



US 20120116871A1

(19) **United States**(12) **Patent Application Publication****Reis et al.**(10) **Pub. No.: US 2012/0116871 A1**(43) **Pub. Date: May 10, 2012**(54) **SOCIAL OVERLAYS ON ADS****Publication Classification**

(75) Inventors: **Davi Reis**, Belo Horizonte (BR); **Christian Oestlien**, New York, NY (US); **Eider Silva de Oliveira**, Belo Horizonte (BR); **Marcus A. Leal**, Rio de Janeiro (BR); **Amy Wu**, Sunnyvale, CA (US); **Brandon Percy**, Cupertino, CA (US); **Nathan Lucash**, San Francisco, CA (US); **Igor P. Soares**, Belo Horizonte (BR); **Rafael M. Borges**, Belo Horizonte (BR)

(73) Assignee: **GOOGLE INC.**, Mountain View, CA (US)

(21) Appl. No.: **12/940,849**

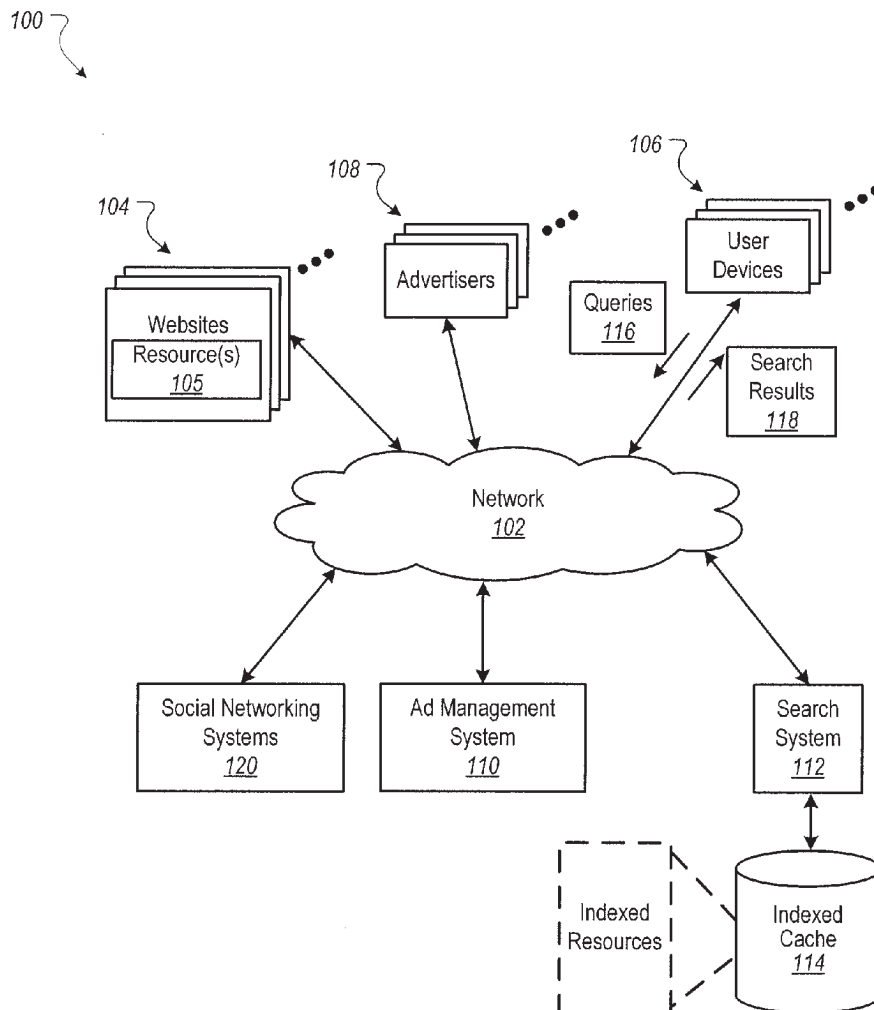
(22) Filed: **Nov. 5, 2010**

(51) **Int. Cl.**  
**G06Q 30/00** (2006.01)

(52) **U.S. Cl.** ..... **705/14.49**

(57) **ABSTRACT**

Methods, systems, and apparatus, including computer programs encoded on a computer-readable storage medium, for providing a user interaction point on a user device in conjunction with content that is provided by a content publisher. A method includes receiving a request for an advertisement to be displayed in a slot associated with a third-party content site; identifying a relevant advertisement to be provided in the slot; determining information to be included in an annotation associated with the advertisement, the annotation including customized information related to the user or a group associated with the user; and providing the advertisement responsive to the request including providing the annotation for presentation along with the relevant advertisement.



