PTO/SB/123 (04-15)
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CHANGE OF CORRESPONDENCE ADDRESS
Patent

Address to:
Mail Stop Post Issue
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Patent Number	9,633,378
Issue Date	4/25/2017
Application Number	13/308,004
Filing Date	11/30/2011
First Named Inventor	Narendra NATH
Attorney Docket Number	M4921.2101

Please change the Correspondence Address for the above-identified patent to:

☐ The address associated with Customer Number: [ ]

OR

☒ **Firm *or* Individual Name** METARAIL, INC.

1901 Central Drive #716

Address

City Bedford **State** TX **ZIP** 76021

Country United States

Telephone **Email** grwhite@metarail.com

This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SB/124).

This form will not affect any "fee address" provided for the above-identified patent. To change a "fee address" use the "Fee Address Indication Form" (PTO/SB/47).

I am the:

☐ Patentee.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☒ Attorney or agent of record. Registration Number 37448.

Signature	/cecily oregan/
Typed or Printed Name	Cecily Anne O'Regan
Date	November 5, 2023
Telephone	

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Post Issue, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Google Exhibit 1017
Google v. Metarail

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
13/308,004	**11/05/2023 12:54:05 PM Z ET**	**M4921.2101 [CAO/sf]**

Title of Invention

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	9633378
CONFIRMATION #	9029	FILED BY	Cecily O'Regan
PATENT CENTER #	63163073	FILING DATE	11/30/2011
CUSTOMER #	62993	FIRST NAMED INVENTOR	Narendra Nath
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Metarail M4921.2101 - Change of Address SB123 - 2023-11-05.pdf	1	Change of Address	62 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
Metarail M4921.2101 - Change of Address SB123 - 2023-11-05.pdf	1F8FFE4B49F2F66A7DC96D753BC47C89A48AA10C9BE53C24F7F5C02713285D7CDA5E5B710BBE21079C63FE558DD7D8595854EAF1F30C79E79ECF8D7D32AAF4D9

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized

by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/308,004	11/30/2011	Narendra Nath	META1100-1

CONFIRMATION NO. 9029

62993
BUCHALTER
18400 VON KARMAN AVE.
SUITE 800
IRVINE, CA 92612

POA ACCEPTANCE LETTER

OC000000117145890

Date Mailed: 05/21/2020

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/15/2020.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/ltaba/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/308,004	11/30/2011	Narendra Nath	META1100-1

CONFIRMATION NO. 9029

44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

POWER OF ATTORNEY NOTICE

OC000000117145767

Date Mailed: 05/21/2020

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/15/2020.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/ltaba/

PTO/AIA/80 (07-17)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

[X] Practitioners associated with Customer Number: 62993

OR

[ ] Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

[X] The address associated with Customer Number: 62993

OR

[ ]

Firm or individual name BUCHALTER		
Address 55 Second Street, 17th Floor		
City San Francisco	State California	Zip 94105
Country United States		
Telephone (415) 227-0900	Email IPDocket@Buchalter.com	

Assignee name and address: METARAIL, INC., 63 Bovet Road #226, San Mateo, CA 94402

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of the practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee.

Signature /Gina R. White/	Date 2020-05-13
Name Gina R. White	Telephone
Title CEO	

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public, which is to update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 18 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt

EFS ID:	39451226
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Cecily Anne O'Regan
Filer Authorized By:	
Attorney Docket Number:	META1100-1
Receipt Date:	15-MAY-2020
Filing Date:	30-NOV-2011
Time Stamp:	12:02:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Assignee showing of ownership per 37 CFR 3.73	M4921-2101_373.pdf	129537 3a77a2e3df93332856a7d11b97d7fc7996abf74e	no	1

Warnings:

Information:					
2	Power of Attorney	Metarail_USPTO_POA-AIA80.pdf	97145 f160605ac12eedfa77c72ca47cbe7060b18a2c02	no	1
Warnings:					
Information:					
			Total Files Size (in bytes):	226682	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: METARAIL, INC.

Application No./Patent No.: 13/308,004 Filed/Issue Date: November 30, 2011

Confirmation No.: 9029

File: M4921.2101

Entitled: DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

METARAIL, INC., a California Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that for the patent application/patent identified above it is:

1. ☒ The assignee of the entire right, title and interest.
2. ☐ An assignee of less than the entire right, title and interest.
   ☐ The extent (by percentage) of its ownership interest is ___%.
   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right title and interest are: _____

Additional Statements by the owners holding the balance of the interest MUST be submitted.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title and interest are: _____

Additional Statements by the owners holding the balance of the interest MUST be submitted.

4. ☐ The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

THE INTEREST IDENTIFIED IN 1, 2, OR 3 ABOVE (NOT 4) IS EVIDENCED BY ONE OF:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel/ Frame (on) _____, or for which a copy thereof is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Inventor To: WAYFARE INTERACTIVE, INC.
   The document was recorded in the United States Patent and Trademark Office at Reel/ Frame (on) **028594/0126 (7/13/2012)**, or for which a copy thereof is attached.
2. From: WAYFARE INTERACTIVE, INC. To: METARAIL, INC.
   The document was recorded in the United States Patent and Trademark Office at Reel/ Frame (on) **044967/0777 (12/27/2017)**, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.
[NOTE: A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee

/ Cecily Anne O'Regan/ DATE: May 15, 2020

Cecily Anne O'Regan
Printed Name

37448
Title or Reg No

Buchalter
55 Second Street | Suite 1700
San Francisco, California 94105
Main No.: (415) 227-0900

Fax No.: (415) 227-0770
EMAIL: IPDocket@BUCHALTER.COM

Doc Code: PET.POA.WDRW
Document Description: Petition to withdraw attorney or agent (SB83)

PTO/AIA/83 (04-13)
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U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Application Number	13/308,004
Filing Date	11/30/2011
First Named Inventor	Narendra NATH
Art Unit	3683
Examiner Name	Alissa D. KARMIS
Practitioner Docket Number	META1100-1

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Please withdraw me as attorney or agent for the above-identified patent application, and

☐ all the practitioners of record;

☐ the practitioners (with registration numbers) of record listed on the attached paper(s); or

☒ the practitioners of record associated with Customer Number: 44654

NOTE: The immediately preceding box should only be marked when the practitioners were appointed using the listed Customer Number.

The reason(s) for this request are those described in 37 CFR:

☐ 11.116(a)(1) ☐ 11.116(a)(2) ☒ 11.116(a)(3)
☐ 11.116(b)(1) ☐ 11.116(b)(2) ☐ 11.116(b)(3)
☐ 11.116(b)(4) ☐ 11.116(b)(5) ☐ 11.116(b)(6)
☐ 11. 116(b)(7) Please explain below:

Client has disengaged our firm and hired other counsel.

Certifications

Check each box below that is factually correct. WARNING: If a box is left unchecked, the request will likely not be approved.

1. ☒ I/We have given reasonable notice to the client, prior to the expiration of the response period, that the practitioner(s) intend to withdraw from employment.

2. ☒ I/We have delivered to the client or a duly authorized representative of the client all papers and property (including funds) to which the client is entitled.

3. ☒ I/We have notified the client of any responses that may be due and the time frame within which the client must respond.

Please provide an explanation, if necessary:

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/83 (04-13)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Complete the following section only when the correspondence address will change. *Changes of address will only be accepted to an applicant.*

Change the correspondence address and direct all future correspondence to:

A. ☐ The address of the applicant associated with Customer Number: _____

OR

B. ■ Applicant

Address c/o Buchalter, 55 Second Street, Suite 1700

City	State	Zip	Country
San Francisco	CA	94105-3493	US

Telephone	Email
415-227-3554	IPDocket@buchalter.com

I am authorized to sign on behalf of myself and all withdrawing practitioners.

