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- (72) Inventors; and
- (71) Applicants : EVANS, Jennifer Anne [CA/CA]; 616A Wellington Street West, Toronto, Ontario M5V 2X5 (CA).  
TANTON, James Adam [CA/CA]; 616A Wellington Street West, Toronto, Ontario M5V 2X5 (CA).
- (74) Agent: CONNEELY, Joseph; Gowling Lafleur Henderson LLP, 1 First Canadian Place, 100 King Street West, Suite 1600, Toronto, Ontario M5X 1G5 (CA).
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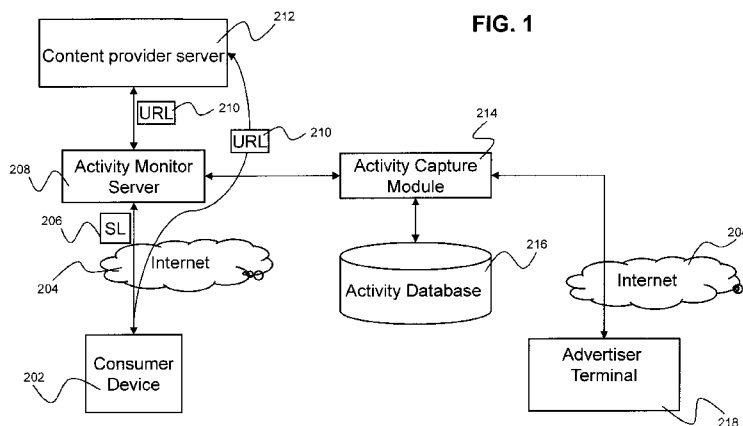
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(54) Title: SYSTEM AND METHOD FOR MONITORING WEB ACTIVITY



(57) Abstract: A method of monitoring web activity is provided. The method comprises enabling an advertiser to provide a web address of content on a content provider server to an activity monitor server. The activity monitor server generates an encoded link from the web address, the encoded link directs a consumer to the activity monitor server. A consumer device to is enabled to obtain and activate the encoded link and upon the consumer activating the encoded link, the activity monitor server obtains the corresponding web address of the content and enables the consumer device to access the content. And, an activity capture module captures the interaction between the consumer and the content.

**SYSTEM AND METHOD FOR MONITORING WEB ACTIVITY**

**[0001]** This application claims priority from U.S. Provisional Patent Application No. 61/613,796, filed on March 21, 2012, the contents of which are incorporated herein by  
5 reference.

**FIELD OF THE INVENTION**

**[0002]** This invention relates to the field of monitoring web activity, and more specifically, to a system and method for monitoring web activity.

**BACKGROUND**

**[0003]** It may be desirable to track the activities of one or more consumers interacting with online content, for example, a web page, an online article, video, a social media platform, etc. An advertiser may wish to monitor consumer activity to quantify the success of an online advertising campaign. An advertiser having a social media presence may also wish to gauge the effectiveness of maintaining the social media presence and to determine  
10 which networks and which content are most engaging for target consumers. It may also be desirable for an advertiser to quantify which online campaigns most successfully drive  
15 desired consumer behaviour to appropriately allocate advertising resources.

**[0004]** The success of an online advertising campaign, for example, a social media campaign, can be inferred by counting the number of consumers who have directly  
20 responded to the campaign. For example, an advertiser may manually quantify the number of replies to a market research question on a social media page. However, manually counting the number of replies is time consuming and may not accurately depict consumer interest or intention to purchase a product. Counting the number of replies to the market research question may also not account for consumers who have not replied but have  
25 nevertheless viewed or otherwise interacted with the content in question.

**[0005]** A need therefore exists for an improved system and method for monitoring web activity. Accordingly, a solution that addresses, at least in part, the above and other shortcoming is desired.

## SUMMARY

**[0006]** According to one aspect of the invention, there is provided a system and method of monitoring web activity. In one aspect, a method of monitoring web activity comprises enabling an advertiser to provide a web address of content on a content provider server to an activity monitor server is provided. The activity monitor server generates an encoded link from the web address, the encoded link directs a consumer to the activity monitor server. A consumer device is enabled to obtain and activate the encoded link and upon the consumer activating the encoded link, the activity monitor server obtains the corresponding web address of the content and enables the consumer device to access the content. And, an activity capture module captures the interaction between the consumer and the content.

**[0007]** The method may further comprise the activity capture module storing a record of consumer activity in an activity database. The method may enable the advertiser terminal to obtain a record of consumer activity. The activity capture module may aggregate records of a plurality of consumers' activities. In addition to the web address, the advertiser may provide information associated with the content to the activity monitor server.

**[0008]** In another aspect, a method of monitoring web activity is provided. The method comprises providing a link to a web address of content on a content provider server to a consumer device and enabling the consumer device to activate the link to the content. Upon the consumer device activating the link, an activity relay module on the content provider server provides consumer information to an activity monitor server. The activity monitor server monitors the interaction between the consumer and the content and the content provider server providing the requested content to the consumer device.

**[0009]** In another aspect, there is provided a method of enabling web activity to be monitored, comprising: obtaining an encoded link at a consumer device, the encoded link having been generated from a web address and directing the consumer device to an activity monitor server, the activity monitor server having determined a web address of content on a content provider server from an advertiser; the consumer device activating the encoded link; the consumer device accessing the content, the content being obtained by the activity monitor server obtaining the corresponding web address of the content from the content provider server; and, the consumer device enabling interaction with the content to enable the activity capture module to capture the interaction.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0010]** Features and advantages of the embodiments of the present invention will become apparent from the following detailed description, taken in combination with the appended drawings, in which:

5 **[0011]** FIG. 1 is a block diagram illustrating a consumer device accessing content on a content provider server, in accordance with an embodiment of the invention;

**[0012]** FIG. 2 is an example flow diagram illustrating a method of registering a web address with an activity monitor server, in accordance with an embodiment of the invention;

10 **[0013]** FIG. 3 is an example flow diagram illustrating an example method of accessing content on a content provider server via a squeezed link, in accordance with an embodiment of the invention;

**[0014]** FIG. 4 is a block diagram illustrating a consumer device accessing content on a content provider server having an activity relay module, in accordance with an embodiment of the invention;

15 **[0015]** FIG. 5 is an example flow diagram illustrating an example method of a content provider server having an activity relay module providing consumer information to an activity monitor server, in accordance with an embodiment of the invention;

20 **[0016]** FIG. 6 is block diagram illustrating a consumer device accessing content on a content provider server having an activity relay module generated using an activity capture API module, in accordance with an embodiment of the invention;

**[0017]** FIG. 7 is an example flow diagram illustrating an example method of a content provider server similar to that of FIG. 5 having an activity relay module providing consumer information to an activity monitor server, in accordance with an embodiment of the invention;

25 **[0018]** FIG. 8 is block diagram illustrating a consumer device accessing content on a content provider module located on an activity monitor server, in accordance with an embodiment of the invention;

**[0019]** FIG. 9 is a flow diagram illustrating an example of an activity monitor server monitoring a consumer device accessing content on from a content provider module, in accordance with an embodiment of the invention;

5 **[0020]** FIG. 10 is a screen capture illustrating an example embodiment of an activity monitoring system, in accordance with an embodiment of the invention;

**[0021]** FIG. 11 is a screen capture illustrating an example user interface for registering a content provider address with a server, in accordance with an embodiment of the invention;

**[0022]** FIG. 12 is a screen capture illustrating an example user interface for specifying the type of activity to be monitored, in accordance with an embodiment of the invention;

10 **[0023]** FIG. 13 is a screen capture illustrating an example user interface for specifying metadata relating to data that is to be tracked, in accordance with an embodiment of the invention;

**[0024]** FIG. 14 is a screen capture illustrating an example user interface for specifying the address of the content provider server, in accordance with an embodiment of the  
15 invention;

**[0025]** FIG. 15 is a screen capture illustrating an example user interface for viewing consumer interactions with content, in accordance with an embodiment of the invention;

**[0026]** FIG. 16 is a screen capture illustrating an example user interface for displaying opt-in information to an advertiser, in accordance with an embodiment of the invention;

20 **[0027]** FIG. 17 is a screen capture illustrating an example user interface for displaying consumer interactions with pieces of content by each channel, in accordance with an embodiment of the invention;

**[0028]** FIG. 18 is a screen capture illustrating an example user interface for displaying opt-in information over a certain period of time, in accordance with an embodiment of the  
25 invention;

**[0029]** FIG. 19 is a screen capture illustrating an example user interface for displaying consumer interaction by channel, in accordance with an embodiment of the invention;

**[0030]** FIG. 20 is a screen capture illustrating an example user interface for displaying individual consumer information, in accordance with an embodiment of the invention; and,

**[0031]** FIG. 21 is a screen capture illustrating an example user interface for new account sign ups, in accordance with an embodiment of the invention.

5 **[0032]** It will be noted that throughout the appended drawings, like features are identified by like reference numerals.

#### DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

**[0033]** In the following description, details are set forth to provide an understanding of the invention. In some instances, certain circuits, structures and techniques have not been  
10 described or shown in detail in order not to obscure the invention.

**[0034]** According to one embodiment of the invention, a system and method are provided for monitoring web activity on a content provider server. In one aspect, the system and method enable an activity monitor server to monitor interactions between content  
15 viewers and one or more content provider servers. The one or more content provider servers may provide content from a number of platforms, for example, social media platforms, web pages, e-mail communications, etc. For example, an advertiser coordinating an advertising campaign across a range of media may wish to monitor the effectiveness of the advertising using various social media platforms, targeted e-mails, one or more web  
20 pages, and through a search engine. An activity monitor server may be used by the advertiser, as is described herein, to monitor the activities of consumers interacting with content on one or more content provider servers. In other words, the system described herein enables marketers to track how consumers interact with a series of content, not just a single piece of content. In this way, a consumer may first interact with a short message  
25 (e.g., a "Tweet"), then read an article, then sign up for a newsletter, then make a purchase, etc. The system described herein enables marketers to follow this entire "conversion" path, as well as compare one conversion path to another to see which is performing best.

**[0035]** The advertiser may use an advertiser terminal to view information relating to the consumers that are viewing the monitored content using a consumer device. The advertiser  
30 terminal may be any computing device operable to register content with a server as is

further explained below. For example, the advertiser terminal may be a desktop computer or a mobile device. The advertiser terminal may provide the advertiser with consumer information such as the number of consumers viewing particular types of content, the number of consumers that respond to particular media and information relating to specific consumers. The advertiser may use this information to provide more focused advertising campaigns as well as to allocate advertising resources to media and content most likely to drive sales. Other information that could be provided includes a best channel to place content, best time of day or day of week to publish content to a particular consumer demographics, etc.

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10 **[0036]** The information obtained from the consumer device may be obtained from the consumer device by, for example, obtaining the IP address of the consumer device. The consumer device may provide information to the activity monitor server based on, for example, the consumer's e-mail address, social media accounts that the consumer is using, or information entered into a form by the consumer on the consumer device.

15 **[0037]** The system enables the advertiser to register the one or more media through which the advertiser is conducting a campaign with the activity monitor server. As will be further described herein, the registration may be achieved by providing an activity monitor server with a web link to content that an advertiser wishes to monitor. The registration may also be achieved by providing an activity relay module associated with a piece of content to monitor interactions between consumers and the piece of content, or by providing an API to enable the administrator of the content provider server to create an activity relay module which may provide consumer information to an activity monitor server. Alternatively, the media may be hosted directly on the activity monitor server, in which case, the activity monitor server can monitor the consumers that access the media.

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25 **[0038]** The content may be created and provided through various means. For example, an advertiser may wish to generate content such as an online catalogue and track consumer information such as the number of consumers who have viewed the catalogue, the time that the consumers spent viewing the catalogue and other information relating to the consumers viewing the catalogue. The advertiser may monitor content by registering the content with an activity monitor server, as is further described below. For example, the advertiser may register the content with the activity monitor server by providing the activity

monitor server with a web link (e.g., a URL) to the content as well as information associated with the content. The activity monitor server may then generate a squeezed link, as is further described below, based on the web link, which may be provided to a consumer and used by the consumer to access the content through the activity monitor server. The information associated with the content may then be associated with the squeezed link as meta data. The web link may be provided to the activity monitor server using a graphical user interface (GUI) or a via an application programming interface (API).

**[0039]** Upon the consumer activating the squeezed link, for example, by clicking the link, the consumer is redirected to the activity monitor server which monitors the consumer's activity. The activity monitor server, using the corresponding web link (e.g., a URL), directs the consumer to the content provider server to access the content or obtains the content from the content provider server and provides this content to the consumer device.

**[0040]** The squeezed link may be any link that can be generated from a web address, for example, a uniform resource locator (URL). The squeezed link may be, for example, a compressed link, an encoded link, an encrypted link, a shortened link, a truncated link, an abbreviated link, an indexing link, synthesized link, shorthand link, or any other link comprising information that may be used by the activity monitor server to generate or locate the original link, for example, the URL.

**[0041]** The squeezed link may be hidden, for example, a consumer who clicks an image may activate the squeezed link. The squeezed link may also be explicit to the consumer, for example, the consumer receives an e-mail comprising the squeezed link.