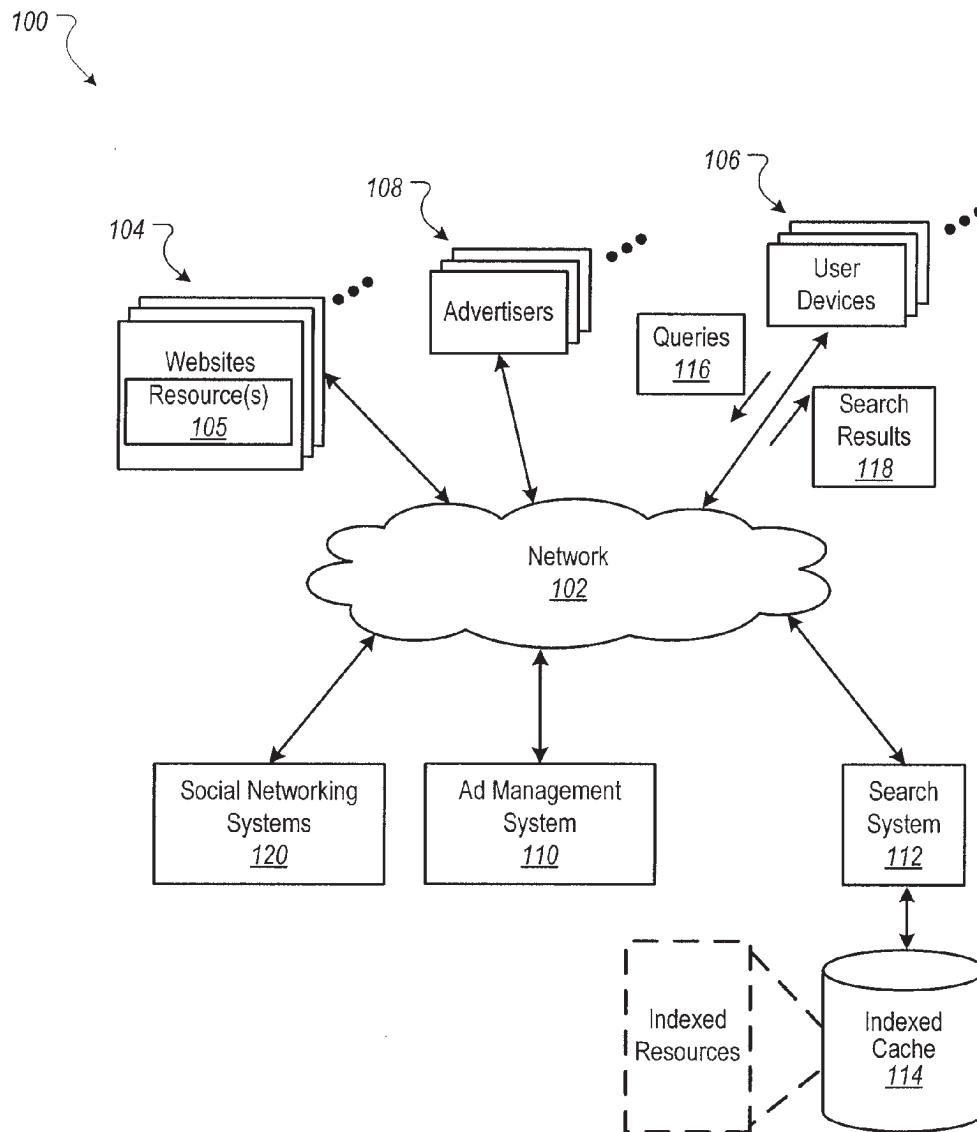


FIG. 1

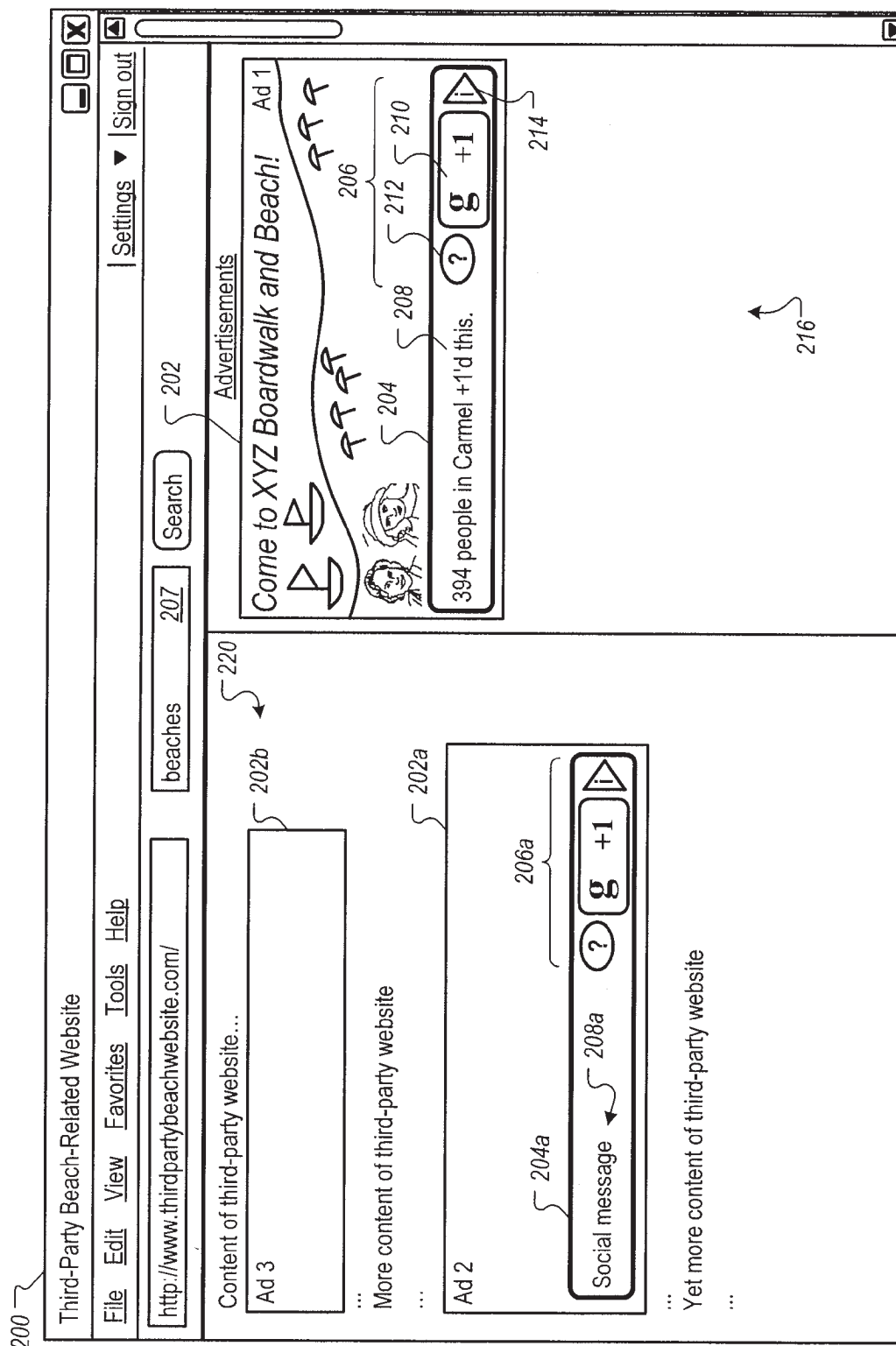


FIG. 2

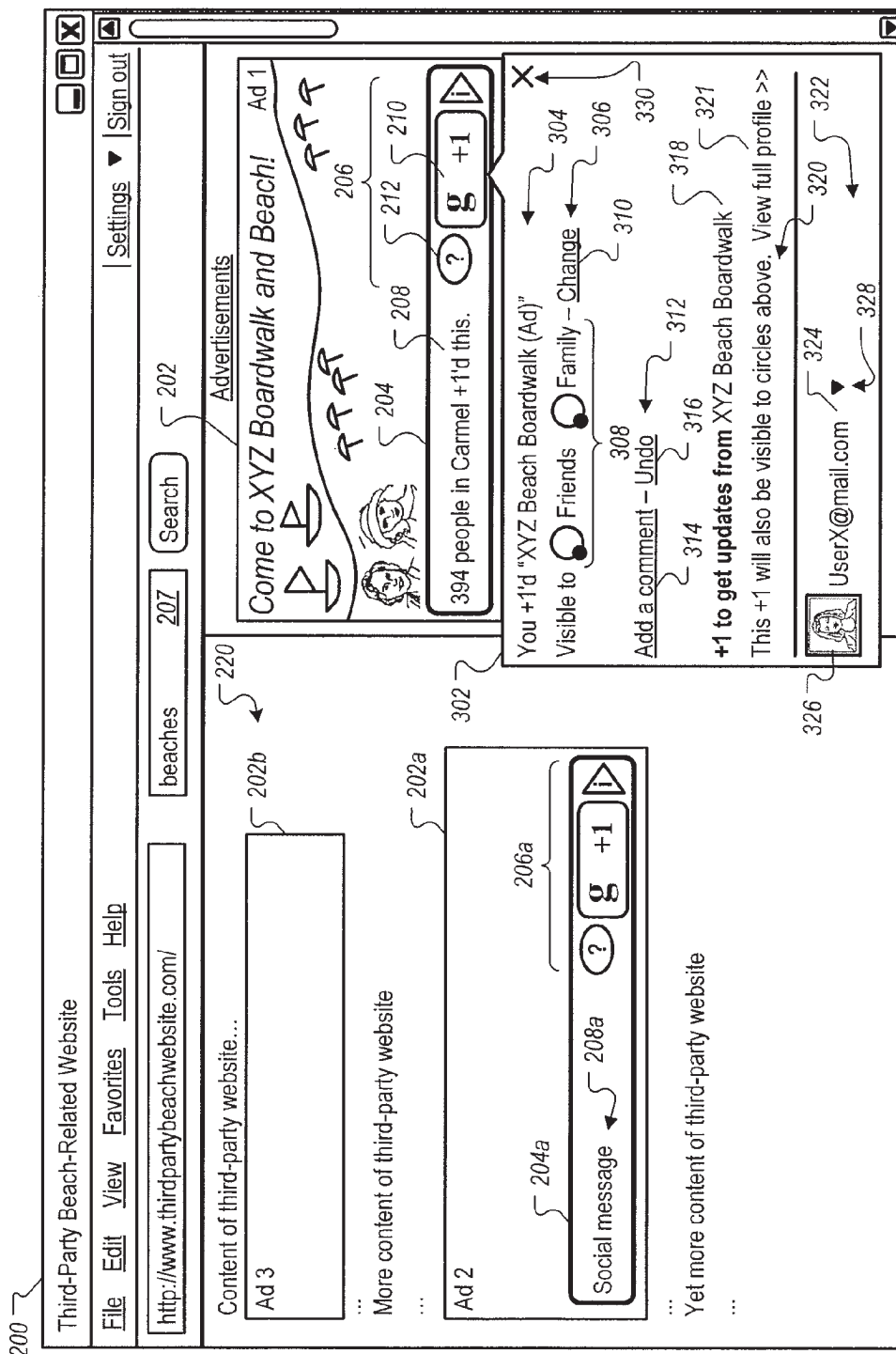


FIG. 3

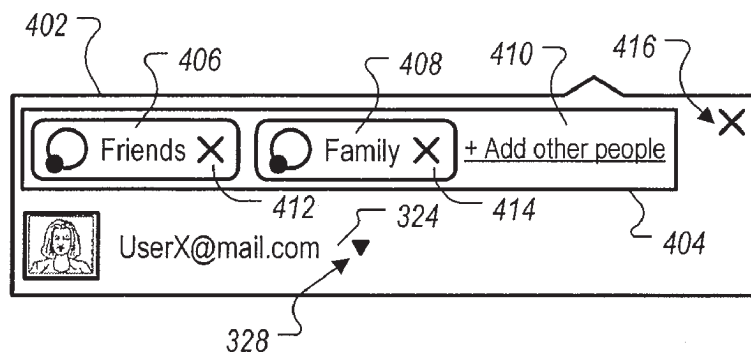


FIG. 4

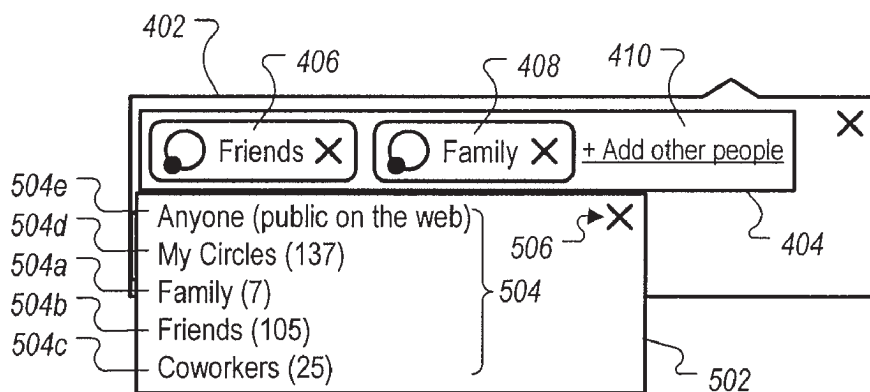


FIG. 5

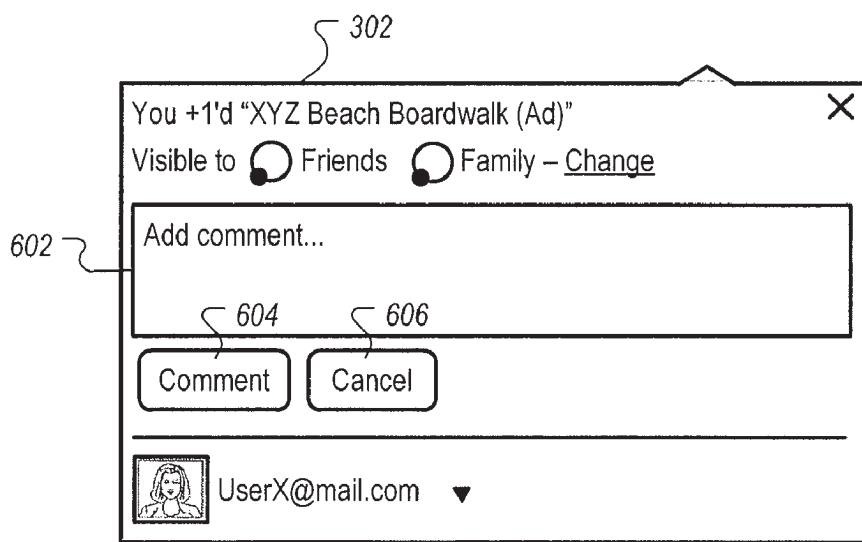


FIG. 6

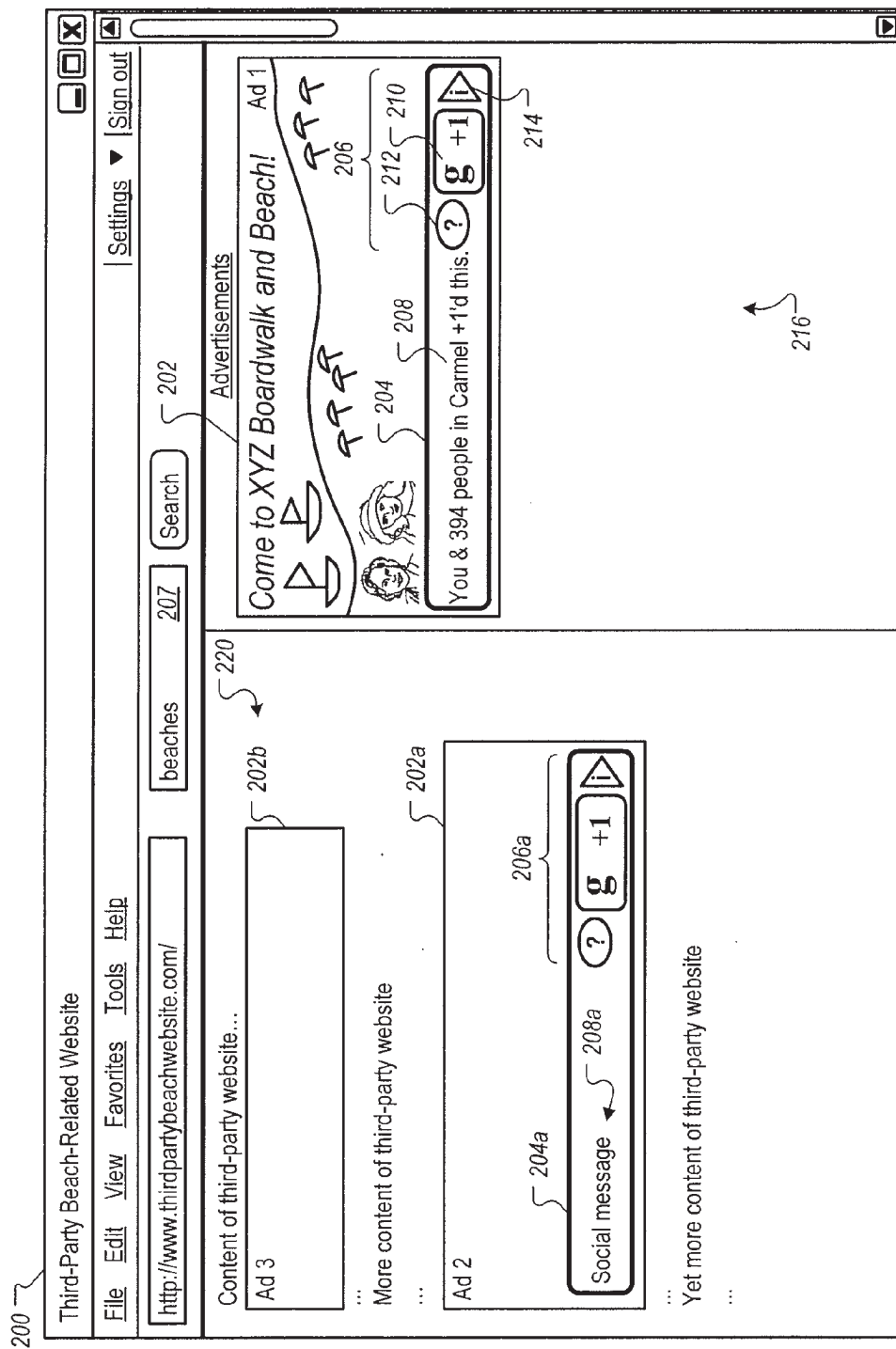


FIG. 7

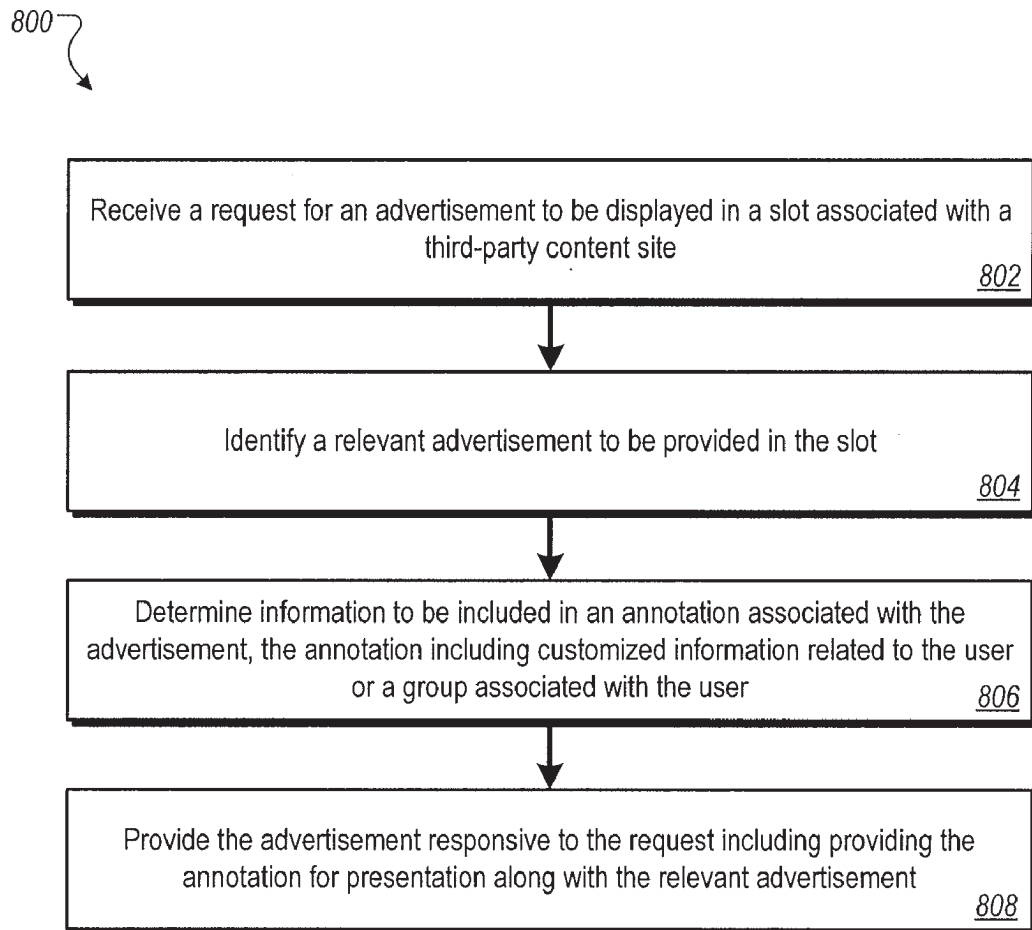


FIG. 8

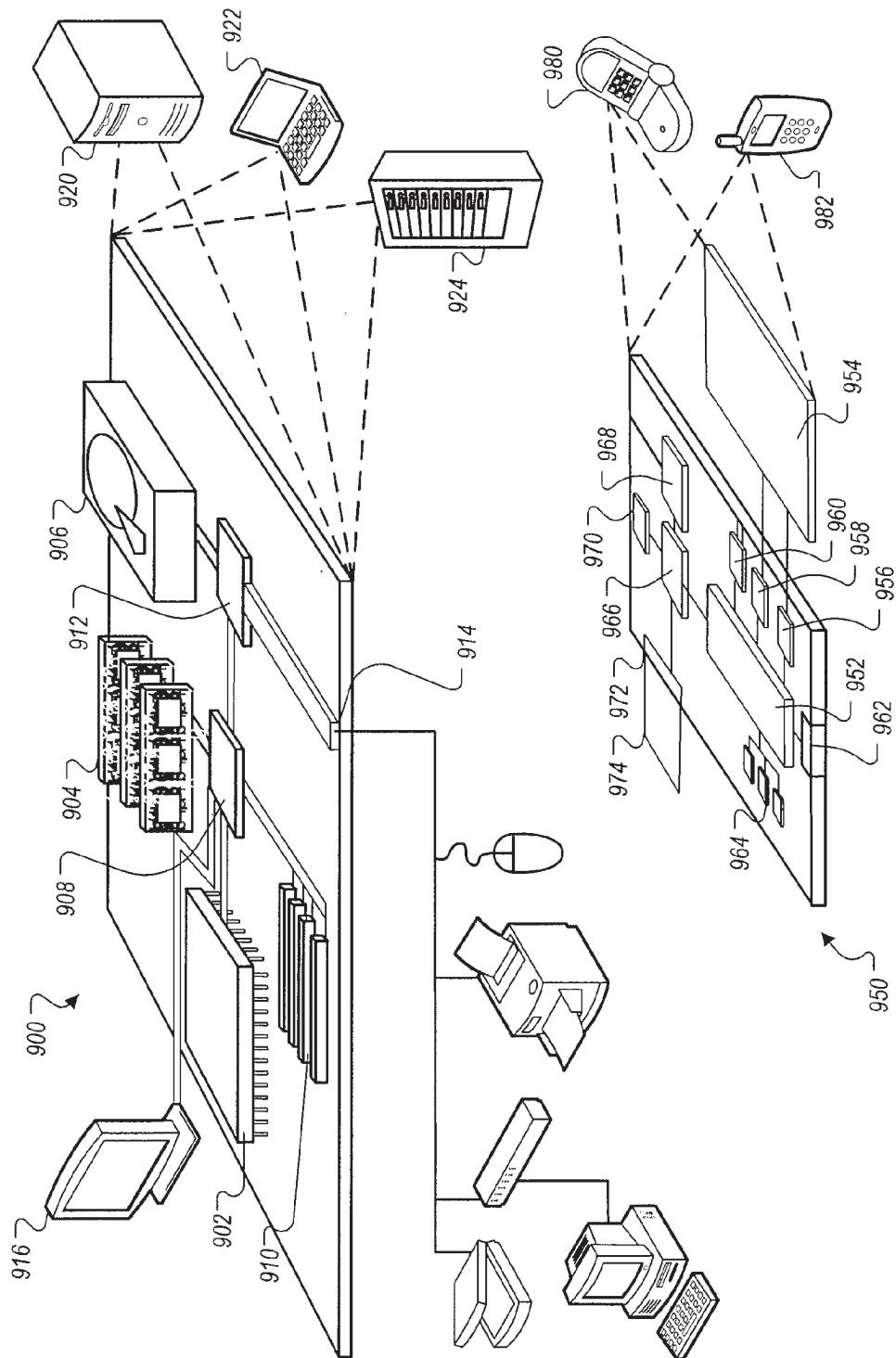


FIG. 9



## SOCIAL OVERLAYS ON ADS

### BACKGROUND

**[0001]** This specification relates to information presentation.

**[0002]** The Internet provides access to a wide variety of resources. For example, video and/or audio files, as well as web pages for particular subjects or particular news articles, are accessible over the Internet. Access to these resources presents opportunities for advertisements to be provided with the resources. For example, a web page can include advertisement slots in which advertisements can be presented. These advertisements slots can be defined in the web page or defined for presentation with a web page, for example, in a pop-up window.

**[0003]** Advertisement slots can be allocated to advertisers through an auction. For example, advertisers can provide bids specifying amounts that the advertisers are respectively willing to pay for presentation of their advertisements ("ads"). In turn, an auction can be performed and the advertisement slots can be allocated to advertisers according, among other things, to their bids and/or the relevance of the advertisement to content presented on a page hosting the slot or a request that is received for the advertisement.

### SUMMARY

**[0004]** In general, one innovative aspect of the subject matter described in this specification can be implemented in methods that include a method for providing a user interaction point on a user device in conjunction with content that is provided by a content publisher. The method comprises: receiving a request for an advertisement to be displayed in a slot associated with a third-party content site; identifying a relevant advertisement to be provided in the slot; determining information to be included in an annotation associated with the advertisement, the annotation including customized information related to the user or a group associated with the user; and providing the advertisement responsive to the request including providing the annotation for presentation along with the relevant advertisement.

**[0005]** These and other implementations can each optionally include one or more of the following features. Determining information to be included in the annotation can include determining message content to be included in the annotation. The message content can include an indicator of a number of users in a user's group that had a favorable response to the advertisement. The user's group can be a social circle. The message content can include an indicator of which members of the user's group had a favorable response to the advertisement. Providing the advertisement can include providing the annotation as an overlay to the advertisement. The annotation can include an information portion and a control, the control for enabling the user to re-publish the advertisement to one or more members of the user's groups. The groups can be selected from the groups comprising a social circle, family, friends, work groups, or other particularly identified groups. The control can enable the user to re-publish the advertisement to others that are not members of the user's groups. The control can enable a user to re-publish the advertisement along with a message. The message can be provided by the user. The message can indicate that the advertisement has been re-published by the user. The message can indicate that

the user and a number of other users have re-published the advertisement. The other users can be within a predetermined proximity of the user. The message can include two portions, a first portion that indicates who has re-published the advertisement and a second portion with specific comments or users that