIG. 3.

[0043] Advancing to **820**, the method includes receiving a selection of a particular selectable icon of the first plurality of selectable icons at a multimedia receiver, where the particular selectable icon represents multimedia content associated with a particular user. In a first particular embodiment, a user may interact with the display device **118** and the multimedia receiver **102** using the input device **128** as described in relation to FIG. 1 to make a selection. In a second particular embodiment, a user may interact with the display device **218** and the set-top box **202** using the controller **228** as described in relation to FIG. 2 to make a selection.

[0044] In response to receiving the selection of the particular selectable icon, the method prompts for a user access credential, at **830**. In particular embodiments, a system for navigating multimedia content according to viewing profiles may prevent access to some viewing profiles by requiring a user access credential to be entered before the viewing profile can be accessed. A user access credential may include a personal identification number (PIN) or a username and a password, for example.

[0045] Advancing to **840**, in response to receiving the user access credential, the method initiates display of a second plurality of selectable icons, where at least one selectable icon of the second plurality of selectable icons represents a particular multimedia program that is associated with the particular user. For example, the second plurality of selectable icons may include the second plurality of selectable icons **178** described in relation to FIG. 1, the second plurality of selectable icons described in relation to FIG. 2, or the selectable icons **530**, **540**, **550**, **560** described in relation to FIG. 5.

[0046] Advancing to **850**, the method includes receiving a selection of the at least one selectable icon of the second plurality of selectable icons at the multimedia receiver

described in relation to the receiving at **820**. In a first particular embodiment, a user may interact with the display device **118** and the multimedia receiver **102** using the input device **128** as described in relation to FIG. 1 to make a selection. In a second particular embodiment, a user may interact with the display device **218** and the set-top box **202** using the controller **228** as described in relation to FIG. 2 to make a selection.

[0047] Advancing to **860**, in response to receiving the selection of the at least one selectable icon of the second plurality of selectable icons, the method initiates a search of a multimedia distribution system to locate episodes of the particular multimedia program that are available to the multimedia receiver and that are in progress. In particular embodiments, the method initiates a search of an electronic program guide, at **862**. The method displays a selectable image corresponding to each available episode that is located by the search, at **870**.

[0048] Referring to FIG. 9, a flow chart **900** of a second particular embodiment of a method of navigating multimedia content is disclosed. The method includes initiating display of a first plurality of selectable icons, where each selectable icon of the first plurality of selectable icons represents multimedia content associated with a user, at **910**. For example, the first plurality of selectable icons may include the first plurality of selectable icons **172** described in relation to FIG. 1, the first plurality of selectable icons described in relation to FIG. 2, or the selectable icons **322**, **324**, **326** described in relation to FIG. 3.

[0049] Advancing to **920**, the method includes receiving a selection of a particular selectable icon of the first plurality of selectable icons, where the particular selectable icon represents multimedia content associated with a particular user. In a first particular embodiment, a user may interact with the display device **118** and the multimedia receiver **102** using the input device **128** as described in relation to FIG. 1 to make a selection. In a second particular embodiment, a user may interact with the display device **218** and the set-top box **202** using the controller **228** as described in relation to FIG. 2 to make a selection.

[0050] Advancing to **930**, in response to receiving the selection of the particular icon, the method includes initiating display of a second plurality of selectable icons, where at least one selectable icon of the second plurality of selectable icons represents a collection of stored multimedia content associated with the particular user. For example, the second plurality of selectable icons may include the second plurality of selectable icons **178** described in relation to FIG. 1, the second plurality of selectable icons described in relation to FIG. 2, or the selectable icons **530**, **540**, **550**, **560** described in relation to FIG. 5.

[0051] Advancing to **940**, the method includes receiving a selection of the at least one selectable icon of the second plurality of selectable icons. In a first particular embodiment, a user may interact with the display device **118** and the multimedia receiver **102** using the input device **128** as described in relation to FIG. 1 to make a selection. In a second particular embodiment, a user may interact with the display device **218** and the set-top box **202** using the controller **228** as described in relation to FIG. 2 to make a selection.

