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(54) **SYSTEMS AND METHODS FOR SYNCHRONIZING MEDIA AND TARGETED CONTENT**

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(57) **ABSTRACT**

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Systems and methods for synchronizing media and targeted content are provided. Timing data associated with playing media content from a disconnected media outlet is obtained. The timing data is sent over a network to a server. Synchronization data is received from the server. The synchronization data is generated without communication with the disconnected media outlet. At least one synchronized advertisement is received, where each synchronized advertisement is associated with a time code associated with the playing media content. The at least one synchronized advertisement is displayed based on the time code and the synchronization data. An e-commerce user interface is provided for at least one product associated with the at least one synchronized advertisement.

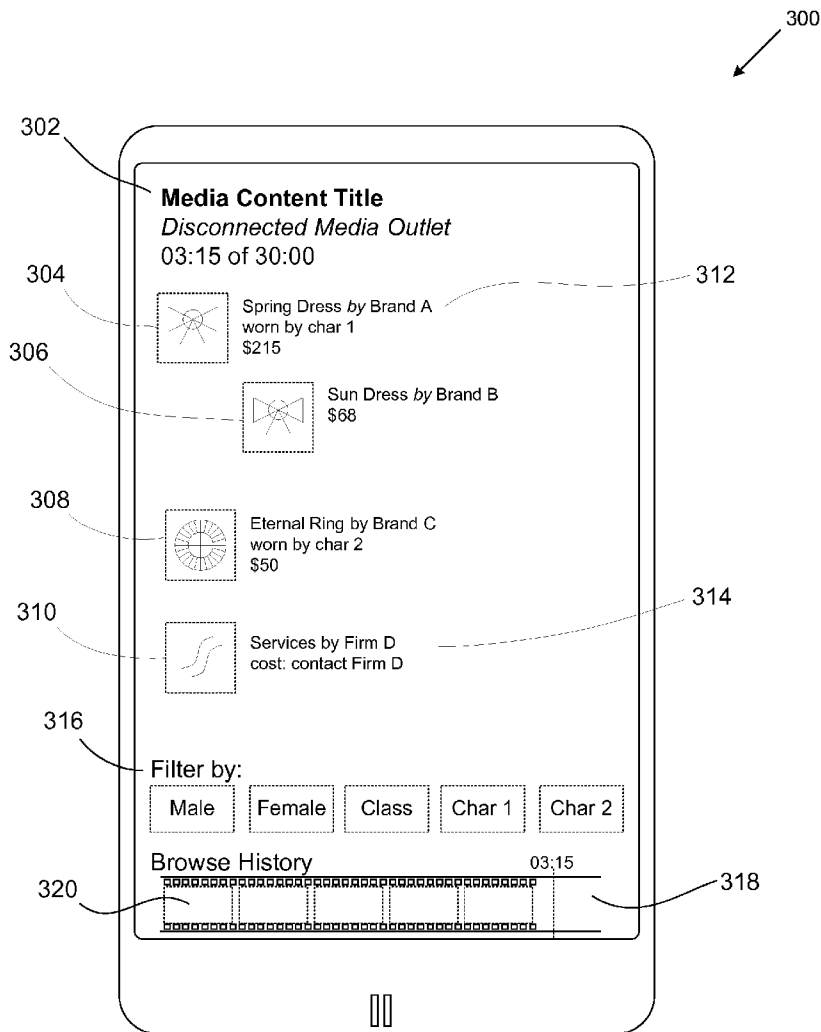
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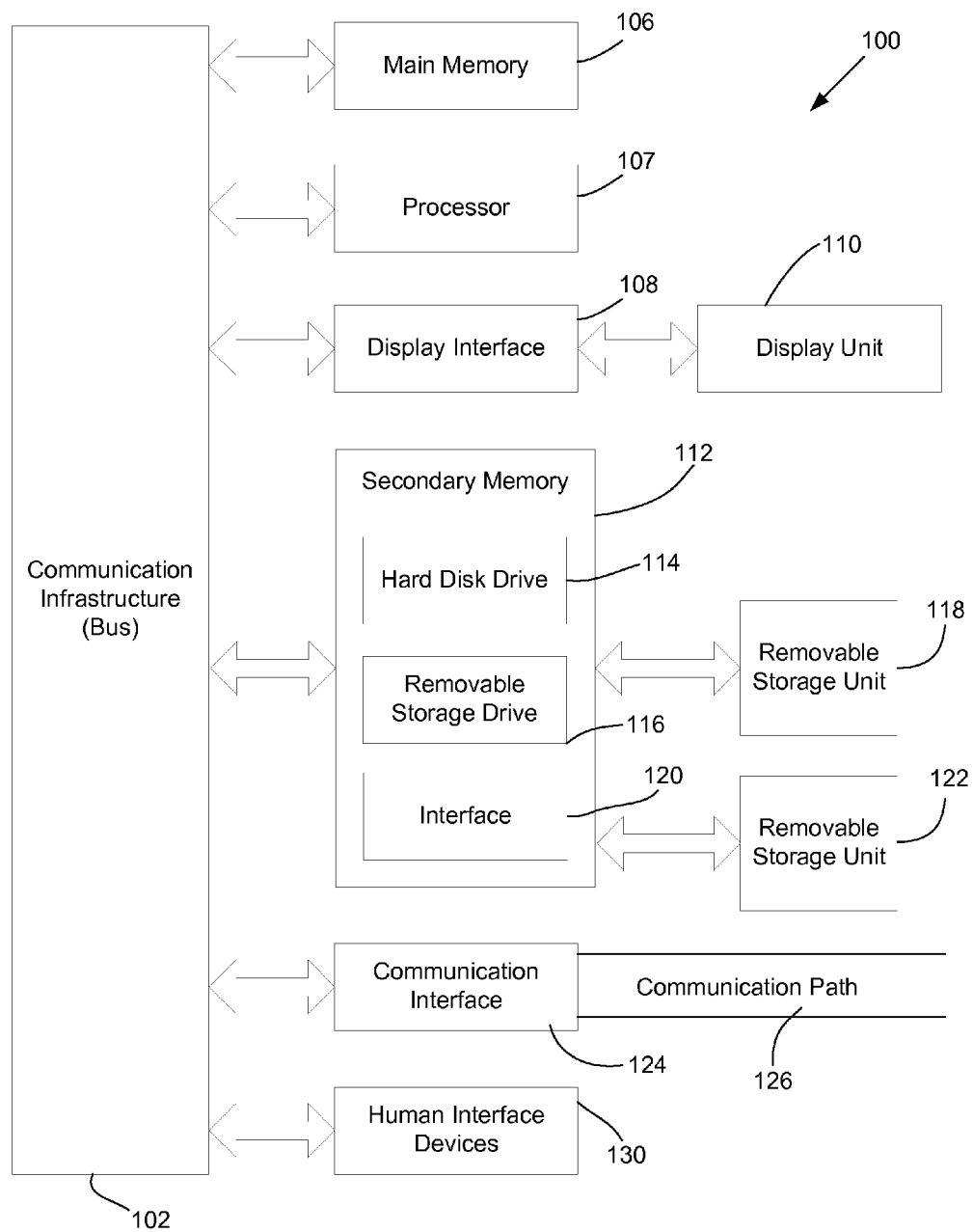