re-published the advertisement. The method can further comprise receiving a comment from the user to be published in the annotation. The method can further comprise providing the annotation along with the comment when re-publishing the advertisement. The method can further comprise receiving a request to re-publish the advertisement to one or more other users and re-publishing the advertisement to the one or more other users including providing a second different annotation along with the re-published advertisement. Re-publishing the advertisement can include determining a message for inclusion in the second different annotation. The message can include an indication that the user has re-published the advertisement and including any comments provided by the user.

**[0006]** Particular implementations may realize none, one or more of the following advantages. For example, a user can see the reaction to ads by other users in a social network. In another example, a user can re-publish and comment upon ads in a social network. Re-published ads can be made available to other users in the user's group (e.g., social network).

**[0007]** The details of one or more implementations of the subject matter described in this specification are set forth in the accompanying drawings and the description below. Other features, aspects, and advantages of the subject matter will become apparent from the description, the drawings, and the claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0008]** FIG. 1 is a block diagram of an example environment that provides social overlays on ads.

**[0009]** FIG. 2 shows an example user interface that includes an ad with a social overlay and a control for re-publishing the ad.

**[0010]** FIG. 3 shows an example details popup for providing detailed information for re-publishing an ad.

**[0011]** FIG. 4 shows an example visibility change popup for changing visibility settings for re-publishing an ad.

**[0012]** FIG. 5 shows an example groups selection list for displaying selectable visibility groups.

**[0013]** FIG. 6 shows an example add comment box for sharing a comment on an ad.

**[0014]** FIG. 7 shows the example user interface of FIG. 2 with the social overlay that is updated to indicate that the user has re-published the ad.

**[0015]** FIG. 8 is a flowchart of an example process for providing a user interaction point on a user device in conjunction with content that is provided by a content publisher.

**[0016]** FIG. 9 is block diagram of an example computer system that can be used to implement the methods, systems and processes described in this disclosure.

**[0017]** Like reference numbers and designations in the various drawings indicate like elements.

### DETAILED DESCRIPTION

**[0018]** When a user requests on-line content (e.g., a web page or another online resource), content requests can be initiated to request content from a content publisher for presentation on a user device. For example, content publishers

can include publishers of web sites or search engines that are publishing search results responsive to a query. One or more additional content items (e.g., ads) can be provided along with the requested content. As a result, the presented content can be, for example, text, images, audio, video, advertisements (or ads) or other content selected for presentation to the user. In response to each content request received, content can be served, including one or more ads. In some implementations, some ads can include a social component or context.