**[0042]** Alternatively, or in addition, the content provider server may be provided with an activity relay module which relays the consumer device's activities with the content provider server to an activity monitor server. The activity relay module may be implemented by embedding code in the content that the consumer is accessing or by providing the advertiser with an API enabling the advertiser to provide code in the content that relays the consumer device's activities to the activity monitor server. The activity relay module may also be implemented by embedding a segment of code, for example java script, into the content provider server. The segment of code may be provided by the advertiser terminal or by the activity monitor server to a content administrator or to the advertiser. The content administrator administrates or creates content on the content provider server.



**[0043]** The consumer device's interaction with content may be monitored by hosting content directly on an activity monitor server comprising a content provider module. The content provider module provides the requested content to one or more consumer devices. The activity monitor server may monitor all interactions between the one or more consumer  
5 devices and the activity monitor server directly. Content that is to be monitored must be registered with the activity monitor server prior to monitoring interactions between a content viewer and the content.

**[0044]** Referring to FIG. 1, an activity monitor server 208 is shown in communication with a content provider server 212, an activity capture module 214 and a consumer device  
10 202 over a network, for example, the Internet 204. The activity monitor server 208 monitors interactions between one or more consumer devices 202 and one or more content provider servers 212. The activity monitor server 208 is in communication with an activity capture module 214, which is in communication with an activity database 216 and an advertiser terminal 218 over a network, for example, the Internet 204. The advertiser terminal 218  
15 may enable a consumer to register content with the activity monitor server and may enable an advertiser to monitor consumers' interactions with registered content. The advertiser terminal 218 may comprise, for example, a desktop computer, a laptop computer, a mobile device, a server, a tablet, etc.

**[0045]** The database 216 is operable to store consumer information. The consumer  
20 information may comprise, for example, information relating the consumer's activities, personal information relating the consumer, geographical information, and information relating to the consumers device, previous activity between the consumer and the advertiser, etc.

**[0046]** The activity monitor server 208 is operable to receive requests from the  
25 consumer device 202 to access content on the content provider server 212. The activity monitor server 208 may provide the consumer device 202 with the requested content and monitor the exchange between the consumer device 202 and the content provider server 212, as is further described below. The activity monitor server 208 may comprise a processor and a memory. The memory may have stored thereon instructions, which when  
30 executed by the processor, provide the functionality described herein.

[0047] The activity monitor server 208 may be enabled to monitor the requests made and content provided by the consumer device 202 to the content provider server 212 without being an intermediary between the content provider server 212 and the device 202. The activity monitor server 208 is operable to enable an advertiser terminal 218 to register content with the activity monitor server 208. The activity monitor server 208 may also be operable to receive a request from a consumer device 202 to access a squeezed link and, upon receiving the request, determine the address of the content corresponding to the squeezed link and enable the consumer device 202 to access the content while monitoring the interaction between the consumer device 202 and the content. Each of the consumer device 202, advertiser terminal 218, activity monitor server 208, and content provider server 212 may also comprise a display, and/or be linked to a display.

[0048] The consumer device 202 may be controlled by a user, for example, a consumer or potential consumer. The consumer device 202 may comprise a processor and a memory. The memory may have stored thereon instructions, which when executed by the processor, provide the functionality described herein. The consumer device may be a computer, such as a desktop computer, a laptop computer, a smartphone, a tablet computer, or any other computer device. The consumer device 202 further comprises a transceiver that is operable to link the consumer device to a network, for example, the Internet 204.

[0049] The activity capture module 214 may be located on the activity monitor server 208 or may be located remotely, but in communication with, the activity monitor server 208.

[0050] Referring to FIG. 2, the steps for registering media with the activity monitor server 208 are illustrated. In step 102, the advertiser registers the address and the platform of the media that the advertiser intends to monitor. For example, the advertiser may wish to monitor content on a social media page. The advertiser would provide the activity monitor server 208 with information regarding the platform on which the content was distributed, for example, LinkedIn<sup>TM</sup>. The advertiser may also wish to provide the activity monitor server 208 with other information such as the purpose of the content in step 104. For example, the purpose of the content may be product awareness or may be a form from which potential clients may obtain a quote. The activity monitor server 208 may request information relating to content being registered with the activity monitor server 208. The advertiser terminal 218 may enable the advertiser to provide definite information relating to registered content to the

activity monitor server 208, for example, date information, platform information, etc. The advertiser terminal 218 may enable the advertiser to provide indefinite information relating to registered content to the activity monitor server 208, for example, using text fields. Information relating to the registered content may be associated with the registered content and stored as a tag. In step 106, the advertiser provides the address of the content. For example, in step 106, the advertiser may provide the activity monitor server 208 with a uniform resource locator corresponding to the address of the content.

**[0051]** In step 108, the activity monitor server generates a squeezed link based on the address of the content which is to be monitored. For example, the squeezed link may comprise a shortened version of a URL. The squeezed link may comprise a link identifier that enables the activity monitor server 208 to generate a URL based on the squeezed link. By way of example, the activity monitor server 208 may generate a squeezed link based on a URL provided by the advertiser. The activity monitor server 208 may then store the squeezed link, or an identifier corresponding to the squeezed link in a lookup table in a memory. The activity monitor server 208 may also store the corresponding URL, for example, the activity monitor server 208 may store the corresponding URL in the same lookup table. The activity monitor server 208 may then, upon receipt of a squeezed link, obtain a corresponding URL from memory, for example, by consulting the lookup table. The activity monitor server 208 may also be operable to use the squeezed link to generate the corresponding URL.

**[0052]** In step 110, the content provider server 208 provides the squeezed link to the advertiser. The advertiser may then, in step 112, provide the squeezed link to one or more consumers. For example, the squeezed link may be provided as a link on a web page, a link in an e-mail address. The squeezed link may be explicitly shown to the consumer or may be hidden from the consumer. When the consumer clicks the squeezed link or otherwise activates (in step 113) the squeezed link to access desired content on the content provider server 212, the consumer's device 202 communicates with the activity monitor server 208. The activity monitor server 208 monitors the consumer's request to view the desired content on the content provider server 212 and may record information relating to the consumer or the consumer's request to view content on the content provider server in step 114.

**[0053]** In step 116, the activity monitor server 208 determines the URL required to obtain content from the content provider server 212 based on the squeezed link. In step 116, the activity monitor server enables the consumer device to access the desired content, for example, by redirecting the consumer device 202 to the content provider server 212 using the URL. Steps 114 and 116 may be performed quickly to leave the consumer with no perception that the consumer's device has been redirected to the content provider server 212.

**[0054]** In order for the advertiser to obtain the information that was obtained by the activity monitor server 208, the advertiser must obtain the information from the activity monitor server 208. FIG. 3 outlines an example process of the advertiser obtaining information from the activity capture module 214 using the advertiser terminal 218. In step 302, the consumer device 202 activates the squeezed link. The consumer device is then directed to the activity monitor server 208 in step 304. In step 306, the activity monitor server 208 redirects the consumer device 202 to the content provider server 212 for the consumer to retrieve the desired content. The activity monitor server 208 provides the consumer information to the activity capture module 214 in step 308. In step 310, the activity capture module 214 stores the consumer information in an activity database 216. The activity capture module 214 may aggregate information from a plurality of consumers who are requesting content from a plurality of content provider servers in step 312. For example, the activity capture module 214 may aggregate statistics for all consumers who have requested access to content registered with the activity monitor server 208 over the previous month and store this information in a file. The activity capture module 214 in step 314 enables the advertiser terminal 218 to obtain consumer information and/or aggregate consumer information. In particular, the activity capture module 214 enables the advertiser terminal 218 to obtain information relating to the number of consumers relating to particular content and/or the degree to which the consumers have interacted with the content. By way of example, if a large number of consumers have viewed an entire 10 minute video, this information could be provided to the advertiser terminal 218 to indicate that the video was successful in advertising to consumers. In contrast, if few consumers accessed the video and no consumers watched the entire length of the video, the advertiser terminal 218 may indicate to the advertiser that the video advertisement was not a success in advertising to

consumers. The advertiser terminal 218 may comprise a display which is operable to display the consumer information to an advertiser, as will be further described below.

**[0055]** Furthermore, the advertiser may put a squeezed link 206 at the end of the video that leads the consumer to a newsletter signup page that has also been squeezed. The advertiser can then see concrete numbers that tell them if the video is effective or not at driving consumers to sign up for the newsletter. This example illustrates a simple conversion path. Also, the advertiser could squeeze multiple versions of the video leading to multiple versions of the newsletter signup page. The advertiser could then retrieve concrete data around what video + signup page combination was most effective at driving consumer signups.

**[0056]** Although the activity monitor server 208 may monitor consumers' interactions with one or more media on one or more content provider servers using a squeezed link, the system may employ code embedded on the content provider server to obtain consumer information. Referring to FIG. 4, a system similar to that of FIG. 1 is shown, however, the activity monitor server 208 does not receive squeezed link requests from the consumer device 202. Instead, or in addition, an activity relay module 402 is provided on the content provider server 212. The activity relay module 402 may comprise, for example, a script such as a JavaScript<sup>™</sup> embedded on the page that the consumer device 202 is accessing. The activity relay module 402 is operable to monitor activity of the consumer and provide this activity to the activity monitor server 208.

**[0057]** Referring to FIG. 5, an example process of monitoring consumer interaction with content on a content provider server 212 is illustrated. In a first step 502, a consumer device 202 accesses content on a content provider server that has previously been registered with the activity monitor server 212. The consumer device 202 may request the content using, for example, a URL 210. The activity relay module 402 on the content provider server 212 then obtains consumer information relating to the consumer devices that have accessed or modified content on the content provider server 212 in step 504. In step 506, the activity relay module provides the activity monitor server 208 with the consumer information. The activity monitor server 208 provides the consumer information to an activity capture module 214, in step 508, as was described above.

**[0058]** In step 510, the activity capture module stores the consumer information obtained from the activity monitor server 208 in an activity database 216. The activity capture module may aggregate consumer information corresponding to a plurality of consumer devices that have accessed and/or modified content on the content provider server 212 in step 512. In step 514, the advertiser terminal 218 may obtain the consumer information from the activity database 216. As will be further explained below, the advertiser terminal 218 may display various statistics and metrics regarding aggregate consumer information and/or information relating to individual consumers. For example, the advertiser terminal 218 may provide an advertiser with information relating to how individual pieces of content are performing. For example, the information may comprise how individual pieces of content are generating sales, sales leads, or requests for further information from the advertiser.

**[0059]** The content provider server 212 may also comprise computer executable instructions enabling the activity relay module 402 to provide consumer information to the activity monitor server 208. This may be accomplished, for example, by providing the creator of the content on the content provider server with an application programming interface (API) enabling the creator of the content to embed instructions on content hosted by the content provider server.

**[0060]** FIG. 6 is an example system level diagram illustrating an activity monitor API module 602 in communication with the content provider server to enable the activity relay module 402 to provide consumer information to the activity monitor server 208. The activity monitor API module 602 may comprise instructions which may be associated, embedded, and/or linked to content on the content provider server 212 when the content is first stored on the content provider server 212. The activity relay module 402 operates similarly to the activity relay module comprising embedded script on the content provider server 212 to provide the activity monitor server with consumer information. The activity monitor API module 602 may be provided to multiple content provider servers and may enable the activity relay module 402 to provide the activity monitor server 208 with consumer information from all, or some, of the content provided by the content provider server 212.

**[0061]** Referring to FIG. 7, an example process of using the activity monitor API module 602 to monitor consumer information is illustrated. In step 700, a content creator provides

content on the content provider server 212 and further provides an activity relay module 402 on the content provider server 212 using the activity monitor API module 602. The content creator may be the advertiser. In step 701, the advertiser registers the content on the content provider server 212 with the activity monitor server 208. In step 702, a consumer device accesses from the content provider server 212 content that has previously been registered with the activity monitor server 208. In step 704, the activity relay module 402 obtains consumer information relating to the consumer device accessing the registered content on the content provider server 212.

**[0062]** The activity relay module 402, in step 708, provides the consumer information to the activity monitor server 208. In step 710, the activity monitor server 208 provides the consumer information to the activity capture module 214, which may store the consumer information in an activity database 216 in step 712. The activity capture module 214 may optionally aggregate consumer information stored on the activity database 216 in step 714. In step 716, the advertiser terminal 718 may obtain aggregate or individual consumer information from the activity database. The advertiser terminal 718 may also be operable to obtain information on a single piece of content.

**[0063]** Referring to FIG. 8, an example system for monitoring activity wherein the activity monitor server 208 hosts the content is illustrated. The activity monitor server 208 comprises a content provider module 802 which serves to provide a consumer device 202 with content desired by a consumer. The consumer device 202 is in communication with the activity monitor server 208 via a network connection, for example, via the Internet 204.

