a user encounters a Handle, the user may select or enter the Handle much like a URL hyperlink, so long as the user's Web browser is capable of making Handle requests. Such an encounter triggers an automated process to look up a resource's current location. The current location of the resource is associated with the resource's Handle in a directory made available by the Handle System, which in turn directs the user to the resource's current location. Unlike with a URL, if the resource moves, the Handle System directory entry can be updated, thereby assuring a persistent association between a Handle and the resource it identifies. An analogy can be made to the physical world: knowing only a URL for a given resource is akin to knowing only a person's street address, and not her name. If she were to move across town, it would be very difficult to locate her without knowing her name. The Handle System allows resources to be permanently named by way of a Handle, and it allows the current network location of resources to be looked up based on that name in a Handle System directory.

ONLINE ADVERTISING

[0019] Advertising technologies have been developed in an effort to capitalize on the Internet's ability to track end user behavior in ways not possible with traditional media: e.g., with television or print magazine ads, where there is no mechanism by which to measure the end user's actual interaction, or even to verify that the end user has seen the ad at all. Companies have created "contextual ads" (such as Google's AdSense) which "read" the content of a Web page and then place certain ads on that page in response to the page's context (e.g., Google "Sponsored Links," which are selected and placed in a Web page in response to the particular subject-matter of the page).

SUMMARY

[0019a] According to an aspect of the present invention, there is provided a method for execution by the processor for an advertisement or electronic commercial transaction, including: a step for receiving a request, from a client that accesses content, for a unique persistent universal name identifier; a step for acquiring a unique persistent universal name

identifier menu specification if said unique persistent universal name identifier menu specification exists; a step for acquiring unique persistent universal name identifier record information from a unique persistent universal name identifier directory; a step for generating metadata for the unique persistent universal name identifier directory if the unique persistent universal name identifier menu specification cannot be obtained; a step for storing the unique persistent universal name identifier menu specification in the unique persistent universal name identifier directory of a unique persistent universal name identifier syndicator; and a step for generating a unique persistent universal name identifier menu from the unique persistent universal name identifier menu specification, wherein: the request for the unique persistent universal name identifier is induced from content access and a code embedded in the content; the unique persistent universal name identifier identifies a target content asset, and is a multiple identifier having references to a plurality of content items regarding the target content asset; the unique persistent universal name identifier menu specification is used in specifying a value from the unique persistent universal name identifier record information for forming the unique persistent universal name identifier menu; the unique persistent universal name identifier menu specification is corrected, so as to improve the unique persistent universal name identifier menu, using tracking information that is collected and stored based on a user action and use log in respect to the unique persistent universal name identifier menu; and the amount of tracking information is limited in accordance with a prescribed parameter in relation to the unique persistent universal name identifier.

[0020] Digital Object Identifiers (DOIs) overcome many of the shortcomings of IP addresses and other location-based addressing schemes. DOIs enable access to

CLAIMS:

1. A method for execution by the processor for an advertisement or electronic commercial transaction, including:

a step for receiving a request, from a client that accesses content, for a unique persistent universal name identifier;

a step for acquiring a unique persistent universal name identifier menu specification if said unique persistent universal name identifier menu specification exists;

a step for acquiring unique persistent universal name identifier record information from a unique persistent universal name identifier directory;

a step for generating metadata for the unique persistent universal name identifier directory if the unique persistent universal name identifier menu specification cannot be obtained;

a step for storing the unique persistent universal name identifier menu specification in the unique persistent universal name identifier directory of a unique persistent universal name identifier syndicator; and

a step for generating a unique persistent universal name identifier menu from the unique persistent universal name identifier menu specification, wherein:

the request for the unique persistent universal name identifier is induced from content access and a code embedded in the content;

the unique persistent universal name identifier identifies a target content asset, and is a multiple identifier having references to a plurality of content items regarding the target content asset;

the unique persistent universal name identifier menu specification is used in specifying a value from the unique persistent universal name identifier record information for forming the unique persistent universal name identifier menu;

the unique persistent universal name identifier menu specification is corrected, so as to improve the unique persistent universal name identifier menu, using tracking information that is collected and stored based on a user action and use log in respect to the unique persistent universal name identifier menu; and

the amount of tracking information is limited in accordance with a prescribed parameter in relation to the unique persistent universal name identifier.