**[0019]** For example, an ad that is served can include a social overlay that includes social information and tools for propagating social information to others. As a result, users can re-publish ads to others, including friends and family. For example, an ad with associated comments can be presented as an update to a social application activity stream of the user, to activity streams of friends and family, and/or activity streams of one or more groups associated with the user. By re-publishing an ad, a user can make his preferences known, including providing comments for specific ads, and the comments can be handled in a structured way. By providing the ability for users to annotate and comment upon ads within a social context, ads can be more interesting to users and their social contacts. As a result, more user attention can be captured by the ads, which can result in higher click-through-rates and overall ad effectiveness. Another use and benefit of the social overlays on ads is the ability to capture user feedback. Advertisers can capture information (e.g., ad-re-publishing statistics, etc.) for ads in order to gauge the quality of their ads, the effectiveness of ad campaigns, and the popularity of certain product brands that are featured in ads.

**[0020]** In some implementations, a widget (e.g., a graphical user interface control) can be overlaid on an ad creative that is displayed to Internet users, such as on a third-party web site. The widget can show social annotations that provide information about the specific ad that is being displayed. This information can include, for example, the number of users who liked or that have interacted with the ad, the number of users in a certain geographic region who re-published the ad, and the name of a user's friend who liked an ad, and so on. The widget can also include buttons or other controls that allow the user to designate (i.e., the user likes the ad or the user wants to share or re-publish the ad), and comment on a given ad, and, in some implementations, follow an advertiser (e.g., an advertiser's profile) in a social network.

**[0021]** Although the examples in this disclosure focus primarily on social overlays used on advertisements, social overlays can occur on any types of content, including websites or any other resource provided by a content provider. Furthermore, social overlays can be provided on (or embedded within) content or on ads on third-party websites.

**[0022]** FIG. 1 is a block diagram of an example environment 100 that provides social overlays on ads. The example environment 100 includes an ad management system 110 that manages advertising services and one or more social networking systems 120 that allow users to interact with other users within a social framework. The example environment 100 includes a network 102, such as a local area network (LAN), a wide area network (WAN), the Internet, or a combination thereof. The network 102 connects websites 104, user devices 106, advertisers 108, the ad management system 110, and social networking systems 120. The example environment 100 may include many thousands of websites 104, user devices 106, and advertisers 108.

**[0023]** A website 104 includes one or more resources 105 associated with a domain name and hosted by one or more servers. An example website is a collection of web pages formatted in hypertext markup language (HTML) that can contain text, images, multimedia content, and programming elements, such as scripts. Each website 104 can be maintained by a content publisher, which is an entity that controls, manages and/or owns the website 104.

**[0024]** A resource 105 can be any data that can be provided over the network 102. A resource 105 can be identified by a resource address that is associated with the resource 105. Resources include HTML pages, word processing documents, portable document format (PDF) documents, images, video, and news feed sources, to name only a few. The resources can include content, such as words, phrases, images and sounds, that may include embedded information (such as meta-information in hyperlinks) and/or embedded instructions (such as JavaScript scripts).

**[0025]** A user device 106 is an electronic device that is under control of a user and is capable of requesting and receiving resources over the network 102. Example user devices 106 include personal computers, mobile communication devices (e.g., smartphones), and other devices that can send and receive data over the network 102. A user device 106 typically includes one or more user applications, such as a web browser, to facilitate the sending and receiving of data over the network 102.