FIGURE 1

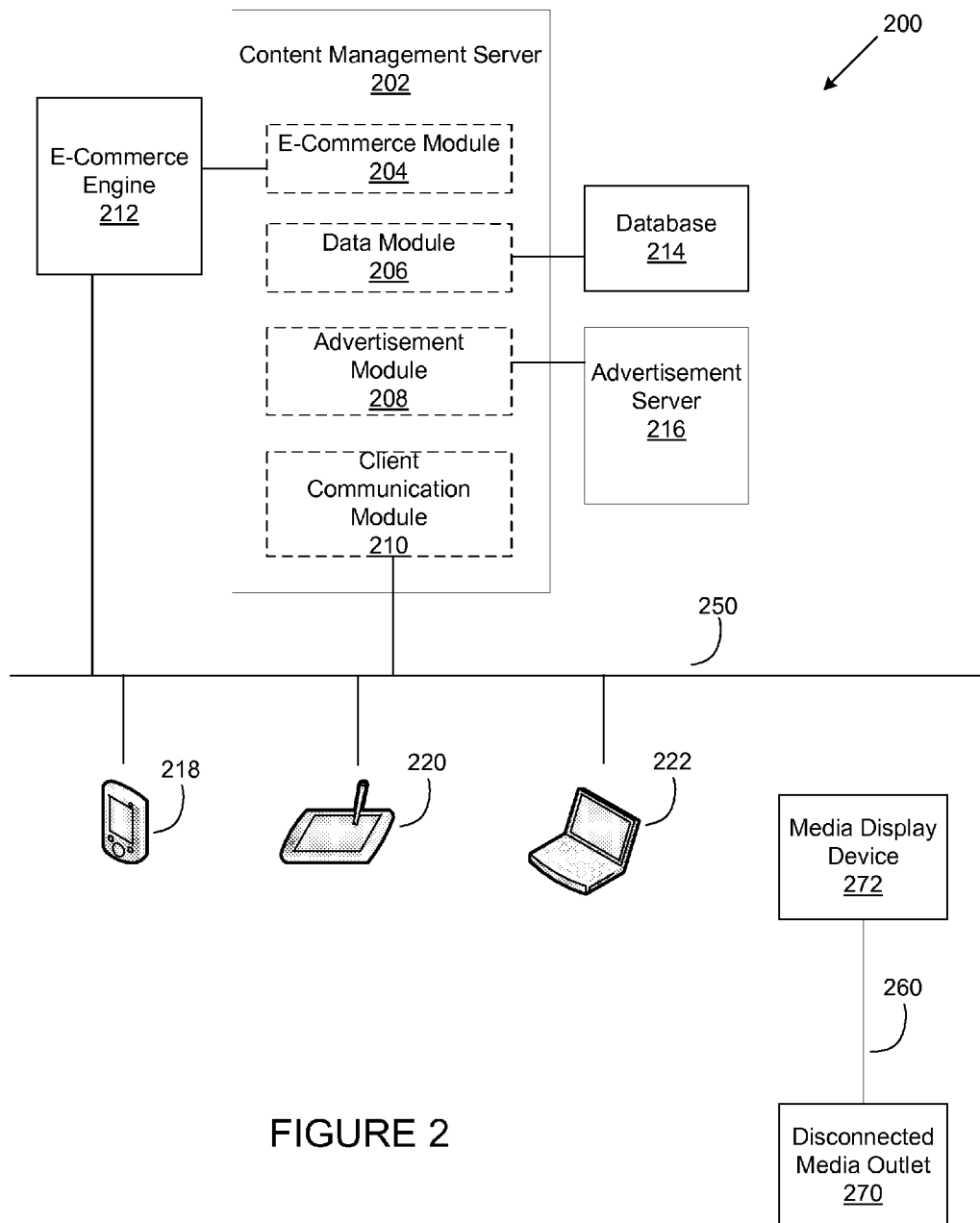


FIGURE 2

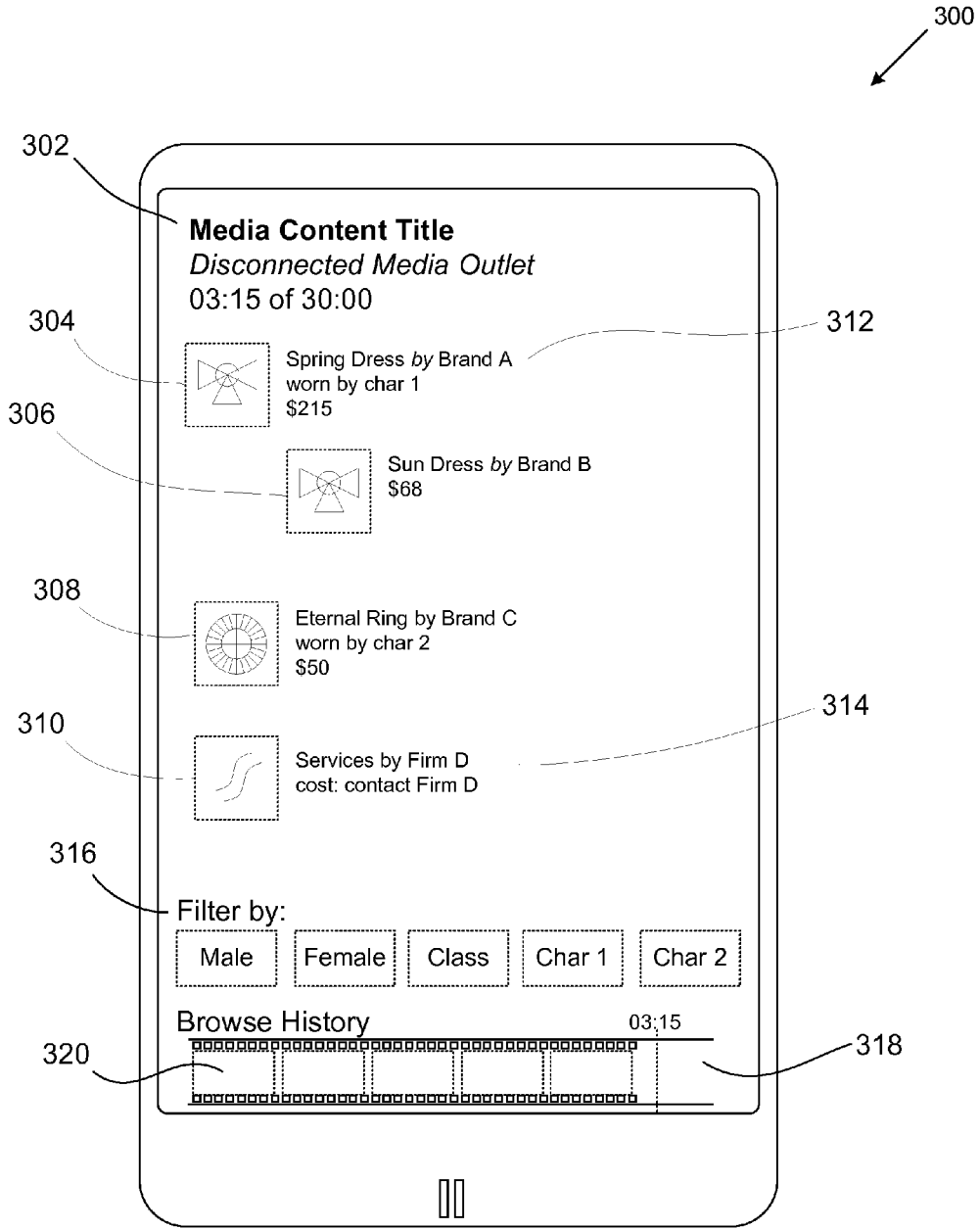


FIGURE 3

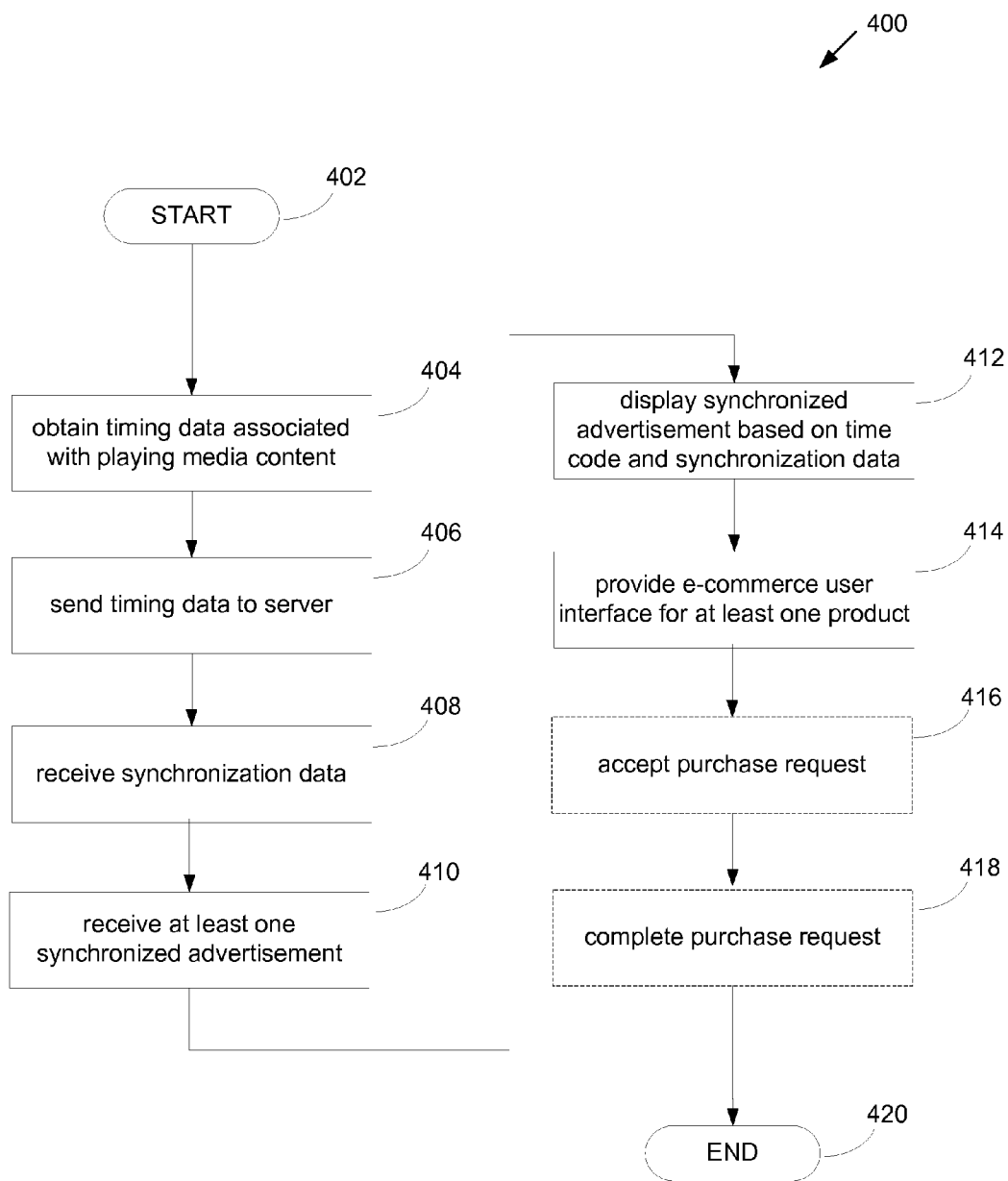


FIGURE 4

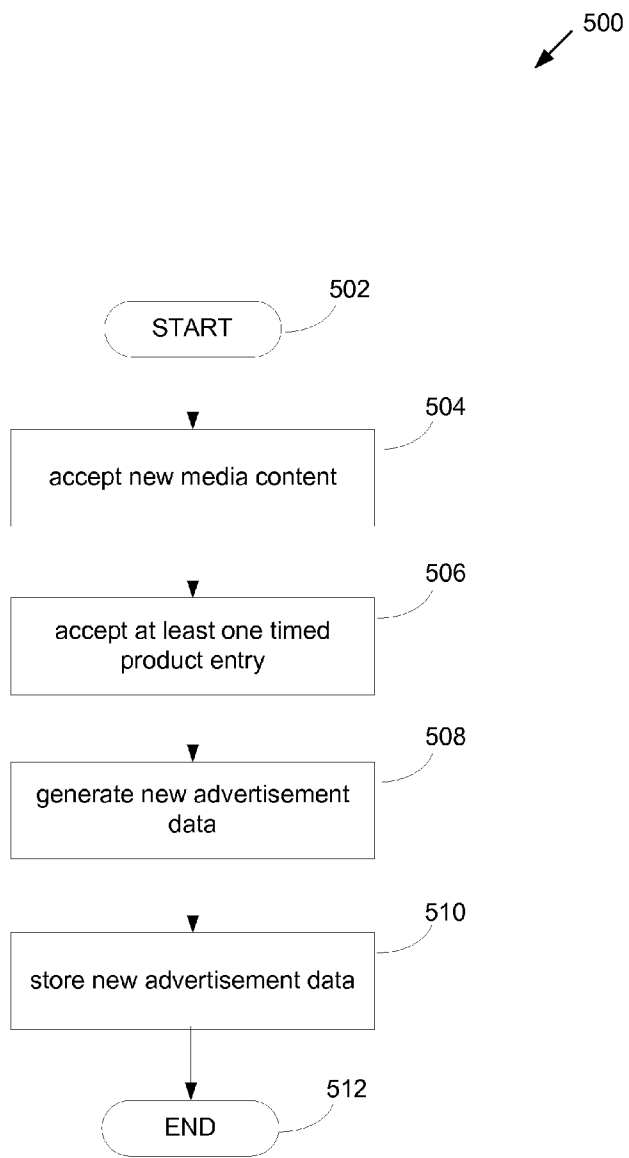


FIGURE 5

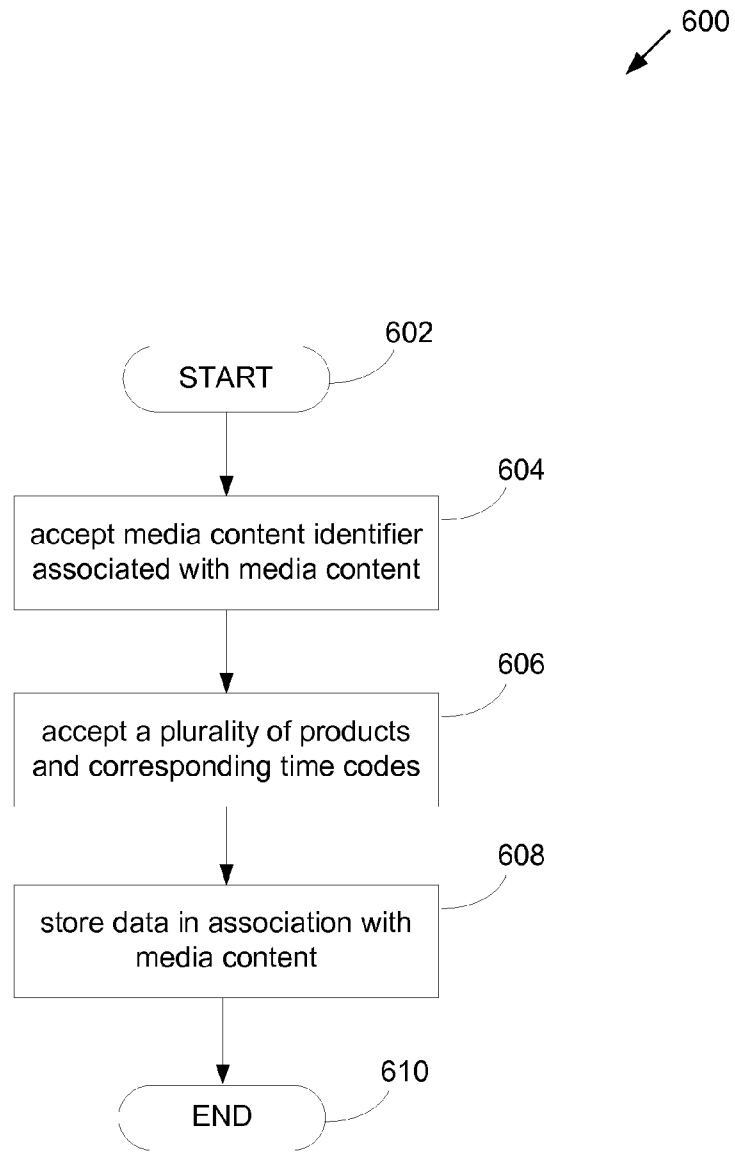


FIGURE 6

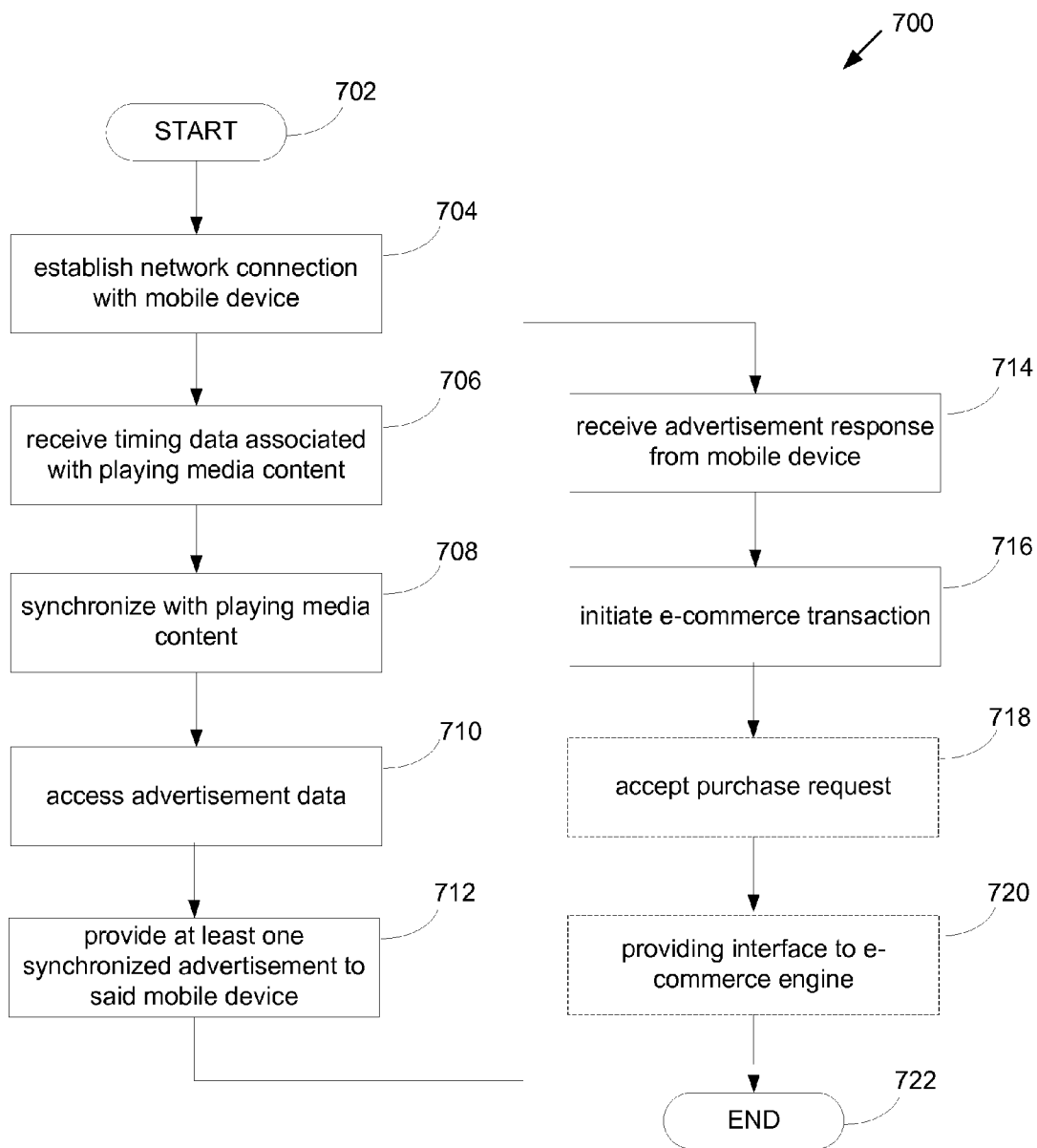


FIGURE 7

**SYSTEMS AND METHODS FOR
SYNCHRONIZING MEDIA AND TARGETED
CONTENT**

[0001] The present application claims priority to U.S. Provisional Application Ser. No. 61/472,436, filed on Apr. 6, 2011 and U.S. Provisional Application Ser. No. 61/472,451, filed on Apr. 6, 2011, all of which are herein incorporated by reference in their entirety for completeness of disclosure.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] Embodiments of the invention described herein pertain to the field of computer systems. More particularly, but not by way of limitation, one or more embodiments of the invention enable systems and methods for synchronizing media and targeted content.