Signature /katharina schuster/

Name Katharina W. Schuster Registration No. 50000

Address 1301 W. 25th Street, Suite 408

City	State	Zip	Country
Austin	TX	78705	US

Date May 14, 2020 Telephone No. 512-637-9220

NOTE: Withdrawal is effective when approved rather than when received.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	39449103
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Janice Pampell
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	META1100-1
Receipt Date:	15-MAY-2020
Filing Date:	30-NOV-2011
Time Stamp:	09:12:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition to withdraw attorney or agent (SB83)	META1100-1_Request_to_Withdraw.pdf	187481 68cf039b3e7ddbae5e39b5528f8b0491258fbe72	no	3

Warnings:

Information:	
Total Files Size (in bytes):	187481

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/308,004	11/30/2011	Narendra Nath	META1100-1

CONFIRMATION NO. 9029

44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

POA ACCEPTANCE LETTER

OC000000098854305

Date Mailed: 04/17/2018

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/11/2018.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/atesfai/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
CERTIFICATE OF TRANSMISSION VIA EFS-WEB SYSTEM	Atty. Docket No. **META1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Filing or 371(c) Date **November 30, 2011**
Patent Number **9,633,378 B1**	Issue Date **April 25, 2017**
Title: **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**	
Group Art Unit **3683**	Examiner Name **Alissa D. Karmis**
Conf. No. **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that the attached Power of Attorney and Transmittal for Power of Attorney are being deposited electronically using the United States Patent and Trademark Office EFS-Web System on April 11, **2018**.

Respectfully submitted,

Sprinkle IP Law Group

M. Marquez

Margarita Marquez

TRANSMITTAL FOR POWER OF ATTORNEY FOR ONE OR MORE REGISTERED PRACTITIONERS

Patent No.:	9,633,378 B1
Issue Date:	April 25, 2017
First Named Inventor:	Narendra Nath
Title:	Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce
Assignee:	MetaRail, Inc.

Statement Under 37 C.F.R. § 3.73

Assignee is:

1. ☒ Assignee of the entire right, title and interest in the above-referenced patent/patent application;

2. ☐ Assignee of less than the entire right, title and interest in the above-referenced patent/patent application:

☐ The extent (by percentage) of its ownership interest is _____%; or

☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ Assignee of an undivided interest in the entirety of the above-referenced patent/patent application (a complete assignment by one or more of the joint inventors was made). The other parties, including inventor, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ Recipient, via court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is/are attached.

The interest identified in option 1, 2 or 3 above as evidenced by either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

or

B. ☒ A chain of title from the inventor(s) of the patent/patent application identified above, to the current assignee;

1. From: Narendra Nath and Mallikarjun Hiremani To: Wayfare Interactive, Inc.

   The document was recorded in the United States Patent and Trademark Office at Reel 028594, Frame 0126, or for which a copy thereof is attached hereto.

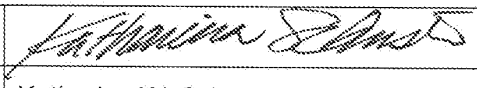
2. From: Wayfare Interactive, Inc. To: MetaRail, Inc.

   The document was recorded in the United States Patent and Trademark Office at Reel 044967, Frame 0777, or for which a copy thereof is attached hereto.

☐ Additional documents in the chain of title are listed on the supplemental sheet(s).

☒ Documentary evidence of chain of title from the original owner to the assignee was, or concurrently is being submitted for recordation pursuant to 37 CFR 3.11 [NOTE: A separate copy (i.e., a true copy the original assignment document(s)) must be/have been submitted to the Assignment Division to record the assignment in the records of the USPTO]

The undersigned (whose title/registration number is supplied below) is authorized to act on behalf of assignee.

Signature:		**Date:** March 13, 2018
Name:	Katharina W. Schuster	**Telephone: 512-637-9220**
Title or Registration No.	50,000	

Power of Attorney to Transact Business with the United States Patent and Trademark Office

I hereby revoke all previous Powers of Attorney given in the application(s) identified in the attached Transmittal for Power of Attorney to One or More Registered Practitioners ("Transmittal Form").

I hereby appoint practitioners associated with the following Customer Number associated with Sprinkle IP Law Group, PC:

44654

as my/our attorney(s) or agent(s) and to transact all business before the United States Patent and Trademark Office (USPTO) in connection with any and all patents and patent applications that are assigned to **Metarail, Inc.** (the "assignee's patents/patent applications") in which they shall appear, any and all assignee's patents/patent applications associated with the above-referenced customer number, and any and all patents and patent applications referenced in the attached Transmittal Form.

Please recognize or change the correspondence address for the patents and patent applications referenced in the attached Transmittal Form to the address associated with the above-referenced customer number.

The undersigned is:

- ☐ Inventor or Joint Inventor
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign
  *the undersigned has authority to act on behalf of the Assignee or Person to Whom the Inventor is Under an Obligation to Assign.
- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is currently being filed in this document)

The Transmittal Form may be completed and executed by one of the practitioners associated with the above-referenced customer number.

SIGNATURE

Signature:	Narendra Nath	**Date:**	Jan 25, 2018
Name:	**Narendra Nath**		
Title:	**Chief Executive Officer**		
Company:	**Metarail, Inc.**		

Electronic Acknowledgement Receipt	
EFS ID:	32314672
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Margarita Marquez
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	META1100-1
Receipt Date:	11-APR-2018
Filing Date:	30-NOV-2011
Time Stamp:	18:48:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	META1100-1_POA_04-11-2018.pdf	1136865 487308c7c2869741ea07e1c45e83a8500102ff0d	no	4

Warnings:

Information:	
Total Files Size (in bytes):	1136865

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	04/25/2017	9633378	WAYF1100-1	9029

44654 7590 04/05/2017

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 687 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Narendra Nath, Hillsborough, CA;
Mallikarjun Hiremani, Fremont, CA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

44654 7590 03/08/2017

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

n/a. Filed EFS	(Depositor's name)
n/a. Filed EFS	(Signature)
n/a. Filed EFS	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

TITLE OF INVENTION: DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	06/08/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
KARMIS, ALISSA D	3683	705-014730

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Sprinkle IP Law Group
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Wayfare Interactive, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Los Altos, CA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 503183 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date March 20, 2017

Typed or printed name Katharina W. Schuster Registration No. 50,000

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
Comments on Statement of Reasons for Allowance	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application No. **13/308,004**	Filing or 371 (c) Date **11/30/2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Alissa D. Kasmis**
Confirmation No. **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on March 20, 2017.

Janice Pampell
Janice Pampell

Dear Sir:

Applicant appreciates the Examiner's allowance of Claims 25-50 of United States Patent Application No. 13/308,004. Applicant submits the record as a whole makes evident the reasons for allowance and that there are additional reasons for patentability not enumerated by the Examiner. While Applicant agrees with the Examiner's reasons for patentability to the extent such reasons are consistent with the record as a whole, Applicant does not acquiesce or agree to any characterization of the claims that place unwarranted limitations or interpretations upon the claims, especially to the extent such limitations or interpretations are inconsistent with the claim language, specification or prior prosecution history in this case.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group

Katharina W. Schuster
Reg. No. 50,000

Dated: March 20, 2017.
1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. 512-637-9220
Fax. 512-371-9088

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO EXAMINER'S INTERVIEW SUMMARY MAILED 03/08/2017	Atty. Docket No. **WAYF1100-1**

First Named Inventor: **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on **March 20, 2017.**

Janice Pampell

Dear Sir:

In response to the Examiner's Interview Summary mailed March 8, 2017, Applicant respectfully notes that a statement of the substance of the interview was submitted on March 6, 2017 with the Reply to Office Action dated September 6, 2016. See "Interview Summary", page 9 of the Reply.

