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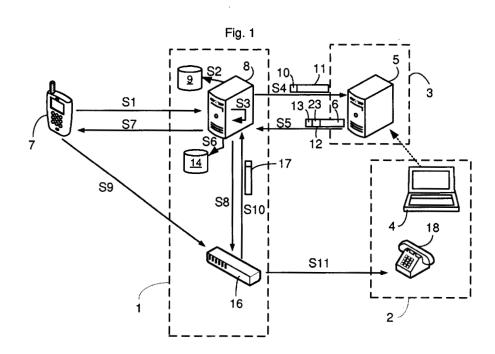
CALL-TRACKING



3 JUN 2012

Abstract of the Invention

A method for call-tracking, call-tracking systems, an HTTP proxy server computer program, web server hosts, web server computer programs and computer program products are disclosed. The method comprises the following steps: forwarding a request for a web page; receiving a reply message comprising a second telephone number; retrieving and storing a first telephone number, the second telephone number, a time associated with the forwarding of the reply message, and a service provider indicator; receiving a trigger message comprising two telephone numbers; determining whether the two telephone numbers correspond to the first telephone number and the second telephone number; and, if the two telephone numbers correspond, determining, based on a time difference, whether the call has been made within a predetermined time or predetermined time interval; and, if the call has been made within the predetermined time or predetermined time interval, store information related to the call.



WE CLAIM:

- 1. A method performed by a call-tracking system, comprising the steps of:
- forwarding from a first user equipment, e.g. a mobile phone, associated with a first telephone number a request for a web page to a web server host;
- receiving in response to the request, a reply message comprising the web page and at least one second telephone number associated with a second user equipment, e.g. a fixed phone;
- forwarding the reply message to the first user equipment;
- retrieving the first telephone number, the second telephone number, a time associated with the forwarding of the reply message to the first user equipment, and a service provider indicator for a service provider associated with the web server host, e.g. a URL of the service provider;
- storing, associated with each other in a first database, the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message;
- receiving from a proxy server a trigger message comprising two telephone numbers, said trigger message indicating a telephone call related to the two telephone numbers;
- determining whether the two telephone numbers correspond to the first telephone number and the second telephone number stored associated with each other in the first database; and,
- if the two telephone numbers correspond to the first telephone number and the second telephone number, determining, based on a time difference between the time associated with the forwarding of the reply message and a time indicative of when the telephone call was made, whether the call has been made within a predetermined time or predetermined time interval from the forwarding of the reply message; and,
- if the call has been made within the predetermined time or predetermined time interval, store information related to the call in the first database or a second database.
- 2. A method according to claim 1, comprising the step of retrieving the second telephone number from an HTTP header of the reply message.
- 3. A method according to claim 1, comprising the step of retrieving the second telephone number from the web page.

- retrieving means configured to retrieve the first telephone number, the second telephone number, a time associated with the forwarding of the reply message to the first user equipment, and a service provider indicator for a service provider associated with the web server host;
- storing means configured to store, associated with each other, in a first database the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message;
- trigger receiving means configured to receive from a proxy server a trigger message comprising two telephone numbers, said trigger message indicating a telephone call related to the two telephone numbers:
- first determining means configured to determine whether the two telephone numbers correspond to the first telephone number and the second telephone number stored associated with each other in the first database; and,
- second determining means configured to, if the two telephone numbers correspond to the first telephone number and the second telephone number, determine, based on a time difference between the time associated with the forwarding of the reply message and a time indicative of when the telephone call was made, whether the call has been made within a predetermined time or predetermined time interval from the forwarding of the reply message; and,
- a call indicator configured to store information related to the call in the first database or a second database, if the call has been made within the predetermined time or predetermined time interval.
- 10. A call tracking system, comprising an HTTP proxy server and a Service Control Point, wherein the HTTP proxy server comprises
- - sending means configured to forward from a first user equipment associated with a first telephone number a request for a web page to a web server host and forwarding a reply message from the web server host to the first user equipment;
- receiving means configured to receive in response to the request, the reply message comprising the web page and at least one second telephone number associated with a second user equipment;
- retrieving means configured to retrieve the first telephone number, the second telephone number, a time associated with the forwarding of the reply message to the first user equipment, and a service provider indicator for a service provider associated with the web server host;