[0004] 2. Description of the Related Art

[0005] Advertisements provided alongside media content are known in the art. However, traditional media content advertising does not offer a point of sale for the advertised products.

[0006] Product placement in media content has been used to further monetize media content. However, it is difficult for viewers of the media content to identify and purchase the advertised products incorporated in media content.

[0007] To overcome the problems and limitations described above there is a need for systems and methods for synchronizing media and targeted content.

BRIEF SUMMARY OF THE INVENTION

[0008] One or more embodiments of systems and methods for synchronizing media and targeted content enable a computing device including at least one processor and a computer-readable medium including computer-readable instructions. In one or more embodiments, the computing device is a mobile device.

[0009] Execution of the computer-readable instructions causes the at least one processor to execute steps including obtaining timing data associated with playing media content associated with a disconnected media outlet. The playing media content may video. In one or more embodiments, the playing media content is selected from scheduled content and pre-recorded content. The disconnected media outlet may be selected from broadcast television, cable television, satellite television, and internet streaming.

[0010] The steps further include sending the timing data over a network to a server. The network may include a cellular network.

[0011] The steps further include receiving synchronization data from the server, where the synchronization data is generated without communication with the disconnected media outlet.

[0012] The steps further include receiving at least one synchronized advertisement, where each synchronized advertisement is associated with a time code associated with the playing media content.

[0013] The steps further include displaying the at least one synchronized advertisement based on the time code and the synchronization data.

[0014] The steps further include providing an e-commerce user interface for at least one product associated with the at least one synchronized advertisement.

[0015] In one or more embodiments, the steps further include accepting a purchase request from a user on the e-commerce user interface, and completing the purchase request over the network.

[0016] The timing data may include current time data, current location data, an identifier associated with the disconnected media outlet, an identifier associated with the playing media content, a start time and/or a current play position associated with the playing media content. In one or more embodiments, the timing data includes an audio sample from the playing media content, and obtaining the timing data includes providing a sampling user interface to a user, and recording the audio sample based on input from the user in the sampling user interface.

[0017] In one or more embodiments, the steps further include providing a media outlet selection user interface, and accepting a media channel selection from the user in the media outlet selection user interface, where the timing data includes the media channel selection.

[0018] In one or more embodiments, the steps further include providing a media content selection user interface, accepting a playing media content selection from the user in the media content selection user interface, and accepting a current play position from the user in the media content selection user interface.

[0019] In one or more embodiments, the at least one synchronized advertisement is displayed based on broadcast syncing and/or manual syncing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] The above and other aspects, features and advantages of the invention will be more apparent from the following more particular description thereof, presented in conjunction with the following drawings wherein:

[0021] FIG. 1 illustrates a general-purpose computer and peripherals that when programmed as described herein may operate as a specially programmed computer capable of implementing one or more methods, apparatus and/or systems of the systems and methods for synchronizing media and targeted content disclosed herein.

[0022] FIG. 2 is a diagram of an exemplary system for synchronizing media and targeted content in accordance with systems and methods for synchronizing media and targeted content disclosed herein.

[0023] FIG. 3 illustrates an exemplary mobile device in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

[0024] FIG. 4 is a flowchart for an exemplary process for requesting synchronized content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

[0025] FIG. 5 is a flowchart for an exemplary process for processing new media and targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

[0026] FIG. 6 is a flowchart for an exemplary process for processing targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

[0027] FIG. 7 is a flowchart for an exemplary process for providing synchronized targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

DETAILED DESCRIPTION

[0028] Systems and methods for synchronizing media and targeted content will now be described. In the following exemplary description numerous specific details are set forth in order to provide a more thorough understanding of embodiments of the invention. It will be apparent, however, to an artisan of ordinary skill that the present invention may be practiced without incorporating all aspects of the specific details described herein. Furthermore, although steps or processes are set forth in an exemplary order to provide an understanding of one or more systems and methods, the exemplary order is not meant to be limiting. One of ordinary skill in the art would recognize that the steps or processes may be performed in a different order, and that one or more steps or processes may be performed simultaneously or in multiple process flows without departing from the spirit or the scope of the invention. In other instances, specific features, quantities, or measurements well known to those of ordinary skill in the art have not been described in detail so as not to obscure the invention. Readers should note that although examples of the invention are set forth herein, the claims, and the full scope of any equivalents, are what define the metes and bounds of the invention.

[0029] As used herein, the term “mobile device” refers to any computing device capable of receiving data over any wireless network, including cellular telephones, smart-phones, PDAs, tablets, laptops, desktop computers, hybrid devices, and any other device capable of receiving data over a wireless network.

[0030] As used herein, the term “wireless network” includes any network including a wireless portion. A wireless network may include cellular networks including cellular data networks, WPAN, WLAN, wireless mesh networks, WMAN, WWAN, and any combination thereof. A wireless network may be communicatively coupled with one or more wired networks, providing access to the wired network/s to one or more mobile devices.

[0031] As used herein, the term “server” refers to any computerized component/s, system/s or entities regardless of form adapted to provide data, files, applications, content, and/or other services to one or more other devices or entities over a network. A server may include distributed elements using systems and methods that are well known in the art.

[0032] As used herein, the term “advertisement” refers to any presentation referring to at least one product that is offered for sale. The presentation may be in any media form, including audio, video, text, graphics, and any combination thereof.

[0033] As used herein, the term “product” refers to any goods, services or combination thereof.

[0034] FIG. 1 diagrams a general-purpose computer and peripherals, when programmed as described herein, may operate as a specially programmed computer capable of implementing one or more methods, apparatus and/or systems of the solution described in this disclosure. Processor **107** may be coupled to bi-directional communication infrastructure **102** such as communication infrastructure system bus **102**. Communication infrastructure **102** may generally be a system bus that provides an interface to the other components in the general-purpose computer system such as processor **107**, main memory **106**, display interface **108**, secondary memory **112** and/or communication interface **124**.