Applicant does not acquiesce or agree to any characterization of the claims that place unwarranted limitations or interpretations upon the claims, especially to the extent such limitations or interpretations are inconsistent with the claim language, specification or prior prosecution history in this case.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Katharina W. Schuster
Reg. No. 50,000

Date: March 20, 2017
1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

Electronic Patent Application Fee Transmittal

Application Number:	13308004
Filing Date:	30-Nov-2011
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Filer:	Katharina W. Schuster/Janice Pampell
Attorney Docket Number:	WAYF1100-1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**480**

Electronic Acknowledgement Receipt	
EFS ID:	28676853
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Janice Pampell
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	20-MAR-2017
Filing Date:	30-NOV-2011
Time Stamp:	14:09:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$480
RAM confirmation Number	032117INTEFSW00000451503183
Deposit Account	503183
Authorized User	Janice Pampell
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	WAYF1100-1_Transmittal_of_Payment_of_Issue_Fee.pdf	574752 722d0cbf8d82135911b4014edb16dc7f42282b75	no	1
Warnings:					
Information:					
2	Issue Fee Payment (PTO-85B)	WAYF1100-1_PTOL-85.pdf	1007365 37a1ed6a113268726709af4bd7ddc44440c3500d	no	1
Warnings:					
Information:					
3	Miscellaneous Incoming Letter	WAYF1100-1_Comments_on_Allowance.pdf	652873 ef8dab28bbf3aa2b2f582e93f58b71c848450de3	no	1
Warnings:					
Information:					
4	Applicant summary of interview with examiner	WAYF1100-1_Reply_to_Int_Summ_Mailed_03-08-17.pdf	637162 a461cdf0c0aef3e5dde961ce7959c0e3524f849a	no	1
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30585 357af57ad6c5cc7b3d3c54726d90d80877b0d436	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2902737		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

TRANSMITTAL OF PAYMENT OF ISSUE FEE (Small Entity) 37 C.F.R. 1.311				Docket No. WAYF1100-1
First Named Inventor: **Narendra Nath**				
Application No. **13/308,004**	Filing Date **11/30/2011**	Examiner **Karmis, Alissa D.**	Group Art Unit **3683**	Confirmation No. **9029**
Title: **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**				

Mail Stop: Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Transmitted herewith are the following items in reference to the above-identified application:

- ☒ Issue Fee Transmittal Form PTOL-85
- ☒ Issue Fee: $480.00
- ☒ Response to Examiner Interview Summary
- ☒ Comments on Reasons for Allowance
- ☒ The Director is hereby authorized to charge Deposit Account No. 50-3183 of Sprinkle IP Law Group.
- ☒ The Director is hereby authorized to charge any deficiencies or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Katharina W. Schuster
Reg. No. 50,000

Customer No. 44654
Sprinkle IP Law Group
1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on **March 30, 2017**.

Janice Pampell

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

44654 7590 03/08/2017

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER
KARMIS, ALISSA D

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 03/08/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

TITLE OF INVENTION: DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	06/08/2017

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

44654 7590 03/08/2017
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

TITLE OF INVENTION: DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	06/08/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
KARMIS, ALISSA D	3683	705-014730

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 03/08/2017

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	
ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 03/08/2017

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/308,004	NATH ET AL.	
	Examiner	Art Unit	
	ALISSA KARMIS	3683	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Alissa Karmis, Examiner, Dave Rines, Primary*.

(2) *Richard L Torczon Jr, Applicant's rep*.

(3) *Katharina Schuster, Applicant's rep*.

(4) *Narendra Nath, Applicant*.

Date of Interview: *19 January 2017*.

Type: ☐ Telephonic ☐ Video Conference
☒ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *25*.

Identification of prior art discussed: *NA*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Proposed amendments were discussed to overcome the outstanding 101 rejection. In addition to the amendments proposed by Applicant, an additional amendment was proposed by the Examiners and agreed to by Applicant and Applicant's representatives that further indicated in the independent claims that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map. Based on the proposed amendments, the 101 rejection will be withdrawn. There was no outstanding 102/103 rejections to discuss.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/DAVID RINES/ Primary Examiner, Art Unit 3624	/ALISSA KARMIS/ Examiner, Art Unit 3683

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Notice of Allowability	Application No. 13/308,004	Applicant(s) NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the interview conducted on Jan. 19, 2017*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *25-50*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date *01/19/2017* .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/DAVID RINES/ Primary Examiner, Art Unit 3624	/ALISSA KARMIS/ Examiner, Art Unit 3683

DETAILED ACTION

1. The following **NOTICE OF ALLOWANCE** is in response to the interview conducted with Applicant on January 19, 2017.

Response to Arguments

2. Applicant's arguments discussed during the interview on January 19, 2017 regarding the rejection of claims 25-50 under 35 U.S.C. 101 were fully considered and persuasive in view of amendments discussed and agreed to in the interview. The rejection is withdrawn.

Examiner's Amendment

3. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The proposed amendments to claim 25 presented by Applicant during the interview on January 19, 2017 in combination with an additional limitation proposed by the Office to further specify the determining of corresponding field identifiers using the universal variable map was accepted and agreed to during the interview as overcoming the outstanding 101 rejection. The exact language of the additional limitation proposed by the Office was finalized and agreed to by Applicant and authorized via communication with Applicant's representative Katharina Schuster (Reg. 50,000) on

January 30, 2017. Based on the agreed to amendments on January 19, 2017 and January 30, 2017, potential antecedent issues were raised and therefore addressed with Applicant's representative on February 3, 2017. A complete listing of the amended claims including amendments to independent claims 37 and 47 to be consistent with amendments to independent claim 25 as well as amendments to claims 31, 32, 34, 36, 41, 42, 44 and 49 to address the potential antecedent basis issues was provided by Applicant's representative on February 3, 2017 and is incorporated below. Also, based on Applicant's amendment, a claim objection to claim 32 from the non-final Office action of 09/06/2016 is withdrawn.

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1.-24. (Cancelled).

25. (Currently Amended) A method, comprising:

at and by a server computer operating in a network environment and having at least one processor and non-transitory computer memory:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable

map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of computer-readable field identifiers used by the second site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are explicitly or implicitly pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

26. (Previously Presented) The method according to claim 25, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product

or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

27. (Previously Presented) The method according to claim 26, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

28. (Previously Presented) The method according to claim 25, wherein field identifiers are programmatically searched or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map.

29. (Previously Presented) The method according to claim 28, wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping.

30. (Previously Presented) The method according to claim 25, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

31. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the ~~first~~ page of the first site or application.

32. (Currently Amended) The method according to claim [[30]]31, wherein the user's implicit action comprises the user hovering over a target of interest on the ~~first~~ page of the first site or application.

33. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

34. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is displayed on the ~~first~~ page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest.

35. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

36. (Currently Amended) The method according to claim [[34]]35, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the second site or application; and

populating the at least one form associated with the second site or application with the values extracted or inferred from the query string.

37. (Currently Amended) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of ~~explicit or implicit~~ computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the explicit or implicit~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the second site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are pre-populated with the

values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

38. (Previously Presented) The system of claim 37, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

39. (Previously Presented) The system of claim 38, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

40. (Previously Presented) The system of claim 37, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

41. (Currently Amended) The system of claim 37, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the ~~first~~ page of the first site or application.

42. (Currently Amended) The system of claim 41, wherein the user's implicit action comprises the user hovering over a target of interest on the ~~first~~ page of the first site or application.

43. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

44. (Currently Amended) The system of claim 37, wherein the deep-linked ad is displayed on the ~~first~~ page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or an element of interest.

45. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

46. (Previously Presented) The system of claim 45, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the second site or application; and

populating the at least one form associated with the second site or application with the values extracted or inferred from the query string.

47. (Currently Amended) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by at least one processor to perform:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of ~~explicit or implicit~~ computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing

a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the explicit or implicit~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the second site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

48. (Previously Presented) The computer program product of claim 47, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

49. (Currently Amended) The computer program product of claim 47, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the ~~first~~ page of the first site or application.

