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(54) Title: METHOD AND SYSTEM FOR PRESENTING RECOMMENDATION INFORMATION

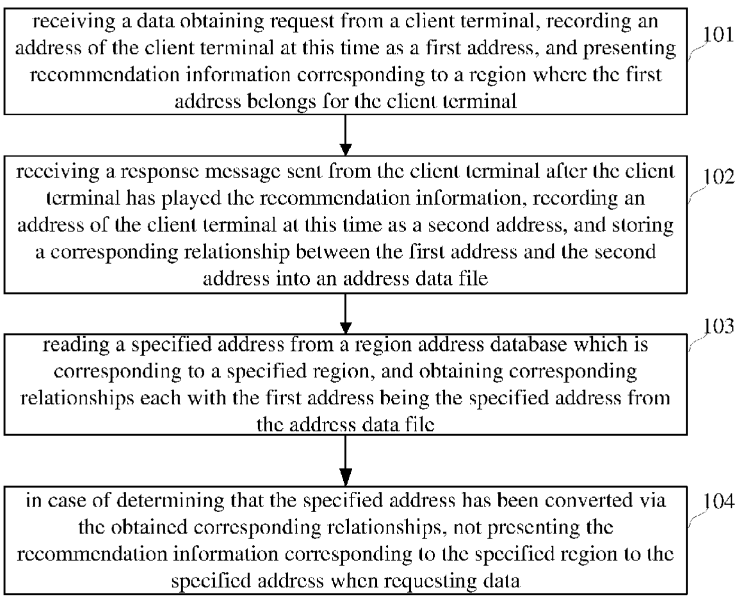

Fig. 1

(57) **Abstract**: A method for presenting recommendation information includes: receiving a data obtaining request from a client terminal,recording a first address of the client terminal at this time and presenting corresponding recommendation information for the client terminal;receiving a response message sent from the client terminal after the client terminal has played the recommendation information,recording a second address of the client terminal at this time,and storing a corresponding relationship between the first address and the second address into an address data file;reading a specified address from a region address database which is corresponding to a specified region,and obtaining corresponding relationships each with the first address being the specified address from the address data file;in case of determining that the specified address has been converted via the corresponding relationships,not presenting recommendation information corresponding to the specified region to the specified address.

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METHOD AND SYSTEM FOR PRESENTING RECOMMENDATION INFORMATION

This application claims the benefit of priority from Chinese Patent Application, No. 201310126152.1, filed on April 12, 2013, the entire contents of which are hereby incorporated by reference.

Field of the Disclosure

The present disclosure relates to information transmission technologies and more particularly to a method and system for presenting recommendation information.

Background

When a client terminal requests data from an information issue server, the information issue system can issue recommendation information to the client terminal according to the client terminal's address. The recommendation information can be recommendation information corresponding to a region where the client terminal's address belongs. For different regions, the information issue system can issue different recommendation information.

In order to monitor situations of the recommendation information issued by the information issue system, a third-party monitoring method is usually adopted to obtain situations of the issued recommendation information and the monitoring result can be used in maintenance work for following recommendation information issuing.

However, an existing method for presenting recommendation information has following deficiencies: intelligent routing can usually be provided in communication networks due to IP address shortage and the intelligent routing can convert IP addresses which have been assigned to users. Specifically, due to the impact of the intelligent routing, the client terminal's address when the client terminal sends a data obtaining request may be converted, which causes a difference between the client terminal's address when the client terminal sends the data obtaining request and an address of the client terminal after the client terminal has played the recommendation information. Thus, a statistical result of a third-party monitoring system may be inconsistent with a number of the recommendation information actually issued by the information issue system, and then accuracy of the monitoring result of the third-party monitoring system can be reduced.

Summary

The present disclosure provides a method for presenting recommendation information, which can improve accuracy of a monitoring result of a third-party monitoring system and make a statistical result of the third-party monitoring system tend to be consistent with a number of recommendation information actually issued by an information issue system.

The present disclosure also provides a system for presenting recommendation information, which can improve accuracy of a monitoring result of a third-party monitoring system and make a statistical result of the third-party monitoring system tend to be consistent with a number of recommendation information actually issued by an information issue system.

A method for presenting recommendation information includes:

receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal;

receiving a response message sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file;

reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file; wherein each region corresponds to its own region address database which contains all addresses assigned to the corresponding region;

in case of determining that the specified address has been converted via the obtained corresponding relationships, not presenting recommendation information corresponding to the specified region to the specified address when requesting data.

A system for presenting recommendation information includes an information issue server, a data collection server and an address analysis server; wherein

the information issue server is configured to, receive a data obtaining request from a client terminal, record an address of the client terminal at this time as a first address, and present recommendation information corresponding to a region where the first address belongs for the client terminal; and receive a conversion notice from the address analysis server and not present recommendation information corresponding to a specified region for a specified address when requesting data;

the data collection server is configured to, receive a response message sent from the client terminal after the client terminal has played the recommendation information, record an address of the client terminal at this time as a second address, and store a corresponding relationship between the first address and the second address into an address data file;

the address analysis server is configured to, read the specified address from a region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address from the address data file; each region corresponds to its own region address database which contains all addresses assigned to the corresponding region; in case of determining that the specified address has been converted via the obtained corresponding relationships, the address analysis server is further configured to send the conversion notice containing the specified address to the information issue server.

A method for presenting recommendation information includes:

recording a client terminal’s first address at which the client terminal sends a data obtaining request to an information issue system;

recording the client terminal’s second address at which the client terminal sends a response message to the information issue system after the client terminal receives recommendation information corresponding to a region where the first address belongs issued by the information issue system;

storing a corresponding relationship between the first address and the second address into an address data file;

reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file; wherein each region corresponds to its own region address database which contains all addresses assigned to the corresponding region;

judging whether the specified address has been converted through the obtained corresponding relationships;

if determining that the specified address is converted, not presenting recommendation information corresponding to the specified region to the specified address during follow-up requesting data;

if determining that the specified address is not converted, presenting the recommendation information corresponding to the specified region to the specified address during follow-up requesting data.