**[0064]** The consumer device 202 may request access to content using a URL 210, which is received by the activity monitor server 208. The content provider module 802 on the activity monitor server 208 may then provide the requested content to the consumer device 202. The activity monitor server 208 captures consumer information from the consumer device 202 in communication with the activity monitor server 208. The activity monitor server 208 is further in communication with an activity capture module 214 that may store consumer information in an activity database 216 and provide consumer information to a content provider 218.

**[0065]** FIG. 9 illustrates an example process for monitoring interactions between the consumer device 202 and the activity monitor server 208. The consumer device 202 first

requests content hosted on the activity monitor server 208 in step 902. The content provider module 802 on the activity monitor server 208 then provides the requested content to the consumer device 202 in step 903. In step 904, the activity monitor server 208 provides consumer information relating to the consumer requesting content to the activity capture module 214. As was described above, once the activity capture module 214 obtains the consumer information from the activity monitor server 208, the activity capture module 214 may store the consumer information in an activity database 216 in step 906. In step 908, the activity capture module may aggregate consumer information stored in the activity database. The advertiser terminal 218, in step 910, may obtain aggregate or individual consumer information from the activity capture module 214.

**[0066]** Referring to FIG. 10, an example activity monitoring system is shown. The activity monitor server 208 is in communication with the consumer device 202 over the internet 204. The activity monitor server 208 comprises an activity capture module 214, a content registration module 920, a scoring module 922, an analysis module 924, and a reporting module 926. The activity capture server is also in communication with a content provider server 212, which may provide web content including a web page 936, a blog 938, an "App" such as a smartphone application 940, and/or social media content 942. A content administrator 946 may be in communication with the activity monitor server via an activity monitor API module 602. The content administrator 946 may be an advertiser terminal 218. The API may be operable to enable the registration of multiple pieces of content with the activity monitor server 208 in a single step. For example, a content administrator 946 may provide the activity monitor server 208 with the URL to several pieces of content as well as provide the activity monitor server 208 with associated content. The activity monitor server 208 may then register each of the pieces of content, generate a squeezed link corresponding to the URL for each piece of content and return the squeezed link to the advertiser. This method may be particularly useful for registering many pieces of content.

**[0067]** The activity monitor server 208 may also be in communication with an advertiser terminal 218. The advertiser terminal 218 may comprise, or be linked to, a display 930 which may provide the advertiser with a graphical user interface (GUI) 932. The GUI 932



may provide the advertiser with consumer information and/or content information, for example, the GUI 932 may display a consumer information report 934.

5 [0068] The content registration module 920 may be operable to receive content information from the content administrator 946 and/or the advertiser terminal 218 and register content 920 to be monitored with the activity monitor server 208. For example, an advertiser operating the advertiser terminal 218 may register content using the GUI 932, as will be further explained herein.

10 [0069] The activity capture module 214, as was described above, is operable to receive consumer information from the activity monitor server 208 and store the consumer information on an activity database 216. The activity capture module 214 may also aggregate consumer information on the activity database 216.

15 [0070] The scoring module 922 may generate a consumer score to indicate to an advertiser the probable effect of content on particular consumers as well as the relative performance of a particular piece of content or a group of pieces of content. For example, the scoring module may generate a value that estimates the likelihood that a particular consumer will satisfy the advertiser's goal, for example, by purchasing a product. This may be generated based on the number of pieces of content with which the consumer has interacted, the rate at which the consumer has interacted with the content, and the tags or other information associated with the content. For example, a consumer that frequently  
20 accesses content relating to product pricing may be assigned a high consumer score as this consumer may be more likely to purchase a product than a consumer who has barely interacted with content. The value may also be compared with values for other consumers accessing similar content.

25 [0071] The scoring module 922 may also generate a content score which calculates the overall performance of a piece of content relative to other pieces of content that the advertiser has registered with the activity monitor server 208. The scoring module 922 may generate a content score based on the performance of a piece of content, or a group of pieces of content, relative to other advertisers in the same industry. The content score may be generated based on the number of interactions between consumers and the content, the  
30 number of times that the content has lead to a sale, the frequency that consumers have interacted with the content, the frequency that the content has lead to a sales lead, etc. For

example, a piece of content that attracts interaction from a larger number of consumers than other content in the same industry may be assigned a higher content score.

5 [0072] The scoring module 922 may also score individual leads based on how they interact with content. For example, someone who downloads 5 pieces of content within an hour may be a "hot lead" and get a high score, someone who downloads 2 pieces of content over 12 months may not. The scoring module may also score how several pieces of content working in conjunction (i.e., a conversion path) lead to customer conversions versus another conversion path.

10 [0073] The analysis module 924 may monitor the interactions between consumers and the content that an advertiser has registered. If a particular piece of content is generating significant interactions with consumers, the analysis module 924 may report the success of the content to the advertiser. For example, the analysis module 924 may report the success of a particular piece of content to the advertiser when a certain threshold of interaction has been met. For example, the threshold may comprise a certain number of  
15 interactions with a piece or group of content in a particular period of time, a total number of interactions with a piece or group of content, a growth rate of the number of interactions with a piece of group of content, etc. The analysis module 924 may also report the channels through which a particular piece or group of content is best performing. The analysis module 924 may be operable to provide other automated analysis and reports to  
20 the advertiser terminal 218.

[0074] The reporting module 926 is operable to obtain information from the activity database 216 and generate reports based on consumer information. For example, the reports may comprise content scores, consumer scores, content interaction rates, etc. The reporting module 926 may be operable to provide reports in a variety of formats, some  
25 examples of which are provided below. The reporting module may provide reporting data in an image format, in a raw data format (e.g., in a comma separated values table), in document form, etc. The reports may also be interactive.

[0075] A graphical user interface (GUI) 932 may be provided on the advertiser terminal 218 and/or on the activity monitor server to enable the advertiser to register content and to  
30 view consumer information across multiple media streams. Referring to FIG. 11, an example GUI 932, 1002 is illustrated that may be displayed by the advertiser terminal 218

when registering content with the activity monitor server 208. The GUI may provide a number of options 1004 enabling an advertiser to navigate from the registration screen to a live monitoring screen, a consumer information report screen, etc.

5 [0076] The GUI may include an element 1006 that indicates to the advertiser the screen that the advertiser is currently viewing. The GUI may also comprise a menu bar 1012, 1010 which enables the advertiser to navigate between various screens that may be used for registering content. For example, the menu bar 1012 may comprise a location setup button 1014, which is the screen that is shown in FIG. 11. The menu bar 1012 may further  
10 comprise an offer setup tab 1020, a forms tab 1022, and a clicks tab 1024, the purpose of each of which will become apparent herein. The example GUI of FIG. 11 further comprises a location in which the content is being distributed, for example, the location may be a social media platform such as Facebook™. A location type field 1018 may also enable the advertiser to input the type of content that the advertiser is registering. For example, the location type field may enable an advertiser to specify whether the location is social media,  
15 a web page, a link in an e-mail, an app, an online catalogue, a multimedia file, or other form of media.

[0077] Referring to FIG. 12, an example screen shot of the GUI is illustrated showing the offer setup tab, which enables the advertiser to enter information relating to the content that is to be monitored. For example, the advertiser may provide the content being  
20 monitored with an identifier 1102 and type 1104. This information may comprise a call to action for the consumer which is associated with the content. Calls to action that have been completed by a consumer may be referred to as “opt-ins”. For example, the content may comprise a call to action for the consumer to enter an e-mail address at which the consumer may receive further communications. A single piece of content may comprise several  
25 offers, for example, an offer to receive e-mails, an offer to join a social media group, an offer to send the advertiser an e-mail, etc.

[0078] The offer setup tab may also comprise inputs for other information concerning the content that is to be monitored 1106. For example, these inputs could include the advertising language, file type of the advertisement, etc. The inputs could also include the  
30 audience and the purpose of the content, for example, whether the content is directed toward the awareness stage, the interest stage or the intent stage. By way of example,

content raising brand awareness to an audience that may not be aware of a brand or aware of particular characteristics of a brand may awareness stage. A needs assessment may be an example of content to raise brand awareness or whether the content is intended to enable a customer to determine the cost of a potential purchase.

5 **[0079]** The GUI may enable the advertiser to enter the URL of the site that the advertiser wishes to register under the forms tab 1022, as can be seen in FIG. 13. The advertiser may also be choose the location of the content that the advertiser wishes to monitor. The advertiser may also be able to enter tags comprising, for example, text relating to the content being registered. The forms tab 1022 may comprise an input for the  
10 URL of a web page 1202. An advertiser can provide a URL in the URL input. The activity monitor server 208 may then generate a squeezed link using the full length URL. As was described above, the activity monitor server 208 may store the URL along with the generated squeezed link. The forms tab 1022 may further comprise inputs for the name of the content being offered by the advertiser to consumers 1204, an identifier of the location  
15 of the content 1206, and an input for one or more tags 1208 relating to the content being offered.

**[0080]** Referring to FIG. 14, the clicks tab 1024 enables the creation of the squeezed link. A URL input field 1302 enables an advertiser to input a URL. Input 1304 enables the advertiser to provide the offer with an identifier. Input 1306 enables the advertiser to specify  
20 the location where the content is hosted and input 1308 enables an advertiser to enter tags corresponding to the URL. For example, an advertiser may associate a blue tag with French language content and a red tag with English language content. The reporting module may then be operable to generate reports having a red line for English language content and a Blue line for French language content.

25 **[0081]** Reference numeral 1310 refers to an example URL that an advertiser may wish to employ to generate a squeezed link. Numerals 1312 and 1314 refer to the corresponding offer identifier which may be input using the identifier input field 1304 and the location input field 1306 respectively. The squeezed link generated from the URL can be displayed at reference numeral 1316. Additionally, the number of consumer devices that have accessed  
30 the squeezed link 1318 may be displayed through the advertiser terminal.

**[0082]** Referring to FIG. 15, an example screen capture of a GUI that can be displayed by the advertiser terminal 218 to provide information relating to different content that has been registered with the activity monitor server 208 is illustrated. For example, an aggregate chart 1404 may be provided to indicate the total number of times that a particular type of content has been accessed as well as other associated information such as how the consumer arrived at the content and the stage of the content. For example, the consumer may have clicked a squeezed link provided in a targeted e-mail that was created to raise awareness of a brand. The chart may display aggregate statistics compiled from the consumer information for each type of media content. Providing a total of the traffic generated by all advertising media may provide the advertiser with an indication of the success of the entire advertising campaign.

**[0083]** Information relating to the registered content that has been stored as a tag associated with the content may be used in the generation of reports of consumer interaction with content. For example, if content has been registered with a tag corresponding to the language of the content, an advertiser terminal 218 may be operable to provide an advertiser with statistics based on language. In this respect, an advertiser terminal 218 may be operable to provide the advertiser with statistics for each language. The advertiser may then, for example, appreciate the effectiveness of content in various languages. The tags may also be used to format reports. For example, a blue line may correspond to consumer interactions with French language content, whereas a red line may correspond to consumer interactions with English language content.

**[0084]** The table may further display consumer information, for example, the number of consumers that have registered on a mailing list, the number of consumers that have ordered a particular product, the number of consumers that have expressed interest in ordering a particular product and the number of consumers that have engaged with the advertising campaign individually, based on each advertising media, as well as in aggregate. There may also be one or more indications 1406, 1408 that provides the advertiser with a summary of the information contained in the chart 1404 to enable the advertiser to quickly view which components of the advertising campaign have been most successful and which have been the least successful. The table 1404 may be user configurable to display statistics desired by the advertiser. For example, the GUI on the

advertiser terminal 218 may be operable to display changes in advertising the effectiveness of each of the advertising media over a period of time.

**[0085]** Referring to FIG. 16, an example report generated by the reporting module 926 is shown. The report outlines the number of opt-ins that an advertiser's content has  
5 generated. As shown by reference number 1602, the opt-ins may be sorted by individual pieces of content. In the chart 1602, there are 7 individual pieces of content which may be distributed through various channels. As can be seen from the table, SIPTrunkingWhitePaperOptin has generated 13 opt-ins, which is the most from this group  
10 of pieces of content. The chart shown by reference numeral 1604 displays to an advertiser the opt-ins that have been generated depending on the type of channel through which the content was distributed. In this example, e-mail content has generated a greater number of opt-ins than has a website. An advertiser may use the information presented in the chart 1604 to direct content through the most appropriate channel.

**[0086]** Referring to FIG. 17, a chart 1702 showing a breakdown of the channel through  
15 which each individual piece of content was most often accessed is illustrated. Using this chart, an advertiser can determine which channel or channels should be used for each individual piece of content. For example, SIPTrunkingWhitePaper has reached most consumers through Twitter<sup>®</sup> and the website but has reached almost no consumers through any other channel.

**[0087]** It may be advantageous for an advertiser to view the performance content  
20 through various channels over time. FIG. 18 is a diagram showing historical opt-in information over time and organized by the channel through which the content was distributed 1802. It can be seen that there are temporal peaks when the content is accessed most frequently on a particular channel. The information obtained by the  
25 advertisers from this chart 1802 may be used to time successful advertising campaigns to produce content that will be highly viewed as soon as it is provided to consumers.