50. (Previously Presented) The computer program product of claim 47, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

Allowable Subject Matter

4. Claims 25-50 are allowed.

Reasons for Allowance

5. The following is an Examiner's statement of reasons for allowance:

With respect to the 35 U.S.C. 101 rejection, Applicant's arguments during the January 19, 2017 interview are persuasive in combination with the proposed amendments including that the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer technology. The claims address a problem and solution of extracting values corresponding to computer-readable field identifiers on a first website or application

being used by a user and populating those values into the corresponding computer-readable field identifiers on a second website or application with no pre-existing relationship between the two pages or applications and by the user interacting with the first website's or application's deep-linked ad that is generated from a universal variable map that maps computer-readable field identifiers on a plurality of websites or application to one another using normalized variables thereby linking the computer-readable field identifiers of the plurality of websites or applications. Similar to findings in the *DDR Holdings, LLC v. Hotels.com, L.P. (773 F.3d 1245, 113 U.S.P.Q.2d 1097 (Fed. Cir. 2014))* decision regarding the manipulation to yield a desired result such as how a user is directed to a particular webpage, Applicant's use of the linkage between the computer-readable field identifiers of websites or applications is interpreted as a similar manipulation to yield a desired result. Also, Applicant's claims recite a normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet which links computer-readable field identifiers of a plurality of websites or applications to one another which is interpreted as having similar qualities to the self-referential database recited in *Enfish LLC v. Microsoft Corp.(822 F.3d 1327, 118 U.S.P.Q.2d 1684 (Fed. Cir. 2016)).* Looking at the claim (e.g., independent claim 25) limitations as an ordered combination results in the claim amounting to significantly more than an abstract idea of collecting, comparing and storing information and generating an advertisement.

With respect to the 35 U.S.C. 103 rejection, the closest cited prior art to the claimed invention is Anagnostopoulos US 2009/0313127 A1 (hereinafter

"Anagnostopoulos") in view of Markus US 6,490,601 (hereinafter "Markus") and further in view of Stephens US 2007/0239494 A1 (hereinafter “Stephens”).

Applicant’s arguments/remarks submitted 09/25/2015 and provided in response to the final Office action of 06/26/2015 were persuasive and the rejections under 35 U.S.C. 103 were previously withdrawn. Anagnostopoulus teaches extracting text and metadata of webpages and mapping or linking webpage content information to corresponding advertisements and placing advertisements into webpages using the mapping. Markus teaches mapping non-standard fields in an electronic form to pre-named fields or standard fields. Stephens teaches a user clicking on a deep-link which takes the user to an intermediate page containing pre-selected characteristics. The combination of Anagnostopoulos in view of Markus and further in view of Stephens does not teach obtaining and mapping computer-readable field identifiers of a plurality of Internet sites or applications to one another using normalized variables to create a universal variable map of searchable classes and attributes of products or service on the Internet to generate a deep-linked ad that links the computer-readable field identifiers of a first site or application to a second site or application and upon user interaction with the ad passing the values of the computer-readable field identifiers on the first site or application to the second site’s or application’s corresponding computer-readable field identifiers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rawat US 6,662,340 B2

Schilit US 6,658,623 B1

Simons WO 01/06416 A2

Myllymaki, Jussi. Effective Web data extraction with standard XML technologies. Computer Networks Vol. 39, Issue 5, 5 August 2002. pages 635-644.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA KARMIS whose telephone number is (571)270-7277. The examiner can normally be reached on Monday - Friday 8:30 am to 5:00 pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, Applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Peter H. Choi can be reached on 571-272-6971. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALISSA KARMIS/
Examiner, Art Unit 3683

/DAVID RINES/
Primary Examiner, Art Unit 3624

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/308,004	NATH ET AL.	
	Examiner	Art Unit	
	ALISSA KARMIS	3683	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Alissa Karmis, Examiner, Dave Rines, Primary*.

(2) *Richard L Torczon Jr, Applicant's rep*.

(3) *Katharina Schuster, Applicant's rep*.

(4) *Narendra Nath, Applicant*.

Date of Interview: *19 January 2017*.

Type: ☐ Telephonic ☐ Video Conference
☒ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *25*.

Identification of prior art discussed: *NA*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Proposed amendments were discussed to overcome the outstanding 101 rejection. In addition to the amendments proposed by Applicant, an additional amendment was proposed by the Examiners and agreed to by Applicant and Applicant's representatives that further indicated in the independent claims that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map. Based on the proposed amendments, the 101 rejection will be withdrawn. There was no outstanding 102/103 rejections to discuss.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/DAVID RINES/ Primary Examiner, Art Unit 3624	/ALISSA KARMIS/ Examiner, Art Unit 3683

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Notice of References Cited	Application/Control No. 13/308,004	Applicant(s)/Patent Under Reexamination NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-6,662,340 B2	12-2003	Rawat; Jai	G06F17/243	705/34
*	B	US-6,658,623 B1	12-2003	Schilit; William Noah	G06F17/3061	707/E17.013
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N	WO 0106416 A2	01-2001	US	SIMONS GEOFFREY W	G06F17/2264
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Myllymaki, Jussi. Effective Web data extraction with standard XML technologies. Computer Networks Vol. 39, Issue 5, 5 August 2002. pages 635-644.
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 01/06416 A2

(54) Title: INTELLIGENT MAPPING OF FIELD NAMES IN AN ELECTRONIC FORM WITH STANDARD FIELD NAMES

(57) Abstract: Methods, apparatus, and computer program products are disclosed for facilitating the mapping of legacy field names in an online vendor form with standard field names as one step in an automatic online form filling process. When a vendor registers a form with a third-party automatic form filling service, fields in the vendor's form must be mapped with standardized field names created and maintained by the third-party service. A process is described for intelligent mapping of a legacy field name in an electronic legacy form with one or more standard field names, thereby saving the vendor time and reducing the chance of error in the form registration process. A method of mapping a standard field name with a legacy field name from an electronic legacy form is described. A legacy field name is extracted from an online vendor form. A list of standard field names that are predicted to most likely map to the legacy field name is created using a linear algebra algorithm. A standard field name from the list that actually maps to the legacy field name is selected. A knowledge base of vectors used to create the list of predicted standard field names is micro-adjusted to reflect the selection of the predicted standard field name that actually maps to the legacy field name.

INTELLIGENT MAPPING OF FIELD NAMES IN AN ELECTRONIC FORM WITH STANDARD FIELD NAMES

CROSS-REFERENCE TO RELATED APPLICATIONS

A system and method for automatic form filling is described in Application No. 09/231,644, titled "Server For Enabling The Automatic Insertion Of Data Into Electronic Forms On A User Computer", (Attorney Dkt: MLLTP001) and in Application No. 09/231,254, (Attorney Dkt: MLLTP002) titled "Method and Apparatus for Client Side Automatic Electronic Form Completion", both filed January 15, 1999.

Background of the Invention

Field of the Invention

The present invention relates generally to computer software for examining form documents over a computer network. More particularly, the present invention provides a method and system for automatically deriving associations between fields in an electronic form with a list of predefined fields on a server computer.

Discussion of Related Art

One result of the recent explosion in the use of computers is the amount of communication that now takes place between separate computers and computer systems. Many methods and systems exist for communications between computers or computer systems. This is reflected in many contexts, such as in the growth of the Internet or, more specifically, the World Wide Web. For purposes of the following discussion, several methods and systems will be described with reference to the Internet and to Web sites as a matter of convenience. It should be understood,

however, that this is not intended to limit the scope of this discussion, and that many other applicable devices and protocols for computer communications exist, such as "Intranets," closed proxy networks, enterprise-wide networks, direct modem to modem connections, etc.

In recent years, the Internet has been used for commerce (often referred to as "e-commerce") and performing various other types of transactions, typically between businesses and individuals. One step generally necessary in performing transactions over the Internet is having the individual fill in some type of electronic or online form so the business or vendor can get some basic information about the customer. In general, many methods may be used to assist a user in filling out such an electronic form document. One or more of these methods may involve a vendor registering its form with a third-party where the third-party facilitates, primarily by automating, the process of filling in the form by the customer.

One method of registering a vendor's electronic form with a third-party service provider (where the "service" consists of automated form filling) typically involves the necessary step of matching fields in the vendor's form with the third-party's standard fields. Presently, this is done without involving the vendor. Employees of the third-party upload or otherwise obtain a copy of a vendor's form and examine each field in the form. They then match each of the fields with one of the third-party's own standard fields. This process is repeated for each vendor (some of whom may have more than one form) the third-party desires to register with its service, without involving or consulting with the vendor.