It can be seen from the above solution, the solution of one embodiment of the present disclosure includes analyzing to obtain addresses of client terminals affected by the intelligent routing, and not presenting corresponding recommendation information for these addresses when requesting data. In this way, a number of issued recommendation information calculated by the third-party monitoring system tends to be consistent with a number of recommendation information actually issued by the information issue system, and thus accuracy of a monitoring result of the third-party monitoring system can be improved.

Brief Description of Drawings

Fig. 1 is a schematic flow chart of a method for presenting recommendation information according to one embodiment of the present disclosure;

Fig. 2 is a schematic flow chart of an example of the method for presenting recommendation information according to one embodiment of the present disclosure;

Fig. 3 is a schematic diagram of a system for presenting recommendation information according to one embodiment of the present disclosure;

Fig. 4 is a schematic diagram showing a hardware structure of a system for presenting recommendation information according to one embodiment of the present disclosure.

Detailed Description

For simplicity and illustrative purposes, the present disclosure is described by referring mainly to examples thereof. In the following description, numerous specific details are set forth in order to provide a thorough understanding of the present disclosure. It will be readily apparent however, that the present disclosure may be practiced without limitation to these specific details. In other instances, some methods and structures have not been described in detail so as not to unnecessarily obscure the present disclosure. Throughout the present disclosure, the terms “a” and “an” are intended to denote at least one of a particular element. As used herein, the term “includes” means includes but not limited to, the term “including” means including but not limited to. The term “based on” means based at least in part on.

A solution of presenting recommendation information according to one embodiment of the present disclosure, includes analyzing to obtain addresses of client terminals affected by intelligent routing, and not presenting corresponding recommendation information for these addresses when requesting data. Fig. 1 is a schematic flow chart of a method for presenting recommendation information according to one embodiment of the present disclosure. Referring to Fig. 1, the method for presenting recommendation information includes following blocks.

Block 101: receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal.

Each region corresponds to its own region address database which contains a plurality of addresses assigned to the each region. Each region has corresponding recommendation information which is associated with the each region. After an information issue system receives the data obtaining request, the information issue system presents the recommendation information corresponding to the region where the address of the client terminal belongs for the client terminal.

The recommendation information may be in a variety of forms; accordingly, the recommendation information may be presented for the client terminal in a variety of ways, which can be illustrated with following examples.

One example: besides displaying subject content provided by a background, a webpage also has vacant displaying positions for displaying the recommendation information; the recommendation information in this example can be text information or video data information; the presenting recommendation information corresponding to a region where the first address belongs for the client terminal in this block includes: extracting the recommendation information corresponding to the region where the first address belongs, inserting the recommendation information into the webpage and then sending the webpage with the recommendation information inserted therein to the client terminal to be presented.

Another example: the recommendation information in this example can be video clip information in a video streaming transmitted to the client terminal; the presenting recommendation information corresponding to a region where the first address belongs for the client terminal in this block includes: inserting the recommendation information into the video streaming and then sending the video streaming with the recommendation information inserted therein to the client terminal to be presented.

Block 102: receiving a response message sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file.

After the client terminal has played the recommendation information, the client terminal feeds back the response message to the information issue system. After receiving the response message, the information issue system records the address of the client terminal at this time as the second address and stores the corresponding relationship between the first address and the second address into the address data file. The corresponding relationship stored in the address data file can be used in a follow-up address conversion judgment.

Block 103: reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file.

Each region corresponds to its own region address database which contains all addresses assigned to the corresponding region.

Specifically, all corresponding relationships each with the first address being the specified address within a set period of time, can be obtained from the address data file. The set period of time, for example, can be the previous month.

Block 104: in case of determining that the specified address has been converted via the obtained corresponding relationships, not presenting the recommendation information corresponding to the specified region to the specified address when requesting data.

If determining that the specified address is not converted, the recommendation information corresponding to the specified region can be presented to the specified address when requesting data. In current actual applications, intelligent routing can usually be provided in communication networks due to IP address shortage; the intelligent routing can capture addresses of some client terminals within one region and convert the captured addresses for client terminals within other regions. In this disclosure, since a specific address may be affected by the intelligent routing, the address of the client terminal when the client terminal sends the data obtaining request may be captured and converted, causing a difference between the client terminal's address when the client terminal sends the data obtaining request and the address of the client terminal after the client terminal has played the recommendation information. This block extracts these addresses so as to not present the recommendation information corresponding to the regions where these addresses belong for these addresses during follow-up requesting data. In this way, a number of issued recommendation information calculated by the third-party monitoring system tends to be consistent with a number of recommendation information actually issued by the information issue system, and thus accuracy of a monitoring result of the third-party monitoring system can be improved. The reliability of performing follow-up maintenance work based on the monitoring result can also be improved.

The determining that the specified address has been converted via the obtained corresponding relationships of this block can be implemented in a variety of ways according to requirements which are illustrated hereinafter with examples.

One way:

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships, is greater than a set number; if yes, determining that the specified address has been converted; otherwise, determining that the specified address is not converted. The set number can be, for example 10 times.

Another way:

judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day;

if the number of days when the second address is not the specified address in the obtained corresponding relationships is greater than the set number of day, judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships, is greater than a set number; if yes, determining that the specified address has been converted; otherwise, determining that the specified address is not converted.

if the number of days when the second address is not the specified address in the obtained corresponding relationships is not greater than the set number of day, determining that the specified address is not converted.