**[0088]** FIG. 19 shows a chart 1902 that can be used to provide the advertiser with  
information relating to which content distribution channels are most likely to provide content with which a consumer will interact. For example, numeral 1902 shows a chart that  
30 indicates that the web site is the channel with which consumers are most often interacting. The advertiser may then ensure that content is created with that channel in mind.

**[0089]** In FIG. 20, a table 2002 that outlines information relating to individual consumers that have interacted with content provided by an advertiser is illustrated. For example, the table may provide the consumer's name, the consumer's job title and company, e-mail address, and the number of times that the consumer has interacted with the content  
5 provided by the advertiser. The advertiser may also be provided with information outlining the time and date on which the consumer has visited content. The advertiser may also be able to access the time and date on which each individual piece of content was accessed. The information in the table 2002 may be used by salespeople, for example, to follow up on consumers who have interacted with content provided by the advertiser.

10 **[0090]** Referring to FIG. 21, there is shown a screen capture illustrating an example user interface 2100 for new account sign ups, in accordance with an embodiment of the invention.

**[0091]** The embodiments of the invention described above are intended to be exemplary only. Those skilled in this art will understand that various modifications of detail may be  
15 made to these embodiments, all of which come within the scope of the invention.

**WHAT IS CLAIMED IS:**

1. A method of monitoring web activity, comprising:
  - enabling an advertiser to provide a web address of content on a content provider
  - 5 server to an activity monitor server,
  - the activity monitor server generating an encoded link from the web address, the
  - encoded link directing a consumer to the activity monitor server;
  - enabling a consumer device to obtain and activate the encoded link;
  - upon the consumer activating the encoded link, the activity monitor server obtaining
  - 10 the corresponding web address of the content from the content provider server and
  - enabling the consumer device to access the content; and,
  - the activity capture module capturing the interaction between the consumer and the
  - content.
- 15 2. The method of claim 1 further comprising the activity capture module storing a record of consumer activity on an activity database.
3. The method of claim 2 further comprising enabling an advertiser terminal to obtain the record of consumer activity.
- 20 4. The method of claim 3 wherein the activity capture module aggregates records of a plurality of consumer activities.
5. The method of claim 1 comprising enabling an advertiser to provide information
- 25 associated with the content to the activity monitor server.
6. A method of monitoring web activity, comprising:
  - providing a link to a web address of content on a content provider server to a
  - consumer device;
  - enabling the consumer device to activate the link to the content;
  - 30 upon the consumer device activating the link, an activity relay module on the content
  - provider server providing consumer information to an activity monitor server;



the activity monitor server monitoring the interaction between the consumer and the content; and,

the content provider server providing the requested content to the consumer device.

5 7. A system comprising at least one server for monitoring web activity, the at least one server comprising a processor and memory, the memory comprising computer executable instructions for performing the method of any one of claims 1 to 6.

10 8. A computer readable medium comprising computer executable instructions for performing the method of any one of claims 1 to 6.

9. A method of enabling web activity to be monitored, comprising:  
obtaining an encoded link at a consumer device, the encoded link having been generated from a web address and directing the consumer device to an activity monitor server, the activity monitor server having determined a web address of content on a content provider server from an advertiser;

15 the consumer device activating the encoded link;  
the consumer device accessing the content, the content being obtained by the activity monitor server obtaining the corresponding web address of the content from the content provider server; and,

20 the consumer device enabling interaction with the content to enable the activity capture module to capture the interaction.

10. A computer readable medium comprising computer executable instructions for performing the method of claim 9.

11. A consumer device comprising a processor, a communication connection, and memory, the memory comprising computer executable instructions for performing the method of claim 9.

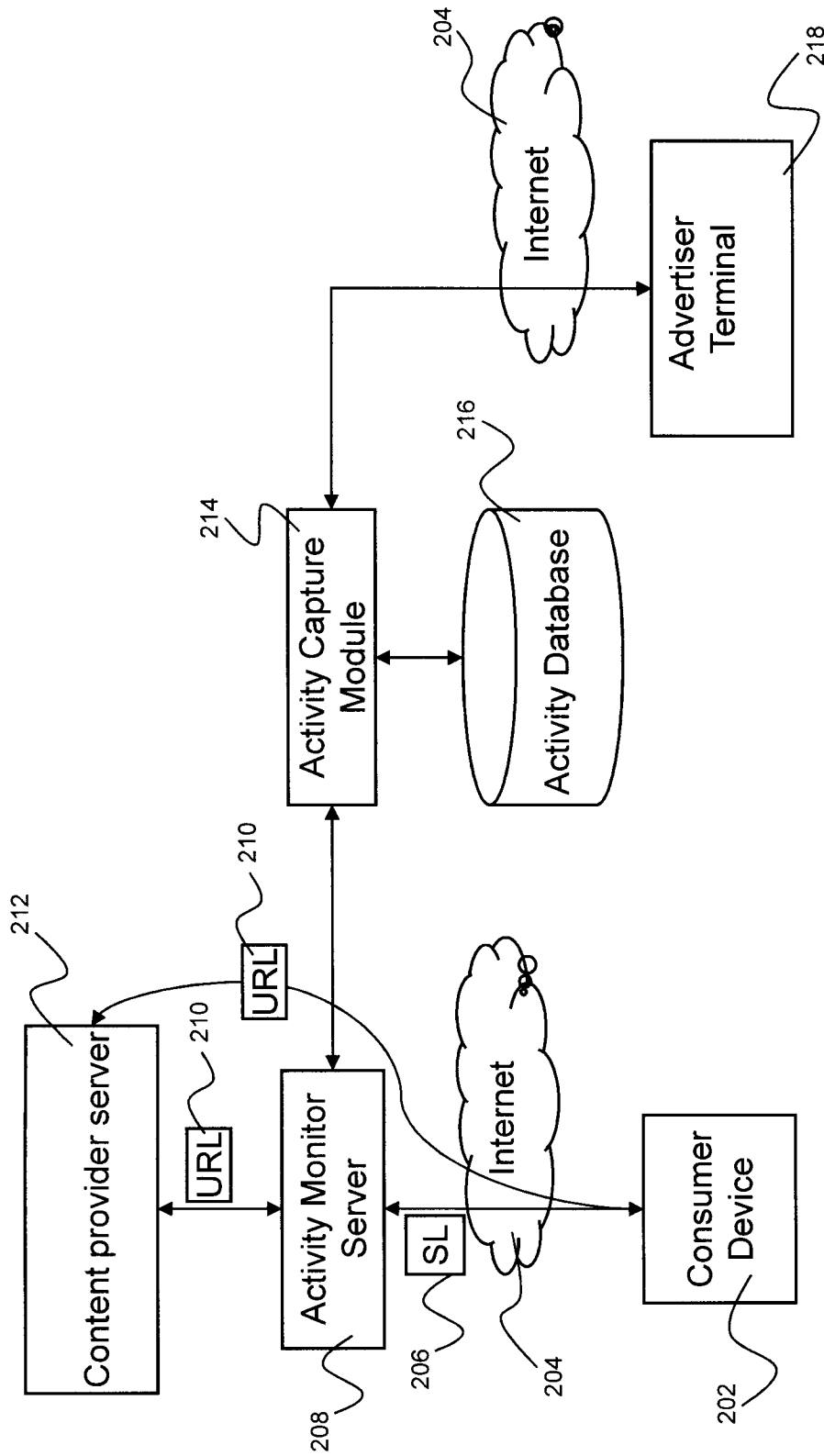
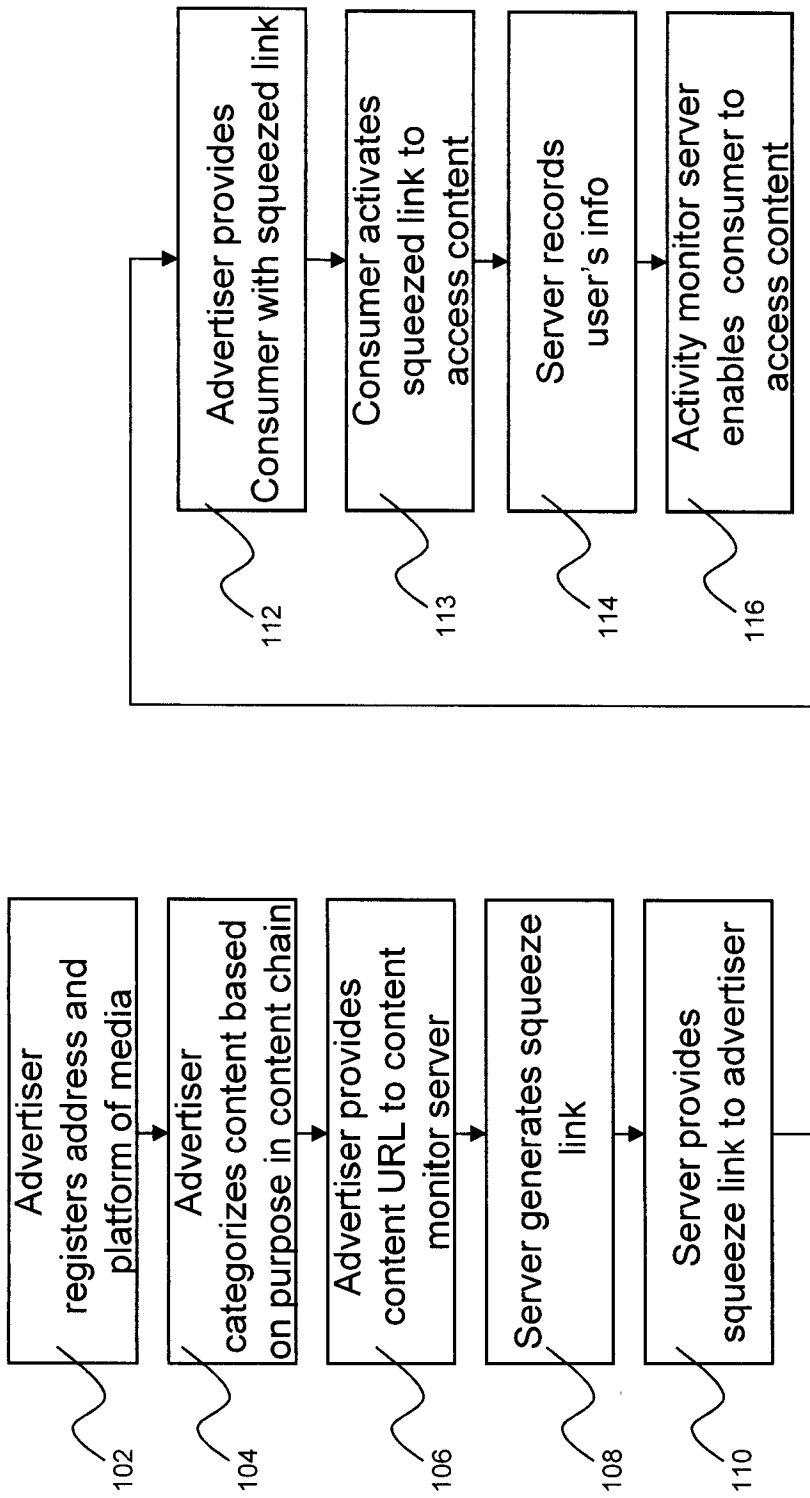
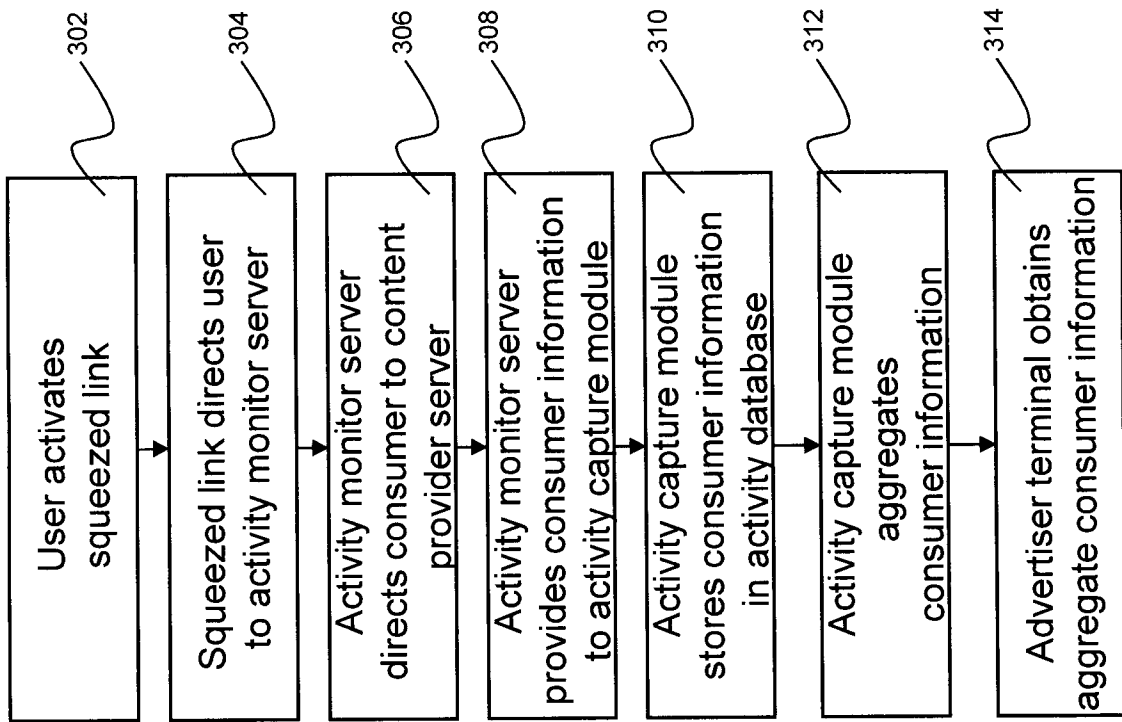