**[0026]** A user device 106 can request resources 105 from a website 104. In turn, data representing the resource 105 can be provided to the user device 106 for presentation by the user device 106. The data representing the resource 105 can also include data specifying a portion of the resource or a portion of a user display, such as a presentation location of a pop-up window or a slot of a third-party content site or web page, in which advertisements can be presented. These specified portions of the resource or user display are referred to as advertisement slots.

**[0027]** To facilitate searching of these resources, the environment 100 can include a search system 112 that identifies the resources by crawling and indexing the resources provided by the content publishers on the websites 104. Data about the resources can be indexed based on the resource to which the data corresponds. The indexed and, optionally, cached copies of the resources can be stored in an indexed cache 114.

**[0028]** User devices 106 can submit search queries 116 to the search system 112 over the network 102. In response, the search system 112 accesses the indexed cache 114 to identify resources that are relevant to the search query 116. The search system 112 identifies the resources in the form of search results 118 and returns the search results 118 to the user devices 106 in search results pages. A search result 118 is data generated by the search system 112 that identifies a resource that is responsive to a particular search query, and includes a link to the resource. An example search result 118 can include a web page title, a snippet of text or a portion of an image extracted from the web page, and the URL of the web page. Search results pages can also include one or more advertisement slots in which advertisements can be presented.

**[0029]** When a resource 105 or search results 118 are requested by a user device 106, the ad management system 110 receives a request for advertisements to be provided with the resource 105 or search results 118. The request for advertisements can include characteristics of the advertisement

slots that are defined for the requested resource or search results page, and can be provided to the ad management system **110**.

**[0030]** For example, a reference (e.g., URL) to the resource for which the advertisement slot is defined, a size of the advertisement slot, and/or media types that are available for presentation in the advertisement slot can be provided to the ad management system **110**. Similarly, keywords associated with a requested resource (“resource keywords”) or a search query **116** for which search results are requested can also be provided to the ad management system **110** to facilitate identification of advertisements that are relevant to the resource or search query **116**.

**[0031]** Based at least in part on data included in the request for advertisements, the ad management system **110** can select advertisements that are eligible to be provided in response to the request (“eligible advertisements”). For example, eligible advertisements can include advertisements having characteristics matching the characteristics of advertisement slots and that are identified as relevant to specified resource keywords or search queries **116**. In some implementations, advertisements having targeting keywords that match the resource keywords or the search query **116** are selected as eligible advertisements by the ad management system **110**.

**[0032]** A targeting keyword can match a resource keyword or a search query **116** by having the same textual content (“text”) as the resource keyword or search query **116**. For example, an advertisement associated with the targeting keyword “beaches” can be an eligible advertisement for an advertisement request including the resource keyword “beaches.” Similarly, the advertisement can be selected as an eligible advertisement for an advertisement request including the search query “beaches.”

**[0033]** The ad management system **110** can select from the eligible advertisements that are to be provided for presentation in advertisement slots of a resource or search results page based on results of an auction. For example, the ad management system **110** can receive bids from advertisers and allocate the advertisement slots, based at least in part on the received bids (e.g., based on the highest bidders at the conclusion of the auction). The bids are amounts that the advertisers are willing to pay for presentation (or selection) of their advertisement with a resource or search results page. For example, a bid can specify an amount that an advertiser is willing to pay for each 1000 impressions (i.e., presentations) of the advertisement, referred to as a CPM bid. Alternatively, the bid can specify an amount that the advertiser is willing to pay for a selection (i.e., a click-through) of the advertisement or a “conversion” following selection of the advertisement. The selected advertisements can be determined based on the bids alone, or based on the bids of each bidder being multiplied by one or more factors, such as quality scores derived from advertisement performance, landing page scores, and/or other factors. In some implementations, the bids can be based on whether the ad includes social information, such as information that identifies how the user or other users in the user’s social network have responded to the ad. For example, the social information can be used to generate a social overlay on the ad.

**[0034]** A conversion occurs when a user performs a particular action related to an advertisement provided with a resource or search results page. What constitutes a conversion may vary from case-to-case and can be determined in a variety of ways. For example, a conversion may occur when a user

clicks on an advertisement, is referred to a web page, and consummates a purchase there before leaving that web page. A conversion can also be defined by an advertiser to be any measurable/observable user action, such as downloading a white paper, navigating to at least a given depth of a website, viewing at least a certain number of web pages, spending at least a predetermined amount of time on a website or web page, registering on a website, re-publishing an ad to other users within a social network, or commenting upon an ad where the comments are visible to others. Other actions that constitute a conversion can also be used.

**[0035]** The system **100** includes one or more social networking systems **120** that provide functions and tools for users to re-publish information in a social network. For example, a social networking system **120** can be a social networking website that users can use to identify friends and social groups (e.g., circles), send and receive email, post messages and multi-media (e.g. photos, video, audio), track social events, provide updates and so on.

**[0036]** For situations in which the systems discussed here collect personal information about users, the users may be provided with an opportunity to opt in/out of programs or features that may collect personal information (e.g., information about a user’s preferences or a user’s current location). User may also be informed of the accompanying limitations on the functionality of a service that may result from limiting access to such personal information. In addition, certain data may be anonymized in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user’s identity may be anonymized so that the no personally identifiable information can be determined for the user, or a user’s geographic location may be generalized where location information is obtained (such as to a city, zip code, or state level), so that a particular location of a user cannot be determined.

**[0037]** Example user interfaces for displaying social overlays are described below with reference to FIGS. 2-7. An example process by which social overlays are generated is described below with reference to FIG. 8. Various user interface elements for receiving user data input are described below with reference to FIGS. 2-7. Example user interface elements include text boxes, radio buttons, check boxes, drop-down menus, and hypertext links.

**[0038]** FIG. 2 shows an example user interface **200** that includes an ad **202** with a social overlay **204** and a control **206** for re-publishing the advertisement. For example, a user can use the control **206** to re-publish the ad to one or more members of the user’s groups. The user interface **200** can be provided, for example, by the ad management system **110** of FIG. 1. For example, the ad **202** can be an ad that is served with other content, such as included with search results **118** that are responsive to a user’s query **116**, as described above. In another example, the ad **202** can be any ad that appears on a third-party website, such as the third-party website (e.g., related to area beaches) that is displayed in the user interface **200**. For example, the third-party beach-related website can be a landing page associated with one of several search results **118** that are responsive to a search query **207** for “beaches.”

**[0039]** The social overlay **204** can serve as an annotation that is associated with the ad **202**. The annotation can include customized information related to the user and/or one or more groups that are associated with the user. For example, the social overlay **204** can annotate the ad **202** with information regarding the user’s actions associated with the ad **202**, or



actions by members of one or more groups associated with the user (e.g., the user's circles of friends, family or other groups that are specified or inferred).

**[0040]** When the social overlay **204** is displayed, a social message **208** can provide any of several types of social information associated with the ad. In the example shown in FIG. 2, the social message **208** indicates that "394 people in Carmel +1'd this," meaning that 394 people in the Carmel area have "plussed one" the ad, or re-published the ad to others, such as family or friends. This example provides a summary based on geographic proximity by identifying the number of users in a certain geographic region (e.g., Carmel) who re-published the ad. Other example proximity-based summaries include time-based summaries, e.g., the number of users who re-published (or liked, etc.) the ad within the last hour (or some other time interval). Regional (e.g., Carmel) and other proximity-based social messages **208** can summarize actions by people who are not members of the user's groups. Other example types of information that the social message **208** can provide include the number of members in the user's groups who liked the ad, the name of a user's friend who liked the ad, and so on.

**[0041]** In some implementations, the social message **208** can provide statistics related to people in the user's various social groups or circles, such as the members of the user's group who had a favorable response to the advertisement. For example, the social message **208** can identify the number of the user's family members who liked the ad, or the number of people in the user's circle of friends who re-published the ad, to name a few examples. Other example social messages **208** include messages such as "Jerry, your wife +1'd this ad," "David, Roger and 4 more friends shared this ad" or "Peggy and 3 other family members shared this ad."

**[0042]** In some implementations, more than one type of summary message may be applied to an ad, such as a geographically-based summary (e.g., Carmel area) and a user's circle-based summary message (e.g., friends or family). In some implementations, if more than one type of summary message is to be applied to an ad, the user interface **200** can cycle between the different summary messages in the social message **208**. For example, the social message **208** that is displayed may alternate between summary messages such as "394 people in Carmel +1'd this," and "14 of your friends liked this ad." In some implementations, the user interface **200** can automatically cycle through summary messages by scrolling through the summary messages that apply to an ad, displaying each in the social message **208**. For example, the user interface **200** can display one summary message for a few seconds, then the next summary message, and so on. In some implementations, the social message **208** can include all summary messages at once (e.g., if there are between one and three summary messages). In some implementations, the user interface **200** can include a control by which the user can access the summary messages that apply to an ad. In some implementations, the summary message that is displayed can change to a different applicable summary message if the user hovers over the social message **208** using a position indicator such as a cursor, a pointer, or the touch of a finger or stylus on a touch screen.

**[0043]** The control **206** can include various controls for re-publishing and/or commenting on the ads (e.g., the ad **202** upon which the social overlay **204** is displayed). In this example, the control **206** includes a plus one control **210** for re-publishing or commenting upon the ad, a help control **212**,

and an information control **214**. The plus one control **210** can lead to an interface from which the user can provide detailed information, as will be described below with reference to FIG. 3. By selecting the help control **212**, for example, the user can be presented with a popup or other control that provides an explanation of the social overlay **204** and how it is used. As an example, a user who is unfamiliar with re-publishing ads may click on the help control **212** to learn how the interface operates and what can result from the user's interaction with it (e.g., what his friends and family may see). By selecting the information control **214**, for example, the user can navigate to a website or other information that provides information on ads.