The set number of day can be, for example 5 days.

Still another way:

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships, is greater than a set number;

if the number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number, judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day; if yes, determining that the specified address has been converted; otherwise, determining that the specified address is not converted;

if the number of times that the second address is not the specified address in the obtained corresponding relationships is not greater than a set number, determining that the specified address is not converted;

In this block, when determining that the specified address has been converted via the obtained corresponding relationships, the method can further include: presenting recommendation information with no requirement of regions to the specified address during follow-up requesting data.

In actual implementations, after determining that the specified address has been converted, a conversion mark can be marked on a corresponding address in the corresponding region address database, or the corresponding address in the corresponding region address database can be deleted, so as to not present the recommendation information corresponding to the specified region for the address during follow-up requesting data.

In the above process, after recording the address of the client terminal at this time as the first address, the block 101 can further include: feeding back the first address to the client terminal. Accordingly, the response message of the block 102 contains the first address. Further, the block 102 can obtain the first address via recording a client terminal identifier, which can specifically include:

the data obtaining request contains a client terminal identifier; after recording the address of the client terminal at this time as the first address in the block 101, the block 101 further includes: recording the client terminal identifier which is corresponding to the first address; the response message contains the client terminal identifier; after receiving the response message sent from the client terminal after the client terminal has played the recommendation information in the block 102, the block 102 further includes extracting the recorded first address corresponding to the client terminal identifier contained in the response message.

After the client terminal has played the recommendation information issued by the information issue system, the client terminal sends a feedback message containing the local address and a recommendation information identifier to the third-party monitoring system. For one region and one recommendation information identifier corresponding to the region, the third-party monitoring system calculates a number of times of presenting the recommendation information corresponding to the recommendation information identifier according to the feedback messages from the client terminal. Specifically, the number of times of presenting the recommendation information in this region can be obtained by extracting each feedback message containing one of addresses of the regions, and summing up times of the feedback messages each containing the recommendation information identifier.

Fig. 2 is a schematic flow chart of an example of the method for presenting recommendation information according to one embodiment of the present disclosure. Referring to Fig. 2, the method includes following blocks.

Block 201: receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, feeding back the first address to the client terminal, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal.

Block 202: receiving a response message containing the first address sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file.

When the client terminal records the address, the client terminal can usually also record corresponding time.

Block 203: reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address within a previous month from the address data file.

Here, suppose the specified address is IPA, all corresponding relationships each with the first address being the IPA can be extracted.

Block 204: judging whether a number of days when the second address is not the IPA in the obtained corresponding relationships is greater than a set number of day; if yes, performing block 205; otherwise, performing block 207.

The set number of day can be for example 5 days; if a number of days when the second address is not the IPA in the obtained corresponding relationships is 6 days, then the block 205 is performed.

Block 205: judging whether a number of times that the second address is not the IPA in the obtained corresponding relationships is greater than a set number; if yes, performing block 206; otherwise, performing the block 207.

The set number can be for example 10 times. If the number of times that the second address is not the IPA in the obtained corresponding relationships is 12 times, then performing the block 206.

Block 206: determining that the IPA has been converted, marking a conversion mark on the IPA in the region address database, so as to not present the recommendation information corresponding to the region for the address which has been marked with the conversion mark in the region address database when requesting data.

Alternatively, after determining that the IPA has been converted, the IPA can be added into a blacklist; adopting the above manner, an address conversion judgment is performed for each address in the region address database one by one. When the client terminal requests data later, the recommendation information corresponding to the region is not presented to addresses in the blacklist.

Block 207: presenting the recommendation information corresponding to the region to the specified address when requesting data.

The recommendation information can be, for example, text notice information, video notice information, video notice information in a video streaming, and so on.

The solution of one embodiment of the present disclosure includes analyzing to obtain addresses of client terminals affected by the intelligent routing, and not presenting corresponding recommendation information for these addresses when requesting data. In this way, a number of issued recommendation information calculated by the third-party monitoring system tends to be consistent with a number of recommendation information actually issued by the information issue system, and thus accuracy of a monitoring result of the third-party monitoring system can be improved. The reliability of performing follow-up maintenance work based on the monitoring result can also be improved.

Fig. 3 shows a schematic diagram of a system for presenting recommendation information according to one embodiment of the present disclosure. The system for presenting recommendation information is the above mentioned information issue system, and includes an information issue server 310, a data collection server 330 and an address analysis server 350.

The information issue server 310 is configured to, receive a data obtaining request from a client terminal, record an address of the client terminal at this time as a first address, and present recommendation information corresponding to a region where the first address belongs for the client terminal; and receive a conversion notice from the address analysis server 350, and not present the recommendation information corresponding to a specified region for a specified address during follow-up requesting data.

The data collection server 330 is configured to, receive a response message sent from the client terminal after the client terminal has played the recommendation information, record an address of the client terminal at this time as a second address, and store a corresponding relationship between the first address and the second address into an address data file.

The address analysis server 350 is configured to, read the specified address from a region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address from the address data file. Each region corresponds to its own region address database which contains all addresses assigned to the corresponding region. In case of determining that the specified address has been converted via the obtained corresponding relationships, the address analysis server 350 is further configured to send the conversion notice containing the specified address to the information issue server 310.

The information issue server 310 is further configured to, after receiving the conversion notice from the address analysis server 350, present recommendation information with no requirement of regions to the specified address during follow-up requesting data.

The address analysis server 350 includes an address obtaining unit 352 and a first judgment unit 354.

The address obtaining unit 352 is configured to read the specified address from the region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address within a set period of time from the address data file, and send the read specified address to the first judgment unit 354.

The first judgment unit 354 is configured to judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server 310.

The address analysis server 350 further includes a second judgment unit 356.