One of the drawbacks to this manual approach to matching form field names is that it is, by its nature, manually intensive if the third-party wants to register hundreds or thousands of forms from different vendors. This would require a large investment in time and labor to initially set up and to continually maintain and expand. Furthermore, because the matching is done manually by human beings, the chances of clerical error are high.

At another level, drawbacks from the manual approach to mapping field names are more significant. When done manually, the third-party could mismatch a vendor field name with one of the standard third-party field names thereby associating a meaning with a vendor, or legacy, field that the vendor did not intend. Another significant drawback stems from not having the vendor participate in the mapping process. By not having the vendor or form owner involved in the mapping process, the third-party is unable to take into account privacy considerations desired

by the vendor. Although online transactions are on the rise, consumers are increasingly wary and sophisticated with respect to the privacy or protection of any personal information they enter online. Generally speaking, consumers, at a minimum, want to know how their information will be used once they have entered it. For example, will it be used strictly for the single transaction being conducted at the moment or will it be saved by the vendor, perhaps to be used in a mailing list or in a database of consumer preferences.

In any case, many online vendors want to have some type of privacy negotiation associated with any forms being registered with the third-party service. If no privacy features are associated with a particular form, consumers will be increasingly reluctant to provide information, especially certain types of information such as billing information or consumer preferences. However, if the vendor is involved in the matching process, the process should be efficient and easy for the vendor, otherwise the vendor is less likely to register its forms with the third-party.

Therefore, it would be desirable to have a process in which the vendor or online merchant performs the matching between the legacy field names and the standardized third-party field names. Furthermore, it would be desirable to make the matching procedure for the vendor efficient, preferably by examining the legacy field name and then providing the most likely matching standard field names from which the vendor can select the correct one. This intelligent mapping process should have the ability to evolve or learn as corrections are made and more forms are registered with the third-party service.

Summary of the Invention

According to the present invention, methods, apparatus, and computer program products are disclosed for intelligent mapping of a legacy field name in an electronic legacy form with one or more standard field names. In one aspect of the present invention a method of mapping a standard field name with a legacy field name from an electronic legacy form is described. A legacy field name is extracted from an online vendor form. A list of standard field names that are predicted to most likely map to the legacy field name is created. A standard field name from the list that actually maps to the legacy field name is selected. A knowledge base used to create the list of predicted standard field names is micro-adjusted to reflect the selection of the predicted standard field name that actually maps to the legacy field name.

In one embodiment the legacy field name is extracted by parsing the online legacy form and creating a document object model. In another embodiment the list of predicted standard field names are drawn from a standard field name list having multiple field names commonly found in vendor forms. In yet another embodiment an initial training set upon which a knowledge base is built is created manually entering field mapping data between standard fields and legacy fields. In yet another embodiment the list of predicted standard field names is created utilizing one or more evidence variables to determine standard field names most likely to map to the legacy field name and where one of the variables is relative distance of a term from the legacy field name being examined. In yet another embodiment the knowledge base used to create the list of predicted standard field names is a vector set having multiple vectors, wherein a vector represents a standard field name. In yet another embodiment the list of predicted standard field names is created using a linear algebra algorithm.

Brief Description of the Drawings

The invention will be better understood by reference to the following description taken in conjunction with the accompanying drawings in which:

FIG. 1 is an overview block diagram showing components of a field mapping system in accordance with one embodiment of the present invention.

FIG. 2 is a block diagram depicting components of a field mapping system in accordance with one embodiment of the present invention.

FIG. 3A is a flow diagram describing a processing for building an initial training set or knowledge base to be used in the field mapping system in accordance with one embodiment of the present invention.

FIG. 3B is a block diagram of an object model in accordance with one embodiment of the present invention.

FIG. 4 is a flow diagram of a process of registering a form with a third-party service after a training set has been created in accordance with one embodiment of the present invention.

FIG. 5 is a table depicting weight values and fields used to calculate probabilities of particular standard fields in accordance with one embodiment of the present invention.

FIG. 6 is a block diagram of a typical computer system suitable for implementing an embodiment of the present invention.

Detailed Description of the Preferred Embodiment

Reference will now be made in detail to a preferred embodiment of the invention. An example of the preferred embodiment is illustrated in the accompanying drawings. While the invention will be described in conjunction with a preferred embodiment, it will be understood that it is not intended to limit the invention to one preferred embodiment. To the contrary, it is intended to cover alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.

In accordance with one embodiment of the present invention, there is provided a system and method for intelligently mapping fields in an electronic form (referred to as legacy fields) with standard fields from a set of predefined field names as described in the various figures. This intelligent field mapping method is one aspect of an automatic form filling procedure for online or electronic transactions, such as those over the Internet. A system and method for automatic form filling is described in Application No. 09/231,644, titled "Server For Enabling The Automatic Insertion Of Data Into Electronic Forms On A User Computer", (Attorney Dkt: MLLTP001) and in Application No. 09/231,254, (Attorney Dkt: MLLTP002) titled "Method and Apparatus for Client Side Automatic Electronic Form Completion", both filed January 15, 1999, and incorporated by reference herein.

The automatic form filling procedure described in these applications require that a merchant or vendor form be registered with a third-party automatic form filling provider ("third-party service" or "third-party"). In order for a form to be registered with the third-party service for automatic form filling, legacy fields in the vendor form need to be mapped or paired with a standard field from a set of field names created and maintained by the third-party (or at least those legacy fields that have a corresponding standard field).

The method of the present invention facilitates the matching process by providing the vendor, desiring to register its form, with standard field names most likely to match each of the legacy field names. As the number of vendor forms registered with the third-party service increases, the field mapping process of the present invention "learns" more about which standardized fields are more likely to match a given legacy field name. Through this field mapping process, the registration process for a vendor evolves and becomes more efficient since the vendor merely has to select a standard field from a short list of "most likely" matching standard fields.

To further illustrate the foregoing, FIG. 1 is an overview block diagram showing components of a field mapping system in accordance with one embodiment of the present invention. For example, a vendor or merchant wanting to do business over a network, such as the Internet, registers a form 102, such as a purchase order form to be filled out by customers, with a third-party service. Form 102 is an electronic form containing legacy fields and labels for such fields to be filled in by a customer. The legacy fields are given names when form 102 is created, such as *fname* and *lname* or *lastname* and *firstname*, etc., which are typically not seen or known to the customer. The labels are the text seen by the customer or user describing these fields such as "First Name" "Last Name" "Street Address," etc. Typically, when an online customer visits the vendor's Web site and decides to make a purchase, the customer fills in each field "manually" by typing in the information, usually starting with a first name, last name, home address, phone number, billing address, and so on.

In order to be registered, form 102 is uploaded to a third-party server 104. As mentioned above, one aspect of the registration process is mapping legacy field names with third-party standard field names. Server 104 contains, among other information, a field map domain database 106 described in greater detail below. Domain database 106 is created using a metric described below and is used to determine the most likely matching standard field names. A client "customer" 108 running a Web browser 110 already registered with the third-party (by providing the third-party with personal information) has form 102 automatically filled in with information associated with customer 108. This last step is not part of the present invention and is described in greater detail in pending patent applications incorporated by reference above. Customer 108 and browser 110 are shown for completeness and are relevant in discussions below regarding the construction of document object models ("DOMs") based on the uploaded vendor forms.

FIG. 2 is a block diagram depicting components of a field mapping system in accordance with one embodiment of the present invention. Shown are vendor form 102, a list of third-party standard field names 202, a field mapping component 204, and a field mapping list 206. Vendor form 102 is described in FIG. 1 above. It is typically an HTML document created and maintained by a vendor. In other embodiments, form 102 can be an XML document. Form 102 contains various fields, of which three are shown (in brackets) with accompanying labels or text: First Name 208: [fname] 210, Last Name 212: [lname] 214, and

Middle Initial 216: [minitial] 218. Of these items or objects, fname 210, lname 214, and minitial 218 are examples of legacy field names and can be categorized as field objects. Labels First Name 208, Last Name 212, and Middle Initial 216 are each text strings and can be further decomposed into "First," "Name," "Last," "Name," "Middle," and "Initial." The legacy field names and text strings are created and maintained by the vendor.