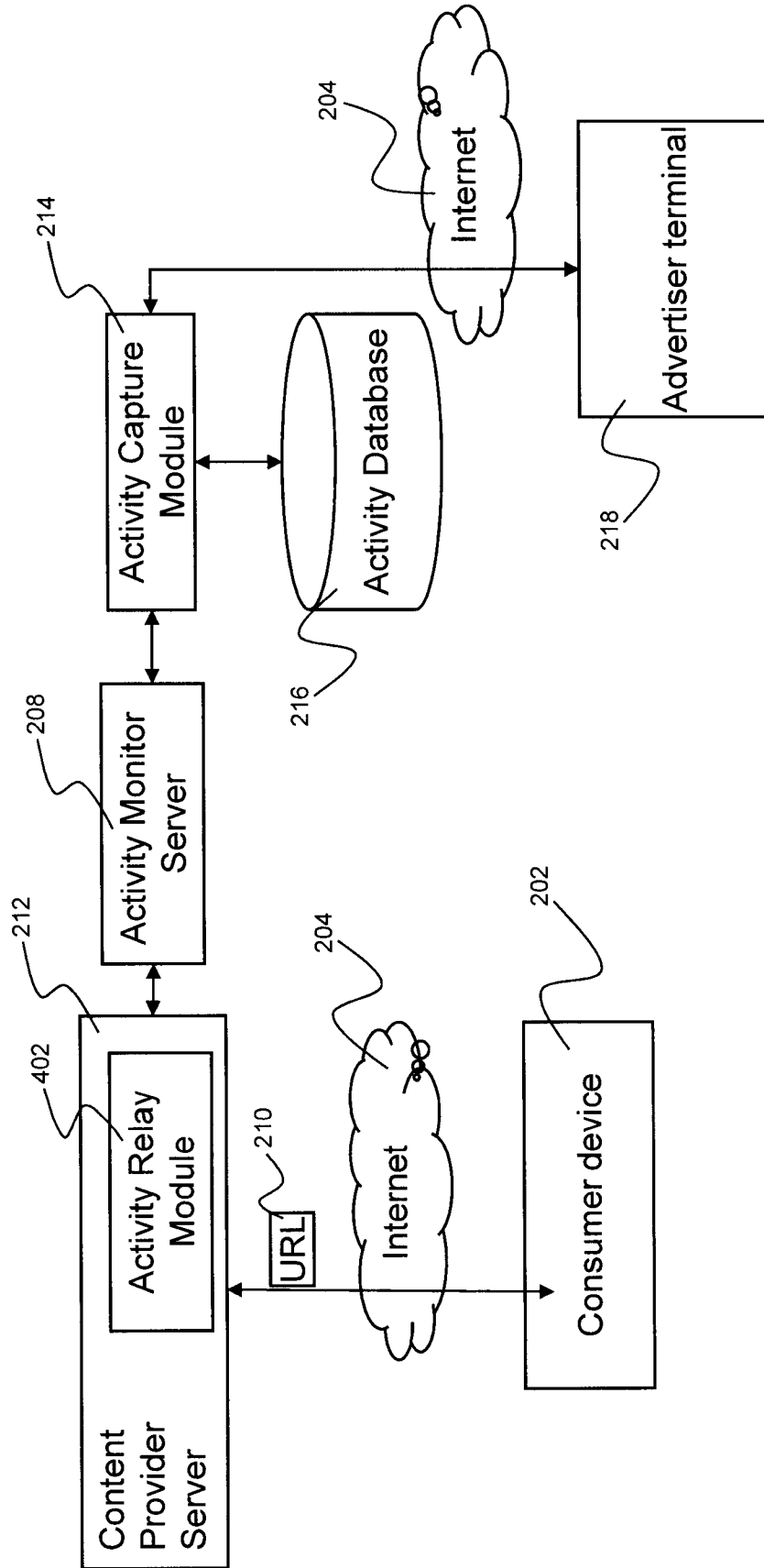
FIG. 1



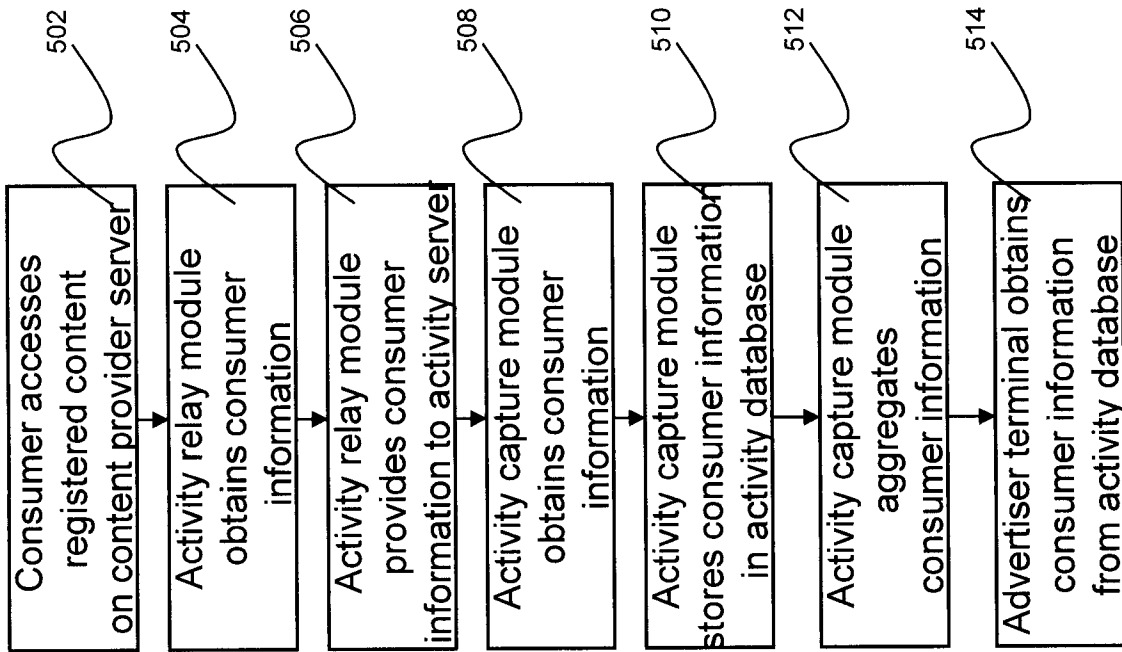
**FIG. 2**



**FIG. 3**



**FIG. 4**



**FIG. 5**

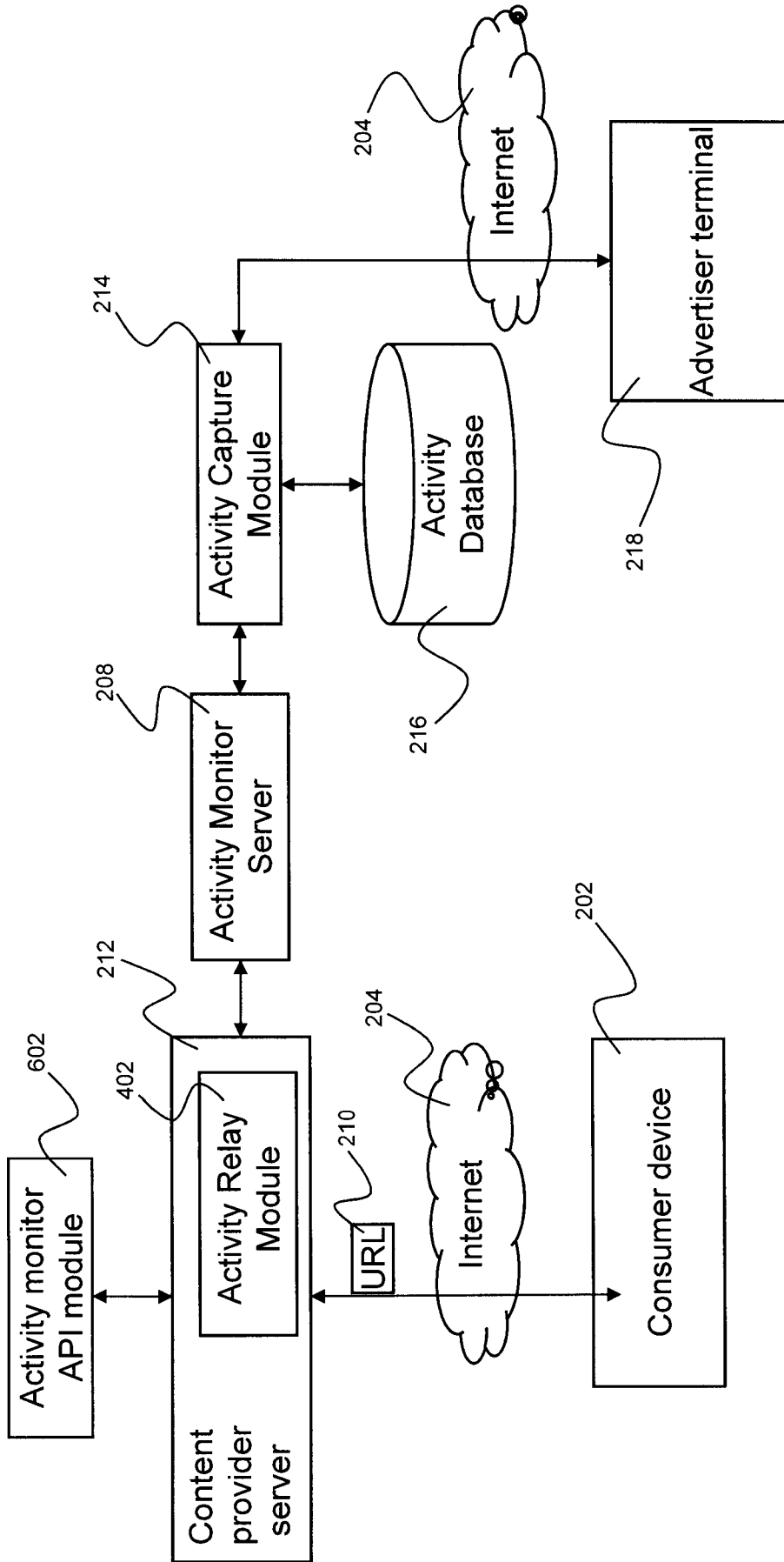
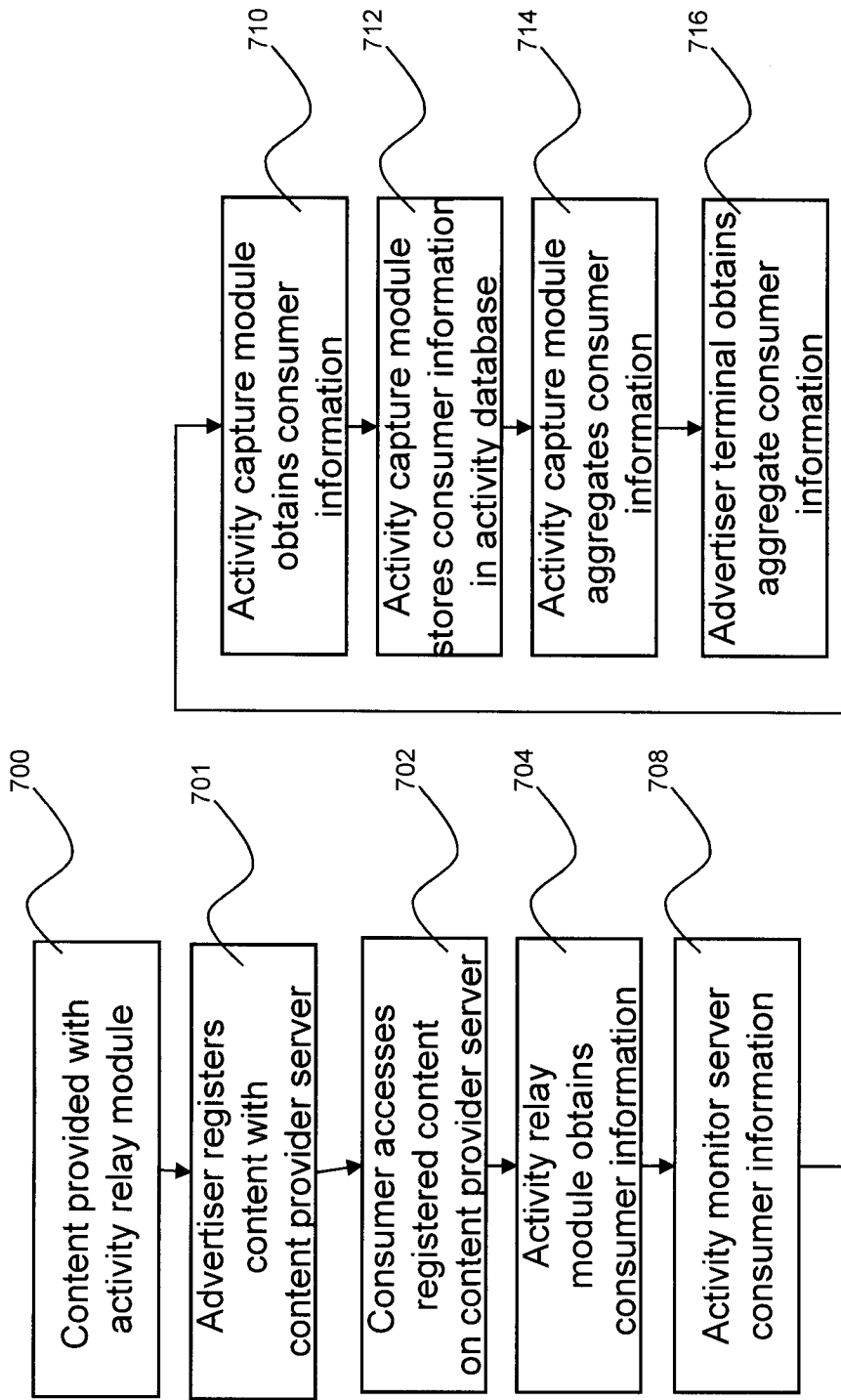