The address obtaining unit 352 is further configured to read a specified address from the region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address within a set period of time from the address data file, and send the read specified address to the second judgment unit 356.

The second judgment unit 356 is configured to, judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server 310; or, judge whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day, if yes, judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server 310; or, judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number, if yes, judge whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day; if yes, send the conversion notice containing the specified address to the information issue server 310.

The information issue server 310 includes an address obtaining unit 312 and an information issue unit 314.

The address obtaining unit 312 is configured to receive the data obtaining request from the client terminal, record the address of the client terminal at this time as the first address, and send the first address to the information issue unit 314.

The information issue unit 314 is configured to, receive the first address from the address obtaining unit 312, extract recommendation information corresponding to the region where the first address belongs, insert the recommendation information into a webpage and send the webpage to the client terminal to be presented; or, insert the recommendation information into a video streaming and send the video streaming to the client terminal to be presented. The information issue unit 314 is further configured to receive the conversion notice from the address analysis server 350 and not present the recommendation information corresponding to the specified region for the specified address during follow-up requesting data.

The address obtaining unit 312 is configured to, after recording the address of the client terminal at this time as the first address, feed back the first address to the client terminal; the response message contains the first address.

The data obtaining request contains a client terminal identifier. The address obtaining unit 312 is further configured to, after recording the address of the client terminal at this time as the first address, record the client terminal identifier which is corresponding to the first address. The response message contains the client terminal identifier. After receiving the response message sent from the client terminal after the client terminal has played the recommendation information, the data collection server 330 is further configured to extract the recorded first address corresponding to the client terminal identifier contained in the response message.

With reference to Fig. 4, Fig. 4 is a schematic diagram showing a hardware structure of a system for presenting recommendation information according to one embodiment of the present disclosure. As shown in Fig. 4, the system may include an information issue server 410, a data collection server 430 and an address analysis server 450.

The information issue server 410 may include a memory 412, a processor 414 in communication with the memory 412, and an interface 416. The memory 412 is a non-transitory machine readable memory and is to store machine readable instructions (e.g. instruction codes) and various kinds of data. Machine readable instructions, shown as an address obtaining unit and an information issue unit and so on, may be stored in the memory 412. The processor 414 is to communication with the memory 412 to read and execute the machine readable instructions stored in the memory 412, so as to complete the functions completed by units in the above information issue server 310 such as the address obtaining unit 312 and the information issue unit 314. The interface 416 is to receive and send data.

The data collection server 430 may include a memory 432, a processor 434 in communication with the memory 432, and an interface 436. The memory 432 is a non-transitory machine readable memory and is to store machine readable instructions (e.g. instruction codes) and various kinds of data. The processor 434 is to communication with the memory 432 to read and execute the machine readable instructions stored in the memory 432, so as to complete the functions completed by the above data collection server 330. The interface 436 is to receive and send data.

The address analysis server 450 may include a memory 452, a processor 454 in communication with the memory 452, and an interface 456. The memory 452 is a non-transitory machine readable memory and is to store machine readable instructions (e.g. instruction codes) and various kinds of data. Machine readable instructions, shown as an address obtaining unit, a first judgment unit and a second judgment unit and so on, may be stored in the memory 452. The processor 454 is to communication with the memory 452 to read and execute the machine readable instructions stored in the memory 452, so as to complete the functions completed by units in the above address analysis server 350 such as the address obtaining unit 352, the first judgment unit 354 and the second judgment unit 356. The interface 456 is to receive and send data.

The methods, units and systems described herein may be implemented by hardware, machine-readable instructions or a combination of hardware and machine-readable instructions. Machine-readable instructions used in the examples disclosed herein may be stored in storage medium readable by multiple processors, such as hard drive, CD-ROM, DVD, compact disk, floppy disk, magnetic tape drive, RAM, ROM or other proper storage device. Or, at least part of the machine-readable instructions may be substituted by specific-purpose hardware, such as custom integrated circuits, gate array, FPGA, PLD and specific-purpose computers and so on.

A machine-readable storage medium is also provided to store instructions to cause a machine to execute a process as described according to examples herein. Specifically, a system or apparatus having a storage medium that stores machine-readable program codes for implementing functions of any of the above examples and that may cause the system or the apparatus (or CPU or MPU) read and execute the program codes stored in the storage medium.

In this situation, the program codes read from the storage medium may implement any one of the above examples, thus the program codes and the storage medium storing the program codes are part of the technical scheme.

The storage medium for providing the program codes may include floppy disk, hard drive, magneto-optical disk, compact disk (such as CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-RAM, DVD-RW, DVD+RW), magnetic tape drive, Flash card, ROM and so on. The program code may be downloaded from a server computer via a communication network.

It should be noted that, alternatively to the program codes being executed by a computer, at least part of the operations performed by the program codes may be implemented by an operation system running in a computer following instructions based on the program codes to implement any of the above examples.

In addition, the program codes implemented from a storage medium are written in a storage in an extension board inserted in the computer or in a storage in an extension unit connected to the computer. In this example, a CPU in the extension board or the extension unit executes at least part of the operations according to the instructions based on the program codes to implement any of the above examples.

Although described specifically throughout the entirety of the instant disclosure, representative examples of the present disclosure have utility over a wide range of applications, and the above discussion is not intended and should not be construed to be limiting, but is offered as an illustrative discussion of aspects of the disclosure.

What has been described and illustrated herein is an example along with some of its variations. The terms, descriptions and figures used herein are set forth by way of illustration only and are not meant as limitations. Many variations are possible within the spirit and scope of the subject matter, which is intended to be defined by the following claims -- and their equivalents -- in which all terms are meant in their broadest reasonable sense unless otherwise indicated.