[0052] Advancing to **950**, in response to receiving the selection of the selectable icon of the second plurality of selectable icons, the method initiates display of a third plurality of selectable icons, where each selectable icon of the third plurality of selectable icons is selectable to initiate a

display of a particular stored multimedia content associated with the particular user. In a first particular embodiment, the third plurality of selectable icons includes the third plurality of selectable icons described in relation to FIG. 1. In a second particular embodiment, the third plurality of selectable icons includes the selectable icons **732**, **734**, **736** described in relation to FIG. 7.

[0053] Referring to FIG. 10, an illustrative embodiment of a general computer system is shown and is designated **1000**. The computer system **1000** can include a set of instructions that can be executed to cause the computer system **1000** to perform any one or more of the methods or computer-based functions disclosed herein. For example, the computer system **1000** may include instructions that are executable to perform the methods discussed with respect to FIGS. 8 and 9. In particular embodiments, the computer system **1000** includes instructions to implement the graphical viewing navigation module **170** shown in FIG. 1. In particular embodiments, the computer system **1000** includes instructions to implement the graphical viewing navigation module **252** shown in FIG. 2. In a particular embodiment, the computer system **1000** includes or is included within the multimedia receiver shown in FIG. 2. In particular embodiments, the computer system **1000** includes or is included within a set top box, such as the set top box **202** shown in FIG. 1. The computer system **1000** may be connected to other computer systems or peripheral devices via a network, such as the network **140** shown in FIG. 1 or the IPTV access network **240** shown in FIG. 2. Additionally, the computer system **1000** may include or be included within other computing devices.

[0054] The methods disclosed in FIG. 8 and FIG. 9 allow a user to navigate multimedia content. The multimedia content may include a large amount of multimedia content and may include both multimedia programs in progress and stored multimedia content.

[0055] As illustrated in FIG. 10, the computer system **1000** may include a processor **1002**, e.g., a central processing unit (CPU), a graphics processing unit (GPU), or both. Moreover, the computer system **1000** can include a main memory **1004** and a static memory **1006** that can communicate with each other via a bus **1008**. As shown, the computer system **1000** may further include a video display unit **1010**, such as a liquid crystal display (LCD), a projection television display, a flat panel display, a plasma display, or a solid state display. Additionally, the computer system **1000** may include an input device **1012**, such as a remote control device having a wireless keypad, a keyboard, a microphone coupled to a speech recognition engine, a camera such as a video camera or still camera, or a cursor control device **1014**, such as a mouse device. The computer system **1000** can also include a disk drive unit **1016**, a signal generation device **1018**, such as a speaker, and a network interface device **1020**. The network interface **1020** enables the computer system **1000** to communicate with other systems via a network **1026**. For example, in particular embodiments the computer system **1000** includes or is included within a set top box. The network interface **1020** may enable the set top box to communicate with a multimedia distribution system, such as the multimedia distribution system **150** shown in FIG. 1 or the IPTV system **250** shown in FIG. 2, and to receive multimedia content to display on a display screen.

[0056] In a particular embodiment, as depicted in FIG. 10, the disk drive unit **1016** may include a computer-readable medium **1022** in which one or more sets of instructions **1024**,

e.g. software, can be embedded. For example, one or more modules, such as the graphical viewing navigation module **170** shown in FIG. **1** or the graphical viewing navigation module **252** shown in FIG. **2** can be embedded in the computer-readable medium **1022**. Further, the instructions **1024** may embody one or more of the methods, such as the methods disclosed with respect to FIGS. **8** and **9**, or logic as described herein. In a particular embodiment, the instructions **1024** may reside completely, or at least partially, within the main memory **1004**, the static memory **1006**, and/or within the processor **1002** during execution by the computer system **1000**. The main memory **1004** and the processor **1002** also may include computer-readable media.