Standard field name list 202 is created and maintained by a third-party service for automatic form filling. In the described embodiment, field name list 202 contains about 70 to 80 of the most common fields found in most customer-oriented forms for purchasing goods or services in North America and internationally. When a vendor registers an electronic form, generally, many of the fields in the form will have a corresponding matching field in field name list 202. Shown as part of field name list 202 are three examples of standard field names: user_name_first 220, user_name_last 222, and user_name_middle 224, collectively making up a customer's name. In other embodiments, names of the standard fields and the number of such fields can vary depending on what the third-party service provider believes is most suitable. Other examples of field names found in field name list 202 include billing_street_address, user_home_phone, credit_card_type, and so on. Field mapping component 204 collects "intelligence" as new forms are registered and performs the field mapping function using various data sources, such as field map domain database 106, to create a field mapping list 206 (i.e., a list of associated field names). Field mapping component 204 is described in greater detail below. Initially (i.e., when no forms have been registered), mapping component 204 uses a training set which it then builds upon as new forms are registered. In the described embodiment, the training set, described below, is created "manually" in that vendors or the third-party service match fields without the benefit of a "most likely" matching field list.

After the training set is created and the mapping component is running, an inference base built using a learning engine is used to provide the vendor with a selection of standard field names for a particular legacy field name. Field mapping list 206 is an abstract representation of the final "output" of the intelligent field mapping process of the present invention. On the left-side column of list 206 are legacy field names found in form 102, such as fname 210, lname 214, and minitial 218. Associated with each legacy field name is a selection list of most likely corresponding standard field names. For example, fname 210 has a selection list

having, as a first and most likely choice, user_name_first 220, followed by the second most likely choice, user_name_last 222, and finally, by user_name_middle 224. If there are fields preceding fname 210 and text string 208, those fields may also be in the selection list. Whether they appear in the selection list depends, for example, in part, on how often they immediately precede fname 210 in other vendor forms. In other embodiments, evidence variables other than proximity and frequency can be used by the learning engine, alone or in combination with other evidence variables, to determine the most likely matching standard field names.

Standard field name user_name_last 222 will likely always be in the selection list since it is almost always very close to user_name_first 220. The same is true for user_name_middle 224, although this field is less predictable: it may appear after lname 214, between fname 210 and lname 214, or not appear at all. In the described embodiment, the selections are presented to the vendor in the form of a pull-down window with only the first, most-likely selection showing initially, and the other choices in the pull-down window. In other embodiments, the selections can be presented to the user in other formats.

FIG. 3A is a flow diagram describing a process for building an initial training set or knowledge base to be used in the field mapping system in accordance with one embodiment of the present invention. The training set is an initial knowledge base that is created "manually" in that legacy fields are mapped to standard fields preferably by the vendor. This is done without providing a short list or most likely standard field to the person performing the mapping. At step 302 a vendor's customer form is uploaded to a server under the control of the third party service provider. In the described embodiment, the vendor uploads one form onto the server in order to register it with the third-party service. In other embodiments, multiple forms from one vendor can be uploaded.

At a step 304 the form, typically an HTML document, is parsed using an HTML parser thereby creating a document object model, or DOM. An example of an object model is shown in FIG. 3B. Such a parsing procedure is well known in the field of Internet programming as is the creation of DOMs (essentially a tree of nodes). Some typical parsing algorithms are widely used in Javascript, browser programs (e.g., Netscape Navigator or Microsoft Internet Explorer), and in WC3. The HTML parsers used in the present invention should be as "forgiving" as the HTML parsers utilized in the widely used Web browsers. In the described embodiment, DOM 330 created is a linear object model made up of a linear series of

linked nodes. Object 330 can be seen as the raw model that represents the legacy form. It should be noted here that the object module is not necessarily created solely for field mapping component 204 and can be used by other components of the broader automatic form filling system.

Following the same example of text and fields in form 102 from above, a corresponding DOM 330 would include a node 332 of type TEXT and value "First" followed by another TEXT node 334 with value "Name" followed by a node 336 of type LFIELD (legacy field) having a value " fname," and so on.

However, one unique feature of object model 330 in the described embodiment is the inclusion of an "unknown" node 338 for each legacy field node in the object model. This node of type "unknown" is parallel to and at the same level as a legacy field, such as "fname." Thus, the HTML parser of the described embodiment inserts these nodes in the object model and creates a set of unknown nodes. These object models containing the normal nodes and "unknown" nodes are assigned a unique identifier and stored. It is also useful to note here that because HTML is linear, the parser can create a linear object model in which it is possible, in subsequent steps, to determine the distance other nodes in the model are from a particular node (i.e., it is possible to count nodes ahead of or behind a given node to determine a distance). Thus, a vendor form is defined as a set of nodes of three types: text (labels), legacy fields, and unknowns.

At step 306, a human performs a manual mapping of each legacy field with a standard field. In this step, the object model representing the form is retrieved and all nodes representing a legacy field are extracted along with each associated unknown node or field. The process of extracting nodes of one or more particular types from an object model is well known in the field of computer and Internet programming. For each legacy field, a corresponding standard field is chosen, if appropriate or available. Once the mapping between the legacy field names and standard field names is complete, at step 308 the object model is retrieved or reconstructed with the unknown nodes or fields eliminated and replaced with the standard field names entered by the vendor. Any unknown nodes associated with legacy fields which did not have a matching standard field are unaltered and are essentially ignored in subsequent processing in the described embodiment. This manually entered mapping data is stored in a field map domain as a form object having individual elements and associated clauses. A clause is a data element and a privacy practice, not relevant to the present invention.

At step 310 the completed object model containing the legacy fields and the standard field names are stored in a field map domain database. In the described embodiment the object model is compressed before being stored in the domain database. Although storing a compressed object model representing a form saves storage space (the number of forms could potentially reach hundreds of thousands), data not necessary to the algorithm described below is lost during compression. If data object modules of mapped forms are stored, no data would be lost.

In another embodiment, the entire object model uncompressed is stored should a different algorithm or learning engine be utilized for the field mapping. By storing an uncompressed object model, the current algorithm or a different type of algorithm can be retrained to use different data in the object model. For example, in another embodiment term or label nodes such as " First" or " Street Address" in the object model can also be mapped or associated with a standard field by the vendor. "First" can be associated with the standard field *user_name_first*, for example, and this added intelligence can be used by the learning engine or algorithm to better predict which standard field names map to a given legacy field.

After step 310 the process of entering one vendor form into a training set is complete. The process is repeated for each form used to initially build the training set. In the described embodiment, intelligence data from 150 to 200 forms is used to initially build the training set. This number can, of course, vary depending on the desired initial accuracy or intelligence of the field mapping system.

FIG. 4 is a flow diagram of a process of registering a form with a third-party service after training set has been created in accordance with one embodiment of the present invention. Once the training set has been created and the field map system is in full operation, an online vendor desiring to take advantage of the third-party's automatic form filling service is required to register the form with the third-party. It is during this registration process that the vendor must map legacy fields in its form with standard field names created and maintained by the third-party. As described above, the present invention describes a method and system of facilitating the field mapping process by providing the vendor with the most likely standard field name to map to a particular legacy field followed by a list of other likely standard fields that might match. For many vendor forms having dozens of fields, intelligently suggesting standard names to the vendor can save the vendor from having to go through a potentially tedious and time-consuming process (otherwise the vendor

would have to search through a long list of standard field names for each field in its form, thereby deterring some vendors from registering with the third party service).

Steps 402 and 404 of FIG. 4 are substantially similar to steps 302 and 304 of FIG. 3A. At step 402 the vendor uploads a form it desires to register to the third-party server. At step 404 the form is parsed using an HTML parser. An object model having nodes for terms, legacy fields, and "unknown" nodes associated with each legacy field node is created. The parser also extracts the legacy field nodes from the object model at step 404. At step 406 the field mapping system predicts which standard field names are most likely to match each legacy field (determined by examining the extracted legacy field nodes from the object model). That is, it makes its best predictions as to what the unknown nodes in the object model are in terms of standard field names. In the described embodiment this is done using a linear algebra algorithm and is described in greater detail below.