What is Claimed is:

1. A method for presenting recommendation information comprising:

receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal;

receiving a response message sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file;

reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file; wherein each region corresponds to its own region address database which contains all addresses assigned to the corresponding region;

in case of determining that the specified address has been converted via the obtained corresponding relationships, not presenting recommendation information corresponding to the specified region to the specified address when requesting data.

2. The method of claim 1, wherein when determining that the specified address has been converted via the obtained corresponding relationships, the method further comprises: presenting recommendation information with no requirement of regions to the specified address when requesting data.

3. The method of claim 1, wherein the obtaining corresponding relationships each with the first address being the specified address from the address data file comprises: obtaining corresponding relationships each with the first address being the specified address within a set period of time from the address data file;

the determining that the specified address has been converted via the obtained corresponding relationships comprises: judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, determining that the specified address has been converted.

4. The method of claim 1, wherein the obtaining corresponding relationships each with the first address being the specified address from the address data file comprises: obtaining corresponding relationships each with the first address being the specified address within a set period of time from the address data file;

the determining that the specified address has been converted via the obtained corresponding relationships comprises:

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, determining that the specified address has been converted; or,

judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day, if yes, judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, determining that the specified address has been converted; or,

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number, if yes, judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day; if yes, determining that the specified address has been converted.

5. The method of claim 1, wherein the presenting recommendation information corresponding to a region where the first address belongs for the client terminal comprises:

extracting the recommendation information corresponding to the region where the first address belongs, inserting the recommendation information into a webpage and sending the webpage to the client terminal to be presented; or,

inserting the recommendation information into a video streaming and sending the video streaming to the client terminal to be presented.

6. The method of claim 1, wherein after recording an address of the client terminal at this time as a first address, the method further comprises: feeding back the first address to

the client terminal; the response message contains the first address; or,

the data obtaining request contains a client terminal identifier; after recording the address of the client terminal at this time as the first address, the method further comprises: recording the client terminal identifier which is corresponding to the first address; the response message contains the client terminal identifier; after receiving the response message sent from the client terminal after the client terminal has played the recommendation information, the method further comprises: extracting the recorded first address corresponding to the client terminal identifier contained in the response message.

7. A system for presenting recommendation information comprising an information issue server, a data collection server and an address analysis server; wherein

the information issue server is configured to, receive a data obtaining request from a client terminal, record an address of the client terminal at this time as a first address, and present recommendation information corresponding to a region where the first address belongs for the client terminal; and receive a conversion notice from the address analysis server and not present recommendation information corresponding to a specified region for a specified address when requesting data;

the data collection server is configured to, receive a response message sent from the client terminal after the client terminal has played the recommendation information, record an address of the client terminal at this time as a second address, and store a corresponding relationship between the first address and the second address into an address data file;

the address analysis server is configured to, read the specified address from a region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address from the address data file; each region corresponds to its own region address database which contains all addresses assigned to the corresponding region; in case of determining that the specified address has been converted via the obtained corresponding relationships, the address analysis server is further configured to send the conversion notice containing the specified address to the information issue server.

8. The system of claim 7, wherein the information issue server is further configured to, after receiving the conversion notice from the address analysis server, present

recommendation information with no requirement of regions to the specified address when requesting data.

9. The system of claim 7, wherein the address analysis server comprises an address obtaining unit and a first judgment unit;

the address obtaining unit is configured to read the specified address from the region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address within a set period of time from the address data file, and send the read specified address to the first judgment unit;

the first judgment unit is configured to judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server.

10. The system of claim 7, wherein the address analysis server comprises an address obtaining unit and a second judgment unit;

the address obtaining unit is configured to read the specified address from the region address database which is corresponding to the specified region, and obtain corresponding relationships each with the first address being the specified address within a set period of time from the address data file, and send the read specified address to the second judgment unit;

the second judgment unit is configured to, judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server; or,

judge whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day, if yes, judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, send the conversion notice containing the specified address to the information issue server; or,

judge whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number, if yes, judge whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day; if yes, send the conversion notice containing the specified address to the information issue server.

11. The system of claim 7, wherein the information issue server comprises an address obtaining unit and an information issue unit;

the address obtaining unit is configured to receive the data obtaining request from the client terminal, record the address of the client terminal at this time as the first address, and send the first address to the information issue unit;

the information issue unit is configured to, receive the first address from the address obtaining unit, extract the recommendation information corresponding to the region where the first address belongs, insert the recommendation information into a webpage and send the webpage to the client terminal to be presented; or, insert the recommendation information into a video streaming and send the video streaming to the client terminal to be presented; the information issue unit is further configured to receive the conversion notice from the address analysis server and not present the recommendation information corresponding to the region for the specified address during follow-up requesting data.

12. The system of claim 11, wherein the address obtaining unit is configured to, after recording the address of the client terminal at this time as the first address, feed back the first address to the client terminal; the response message contains the first address; or,

the data obtaining request contains a client terminal identifier; the address obtaining unit is further configured to, after recording the address of the client terminal at this time as the first address, record the client terminal identifier which is corresponding to the first address; the response message contains the client terminal identifier; after receiving the response message sent from the client terminal after the client terminal has played the recommendation information, the data collection server is further configured to extract the recorded first address corresponding to the client terminal identifier contained in the response message.

13. A method for presenting recommendation information comprising:

recording a client terminal’s first address at which the client terminal sends a data obtaining request to an information issue system;

recording the client terminal's second address at which the client terminal sends a response message to the information issue system after the client terminal receives recommendation information corresponding to a region where the first address belongs issued by the information issue system;

storing a corresponding relationship between the first address and the second address into an address data file;

reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file; wherein each region corresponds to its own region address database which contains all addresses assigned to the corresponding region;

judging whether the specified address has been converted through the obtained corresponding relationships;

if determining that the specified address is converted, not presenting recommendation information corresponding to the specified region to the specified address during follow-up requesting data;

if determining that the specified address is not converted, presenting the recommendation information corresponding to the specified region to the specified address during follow-up requesting data.