[0035] Main memory **106** may provide a computer readable medium for accessing and executed stored data and

applications. Display interface **108** may communicate with display unit **110** that may be utilized to display outputs to the user of the specially-programmed computer system. Display unit **110** may comprise one or more monitors that may visually depict aspects of the computer program to the user. Main memory **106** and display interface **108** may be coupled to communication infrastructure **102**, which may serve as the interface point to secondary memory **112** and communication interface **124**. Secondary memory **112** may provide additional memory resources beyond main memory **106**, and may generally function as a storage location for computer programs to be executed by processor **107**. Either fixed or removable computer-readable media may serve as Secondary memory **112**. Secondary memory **112** may comprise, for example, hard disk **114** and removable storage drive **116** that may have an associated removable storage unit **118**. There may be multiple sources of secondary memory **112** and systems implementing the solutions described in this disclosure may be configured as needed to support the data storage requirements of the user and the methods described herein. Secondary memory **112** may also comprise interface **120** that serves as an interface point to additional storage such as removable storage unit **122**. Numerous types of data storage devices may serve as repositories for data utilized by the specially programmed computer system. For example, magnetic, optical or magnetic-optical storage systems, or any other available mass storage technology that provides a repository for digital information may be used.

[0036] Communication interface **124** may be coupled to communication infrastructure **102** and may serve as a conduit for data destined for or received from communication path **126**. A network interface card (NIC) is an example of the type of device that once coupled to communication infrastructure **102** may provide a mechanism for transporting data to communication path **126**. Computer networks such Local Area Networks (LAN), Wide Area Networks (WAN), Wireless networks, optical networks, distributed networks, cellular networks, the Internet or any combination thereof are some examples of the type of communication paths that may be utilized by the specially program computer system. Communication path **126** may comprise any type of telecommunication network or interconnection fabric that can transport data to and from communication interface **124**.

[0037] To facilitate user interaction with the specially programmed computer system, one or more human interface devices (HID) **130** may be provided. Some examples of HIDs that enable users to input commands or data to the specially programmed computer may comprise a keyboard, mouse, touch screen devices, microphones or other audio interface devices, motion sensors or the like, as well as any other device able to accept any kind of human input and in turn communicate that input to processor **107** to trigger one or more responses from the specially programmed computer are within the scope of the system disclosed herein.

[0038] While FIG. 1 depicts a physical device, the scope of the system may also encompass a virtual device, virtual machine or simulator embodied in one or more computer programs executing on a computer or computer system and acting or providing a computer system environment compatible with the methods and processes of this disclosure. In one or more embodiments, the system may also encompass a cloud computing system or any other system where shared resources, such as hardware, applications, data, or any other resource are made available on demand over the Internet or

any other network. In one or more embodiments, the system may also encompass parallel systems, multi-processor systems, multi-core processors, and/or any combination thereof. Where a virtual machine, process, device or otherwise performs substantially similarly to that of a physical computer system, such a virtual platform will also fall within the scope of disclosure provided herein, notwithstanding the description herein of a physical system such as that in FIG. 1.

[0039] FIG. 2 is a diagram of an exemplary system for synchronizing media and targeted content in accordance with systems and methods for synchronizing media and targeted content disclosed herein.

[0040] System 200 includes content management server 202. Content management server 202 is configured to provide at least one synchronized advertisement to mobile devices 218-222 over network 250. The advertisements are synchronized to media content currently being played on media display device 272. Network 250 may include Local Area Networks (LAN), Wide Area Networks (WAN), wireless networks, optical networks, distributed networks, cellular networks, the Internet and/or any combination thereof. Content management server 202 may be implemented on one or more computer systems.

[0041] The synchronized advertisements provided by content management server 202 to mobile devices 218-222 are synchronized to media content being displayed on media display device 272 via disconnected media outlet 270. The media content may include any media intended to be played over a set period of time, such as audio content, video content, streaming content, multimedia content slideshow content, or any other media content.

[0042] The media content may include scheduled content, such as a scheduled broadcast, a television show, a radio show, or any other content where the media content is viewable during a scheduled time.

[0043] The media content may also include prerecorded content, including DVR content, streaming content, recorded content, content played from pre-recorded a medium, or any other content where a user initiates the viewing of the media content at a user-determined start time.

[0044] Disconnected media outlet 270 may include any source of media content, including but not limited to broadcast television, cable television, satellite television, and Internet streaming of scheduled content and/or pre-recorded content. The media content is provided to media display device 272 over disconnected media network 260. Disconnected media network 260 may include any broadcast network, television network, cable network, satellite network, wired network, the Internet, or any other network capable of distributing media from a disconnected media outlet 270 to media display device 272.

[0045] Content management server 202 is not communicatively coupled with disconnected media outlet 270, disconnected media network 260 or media display device 272. In one or more embodiments, at least one of disconnected media outlet 270, disconnected media network 260 and media display device 272 may be connected with network 250. However, no communication channel is established and no data is transferred over a network between these disconnected media elements and content management server 202.

[0046] Content management server 202 is communicatively coupled with database 214. Database 214 is configured to store any data in accordance with systems and methods for synchronizing media and targeted content. For example, data-

base 214 may be configured to store consumer information, demographic information, product information, pricing information, media content information, disconnected media outlet information, advertisement information, e-commerce information, transaction information, and any other information relevant to systems and methods for synchronizing media and targeted content. Database 214 may include one or more databases that reside locally or remotely to one or more computer systems implementing content management server 202. In one or more embodiments, portions of data relevant to system 200 may be alternatively managed by one or more other servers, such as advertisement server 216 or e-commerce engine 212, that provide the portions of data to content management server 202. In one or more embodiments, content management server 202 includes data module 206. Data module 206 may be any application, or component thereof, configured to interact with database 214.

[0047] Content management server 202 is communicatively coupled with advertisement server 216. Advertisement server 216 is configured to serve one or more advertisements to mobile devices 218-222. Advertisement server 216 is configured to serve the advertisements in a synchronized manner to media content being currently played on media display device 272. The advertisements may be served directly or through content management server 202. In one or more embodiments, content management server 202 includes advertisement module 208. Advertisement module 208 may be any application, or component thereof, configured to interact with advertisement server 216. One or more systems implementing one or more components of content management server 202 may also implement one or more components of advertisement server 216.

[0048] Content management server 202 is communicatively coupled with e-commerce engine 212. E-commerce engine 212 is configured to receive and process e-commerce transactions requested by mobile devices 218-222. An e-commerce transaction may be requested in response to a synchronized advertisement. E-commerce engine 212 may handle any e-commerce function and data, including shipping, payment authorization, payment information, and any other e-commerce function. E-commerce engine 212 may interact directly with mobile devices 218-222 or indirectly through content management server 202. In one or more embodiments, content management server 202 includes e-commerce module 204. E-commerce module 204 may be any application, or component thereof, configured to interact with e-commerce engine 212. One or more systems implementing one or more components of content management server 202 may also implement one or more components of e-commerce engine 212.