- storing means configured to store, associated with each other, in a first database the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message;
- a call indicator configured to store, in the first database or a second database, information related to a telephone call having been made between the first telephone number and the second telephone number within a predetermined time or predetermined time interval;
- second sending means configured to send the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message to a third database; and
- a second receiving means for receiving from the Service Control Point a message comprising the first telephone number, the second telephone number and an indication that the telephone call has been made;

and the Service Control Point comprises

- trigger receiving means configured to receive from a proxy server a trigger message comprising two telephone numbers, said trigger message indicating a telephone call related to the two telephone numbers:
- the third database;
- first determining means configured to determine whether the two telephone numbers correspond to the first telephone number and the second telephone number stored associated with each other in the third database:
- second determining means configured to, if the two telephone numbers correspond to the first telephone number and the second telephone number, determine, based on a time difference between the time associated with the forwarding of the reply message and a time indicative of when the telephone call was made, whether the call has been made within the predetermined time or predetermined time interval from the forwarding of the reply message; and
- a message generator for generating and sending the message, if the telephone call related to the two telephone numbers correspond to the first telephone number and the second telephone number and has been made within the predetermined time or predetermined time interval.
- 11. A call-tracking system according to claim 9 or 10, comprising an information header inserter configured to add in the request an information header with data indicating to the web server host

that possible calls from the first user equipment to the second user equipment can be tracked by the call-tracking system.

- 12. A call-tracking system according to any one of claims 9-11, wherein
- the retrieving means is configured to retrieve an advertisement identity from the reply
 message and the storing means is configured to store the advertisement identity in the first
 database associated with the first telephone number, the second telephone number, the service
 provider indicator and the time associated with the forwarding of the reply message;
- the call indicator is configured to store the advertisement identity in the second database together with the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message, if the call has been made within the predetermined time or predetermined time interval.
- 13. A call-tracking system according to any one of claims 9-12, comprising the first database.
- 14. A call-tracking system according to any one of claims 9-13, comprising the second database.
- 15. A call-tracking system according to any one of claims 9-14, wherein the trigger message is an Intelligent Network trigger.
- 16. A call-tracking system according to any one of claims 9-15, wherein the service provider indicator is a Uniform Resource Locator of the service provider.
- 17. An HTTP proxy server computer program, comprising computer readable code means which when run on an HTTP proxy server causes the HTTP proxy server to
- forward from a first user equipment associated with a first telephone number a web request for a web page to a web server host,
- receive in response to the request, a reply message comprising the web page and at least one second telephone number associated with a second user equipment,
- forwarding the reply message to the first user equipment,

- retrieve the first telephone number, the second telephone number, a time associated with the forwarding of the reply message to the first user equipment, and a service provider indicator for a service provider associated with the web server host,
- store, associated with each other in a first database, the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message to the first user equipment,
- receive from a proxy server a trigger message comprising two telephone numbers, said trigger message indicating a telephone call related to the two telephone numbers,
- determine whether the two telephone numbers correspond to the first telephone number and the second telephone number stored associated with each other in the first database, and,
- if the two telephone numbers correspond to the first telephone number and the second telephone number, determining, based on a time difference between the time associated with the forwarding of the reply message and a time indicative of when the telephone call was made, whether the call has been made within a predetermined time or predetermined time interval from the forwarding of the reply message, and,
- if the call has been made within the predetermined time or predetermined time interval, store information related to the call in the first database or a second database.
- 18. An HTTP proxy server computer program according to claim 17, comprising computer readable code means which when run on the HTTP proxy server causes the HTTP proxy server to insert in the request an information header with data indicating to the web server host that a call from the first user equipment to the second user equipment can be tracked by the HTTP proxy server.
- 19. An HTTP proxy server computer program according to claim 17 or 18, comprising computer readable code means which when run on the HTTP proxy server causes the HTTP proxy server to:
- receive from the web server host an advertisement identity comprised in the reply message;
- store the advertisement identity in the first database associated with the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message; and