**[0044]** The ad **202** can be one of several ads that appear in an advertisements section **216** on the third-party website. Other ads **202a** and **202b** can appear in a content section **220** of the third-party website. For example, the ad **202a** can be another ad that includes a social overlay **204a**. In this example, the social overlay **204a** includes a control **206a** and a social message **208a** that can be similar to the control **206** and social message **208** described above.

**[0045]** FIG. 3 shows an example details popup **302** for providing detailed information for re-publishing an ad. The details popup **302** can be displayed, for example, if the user selects the plus one control **210** shown in FIG. 2. The details popup **302** is just one example implementation of an interface that the user can use to provide detailed information for re-publishing an ad (e.g., re-publishing and/or commenting upon the ad **202**). A header **304** can explain why the details popup **302** is displayed. In this example, the header **304** states that the user plussed-one (or re-published) the "XYZ Beach Boardwalk" ad that is the subject of the ad **202**, and in this case, the name of the advertiser. In some implementations, the name of the advertiser can be determined using application code that runs behind the plus one control **210** or the details popup **302**, such as at the same time that the application retrieves existing social annotations and user information. In some implementations, if the user is the first person in a social group (e.g., friends, family, etc.) to see the ad **202**, or if no one else has re-published or commented upon the ad **202**, then a message can indicate to the user that he is the first to re-publish/comment.

**[0046]** The details popup **302** includes a visibility area **306** that summarizes the groups with which the user's ad re-publishing/comments are to be applied. For example, current settings **308** indicate that the user's re-published information is to be visible to (and thus shared with) the user's friends and family. The user can use a change control **310** to change the visibility of the re-published information, effectively changing the current settings **308**. FIGS. 4 and 5, described below, show example user interfaces that can appear if the user selects the change control **310**.

**[0047]** The details popup **302** includes a commenting area **312** for adding a comment and/or removing a comment that has been associated with an ad. The commenting area **312** includes an add comment control **314** for adding a comment (e.g., described below with reference to FIG. 6) and an undo comment control **316** for undoing (or deleting) the added comment. In some implementations, the undo comment control **316** does not appear within the details popup **302** (or may be grayed out or otherwise inactive) until a comment has been added.

**[0048]** The details popup **302** can include an update request control **318** that the user can use to request to receive periodic

updates from the advertiser that is associated with the ad **202**. For example, using the control **318**, the user can subscribe to periodic email messages, text messages, or other forms of communication that the advertiser can send to interested parties. In this way, the user can “follow” an advertiser in a way that is similar to how users “follow” an individual or entity online (e.g., such as on Twitter).

**[0049]** A statement **320** that can be displayed within the details popup **302** can identify, to the user, the users (e.g., individuals, specified or inferred groups or social circles) who may be eligible to see the re-published ad. For example, the statement **320** can state, “This +1 will also be visible to circles above.” As a result, the user can become acquainted with the mechanics and consequences of re-publishing ads that result from the selections and settings in the details popup **302**, further allowing the user to understand the visibility of the ad-re-publishing. In some implementations, if the user has used the change control **310** to change the visibility to the extent that no other users currently have visibility, then the statement **320** can state, for example, “No users currently have visibility.” By selecting a view full profile control **321**, the user can navigate, for example, to the advertiser profile page on a social network site.

**[0050]** In some implementations, filtering or limiting of re-publication requests can occur. As a result, the mere designation by a user to re-publish to one or more groups or individuals does not necessarily mean that re-publishing will occur. For example, the designated receivers may have blocked receipt (e.g., by setting preferences in a browser to block all or selected types of social overlays on content and/or ads). In another example, some implementations of the ad management system **110** may filter re-publication requests based on one or more criteria. Example criteria include imposing limits on re-publishing, e.g., limiting the number of re-publishing events, the number of recipients, and so on. In some implementations, imposed limits on re-publishing can be applied to intervals of time, e.g., enforcing a limit of five re-published ads per day, twenty re-published ads per week, and so on. As a result, the ad management system **110** can prevent users from re-publishing too often or to too many people. Other criteria can be used for filtering re-publishing requests.

**[0051]** In some implementations, an email area **322** can identify the user account **324** (e.g., userX@mail.com) from which the ad-re-publishing will occur. For example, an email address can be tied to the user’s social networking account, or the email address may not be tied to any social networking account. In some implementations, a user profile image **326** can provide a visual identification to the user as to what account **324** is currently displayed. If the user has multiple computer logins and/or accounts, then the user can use an email change control **328**, for example, to select a different one of the user’s accounts (e.g., userX@ABCDmail.com). In some implementations, ad-re-publishing need not rely upon the user having an email account. For example, the user can belong to one or more social networking systems, and ad-re-publishing that the user performs can be tied to a user name, a user account, or other form of user identification.

**[0052]** As a result of selecting which account (email or user login/account) to use, the user is also associating the ad-re-publishing with the groups or social circles that correspond to that user account. For example, the user’s circles of family and friends may be vastly different for the social networking accounts associated with the user’s email addresses

userX@mail.com versus userX@ABCDmail.com (or one user login/account versus another user login/account).

**[0053]** A close control **330** can be used to exit the details popup **302** and save the current settings and inputs. In some implementations, a cancel control can exist that can allow the user to exit the details popup **302** without saving any changes, essentially restoring the values of the details popup **302** to their original settings (e.g., before the user displayed the popup).

**[0054]** In some implementation, the details popup **302** can include an option to un-plus the ad, or to cancel the act of re-publishing the ad with others. For example, if the user changes his mind about re-publishing the ad to family and friends, or decides not to share his comments, the user can select an un-plus option (not shown in FIG. 3), e.g., somewhere inside the details popup **302**. In some implementations, selecting the un-plus option can make the social overlay **204** appear in a different way in order to indicate that the ad is no longer to be re-published. For example, while the ad is still displayed after the user has plussed-one the ad and the message reads “You and 394 people in Carmel +1’d this,” upon the user un-plussing the ad, the message can return to its original state, namely “394 people in Carmel +1’d this.”

**[0055]** FIG. 4 shows an example visibility change popup **402** for changing visibility settings for re-publishing an ad. In some implementations, the user interface **200** can display the visibility change popup **402** when, for example, the user selects the visibility change control **310** described with reference to FIG. 3. As an example, the user may select the visibility change control **310** to delete one or more of the visibility settings **308** (e.g., “Friends” or “Family”) and/or to choose additional visibility options.

**[0056]** In some implementations, when the visibility change popup **402** is displayed, the current visibility settings **308** can be displayed as selectable controls, e.g., controls **406** and **408** (e.g., for “Friends” and “Family”). The controls **406** and **408** can identify the name of the group for which visibility is currently set for the user’s re-published ad.

**[0057]** An add other people control **410** can provide a way for adding additional individuals or groups to the existing groups for which visibility exists regarding the user’s re-published ad. For example, if the user selects the add other people control **410**, another popup can appear from which the user can add visibility entities, as described below with reference to FIG. 5.

**[0058]** The controls **406** and **408** can further include delete controls **412** and **414**, respectively, that the user can use to selectively delete either or both groups. For example, by selecting the delete control **412**, the “Friends” group can be removed from visibility, and the group control **406** can disappear from the visibility change popup **402**.

**[0059]** In some implementations, by clicking on the either of the controls **406** and **408**, the user can view the names of the users in that group. For example, if the user selects the “Friends” control **412**, then the user interface **200** can display a popup that lists the people in the user’s circle of friends.

**[0060]** In some implementations, the visibility change popup **402** can display the user account **324** and the email change control **328** that the user can select to switch to a different user login. The user may switch to a different user login, for example, in order to re-publish the ad with a different circle of family and friends, e.g., the family and friends associated with his other user login (e.g., UserX@ABCDmail.com).

[0061] A close control 416 can be used to exit the visibility change popup 402 and save the current settings and inputs. In some implementations, a cancel control can exist that can allow the user to exit the visibility change popup 402 without saving any changes, essentially restoring the values of the visibility change popup 402 to their original settings (e.g., before the user displayed the popup).

[0062] FIG. 5 shows an example groups selection list 502 for displaying selectable visibility groups. For example, the user interface 200 can display the groups selection list 502 if the user selects the add other people control 410 on the visibility change popup 402 as described above.

[0063] The groups selection list 502 can include group entries 504, each of which can identify the name of the group and can further include, in parentheses, the number of people in that group. For example, the group entries 504 can include a Family group 504a with seven members, a Friends group 504b with 105 members, and a coworkers group 504c with 25 members. In some implementations, the group entries 504 can include entries that are supersets or unions of two or more other groups. For example, a My Circles group 504d can represent the union of the Family, Friends and Coworkers groups 504a-c. As a result, the total membership in the My Circles group 504d (e.g., 137) can be the sum of the group memberships that the superset group includes (e.g., 7+105+25). An Anyone group 504e can apply to the group by which the user can re-publish the ad with everyone online, and the parenthetical membership for the Anyone group 504e can be “public on the web.” In some implementations, by selecting the parenthetical membership number, the user interface 200 can display the list of individual members in the group. For example, the user may want to see the names of the people in a group as reminder of who the re-published ad would be re-published with if that group is made visible.

[0064] In some implementations, each time the user selects a new group from the group entries 504, a selectable control for that group can appear in the visibility change popup 402, such as is shown for the Friends control 406 and the Family control 408. In some implementations, updating the controls in the visibility change popup 402 may not occur until after the user exits the groups selection list 502, such as by selecting an exit control 506.