[0049] In one or more embodiments, content management server 202 includes client communication module 210. Client communication module 210 may be any application, or component thereof, configured to handle communication with mobile devices 218-222, including any communication required to enable functionality of e-commerce module 204 and/or advertisement module 208.

[0050] FIG. 3 illustrates an exemplary mobile device in accordance with the systems and methods for synchronizing media and targeted content disclosed herein.

[0051] Mobile device 300 is configured to receive and display one or more synchronized advertisements 304-310 for

one or more products that are associated with one or more segments of media content being currently played on a disconnected display device.

[0052] Mobile device **300** may be configured to display media content information **302** corresponding to the playing media content. Media content information **302** may include playing media content title, playing media content duration, playing media content scheduling information, media outlet information corresponding to a source of the media content, a current play position, other timing data, and any other data associated with the playing media content.

[0053] In one or more embodiments, synchronized advertisements **304-310** correspond to product appearing in the playing media content. A synchronized advertisement may be associated with a time code of the playing media content. As used herein, the term “time code” refers to any data identifying a single time, a range of time, or a segment with respect to the playing media content. A synchronized advertisement may be displayed on mobile device **300** for a predetermined duration, a time range, or a segment. Furthermore, a synchronized advertisement may be associated with one or more time codes such that a synchronized advertisement may be displayed one or more times over the duration of the playing media content.

[0054] Synchronized advertisements **304-310** may include product descriptions **312-314**. Product descriptions **312-314** may include information associated with one or more goods and/or services, including but not limited to name, product line, brand, pricing, and other information associated with the product offered in synchronized advertisements **304-310**. Product descriptions **312-314** may further include contextual information regarding the appearance of the associated product in the playing media content. Exemplary products that may be associated with synchronized advertisements **304-310** include clothing, makeup, accessories, vehicles, furniture, events, venues, services, and any other product that may be associated with media content.

[0055] In one or more embodiments, one or more alternative products may be offered in a synchronized advertisement, such as synchronized advertisement **306**. The alternative product may offer goods or services that are similar to a product appearing in the playing media content. The alternative product may be in a different pricing range and/or directed to a different demographic, such as a political group, ideological group, age group, gender group, interest group, cultural group, geographic group, or any other demographic.

[0056] Synchronized advertisements **304-310** may be made available for purchase through mobile device **300**, such as through an e-commerce user interface. Alternatively, one or more synchronized advertisements, such as synchronized advertisement **310**, may display product information without offering a product for sale via an e-commerce transaction.

[0057] In one or more embodiments, a filtering user interface **316** may be provided on mobile device **300**. Filtering user interface **316** allows a user to filter synchronized advertisements **304-310** using one or more filters. For example, the filters may filter by demographic classification, such as a political group, ideological group, age group, gender group, interest group, cultural group, geographic group or any other demographic. The filters may also be determined based on the context of the playing media content, such as by character, location, family, or any context specific to the playing media content.

[0058] In one or more embodiments, a browsing user interface **318** may be provided on mobile device **300**. Browsing user interface **318** allows a user to browse the playing media content and/or synchronized advertisements **304-310** that have previously appeared or that will appear over the duration of the playing media content. In one or more embodiments, browsing user interface **318** allows a user to pause, adjust, skip forward, skip backward or otherwise change the current play position. For example, a user may pause the current play position through browsing user interface **318** when the user pauses the playing media content on the media display device. Browsing user interface **318** may further include one or more visual cues **320** associated with a time code of the playing media content. In one or more embodiments, non-visual cues, such as segment number, start times, other timing information, seeing information, or other information may also be used.

[0059] FIG. 4 is a flowchart for an exemplary process for requesting synchronized content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein. In one or more embodiments, process **400** is performed by a client device, such as a mobile device. Process **400** begins at step **402**.

[0060] Processing continues to step **404**, where timing data associated with playing media content is obtained. The playing media content is associated with the disconnected media outlet. The timing data may include current time data, an identifier associated with the disconnected media outlet, an identifier associated with the playing media content, a start time, and/or a current play position associated with the playing media content. In one or more embodiments, the timing data includes manual data entered by a user into the mobile device. The timing may include an audio sample from the playing media content.

[0061] Processing continues to step **406**, where the timing data is sent over a network to a server.

[0062] Processing continues to step **408**, where synchronization data is received from the server. The synchronization data is generated without communication from the disconnected media outlet. In one or more embodiments, the synchronization data is generated by the server based on the timing data. Synchronizing with the playing media content based on the timing data may include acoustic fingerprint syncing based on the audio sample. Synchronizing with the playing media may be performed based on broadcast syncing and/or manual syncing.

[0063] In manual syncing, a user is offered a user interface on the mobile device to activate at the beginning of the playing media content. Synchronized advertisements are displayed based on the time elapsed from the time the user pressed the button, which corresponds to an estimated current play position. In manual syncing, a user may also be given interface to select a current play position, such as the interface described in FIG. 3.

[0064] In broadcast syncing, a user is offered a user interface on the mobile device to select a media outlet selection. The playing media content is determined based on the media it Show that is currently broadcast, such as through broadcast television, cable television, satellite television. Advertisements are displayed based on the media outlet selection and time zone data, which may be determined automatically based on location information. An estimated current play position may be determined based on the media outlet selec-

tion and sent to scheduling information on the media content scheduled to currently playing on the selected media outlet.

[0065] In acoustic fingerprint syncing, a short audio sample is recorded on the mobile device. The short audio sample is recorded using a device in the proximity of the media display device that is showing the playing media content. In one or more embodiments, the sample is matched to identify the playing media content based on a database of acoustic fingerprint data. In one or more embodiments, the sample is used to estimate the current play position.

[0066] Processing continues to step **410**, where at least one synchronized advertisement is received. Each synchronized advertisement is associated with at least one time code associated with the playing media content. The time code may identify a single time, a range of time, or a segment with respect to the playing media content. In one or more embodiments, the at least one synchronized advertisement is received from an advertisement server.

[0067] Processing continues to step **412**, where a synchronized advertisement is displayed based on the time code and synchronization data.

[0068] Processing continues to step **414**, where an e-commerce user interface is provided for at least one product associated with at least one synchronized advertisement.

[0069] Processing continues to optional step **416**, where a purchase request from a user of the e-commerce user interface is accepted.

[0070] Processing continues to optional step **418**, where the purchase request is completed over the network. In one or more embodiments, the purchase request is completed with an e-commerce engine.

[0071] Processing continues to step **420**, where process **400** terminates.

[0072] FIG. 5 is a flowchart for an exemplary process for processing new media and targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein. Process **500** begins at step **502**.

[0073] Processing continues to step **504**, where new media content is accepted from the user device. The new media content may be accepted as an identifier that identifies new media content that is accessible over a network. The new media content may also be a complete media file. In one or more embodiments, the new media content is user generated content. The new media content may be content that is generated and recorded by the user device. The user device may refer to mobile devices to which synchronized advertisements are provided. Alternatively, the user device may refer to any computing device that may be configured to upload new media content information in accordance with systems and methods for synchronizing media and targeted content.