- if the call has been made within the predetermined time or predetermined time interval, store the advertisement identity in the second database together with the first telephone number, the second telephone number, the service provider indicator and the time associated with the forwarding of the reply message.
- 20. An HTTP proxy server computer program according to any one of claims 17-19, comprising computer readable code means which when run on the HTTP proxy server causes the HTTP proxy server to retrieve the second telephone number from an HTTP header of the reply message.
- 21. An HTTP proxy server computer program according to any one of claims 17-19, comprising computer readable code means which when run on the HTTP proxy server causes the HTTP proxy server to retrieve the second telephone number from the web page.
- 22. A computer program product comprising computer readable means and an HTTP proxy server computer program according to claim 17, the HTTP proxy server computer program being stored on the computer readable means.
- 23. A web server host adapted for communication with a call-tracking system according to claim 9 or 10 and comprising message means configured to create and send to the call-tracking system a reply message to a request for a web page from a first user equipment associated with a first telephone number forwarded by the call-tracking system, where the reply message comprises the web page with at least one second telephone number and an HTTP header comprising the second telephone number.
- 24. A web server host according to claim 23, comprising a header analyzer configured to determine if there in the forwarded request is data indicating that a call from the first user equipment to a second user equipment associated with the second telephone number can be tracked by the call-tracking system.
- 25. A web server host adapted for communication with a call-tracking system according to claim 9 or 10 and comprising:

message means configured to create and send a reply message to a, from the call-tracking system forwarded, request for a web page from a first user equipment associated with a first telephone number, said web-page comprising at least one second telephone number,

a header analyzer configured to determine if there in the forwarded request is an information header with data indicating that a call from the first user equipment to a second user equipment associated with the second telephone number can be tracked by the call-tracking system, wherein the message means is configured to add an HTTP header comprising the second telephone number to the reply message only if it has been determined that the information header is present in the request.

- 26. A web server host according to any one of claims 23-25, wherein the message means is configured to insert an advertisement identity in the HTTP header or in a second HTTP header of the reply message.
- 27. A web server computer program comprising computer readable code means which when run on a web server host causes the web server host to create and send to a call-tracking system a reply message to a request for a web page from a first user equipment associated with a first telephone number forwarded by the call-tracking system, where the reply message comprises the web page with at least one second telephone number and an HTTP header comprising the second telephone number.
- 28. A web server computer program according to claim 27, comprising computer readable code means which when run on the web server host causes the web server host to determine if there in the forwarded request is data indicating that a call from the first user equipment to a second user equipment associated with the second telephone number can be tracked by the call-tracking system.
- 29. A web server computer program comprising computer readable code means which when run on a web server host causes the web server host to:
- create and send a reply message to a, from the call-tracking system forwarded, request for a web page from a first user equipment associated with a first telephone number, said web page comprising at least one second telephone number;

- determine if there in the forwarded request is an information header with data indicating that a call from the first user equipment to a second user equipment associated with a second telephone number can be tracked by the call-tracking system; and
- -add an HTTP header comprising the second telephone number to the reply message only if it has been determined that the information header is present in the request.
- 30. A web server computer program according to any one of claims 27-29, comprising computer readable code means which when run on the web server host causes the web server host to insert an advertisement identity in the HTTP header or in a second HTTP header of the reply message.
- 31. A computer program product comprising a computer readable means and a web server computer program according to claim 27 or 29, the web server computer program being stored on the computer readable means.