[0065] FIG. 6 shows an example add comment box 602 for sharing a comment on an ad. For example, the user can use the add comment box 602 to enter a comment associated with an ad (e.g., the ad 202). The user interface 200 can display the add comment box 602, for example, if user selects the add a comment control 314 in order to comment upon the ad 202 and share his comments with others. As an example, if the ad 202 advertises a particularly interesting-looking waterfront location (e.g., the oceanfront boardwalk in the ad 202), then the user may enter, “I bet the view of the ocean is beautiful!” or some other comment in the add comment box 602. In some implementations, as soon as the user begins typing in the add comment box 602, any prompt message (e.g., “add comment . . .”) can be immediately replaced by whatever the user types in.

[0066] By selecting a comment control 604, the user can save the comment that he has typed into the add comment box 602, and the saved comment can be displayed, for example, in the details popup 302. However, if the user decides not to keep the comment, the user can select a cancel control 606. Comments entered using the add comment box 602 can appear in an activity stream, such as the user’s activity stream that lists

recent activities performed by the user. In some implementations, the activity stream that is updated with the comment can be on a social website. In some implementations, comments that are posted to one or more activity streams can be in a standardized format so that any social website can interact with the comment and other components of an activity stream. In some implementations, the comment added using the add comment box 602 can appear in a social overlay 204, e.g., as all or part of a social message 208.

[0067] In some implementations, the control 206 described above can include or provide access to additional controls by which a user can view comments for an ad (e.g., the ad 202) that have been made by other users. In some implementations, the comments that a user views using the control 206 can be made anonymous. In some implementations, the social message 208 can indicate the number of users who have commented upon an ad (e.g., “25 people in Carmel commented on this ad”).

[0068] FIG. 7 shows the example user interface 200 of FIG. 2 with the social overlay 204 that is updated to indicate that the user has re-published the ad 202. In the current example, because the user has re-published the ad 202, the social message 208 is now prefaced with “You and . . .” and now reads “You and 394 people in Carmel + I’d this.” In some implementations, if additional users (e.g., three more users) in the Carmel area have re-published the ad 202 since the user’s act of re-publishing the ad, the social message 208 can update the information (e.g., “You and 397 people in Carmel + I’d this”). In some implementations, other information can be included in the social message 208 if additional activity has occurred (e.g., re-publishing, etc.) by one or more other users.

[0069] The updated social overlay 204 in FIG. 7 is an example completed loop of events and user actions, starting with the display of the ad 202 that is annotated with the original social overlay 204 and social message 208. Then, as a result of the user re-publishing the ad 202 (e.g., by choosing to “plus one” the ad), the ad 202 is re-published. As a result, the user’s social overlay 204 includes a second different annotation (e.g., an updated social message 208, “You and . . .”) along with the re-published ad. Other users can also experience an updated social message 208 that reflects the current user’s activity. For example, the social message 208 that the other users see can include an updated count of users who re-published the ad, e.g., “395 people in Carmel + I’d this.” The ad management system 110, for example, can produce one or more new social messages 208 for an ad 202 based on actions of one or users in re-publishing the ad 202 (e.g., re-publishing, commenting, etc.).

[0070] In some implementations, in addition to determining which social message 208 is to be included or annotated in the social overlay 204, a determination can be made (e.g., by the ad management system 110) whether to show the annotation at all. For example, since the annotation may occupy valuable space within the ad block of the ad 202, the ad management system 110 can decide to show the annotation only when it is believed that the annotation will actually be relevant, e.g., that the user re-publishes the ad. In some implementations, the placement, size and format of the social overlay 204 in the ad 202 can depend on the size and position of un-used space (e.g., blank space) in the ad. For example, the social overlay 204 can generally appear along the bottom of the ad 202 only if nothing relevant (e.g., text) in the ad 202 is covered by the annotation.



[0071] FIG. 8 is a flowchart of an example process 800 for providing a user interaction point on a user device in conjunction with content that is provided by a content publisher. For example, the process 800 can be used to serve an ad 202 with a social overlay 204. The social overlay 204 can include tools by which the user can provide input for re-publishing the ad. The process 800 can be performed, for example, by the ad management system 110.

[0072] A request is received for an advertisement to be displayed in a slot associated with a third-party content site (802). For example, referring to FIG. 1, the ad management system 110 can receive a request to provide an ad in a slot in the third-party web page that corresponds to a resource 105. The request can occur, for example, when search results 118 are generated in response to a query 116. In some implementations, the ad management system 110 can have no control of the general content of the third-party website except for providing ads that fill slots on the web page.

[0073] A relevant advertisement is identified to be provided in the slot (804). As an example, the ad management system 110 can identify an ad 202 (see FIG. 2) that is relevant to the third-party web site. For example, if the website is related to beaches or waterfronts, then the ad management system 110 can identify an ad 202 that advertises a beach-related product or service. In some implementations, the identification process can use keywords (e.g., “beaches”) that correspond to the user’s query for content. In some implementations, the ad management system 110 can identify ads that are targeted to the user. For example, if the user is known to live in the Carmel area of California, or if the GPS location of the user’s mobile computing device indicates that the user is currently in that area, then the ad management system 110 can identify an ad for a Carmel area beach. In some implementations, identification of the ad can be based on the extent or recentness of users in the user’s social circles who have re-published the ad. For example, if several members of the user’s groups have commented on an ad, or if significant recent re-publishing of the ad has occurred, the ad management system 110 can select that particular ad over other ads that may have less social context (e.g., and interest to the user).

[0074] Information to be included in an annotation associated with the advertisement is determined, and the annotation includes customized information related to the user or a group associated with the user (806). As an example, for the relevant advertisement that is identified, the ad management system 110 can identify information that is customized for the user on whose computing device the ad will be displayed. Examples of customization include the number of the user’s family or friends who re-published the ad, or the number of users in the user’s geographic area who re-published the ad.

[0075] In some implementations, the customization can use any suitable piece of demographic information that is associated with the user when determining information to be included in the annotation. Example demographics include gender, age, income, occupation, hobbies, and so on. These demographic categories can be used to create annotations that are meaningful to the user because the user is also within those demographics.

[0076] The advertisement responsive to the request is provided, including the annotation for presentation along with the relevant advertisement (808). As an example, referring to FIG. 2, the ad management system 110 can provide the ad 202 that is annotated with the social overlay 204. The social message 208 that is included in the social overlay 204

includes customized information that is related to the user or a group associated with the user. For example, the social overlay 204 can include information regarding the user’s re-publishing of the ad and/or information regarding the actions of members of the user’s social groups.

[0077] FIG. 9 is a block diagram of computing devices 900, 950 that may be used to implement the systems and methods described in this document, as either a client or as a server or plurality of servers. Computing device 900 is intended to represent various forms of digital computers, such as laptops, desktops, workstations, personal digital assistants, servers, blade servers, mainframes, and other appropriate computers. Computing device 950 is intended to represent various forms of mobile devices, such as personal digital assistants, cellular telephones, smartphones, and other similar computing devices. The components shown here, their connections and relationships, and their functions, are meant to be exemplary only, and are not meant to limit implementations of the inventions described and/or claimed in this document.

[0078] Computing device 900 includes a processor 902, memory 904, a storage device 906, a high-speed interface 908 connecting to memory 904 and high-speed expansion ports 910, and a low speed interface 912 connecting to low speed bus 914 and storage device 906. Each of the components 902, 904, 906, 908, 910, and 912, are interconnected using various busses, and may be mounted on a common motherboard or in other manners as appropriate. The processor 902 can process instructions for execution within the computing device 900, including instructions stored in the memory 904 or on the storage device 906 to display graphical information for a GUI on an external input/output device, such as display 916 coupled to high speed interface 908. In other implementations, multiple processors and/or multiple buses may be used, as appropriate, along with multiple memories and types of memory. Also, multiple computing devices 900 may be connected, with each device providing portions of the necessary operations (e.g., as a server bank, a group of blade servers, or a multi-processor system).

[0079] The memory 904 stores information within the computing device 900. In one implementation, the memory 904 is a computer-readable medium. In one implementation, the memory 904 is a volatile memory unit or units. In another implementation, the memory 904 is a non-volatile memory unit or units.

[0080] The storage device 906 is capable of providing mass storage for the computing device 900. In one implementation, the storage device 906 is a computer-readable medium. In various different implementations, the storage device 906 may be a floppy disk device, a hard disk device, an optical disk device, or a tape device, a flash memory or other similar solid state memory device, or an array of devices, including devices in a storage area network or other configurations. In one implementation, a computer program product is tangibly embodied in an information carrier. The computer program product contains instructions that, when executed, perform one or more methods, such as those described above. The information carrier is a computer- or machine-readable medium, such as the memory 904, the storage device 906, or memory on processor 902.

[0081] The high speed controller 908 manages bandwidth-intensive operations for the computing device 900, while the low speed controller 912 manages lower bandwidth-intensive operations. Such allocation of duties is exemplary only. In one implementation, the high-speed controller 908 is coupled

to memory 904, display 916 (e.g., through a graphics processor or accelerator), and to high-speed expansion ports 910, which may accept various expansion cards (not shown). In the implementation, low-speed controller 912 is coupled to storage device 906 and low-speed expansion port 914. The low-speed expansion port, which may include various communication ports (e.g., USB, Bluetooth, Ethernet, wireless Ethernet) may be coupled to one or more input/output devices, such as a keyboard, a pointing device, a scanner, or a networking device such as a switch or router, e.g., through a network adapter.

[0082] The computing device 900 may be implemented in a number of different forms, as shown in the figure. For example, it may be implemented as a standard server 920, or multiple times in a group of such servers. It may also be implemented as part of a rack server system 924. In addition, it may be implemented in a personal computer such as a laptop computer 922. Alternatively, components from computing device 900 may be combined with other components in a mobile device (not shown), such as device 950. Each of such devices may contain one or more of computing device 900, 950, and an entire system may be made up of multiple computing devices 900, 950 communicating with each other.