[0057] In an alternative embodiment, dedicated hardware implementations, such as application specific integrated circuits, programmable logic arrays and other hardware devices, can be constructed to implement one or more of the methods described herein. Applications that may include the apparatus and systems of various embodiments can broadly include a variety of electronic and computer systems. One or more embodiments described herein may implement functions using two or more specific interconnected hardware modules or devices with related control and data signals that can be communicated between and through the modules, or as portions of an application-specific integrated circuit. Accordingly, the present system encompasses software, firmware, and hardware implementations, or combinations thereof.

[0058] While the computer-readable medium is shown to be a single medium, the term “computer-readable medium” includes a single medium or multiple media, such as a centralized or distributed database, and/or associated caches and servers that store one or more sets of instructions. The term “computer-readable medium” shall also include any medium that is capable of storing or encoding a set of instructions for execution by a processor or that cause a computer system to perform any one or more of the methods or operations disclosed herein.

[0059] In a particular non-limiting, exemplary embodiment, the computer-readable medium can include a solid-state memory such as a memory card or other package that houses one or more non-volatile read-only memories. Further, the computer-readable medium can be a random access memory or other volatile re-writable memory. Additionally, the computer-readable medium can include a magneto-optical or optical medium, such as a disk or tapes or other storage device to capture carrier wave signals such as a signal communicated over a transmission medium. A digital file attachment to an email or other self-contained information archive or set of archives may be considered equivalent to a tangible storage medium. Accordingly, the disclosure is considered to include any one or more of a computer-readable medium or other equivalents and successor media, in which data or instructions may be stored.

[0060] The illustrations of the embodiments described herein are intended to provide a general understanding of the structure of the various embodiments. The illustrations are not intended to serve as a complete description of all of the elements and features of apparatus and systems that utilize the structures or methods described herein. Many other embodiments may be apparent to those of skill in the art upon reviewing the disclosure. Other embodiments may be utilized and derived from the disclosure, such that structural and logical substitutions and changes may be made without

departing from the scope of the disclosure. Accordingly, the disclosure and the figures are to be regarded as illustrative rather than restrictive.

[0061] One or more embodiments of the disclosure may be referred to herein, individually and/or collectively, by the term “invention” merely for convenience and without intending to voluntarily limit the scope of this application to any particular invention or inventive concept. Moreover, although specific embodiments have been illustrated and described herein, it should be appreciated that any subsequent arrangement designed to achieve the same or similar purpose may be substituted for the specific embodiments shown. This disclosure is intended to cover any and all subsequent adaptations or variations of various embodiments. Combinations of the above embodiments, and other embodiments not specifically described herein, will be apparent to those of skill in the art upon reviewing the description.

[0062] The Abstract of the Disclosure is provided with the understanding that it will not be used to interpret or limit the scope or meaning of the claims. In addition, in the foregoing Detailed Description, various features may be grouped together or described in a single embodiment for the purpose of streamlining the disclosure. This disclosure is not to be interpreted as reflecting an intention that the claimed embodiments require more features than are expressly recited in each claim. Rather, as the following claims reflect, inventive subject matter may be directed to less than all of the features of any of the disclosed embodiments. Thus, the following claims are incorporated into the Detailed Description, with each claim standing on its own as defining separately claimed subject matter.

[0063] The above-disclosed subject matter is to be considered illustrative, and not restrictive, and the appended claims are intended to cover all modifications, enhancements, and other embodiments, that fall within the true scope of the present disclosure. Thus, to the maximum extent allowed by law, the scope of the present invention is to be determined by the broadest permissible interpretation of the following claims and their equivalents, and shall not be restricted or limited by the foregoing detailed description.

What is claimed is:

1. A method comprising:

sending a user interface to a device, wherein the user interface includes information associated with display of a plurality of selectable icons, wherein a first icon of the plurality of selectable icons includes a face of a fictional character; and

in response to a selection of the first icon, sending a second user interface to the device, wherein the second user interface includes information associated with display of a second plurality of selectable icons, wherein at least one of the second plurality of selectable icons depicts a second fictional character, and wherein the at least one of the second plurality of selectable icons is associated with a plurality of multimedia programs.