Dated this the 13th day of June, 2012

MANISHA SINGH NAIR

Agent for the Applicant [IN/PA-740]

Mariele Ligh Dair

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Intellectual Property Practice 709/710, Tolstoy House, 15-17, Tolstoy Marg,

New Delhi-110001

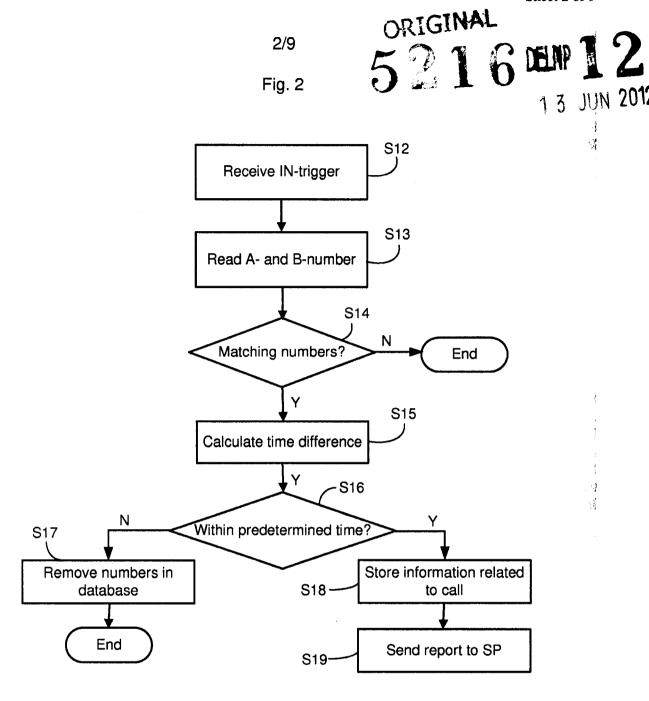
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MANISHA SINGH NAIR Agent for the Applicant [IN/PA –740] LEX ORBIS IP PRACTICE

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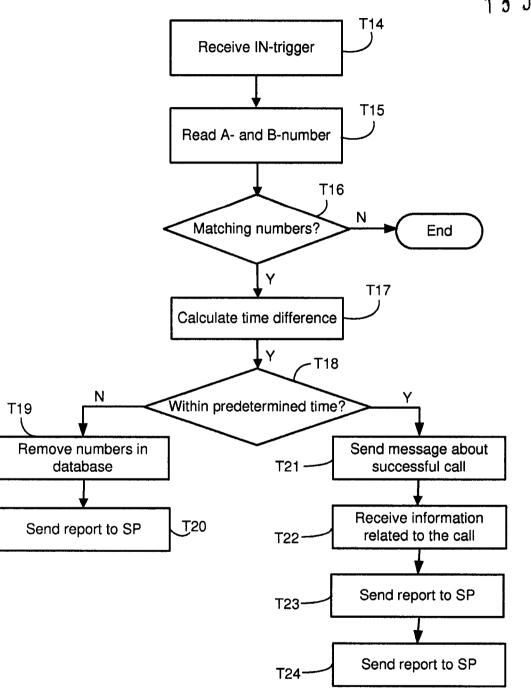
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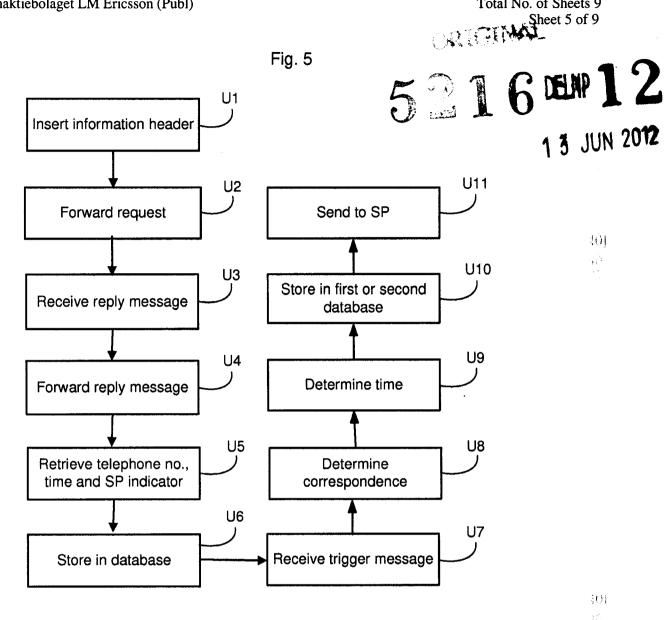
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MANISHA SINGH NAIR
Agent for the Applicant [IN/PA -740]
LEX ORBIS IP PRACTICE