FIG. 6



**FIG. 7**



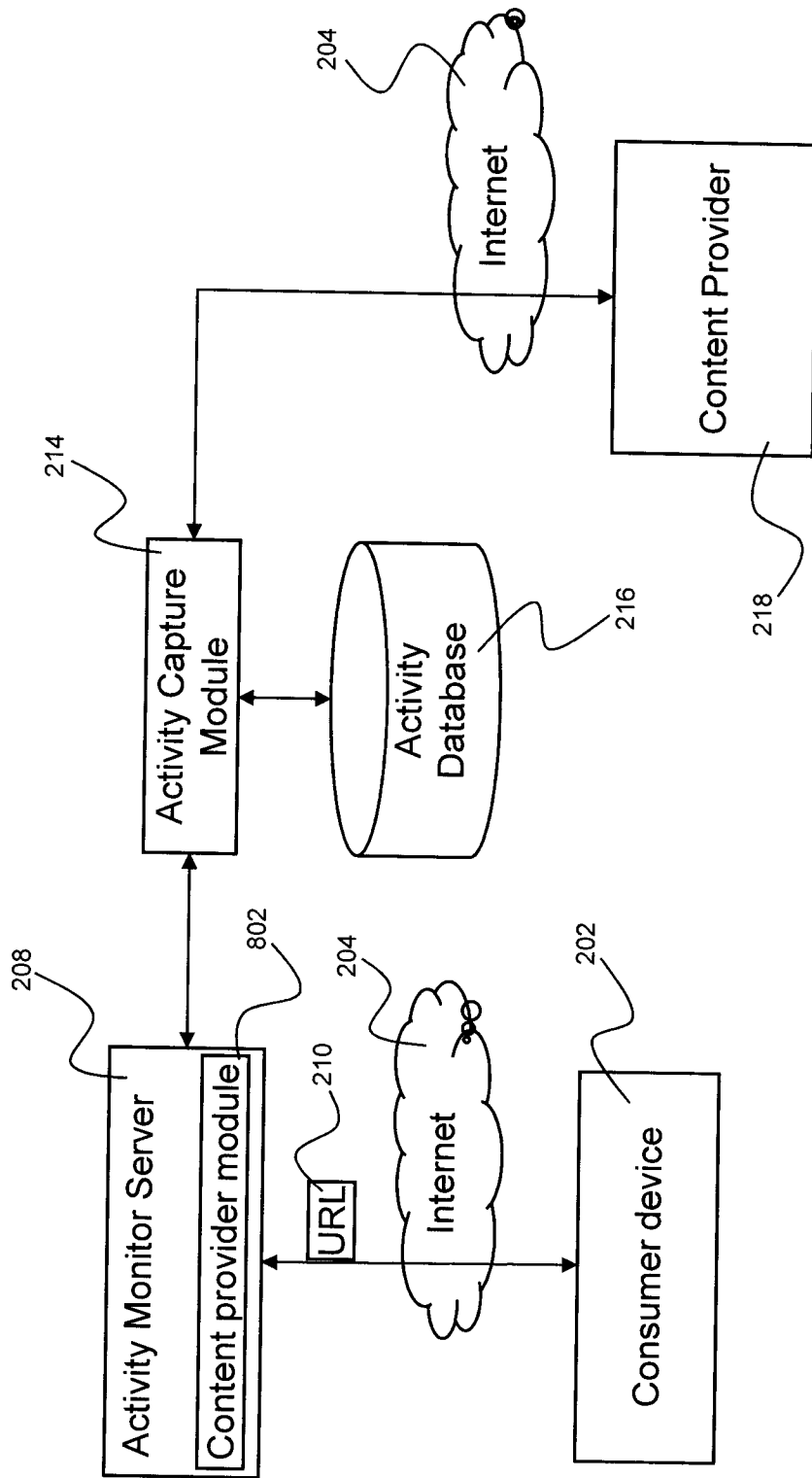
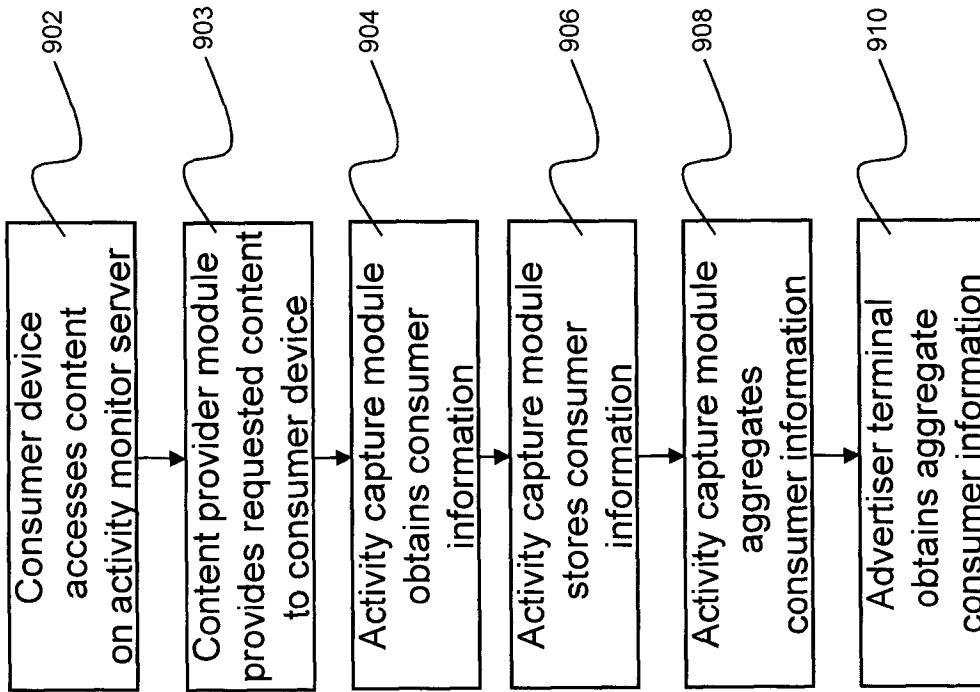