At step 408 the predicted standard field names for the legacy fields are presented to the user. In the described embodiment, the vendor initially sees one selection (the most likely standard field) followed by a pull-down menu of three or four other likely fields in descending order. The vendor either selects the standard field dame presented (i.e., the one the field mapper determined should be the corresponding standard field for the particular legacy field) or one of the other likely standard field names. If the vendor selects the first choice, it is essentially confirming the field mapper's prediction. If the vendor selects one of the others or none at all, he is implicitly correcting the field mapper's intelligence.

At step 410 this confirmation or correction feedback from the vendor (provided by the vendor simply from using the field mapping component) is used to micro-adjust the inference base or rule set of the field map system. The inference base is compressed into linear algebra tables as described below. In the described embodiment any corrections to or confirmations of the field map intelligence by the vendor are used to correct one evidence variable, namely, the relative distance of certain terms from the legacy field being examined. The distance is measured in terms of the number of nodes (in the object model) from a legacy field node. The role of this distance variable and how it is used is described in greater detail below. In other embodiments, other evidence variables can be used (e.g., a Boolean variable indicating whether a term is before or after a particular legacy field node) and, thus, input from the vendor can be used to micro-adjust the weights of those variables as

well. Once the vendor settings are fed to the field map inference base, the process, of registering a form is complete.

In the described embodiment a linear algebra algorithm is used as a learning engine for building the inference base of the field map system. In other embodiments the learning engine can be based on a Bayesian network or a neural network. Generally, the linear algebra algorithm used in the described embodiment uses a vector set or matrix to represent a form where each row is keyed based on a standard field. Once a matrix, described below, is created for a form, its values are averaged or combined with corresponding values in a "master" matrix which represents a constantly adjusted inference base for the field map system. Predictions as to legacy field/standard field mappings are derived from this inference base or master matrix. $\hat{P}_j$

A selected form *l* includes a series of labels (terms) and fields (legacy fields). In the first stage of the linear algebra algorithm a set of vectors, $\overline{T}_l$ is created for a form *l*. This set of vectors only corresponds to nodes that were in the selected form *l*. Each vector represents one term *i* contained in form *l*, such as "First" "Last" or " Street." Thus, if one form had the term "Email" the vector set for that form would have a vector corresponding to that term, whereas another vendor form that did not contain a field for "Email" would not have a vector for that term *i*. A vector for a term *i* in form *l* is represented by the following formula: $\overline{T}_{l_i} = \Sigma_j \neq_i w_{l_{ij}} \hat{P}_j$. Thus, for a given term or node *i* in a form *l*, a vector is created. An example of a single vector for the term "First" would be: $\overline{T}_{l_{(First)}} = \frac{1}{3} \hat{P}_{(user\_name\_first)} + \frac{1}{3} \hat{P}_{(user\_name\_first)} + \ldots$ The variable w represents a "weight" calculated based on the distance a term node or field node is from a particular standard field. The calculation of this weight is described below. Each vector is a sum of values where each value is the equivalent of a dot product of a weight (e.g., 1/3, 1/6. . .) and an unknown node in the object model. The operation performed is similar to a dot product taken in an inverted manner. Essentially, each vector represents how term *i* is associated with standard field nodes, symbolized by $\hat{P}_j$.

The weights of nodes in the vicinity of term *i* are inversely proportional to the distance of the node from the term. The distance is determined by the number of nodes from the term *i* node in object model 330. This distance is essentially the same as the relative position of terms in the original HTML document of form *l*. Thus, if

the nodes are in the following order: "First" "Name" [fname] "Last" "Name" and [lname], the node for term "First" is two away from the [fname] node and five away from the [lname] node, for example. A node is zero distance away from itself. Each vector $\overline{T}_{l_i}$ (for term *i* in form *l*) has a vector of weights, w_{li0}, w_{li1}, w_{li2}, and so on, associated with each node. If the weight falls below a certain threshold value, the node is ignored and not included in the vector for that term. For example, while [lname] is sufficiently close to "First" to be included in the vector for "First", a term much further down the form, such as "Payment" or "Email", may be too far from "First" to have any significant weight and therefore, not be included in the vector. In the described embodiment, the weight of a particular node with respect to a term *i* is calculated based on the following formula: w=1/(1+d), hence, inversely proportional to the distance of the node from the term. The variable d is the distance a node is from term *i*. If a term has a distance of two, it is assigned a weight of 1/3; if it has a distance of one, it has a weight of ½. Thus, the farther the distance a node is from term *i*, less weight is accorded to that node. In the described embodiment, if a node has a weight less than 1/8, it is not included in the vector N_{l_i} for term *i*.

The set of vectors $\widetilde{T}_l$ represents vectors for each term in form *l*. Each vector, in turn, can be seen as a series of weight, standard field pairs as described above. The number of these pairs in each vector can vary, as can the number of vectors in the set of vectors representing a form since forms can have varying number of terms.

$$\widetilde{T}_l = \begin{Bmatrix} \overline{T}l_{first} \\ \overline{T}l_{name} \\ \overline{T}l_{fname} \\ \vdots \end{Bmatrix} = \begin{Bmatrix} 1/3\,\hat{P}_{user\_name\_first} + 1/6\,\hat{P}_{user\_name\_last} + \cdots \\ 1/3\,\hat{P}_{user\_name\_first} + 1/6\,\hat{P}_{user\_name\_last} + \cdots \\ 1\,\hat{P}_{user\_name\_first} + 1/4\,\hat{P}_{user\_name\_last} + \cdots \\ \vdots \end{Bmatrix}$$

The inference base is the center of intelligence of the field map system and is continually modified when new forms are registered. In other words, when a new $\widetilde{T}_l$ is entered into the system, data from the vectors in $\widetilde{T}_l$ are used to update or, more accurately, micro-adjust data in the inference base. One primary difference in calculating values for the inference base is that it is not specific to one form *l*; thus, subscript *l* does not appear in any of the equations. The inference base is also a series of vectors, similar to the matrix for a single form *l*. However, the number of vectors is much larger since each unique term found in all forms registered has a vector in the inference base, which could range in the hundreds and possibly

thousands. The equation used to calculate a vector inference base is similar to that for a form: $\overline{T}_i = \sum_j w_{ij}\hat{P}_j$, for a term *i* and a standard field *j*.

The matrix $\widetilde{T}_i$ is a sum of vectors $\overline{T}_{l_i}$, described below, where each vector represents a term found in at least one of the registered forms and that term's association with other nodes. The weight given to a particular standard field to represent that field's association with a particular term, such as a legacy field or text string, is an average of weights given to the same standard field with respect to the same particular term over all previously registered forms. Each vector in the inference base matrix is calculated based on the formula $\overline{T}_i = \sum_j w_{ij}\hat{P}_j$. The weight w_{ij} is calculated by summing all the weights from individual forms, represented by $w_{l_{ij}}$, as described above, divided by the number of times n_i the term *i* has appeared in previously registered forms. The matrix $\widetilde{T}_i$ is the average of individual form matrices $\widetilde{T}_l$. The field map system keeps a count of the number of times a term appears in a particular form. A count vector $\overline{N}$ is maintained using the formula $\overline{N} = \sum_j n_i Ni$, where n_i is the number of times node *i* appeared in all the registered forms. Thus, when calculating the average, the sum of the number of times a term appears is determined first. The row corresponding to the term is divided by the sum to obtain the average weight for that term with respect to each standard field name in that row. Each element (node) in a row is divided by the number of times it appears in a particular form.