MANISHA SINGH NĂIR Agent for the Applicant [IN/PA -740] LEX ORBIS IP PRACTICE

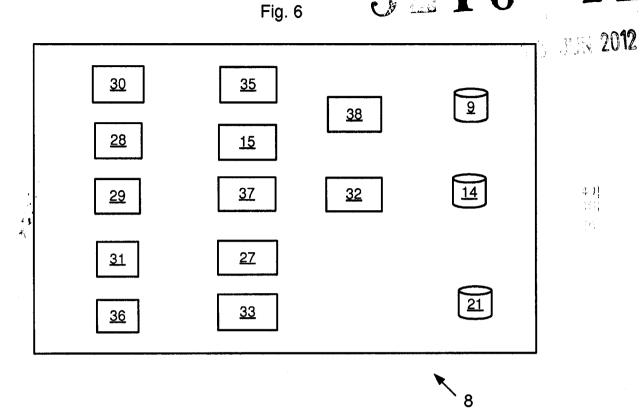
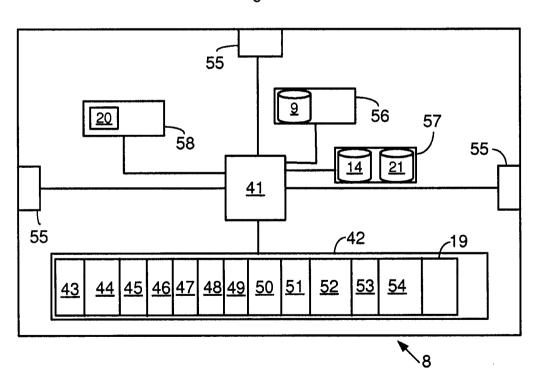