[0074] Processing continues to step **506**, where at least one time product entry is accepted from the user device. The at least one time product entry includes new time code data and a product identifier. The product identifier identifies one or more goods, services, or combination thereof. The new time code data may identify a single time, a range of time, or a segment of the new media content that is associated with the product entry. Multiple new time codes may be associated with a single product entry.

[0075] Processing continues to step **508**, where new advertisement data is generated based on the new time code data and the product identifier.

[0076] Processing continues to step **510**, where the new advertisement data is stored in association with the new media content.

[0077] Processing continues to step **512**, where process **500** terminates.

[0078] FIG. 6 is a flowchart for an exemplary process for processing targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein. Process **600** begins at step **602**.

[0079] Processing continues to step **604**, where a media content identifier associated with a selected media content is accepted. The media content identifier may include any name, web address, ISBN, serial number, product tag, or any other identifier that uniquely identifies the selected media content.

[0080] Processing continues to step **706**, where a plurality of products and corresponding time codes associated with the selected media content are accepted. The time code data may identify a single time, a range of time, or a segment of the selected media content that is associated with the product entry. Multiple time codes may be associated with a single product.

[0081] Processing continues to step **708**, where the plurality of products and corresponding time codes are stored in association with the selected media content.

[0082] Processing continues to step **710**, where process **700** terminates.

[0083] FIG. 7 is a flowchart for an exemplary process for providing synchronized targeted content in accordance with the systems and methods for synchronizing media and targeted content disclosed herein. In one or more embodiments, process **700** is performed by a server device, such as a content management server. Process **700** begins at step **702**.

[0084] Processing continues to step **704**, where a network connection is established with a mobile device.

[0085] Processing continues to step **706**, where timing data associated with playing media content is received from the mobile device. The playing media content is associated with a disconnected media outlet. The timing data may include current time data, an identifier associated with the disconnected media outlet, an identifier associated with the playing media content, a start time, and/or a current play position associated with the playing media content. In one or more embodiments, the timing data includes manual data entered by a user into the mobile device. The timing may include an audio sample from the playing media content.

[0086] Processing continues to step **708**, which involve synchronizing with the playing media content based on the timing data. The synchronization is performed based on the timing data without communication from the disconnected media outlet. Synchronizing with the playing media content based on the timing data may include acoustic fingerprint syncing based on the audio sample. Synchronizing with the playing media content based on the timing data may be performed based on broadcast syncing and/or manual syncing.

[0087] Processing continues to step **710**, where advertisement data associated with the playing media content is accessed. The advertisement data may reside on a local or remote database, and may be accessed directly or via an advertisement server.

[0088] Processing continues to step **712**, where at least one synchronized advertisement is provided to the mobile device in synchronized time. Each synchronized advertisement is associated with a time code associated with the playing media content. The time code may identify a single time, a range of

time, or a segment with respect to the playing media content. A synchronized advertisement may be associated with one or more time codes. In one or more embodiments, the synchronized advertisement is provided in synchronized time by providing the synchronized advertisement at about the time associated with the time code. Cue time syncing may be performed by entering cue times for each of the products being sold using the system. Synchronized advertisements are delivered based on that cue time, which is based on the current play position detected. Alternatively, the synchronized advertisement is provided any period before the associated time code will be reached in the playing media content. In this case, the mobile device may determine the proper timing to display the synchronized advertisement based on the time code and synchronization data determined by the server.

[0089] Processing continues to step **714**, where an advertisement response is received from the mobile device. The advertisement response is associated with a selected advertisement, which is selected from the at least one synchronized advertisement.

[0090] Processing continues to step **716**, where an e-commerce transaction is initiated based on the advertisement response.

[0091] Processing continues to optional step **718**, where a purchase request is accepted from the mobile device.

[0092] Processing continues to optional step **720**, where an interface to an e-commerce engine is provided to complete the purchase request.

[0093] Processing continues to step **722**, where process **700** terminates.

[0094] While the invention herein disclosed has been described by means of specific embodiments and applications thereof, numerous modifications and variations could be made thereto by those skilled in the art without departing from the scope of the invention set forth in the claims.

What is claimed is:

1. A computing device comprising at least one processor and a computer-readable medium comprising computer-readable instructions, wherein execution of said computer-readable instructions causes said at least one processor to execute steps comprising:

- obtaining timing data associated with playing media content associated with a disconnected media outlet;
- sending said timing data over a network to a server;
- receiving synchronization data from said server, wherein said synchronization data is generated without communication with said disconnected media outlet;
- receiving at least one synchronized advertisement, wherein each synchronized advertisement is associated with a time code associated with said playing media content;
- displaying said at least one synchronized advertisement based on said time code and said synchronization data; and

providing an e-commerce user interface for at least one product associated with said at least one synchronized advertisement.

2. The computing device of claim **1**, wherein said computing device is a mobile device.

3. The computing device of claim **1**, wherein said network comprises a cellular network.

4. The computing device of claim **1**, wherein said steps further comprise:

- accepting a purchase request from a user on said e-commerce user interface; and
- completing said purchase request over said network.

5. The computing device server of claim **1**, wherein said playing media content comprises video.

6. The computing device of claim **1**, wherein said disconnected media outlet is selected from broadcast television, cable television, satellite television, and internet streaming.

7. The computing device of claim **1**, wherein said playing media content is selected from scheduled content and pre-recorded content.

8. The computing device of claim **1**, wherein said timing data comprises current time data.

9. The computing device of claim **1**, wherein said timing data comprises current location data.

10. The computing device of claim **1**, wherein said timing data comprises an identifier associated with said disconnected media outlet.

11. The computing device of claim **1**, wherein said timing data comprises an identifier associated with said playing media content.

12. The computing device of claim **1**, wherein said timing data comprises a start time.

13. The computing device of claim **1**, wherein said timing data comprises a current play position associated with said playing media content.

14. The computing device of claim **1**, wherein obtaining said timing data comprises:

- providing a media outlet selection user interface; and
- accepting a media channel selection from said user in said media outlet selection user interface, wherein said timing data comprises said media channel selection.

15. The computing device of claim **1**, wherein obtaining said timing data comprises:

- providing a media content selection user interface;
- accepting a playing media content selection from said user in said media content selection user interface; and
- accepting a current play position from said user in said media content selection user interface.

16. The computing device of claim **1**, wherein said timing data comprises an audio sample from said playing media content, and wherein obtaining said timing data comprises:

- providing a sampling user interface to a user; and
- recording said audio sample based on input from said user in said sampling user interface.

17. The computing device of claim **1** wherein said at least one synchronized advertisement is displayed based on broadcast syncing.

18. The computing device of claim **1**, wherein said at least one synchronized advertisement is displayed based on manual syncing.

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