14. The method of claim 13, wherein when determining that the specified address is converted, the method further comprises: presenting recommendation information with no requirement of regions to the specified address during follow-up requesting data.

15. The method of claim 13, wherein the judging whether the specified address has been converted through the obtained corresponding relationships comprises:

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, determining that the specified address is converted, if not, determining that the specified address is not converted; or,

judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day, if yes, judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number; if yes, determining that the specified address is converted, if not, determining that the specified address is not converted; or,

judging whether a number of times that the second address is not the specified address in the obtained corresponding relationships is greater than a set number, if yes, judging whether a number of days when the second address is not the specified address in the obtained corresponding relationships is greater than a set number of day; if yes, determining that the specified address is converted, if not, determining that the specified address is not converted.

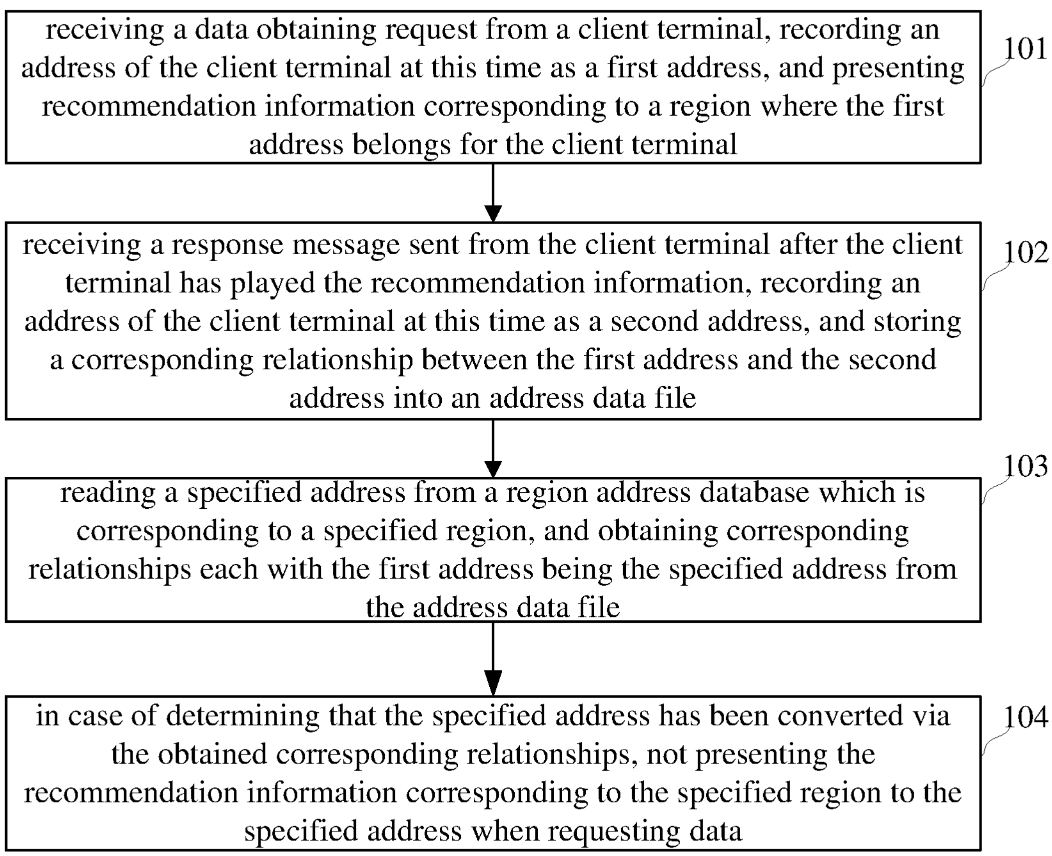
receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal
101
receiving a response message sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file
102
reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address from the address data file
103
in case of determining that the specified address has been converted via the obtained corresponding relationships, not presenting the recommendation information corresponding to the specified region to the specified address when requesting data
104