Fig. 8

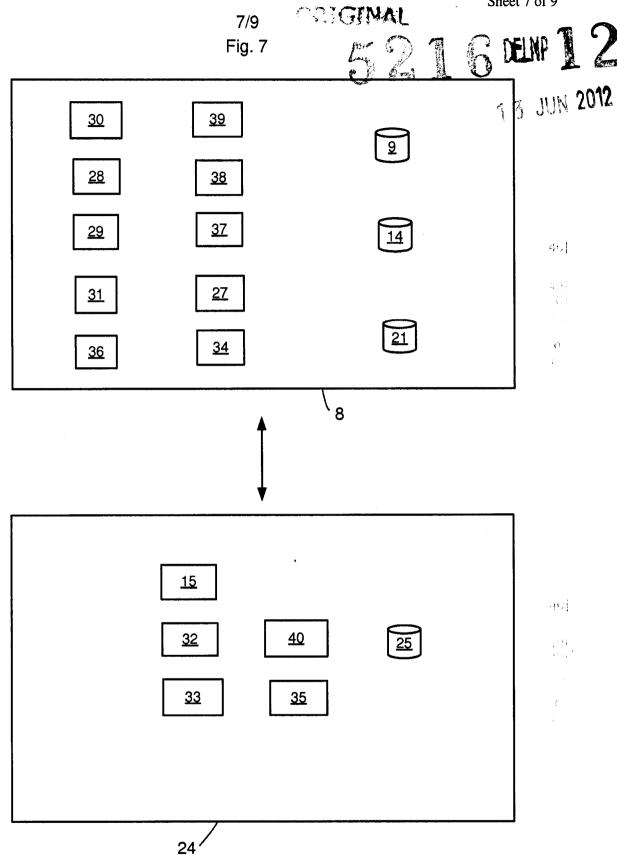


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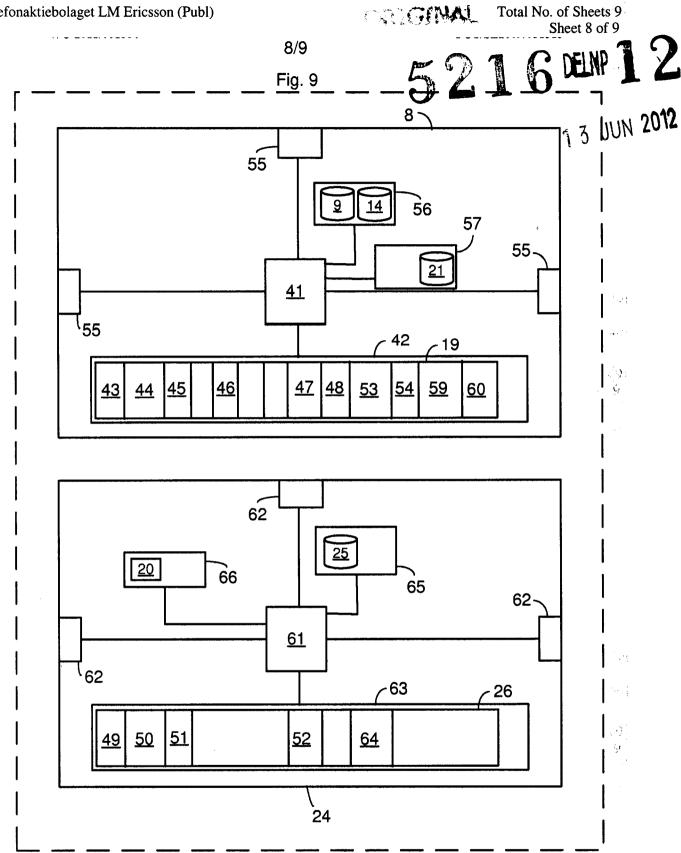
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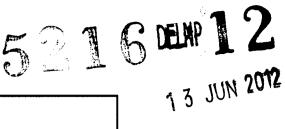
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Fig. 10



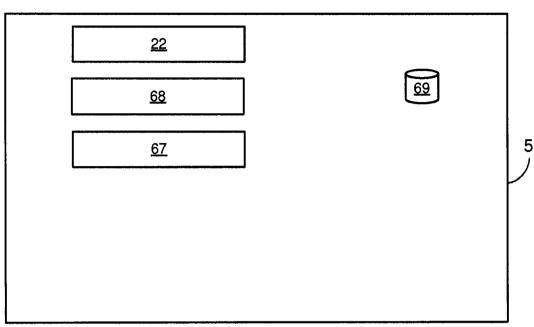
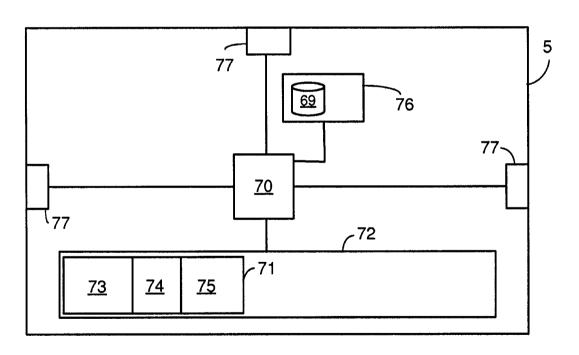


Fig 11



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