FIG. 8



**FIG. 9**

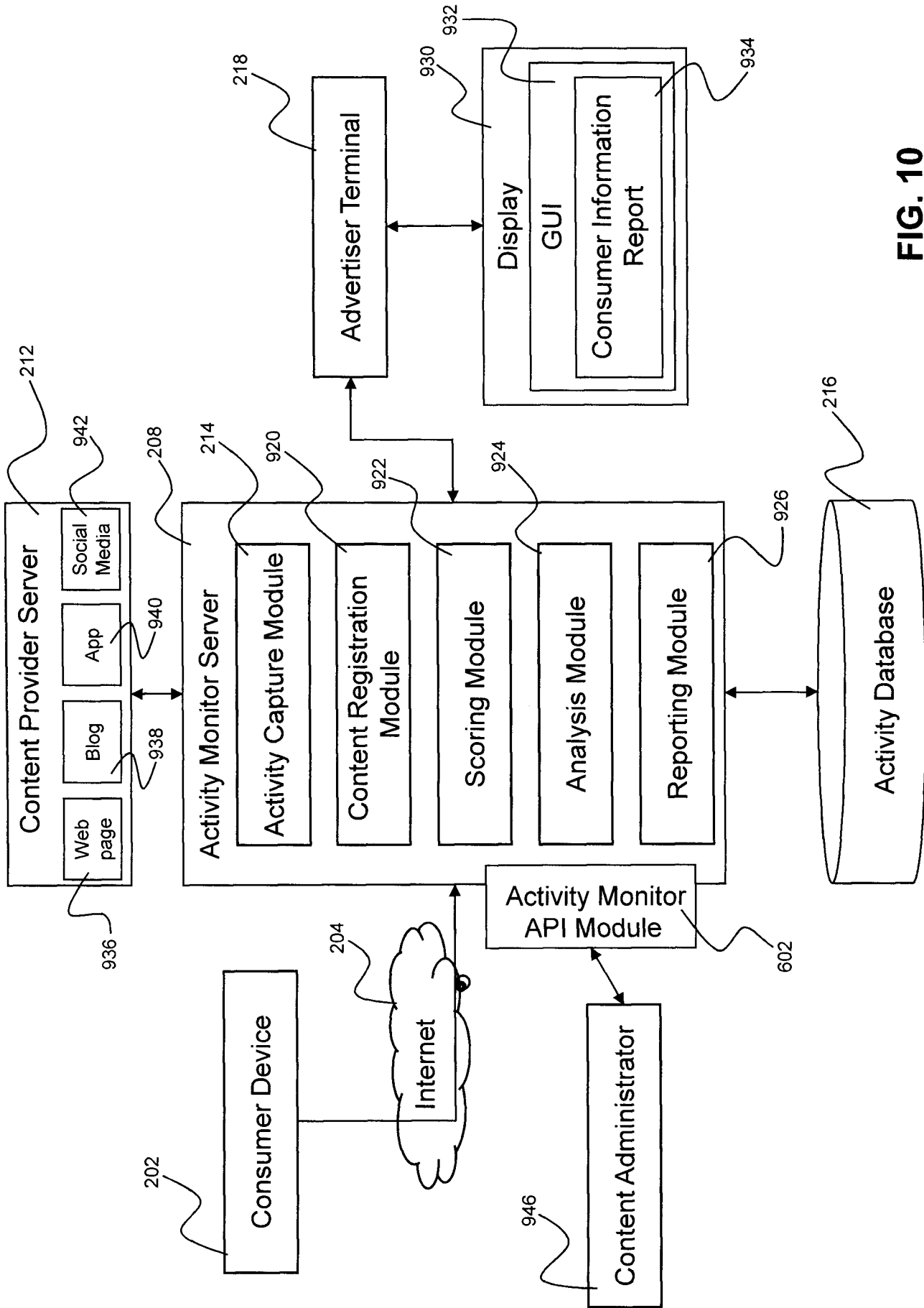


FIG. 10

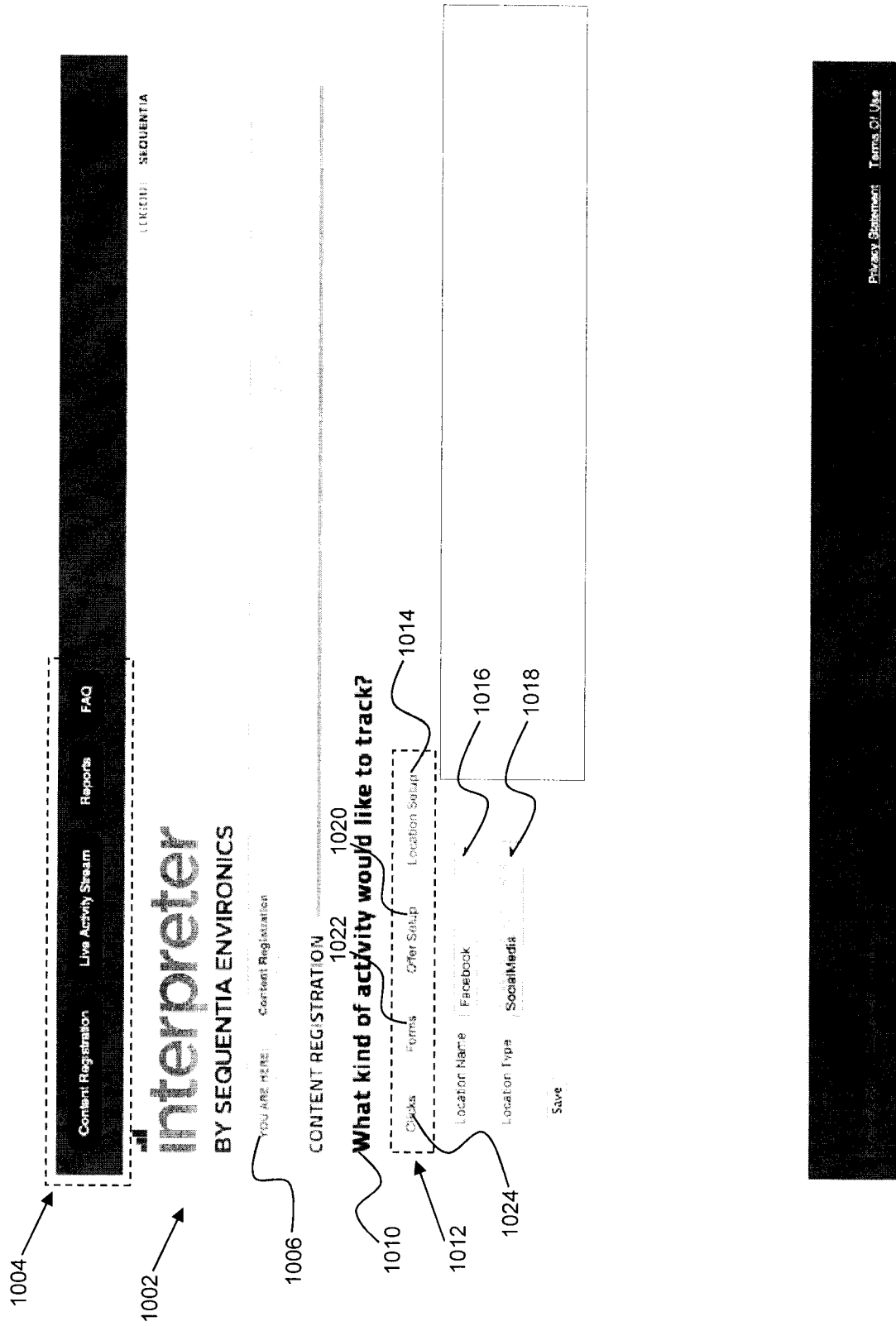


FIG. 11

1004

Content Registration Live Activity Stream Reports FAQ

LOGOUT SEQUENTIA

# interpreter

BY SEQUENTIA ENVIRONICS

YOU ARE HERE: Content Registration

CONTENT REGISTRATION 1022 1020

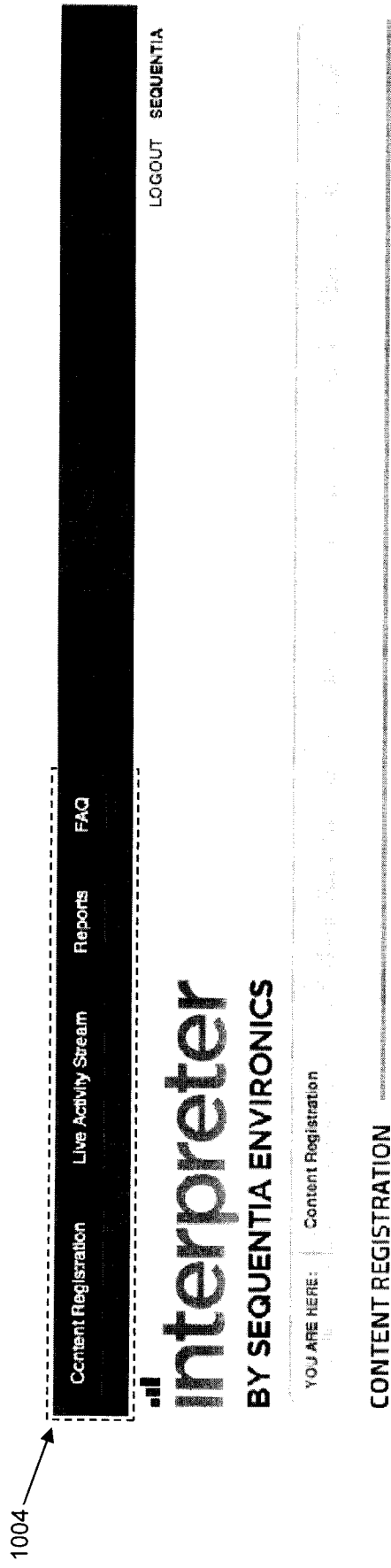
**What kind of activity would like to track?** 1014

1012 1024

1102 1104 1106

1014

FIG. 12



**What kind of activity would like to track?**

1012 Clicks 1014 Location Setup

1022 Forms 1020 Offer Setup

help? 1024 URL\* Provide the base URL of your form

Offer: Unique name of what you're offering with the form

Location: Unique name of the website where the form sits.

Tracker tags: Associate this form with a campaign or other tags

Save

1202

1204

1206

1208

**FIG. 13**

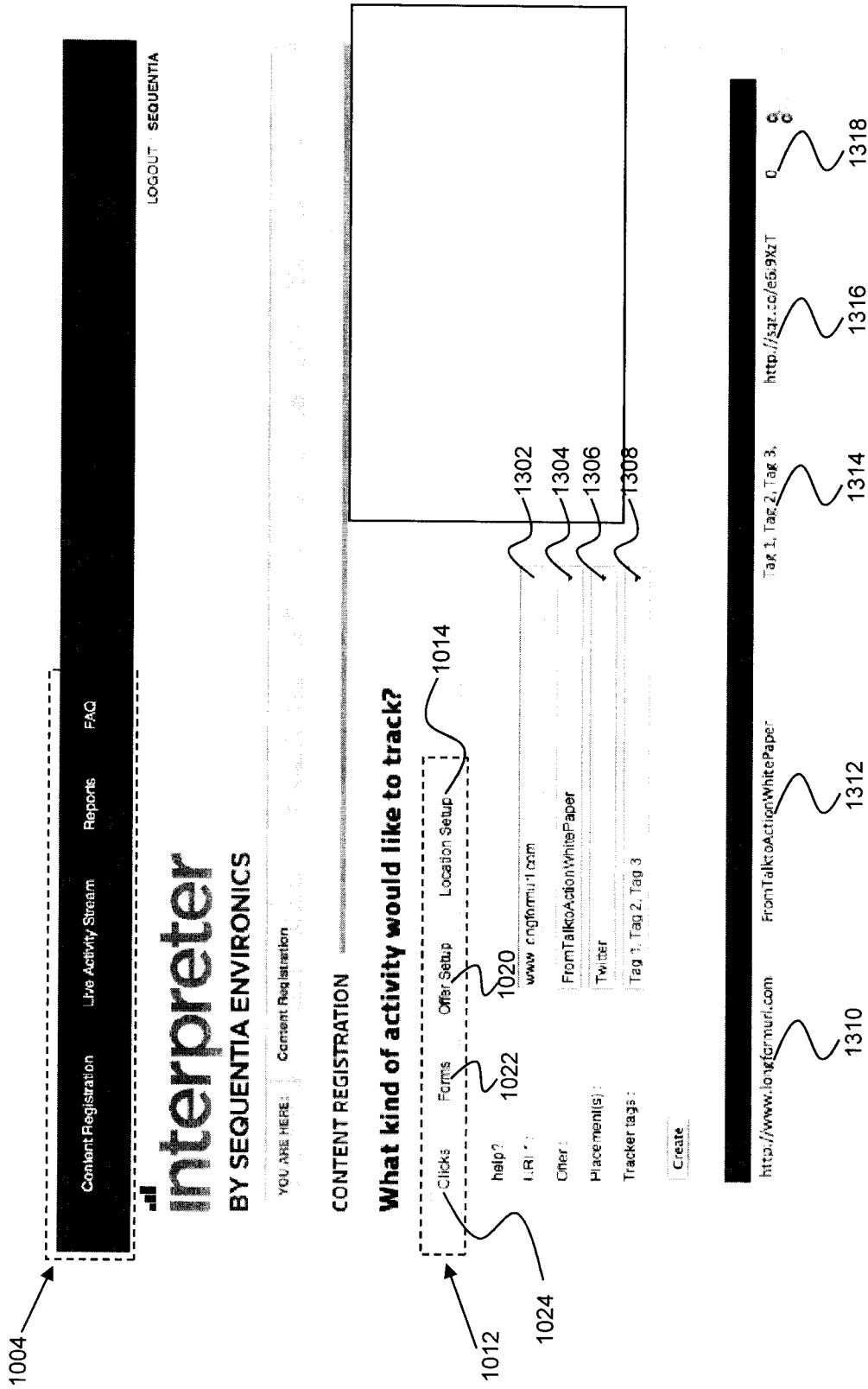
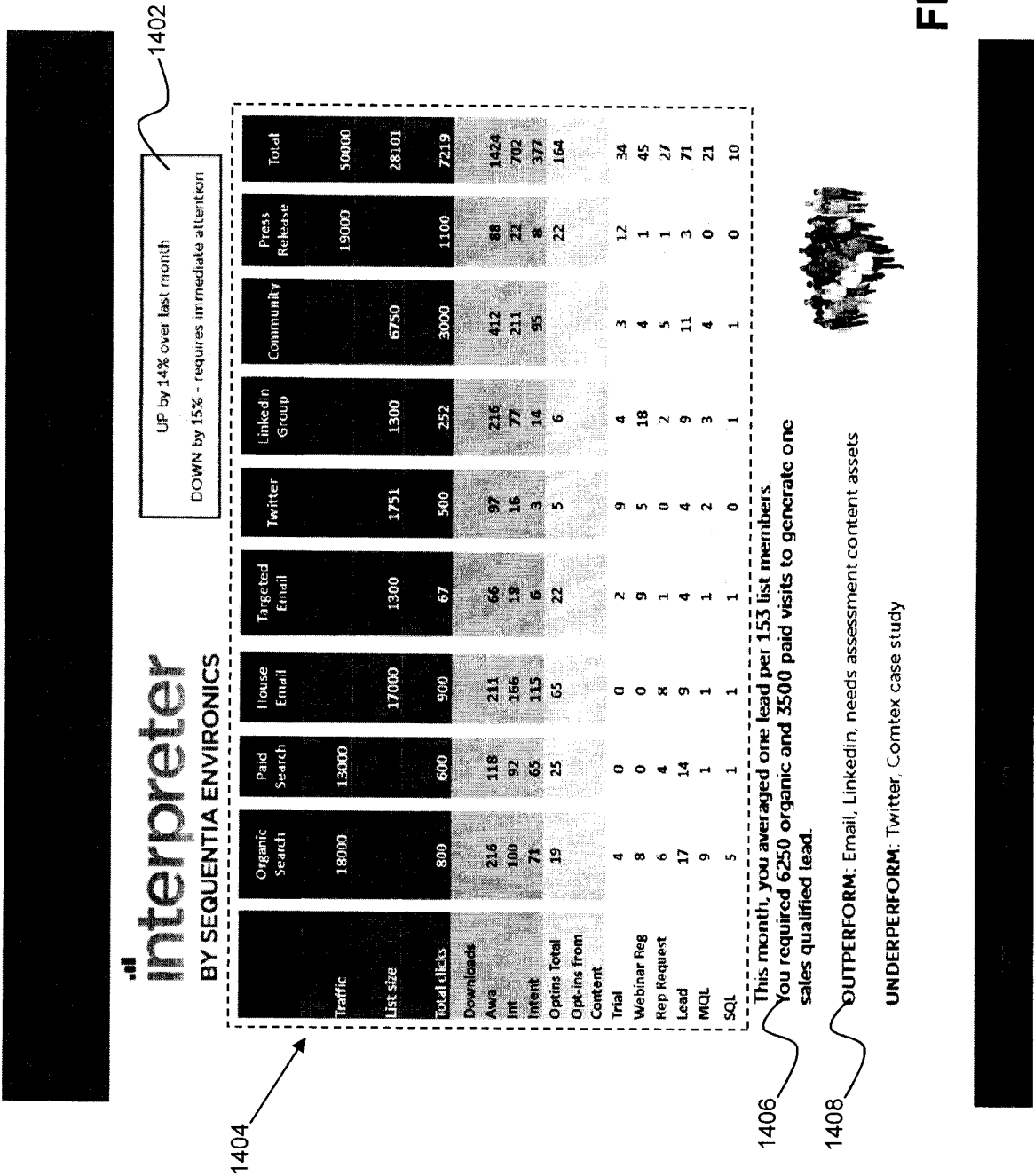
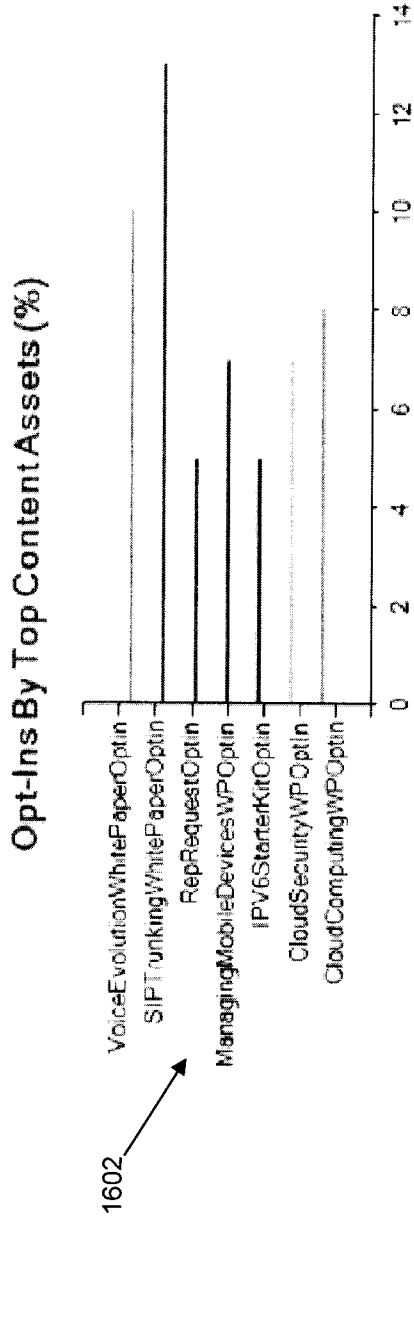