Fig. 1

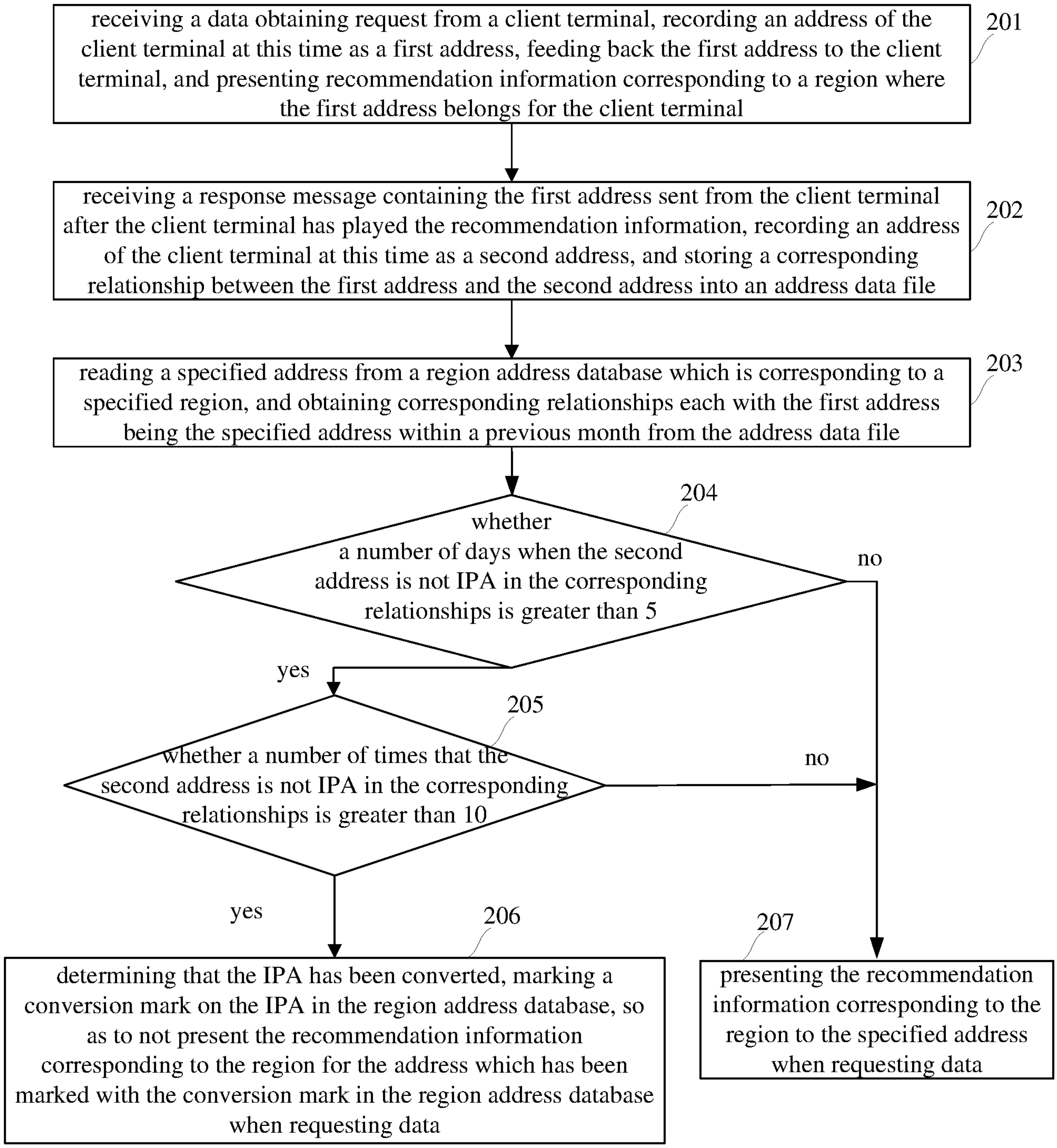
receiving a data obtaining request from a client terminal, recording an address of the client terminal at this time as a first address, feeding back the first address to the client terminal, and presenting recommendation information corresponding to a region where the first address belongs for the client terminal
201
receiving a response message containing the first address sent from the client terminal after the client terminal has played the recommendation information, recording an address of the client terminal at this time as a second address, and storing a corresponding relationship between the first address and the second address into an address data file
202
reading a specified address from a region address database which is corresponding to a specified region, and obtaining corresponding relationships each with the first address being the specified address within a previous month from the address data file
203
whether a number of days when the second address is not IPA in the corresponding relationships is greater than 5
204
no
yes
whether a number of times that the second address is not IPA in the corresponding relationships is greater than 10
205
no
yes
206
determining that the IPA has been converted, marking a conversion mark on the IPA in the region address database, so as to not present the recommendation information corresponding to the region for the address which has been marked with the conversion mark in the region address database when requesting data
207
presenting the recommendation information corresponding to the region to the specified address when requesting data

Fig. 2

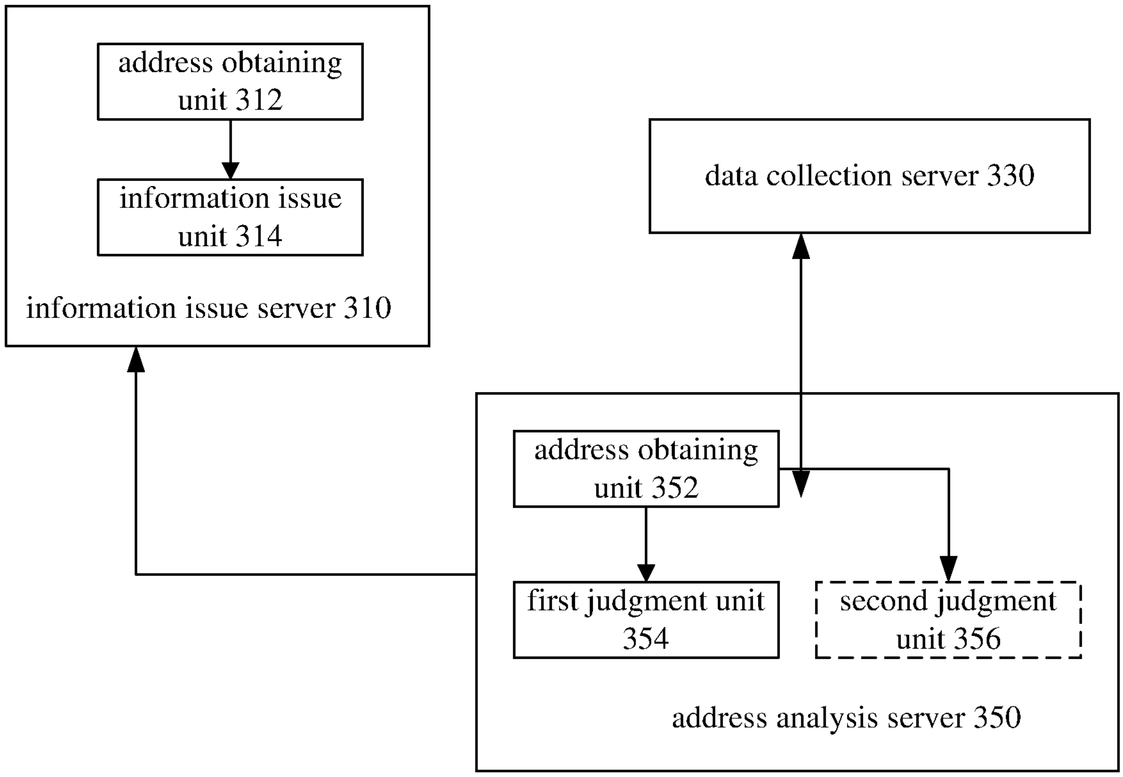
address obtaining unit 312
information issue unit 314
information issue server 310
data collection server 330
address obtaining unit 352
first judgment unit 354
second judgment unit 356
address analysis server 350