2. The method of claim **1**, wherein the at least one of the second plurality of selectable icons includes a face of the second fictional character.

3. The method of claim **1**, wherein the second fictional character appears in at least one of the plurality of multimedia programs.

4. The method of claim **1**, wherein the device is a set-top box, a computer, or a television.

5. The method of claim 1, wherein the user interface and the second user interface are sent from a server to the device via a network.

6. The method of claim 1, wherein the network includes the Internet.

7. The method of claim 1, further comprising: in response to a selection of the at least one of the second plurality of selectable icons, sending a third user interface to the device, wherein the third user interface includes a third plurality of selectable icons associated with the plurality of multimedia programs.

8. A method comprising: sending a user interface to a device, wherein the user interface includes information associated with display of a plurality of selectable icons, wherein a first icon of the plurality of selectable icons includes a first image of a first fictional character;

in response to a selection of the first icon, sending a second user interface to the device, wherein the second user interface includes information associated with display of a second plurality of selectable icons, wherein at least one of the second plurality of selectable icons includes a second image of a second fictional character, and wherein the at least one of the second plurality of selectable icons is associated with a plurality of multimedia programs; and

in response to a selection of the at least one of the second plurality of selectable icons, sending a third user interface to the device, wherein the third user interface includes information associated with display of a third plurality of selectable icons, and wherein each selectable icon of the third plurality of selectable icons is selectable to initiate playback of a particular multimedia program of the plurality of multimedia programs.

9. The method of claim 8, wherein initiating playback of the particular multimedia program comprises:

accessing a copy of the particular multimedia program that is stored at a server; and

streaming the copy of the particular multimedia program from the server to the device.

10. The method of claim 8, wherein the first image of the first fictional character includes at least a face of an animal.

11. The method of claim 10, wherein the animal is a bear or a mouse.

12. The method of claim 8, further comprising associating the first image of the first fictional character with the first icon in response to a request received from the device to modify a user profile associated with the first icon.

13. The method of claim 8, wherein the second fictional character appears in at least one multimedia program of the plurality of multimedia programs.

14. The method of claim 13, wherein the second fictional character is a favorite character of a younger viewer.

15. The method of claim 13, wherein the second fictional character is a cartoon character.

16. The method of claim 8, wherein:

the sending of the first user interface to the device is responsive to a first input received from an input device associated with the device;

the sending of the second user interface is responsive to a second input received from the input device; and

the sending of the third user interface is responsive to a third input received from the input device.

17. The method of claim 16, wherein the device is a television, and wherein the input device includes a remote control.

18. The method of claim 16, wherein the device is a computer, and wherein the input device is communicatively coupled to the computer.

19. A computer-readable storage device storing instructions that, when executed by a processor, cause the processor to perform operations comprising:

sending a user interface to a device, wherein the user interface includes information associated with display of a plurality of selectable icons, wherein a first icon of the plurality of selectable icons includes a face of a first fictional character;

in response to a selection of the first icon, sending a second user interface to the device, wherein the second user interface includes information associated with display of a second plurality of selectable icons, wherein at least one of the second plurality of selectable icons includes a face of a second fictional character, wherein the at least one of the second plurality of selectable icons is associated with a plurality of multimedia programs, and wherein the second fictional character appears in at least one of the multimedia programs; and

in response to a selection of the at least one of the second plurality of selectable icons, sending a third user interface to the device, wherein the third user interface includes information associated with display of a third plurality of selectable icons, and wherein each selectable icon of the third plurality of selectable icons is selectable to initiate playback of a particular multimedia program of the plurality of multimedia programs.

20. The computer-readable storage device of claim 19, wherein the first icon is modifiable to include a face of a different fictional character.

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