FIG. 14





# Opt-Ins Overview



# Opt-Ins By Channel (%)

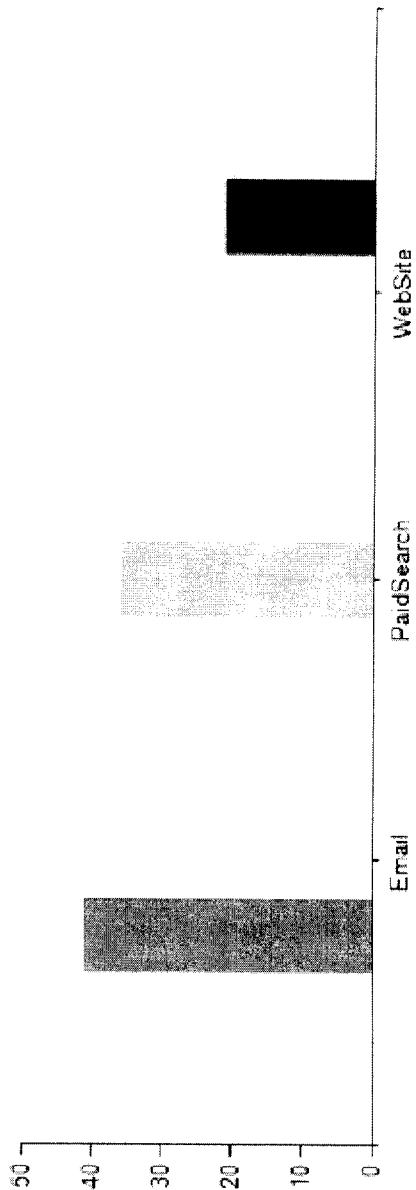


FIG. 16

# What's your best content?

1702 →

## Content Downloads by Channel

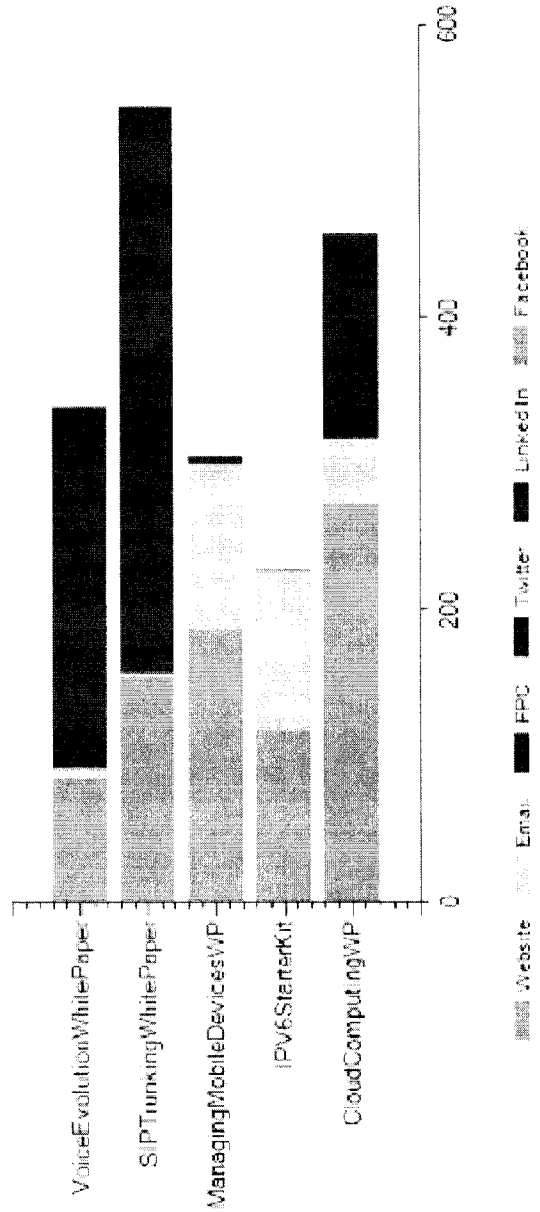


FIG. 17

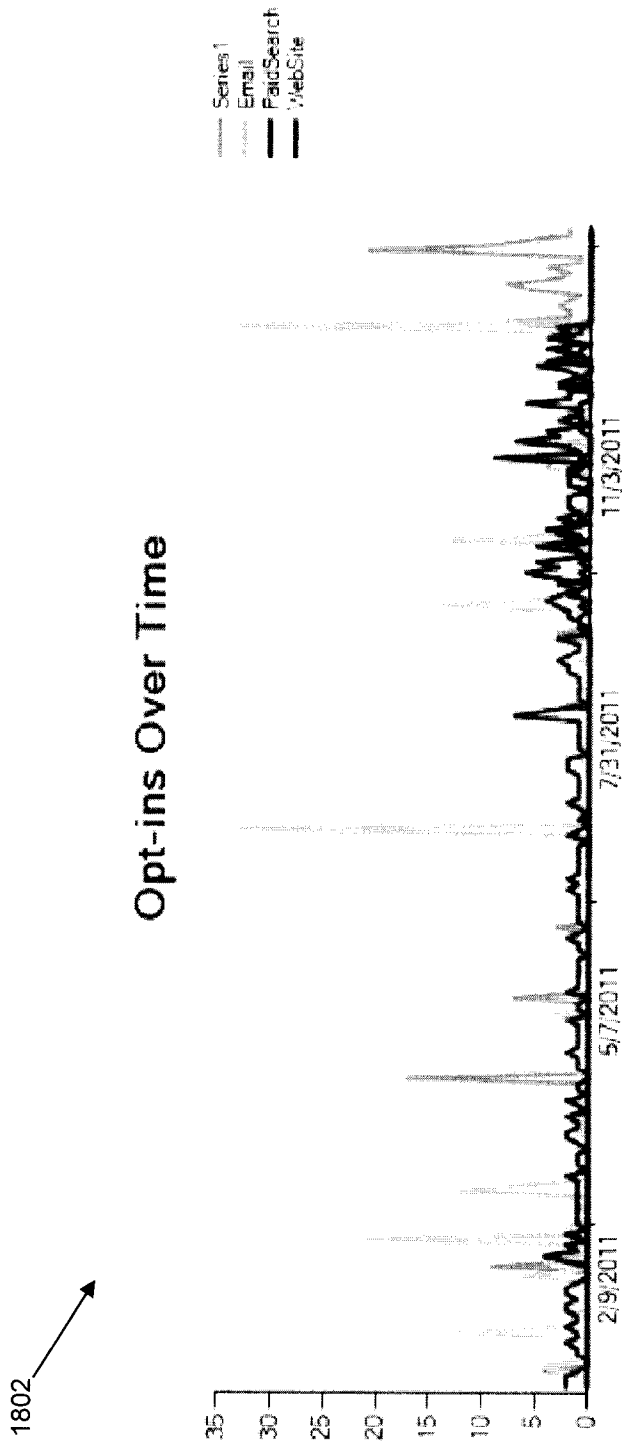


FIG. 18

1902 ↗

Which channels are most popular?

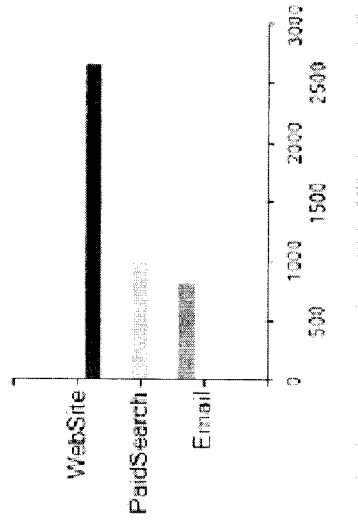


FIG. 19

2002



**Who is downloading your content?**

First Name	Last Name	Title	Company	Email	Downloads
John	Turner	Other	ABC Corp.	jtur@abc.com	18
Nicole	Johns	CFO / Financial Director	BCD Corp.	njohns@bcd.com	18
Heather	Johnston	Consultant	CDE Corp.	hjohn@cde.com	14
James	Roberts	Marketing Director / VP	DEF Corp.	jrober@def.ca	12
Sean	Alexander	Other	EFG Corp.	salex@efg.com	11
Alexandre	Desjardins	Consultant	FGH Corp.	adesj@fgh.com	10
Collins Eds.		CEO / Managing Director	GHI Corp.	collinseds@ghi.ca	10

**FIG. 20**



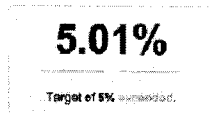
Dashboard | Squeeze it + | All my Reports + | My Settings | **Logout**

### Conversion Paths

← Back to Paths

## New Account Sign Ups for Valentine's Day Promo

### Conversion Goal Summary



#### Step 1

Twitter	Facebook	SQZ - tumblr	SQZ - Pinterest
Bj28DKC	19PZt3o	Xc54DsA	Gs32Pf
<b>660</b>	<b>205</b>	<b>93</b>	<b>80</b>
Clicks on this link	Clicks on this link	Clicks on this link	Clicks on this link

get help & give feedback

#### Step 2



### New Account Sign Ups Page

http://sqz.co/3N2e47

SQZ - Store	Originating Channel	Count	Percentage
a3N2ec7 <b>143</b> Clicks on this link	Twitter	70	48.95%
	Facebook	11	7.68%
	- tumblr	23	16.00%
	- Pinterest	19	13.29%

#### Step 3



### Create An Account

http://sqz.co/67NFw53

SQZ - Account Page	Originating Channel	Count	Percentage
r7Nfw93 <b>52</b> Clicks on this link	Twitter	16	30.62%
	Facebook	7	13.46%
	- tumblr	10	19.23%
	- Pinterest	17	32.69%

← Back to Paths

133 Spadina Ave, info@getsqueeze.com  
 Suite 401 Toronto, getsqueeze.com  
 ON M5V 2L4 Canada 416 203 3884

2100 **FIG. 21**

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2013/000271

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: **H04L 12/26** (2006.01) , **G06Q 30/02** (2012.01)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: H04L 12/26 (2006.01), G06Q 30/02 (2012.01)

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

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Databases: EPOQUE (Epodoc, English Full-text), Canadian Patents Database, IEEEExplore, Google

Keywords: monitor/measure, interaction/activity, user/consumer, web, server, content provider, advertiser/advertisement, social media/email/page, squeezed/encoded/shortened link/URL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/0239528 A1 (XIE et al.) 11 October 2007 (11-10-2007) *abstract; paragraphs [0002], [0008]-[0013], [0025]-[0064], [0072]-[0078]; claims 1-11; figs. 2, 3, 5*	1-11
X	WO 2006/031402 A2 (HANSEN) 23 March 2006 (23-03-2006) *abstract; paragraphs [0003]-[0012], [0022]-[0067]; claims 1-22; figs. 1, 2*	1-11
X	US 6 052 730 (FELCIANO et al.) 18 April 2000 (18-04-2000) *abstract; col. 1, lines 55-67; col. 2, line 57 - col. 7, line 67; claims 1-12; figs. 1-4*	1-11
X	CA 2 724 515 A1 (BANSAL et al.) 10 June 2011 (10-06-2011) *page 1, line 3 - page 2, line 11; page 3, line 2 - page 17, line 10; fig. 4*	1-11
A	US 2011/0251895 A1 (BLADEL) 13 October 2011 (13-10-2011) *whole document*	1-11
A	US 2006/0074751 A1 (KLINE et al.) 6 April 2006 (06-04-2006) *whole document*	1-11

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

31 May 2013 (31-05-2013)

Date of mailing of the international search report

13 June 2013 (13-06-2013)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
Place du Portage I, C114 - 1st Floor, Box PCT  
50 Victoria Street  
Gatineau, Quebec K1A 0C9  
Facsimile No.: 001-819-953-2476

Authorized officer

Daniela Savin (819) 934-4890

## INTERNATIONAL SEARCH REPORT

International application No.  
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