Fig. 3

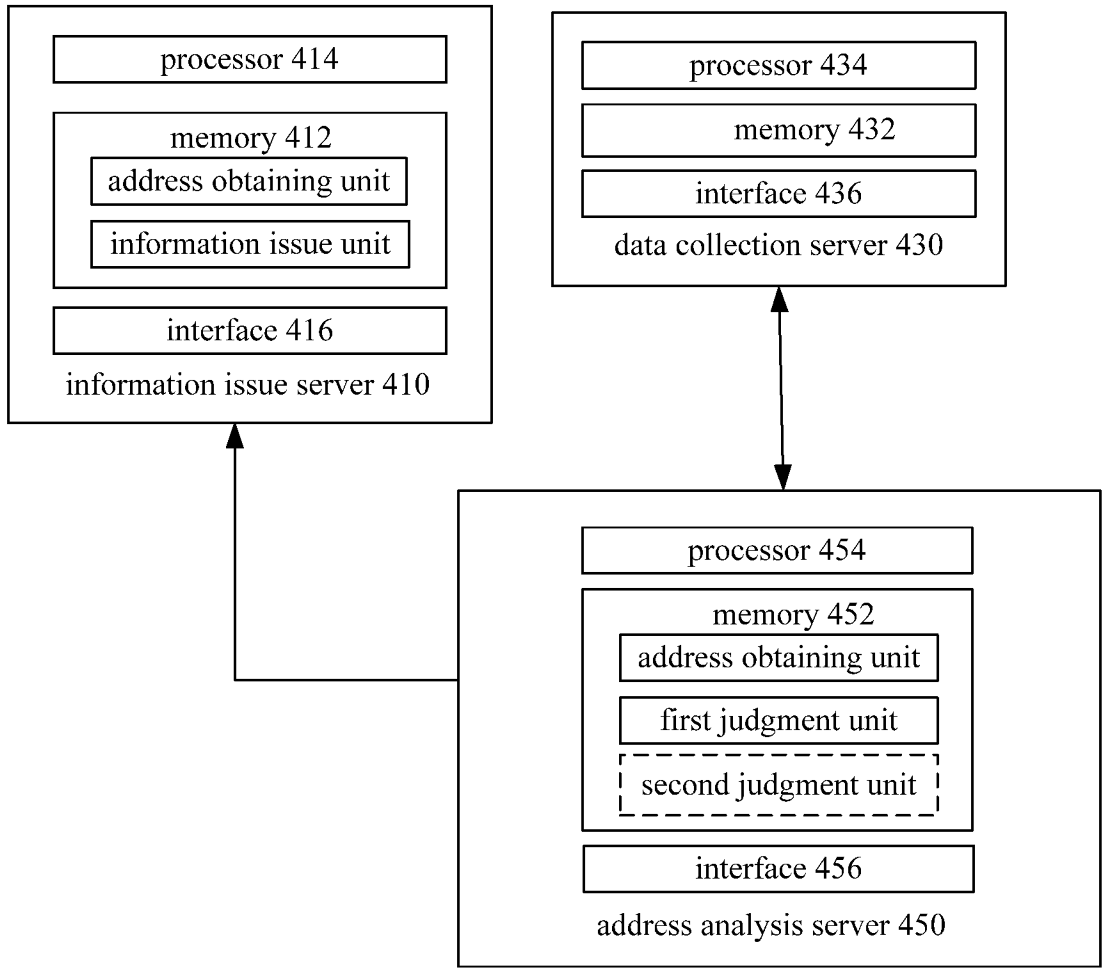
processor 414
memory 412
address obtaining unit
information issue unit
interface 416
information issue server 410
processor 434
memory 432
interface 436
data collection server 430
processor 454
memory 452
address obtaining unit
first judgment unit
second judgment unit
interface 456
address analysis server 450

Fig. 4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2014/074500

A. CLASSIFICATION OF SUBJECT MATTER

H04L 29/06 (2006.01)i

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)

H04L

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

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

CNTXT;CNABS;VEN;CNKI:address， convert， address w convert??， recommendation， present???， information， region， transmi+， route

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 101290642 A (SHUNLIAN SOFTWARE SCI & TECHNOLOGY BEIJING CO LTD) 22 October 2008 (2008-10-22) The whole document	1-15
A	CN 1817055 A (SOHN S C) 09 August 2006 (2006-08-09) The whole document	1-15
A	CN 1722162 A (HITACHI MAXELL KK) 18 January 2006 (2006-01-18) The whole document	1-15

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"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)

"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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
08 June 2014	**18 June 2014**

Name and mailing address of the ISA/	Authorized officer
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Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
CN 101290642 A	22 October 2008	CN 101290642B	29 September 2010
		US 2008313527A1	18 December 2008
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		KR 20060025217A	20 March 2006
		JP 2007527144A	20 September 2007
		CN 100455061C	21 January 2009
		JP 4707664B2	22 June 2011
		KR 20050003978A	12 January 2005
CN 1722162 A	18 January 2006	JP 2006031357A	02 February 2006