[0083] Computing device 950 includes a processor 952, memory 964, an input/output device such as a display 954, a communication interface 966, and a transceiver 968, among other components. The device 950 may also be provided with a storage device, such as a microdrive or other device, to provide additional storage. Each of the components 950, 952, 964, 954, 966, and 968, are interconnected using various buses, and several of the components may be mounted on a common motherboard or in other manners as appropriate.

[0084] The processor 952 can process instructions for execution within the computing device 950, including instructions stored in the memory 964. The processor may also include separate analog and digital processors. The processor may provide, for example, for coordination of the other components of the device 950, such as control of user interfaces, applications run by device 950, and wireless communication by device 950.

[0085] Processor 952 may communicate with a user through control interface 958 and display interface 956 coupled to a display 954. The display 954 may be, for example, a TFT LCD display or an OLED display, or other appropriate display technology. The display interface 956 may comprise appropriate circuitry for driving the display 954 to present graphical and other information to a user. The control interface 958 may receive commands from a user and convert them for submission to the processor 952. In addition, an external interface 962 may be provided in communication with processor 952, so as to enable near area communication of device 950 with other devices. External interface 962 may provide, for example, for wired communication (e.g., via a docking procedure) or for wireless communication (e.g., via Bluetooth or other such technologies).

[0086] The memory 964 stores information within the computing device 950. In one implementation, the memory 964 is a computer-readable medium. In one implementation, the memory 964 is a volatile memory unit or units. In another implementation, the memory 964 is a non-volatile memory unit or units. Expansion memory 974 may also be provided and connected to device 950 through expansion interface 972, which may include, for example, a SIMM card interface. Such expansion memory 974 may provide extra storage space

for device 950, or may also store applications or other information for device 950. Specifically, expansion memory 974 may include instructions to carry out or supplement the processes described above, and may include secure information also. Thus, for example, expansion memory 974 may be provided as a security module for device 950, and may be programmed with instructions that permit secure use of device 950. In addition, secure applications may be provided via the SIMM cards, along with additional information, such as placing identifying information on the SIMM card in a non-hackable manner.

[0087] The memory may include for example, flash memory and/or MRAM memory, as discussed below. In one implementation, a computer program product is tangibly embodied in an information carrier. The computer program product contains instructions that, when executed, perform one or more methods, such as those described above. The information carrier is a computer- or machine-readable medium, such as the memory 964, expansion memory 974, or memory on processor 952.

[0088] Device 950 may communicate wirelessly through communication interface 966, which may include digital signal processing circuitry where necessary. Communication interface 966 may provide for communications under various modes or protocols, such as GSM voice calls, SMS, EMS, or MMS messaging, CDMA, TDMA, PDC, WCDMA, CDMA2000, or GPRS, among others. Such communication may occur, for example, through radio-frequency transceiver 968. In addition, short-range communication may occur, such as using a Bluetooth, WiFi, or other such transceiver (not shown). In addition, GPS receiver module 970 may provide additional wireless data to device 950, which may be used as appropriate by applications running on device 950.

[0089] Device 950 may also communicate audibly using audio codec 960, which may receive spoken information from a user and convert it to usable digital information. Audio codec 960 may likewise generate audible sound for a user, such as through a speaker, e.g., in a handset of device 950. Such sound may include sound from voice telephone calls, may include recorded sound (e.g., voice messages, music files, etc.) and may also include sound generated by applications operating on device 950.

[0090] The computing device 950 may be implemented in a number of different forms, as shown in the figure. For example, it may be implemented as a cellular telephone 980. It may also be implemented as part of a smartphone 982, personal digital assistant, or other similar mobile device.

[0091] Various implementations of the systems and techniques described here can be realized in digital electronic circuitry, integrated circuitry, specially designed ASICs (application specific integrated circuits), computer hardware, firmware, software, and/or combinations thereof. These various implementations can include implementation in one or more computer programs that are executable and/or interpretable on a programmable system including at least one programmable processor, which may be special or general purpose, coupled to receive data and instructions from, and to transmit data and instructions to, a storage system, at least one input device, and at least one output device.

[0092] These computer programs (also known as programs, software, software applications or code) include machine instructions for a programmable processor, and can be implemented in a high-level procedural and/or object-oriented programming language, and/or in assembly/ma-



chine language. As used herein, the terms “machine-readable medium” “computer-readable medium” refers to any computer program product, apparatus and/or device (e.g., magnetic discs, optical disks, memory, Programmable Logic Devices (PLDs)) used to provide machine instructions and/or data to a programmable processor, including a machine-readable medium that receives machine instructions as a machine-readable signal. The term “machine-readable signal” refers to any signal used to provide machine instructions and/or data to a programmable processor.

**[0093]** To provide for interaction with a user, the systems and techniques described here can be implemented on a computer having a display device (e.g., a CRT (cathode ray tube) or LCD (liquid crystal display) monitor) for displaying information to the user and a keyboard and a pointing device (e.g., a mouse or a trackball) by which the user can provide input to the computer. Other kinds of devices can be used to provide for interaction with a user as well; for example, feedback provided to the user can be any form of sensory feedback (e.g., visual feedback, auditory feedback, or tactile feedback); and input from the user can be received in any form, including acoustic, speech, or tactile input.

**[0094]** The systems and techniques described here can be implemented in a computing system that includes a back end component (e.g., as a data server), or that includes a middleware component (e.g., an application server), or that includes a front end component (e.g., a client computer having a graphical user interface or a Web browser through which a user can interact with an implementation of the systems and techniques described here), or any combination of such back end, middleware, or front end components. The components of the system can be interconnected by any form or medium of digital data communication (e.g., a communication network). Examples of communication networks include a local area network (“LAN”), a wide area network (“WAN”), and the Internet.

**[0095]** The computing system can include clients and servers. A client and server are generally remote from each other and typically interact through a communication network. The relationship of client and server arises by virtue of computer programs running on the respective computers and having a client-server relationship to each other.

**[0096]** While this specification contains many specific implementation details, these should not be construed as limitations on the scope of any inventions or of what may be claimed, but rather as descriptions of features specific to particular implementations of particular inventions. Certain features that are described in this specification in the context of separate implementations can also be implemented in combination in a single implementation. Conversely, various features that are described in the context of a single implementation can also be implemented in multiple implementations separately or in any suitable subcombination. Moreover, although features may be described above as acting in certain combinations and even initially claimed as such, one or more features from a claimed combination can in some cases be excised from the combination, and the claimed combination may be directed to a subcombination or variation of a subcombination.

**[0097]** Similarly, while operations are depicted in the drawings in a particular order, this should not be understood as requiring that such operations be performed in the particular order shown or in sequential order, or that all illustrated operations be performed, to achieve desirable results. In cer-

tain circumstances, multitasking and parallel processing may be advantageous. Moreover, the separation of various system components in the implementations described above should not be understood as requiring such separation in all implementations, and it should be understood that the described program components and systems can generally be integrated together in a single software product or packaged into multiple software products.

**[0098]** Thus, particular implementations of the subject matter have been described. Other implementations are within the scope of the following claims. In some cases, the actions recited in the claims can be performed in a different order and still achieve desirable results. In addition, the processes depicted in the accompanying figures do not necessarily require the particular order shown, or sequential order, to achieve desirable results. In certain implementations, multitasking and parallel processing may be advantageous.

What is claimed is:

1. A method for providing a user interaction point on a user device in conjunction with content that is provided by a content publisher, the method comprising:

receiving a request for an advertisement to be displayed in a slot associated with a third-party content site;

identifying a relevant advertisement to be provided in the slot;

determining information to be included in an annotation associated with the advertisement, the annotation including customized information related to the user or a group associated with the user; and

providing the advertisement responsive to the request including providing the annotation for presentation along with the relevant advertisement.

2. The method of claim 1 where determining information to be included in the annotation includes determining message content to be included in the annotation.

3. The method of claim 2 where the message content includes an indicator of a number of users in a user's group that had a favorable response to the advertisement.

4. The method of claim 3 where the user's group is a social circle.

5. The method of claim 3 where the message content includes an indicator of which members of the user's group had a favorable response to the advertisement.

6. The method of claim 1 where providing the advertisement includes providing the annotation as an overlay to the advertisement.

7. The method of claim 1 where annotation includes an information portion and a control, the control for enabling the user to re-publish the advertisement.

8. The method of claim 7 where the control enables a user to re-publish the advertisement to one or more members of the user's groups.

9. The method of claim 8 where the groups are selected from the groups comprising a social circle, family, friends, work groups, or other particularly identified groups.

10. The method of claim 8 where the control enables the user to re-publish the advertisement to others that are not members of the user's groups.

11. The method of claim 8 where the control enables a user to re-publish the advertisement along with a message.

12. The method of claim 11 where the message is provided by the user.

13. The method of claim 11 where the message indicates that the advertisement has been re-published by the user.

**14.** The method of claim **11** where the message indicates that the user and a number of other users have re-published the advertisement.

**15.** The method of claim **14** where the other users are within a predetermined proximity of the user.

**16.** The method of claim **11** where the message includes two portions, a first portion that indicates who has re-published the advertisement and a second portion with specific comments or users that re-published the advertisement.

**17.** The method of claim **16** further comprising receiving a comment from the user to be published in the annotation.

**18.** The method of claim **17** further comprising providing the annotation along with the comment when re-publishing the advertisement.

**19.** The method of claim **1** further comprising receiving a request to re-publish the advertisement to one or more other users and re-publishing the advertisement to the one or more other users including providing a second different annotation along with the re-published advertisement.

**20.** The method of claim **19** where re-publishing the advertisement includes determining a message for inclusion in the second different annotation.

**21.** The method of claim **20** where the message includes an indication that the user has re-published the advertisement and including any comments provided by the user.

\* \* \* \* \*