The inference base matrix is used to calculate probabilities that a particular unknown or standard field is a matching standard field for a given legacy field. In the described embodiment a general formula used to derive probabilities for an unknown field *k* in form *l* is $\overline{U}_{l_k} = \sum_i w_{l_{ik}} \hat{T}_i$. Weights $w_{l_{ik}}$ are only those weights that exceed a threshold value, such as 1/8. Any fields having weights lower than the threshold are not worth considering in the equation. In the described embodiment $\hat{T}_i$ is normalized by dividing $\overline{T}_i$ by the magnitude of $\overline{T}_i$. A normalized $\hat{T}_i$ is, for a particular legacy term *i*, a vector of sums of the dot product of weight and a standard field *j*, based on the formula $\overline{T}_i = \sum_i w_{ij}\hat{P}_i$, as described above. A substitution can be made replacing $\hat{T}_i$ in the general formula $\overline{U}_{l_k} = \sum_i w_{l_{ik}} \hat{T}_i$ with $\sum_i w_{ij} P_i$.

By performing this substitution, $\overline{U}_{l_k}$ can now be expressed in terms of weights and standard field names, $\hat{P}_j$. This makes calculating the probabilities for $\overline{U}_{l_k}$ practical. The probabilities can now be expressed as a sum within a sum: $\overline{U}_{l_k} = \sum_i w_{l_{ik}} \left(\sum_i w_{ij} \hat{P}_i \right)$. This can be rearranged to express the probabilities more explicitly in terms of $\hat{P}_j$ or standard field: $\overline{U}_{l_k} = \left[\sum_j \left(\sum_i w_{l_{ik}} w_{ij} \right) \right] \hat{P}_j$ where the sums within the brackets represent the probability that the unknown field *k* in form *l* is the standard field $\hat{P}_j$. The final result, that $\overline{U}_{l_k}$ be expressed as a linear combination of possible P_j's, is then achieved. The sums expressed in the formula are depicted in the form of a table shown in FIGURE 5.

FIG. 5 is a table depicting weight values and fields used to calculate probabilities of particular standard fields in accordance with one embodiment of the present invention. The final step in the linear algebra learning algorithm used by the field map system is calculating a probability that a legacy field maps to a given standard field. The calculation based on the formula $\overline{U}_{l_k} = \left[\sum_j \left(\sum_i w_{l_{ik}} w_{ij} \right) \right] \hat{P}_j$ can be shown more explicitly in table 500. Columns 502 represent standard field names that can possibly match (i.e., have weights above a threshold value) any of the legacy fields in form *l*. Thus, the number of columns in table 500 can vary depending on the form *l* being parsed. Shown in table 500 are two sample columns: *user_name_first* 504 and *user_name_last* 506. Rows 508 represent all terms and legacy fields in form *l* and are drawn from the form object model. As with columns 502, the number of rows can vary depending on the form being parsed. Shown in table 500 are four sample rows for "First", "Name", [fname], and "Last."

In the described embodiment each term in rows 508 has a corresponding weight column 510 containing individual weight values $w_{l_{ik}}$, previously calculated as described above. This weight corresponds to a particular term's distance from an unknown field. Thus, $w_{l_{ik}}$ is the weight between the unknown *k* and node *i*. In table 500, the term "First" has a weight of 1/3 with respect to legacy field [fname]. "Name" and "Last" have higher weights since they are closer to [fname]. Legacy field [fname] has a weight of one with respect to itself. A cell 512 (intersection of a row and column) contains another weight value, specifically w_{ij}, needed to complete the sum operations to calculate the probability that particular unknown U_{l_k} matches a standard field P_j. Cell 512, for example, holds the value .35. This is the weight given to the term "First" with respect to the standard field *user_name_first*. The

variable $\overline{w}_{ij}$ is calculated as $\overline{w}_{ij} = \frac{\sum W_{hj}}{N_j}$. In another cell 514 representing [fname] and *user_first_name*, w_{ij} is very high since, drawing from past form registrations, the legacy field [fname] has frequently matched standard field *user_name_first*. The weight would be higher, such as .99, if all previous forms called the field for the customer's first name "fname." Vendors can call this field various other names, such as [firstname] or [name_first], and so on, which somewhat dilutes the possibility that [fname] matches *user_name_first*.

Once the weight values are in table 500, probabilities that a particular standard field matches a legacy field can be calculated. As noted above in the formula for unknown $\overline{U}_{l_k} = \left[\sum_j \left(\sum_i w_{l_{ik}} w_{ij}\right)\right] \hat{P}_j$, operations are performed for a particular column (standard field name). The summation of $w_{l_{ik}}$ and w_{ij} is first taken. These values are then summed to derive a particular probability. Using sample values from table 500, the calculations to be performed for *user_name_first* would include: $\hat{P}$ *user_name_first* = [(1/3)*.35] + [(1/2)*.5] + [1*.9] + [(1/2)*.5] + . . . These calculations result in a value representing a probability that *user_name_first* maps to [fname]. A similar calculation is done for : $\hat{P}$ *user_name_last*: [(1/3)*.35] + [(1/2)*.2] + [1*.4] + [(1/2)*.6] . . . . These probability values are then examined and the standard field having the highest probability is presented to the vendor during registration. In the described embodiment, the standard fields having the second, third, and fourth highest probability values are presented to the vendor in a pop-down window should the first, most-likely, candidate standard field not be the one that maps to the legacy field. These calculations lead to the formation of logical legacy field/standard fields list 206 of FIG. 2. Table 500 is logically created for each legacy field in vendor form *1*. Through this process, potential standard fields for each legacy field in a form are derived and presented to the vendor.

The present invention employs various computer-implemented operations involving data stored in computer systems. These operations include, but are not limited to, those requiring physical manipulation of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. The operations described herein that form part of the invention are useful machine operations. The manipulations performed are often referred to in terms, such as, producing, identifying, running, determining, comparing, executing,

downloading, or detecting. It is sometimes convenient, principally for reasons of common usage, to refer to these electrical or magnetic signals as bits, values, elements, variables, characters, data, or the like. It should remembered, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

The present invention also relates to a server computer or similar system for performing the aforementioned operations. The system may be specially constructed for the required purposes, or it may be a general purpose computer selectively activated or configured by a computer program stored in the computer. The processes presented above are not inherently related to any particular computer or other computing apparatus. In particular, various general-purpose computers may be used with programs written in accordance with the teachings herein, or, alternatively, it may be more convenient to construct a more specialized computer system, such as a privacy bank server, to perform the required operations.

FIG. 6 is a block diagram of a general purpose computer system 600 suitable for carrying out the processing in accordance with one embodiment of the present invention. FIG. 6 illustrates one embodiment of a general purpose computer system. Other computer system architectures and configurations can be used for carrying out the processing of the present invention. Computer system 600, made up of various subsystems described below, includes at least one microprocessor subsystem (also referred to as a central processing unit, or CPU) 602. That is, CPU 602 can be implemented by a single-chip processor or by multiple processors. It should be noted that in reconfigurable computing systems, CPU 602 can be distributed amongst a group of programmable logic devices. In such a system, the programmable logic devices can be reconfigured as needed to control the operation of computer system 600. In this way, the manipulation of input data is distributed amongst the group of programmable logic devices. CPU 602 is a general purpose digital processor which controls the operation of the computer system 600. Using instructions retrieved from memory, the CPU 602 controls the reception and manipulation of input data, and the output and display of data on output devices.

CPU 602 is coupled bi-directionally with a first primary storage 604, typically a random access memory (RAM), and uni-directionally with a second primary storage area 606, typically a read-only memory (ROM), via a memory bus 608. As is well known in the art, primary storage 604 can be used as a general storage area and as scratch-pad memory, and can also be used to store input data and

processed data. It can also store programming instructions and data, in the form of a field map domain database or a standard field name list, to name just two example, in addition to other data and instructions for processes operating on CPU 602, and is used typically used for fast transfer of data and instructions in a bi-directional manner over the memory bus 608. Also as well known in the art, primary storage 606 typically includes basic operating instructions, program code, data and objects used by the CPU 602 to perform its functions. Primary storage devices 604 and 606 may include any suitable computer-readable storage media, described below, depending on whether, for example, data access needs to be bi-directional or uni-directional. CPU 602 can also directly and very rapidly retrieve and store frequently needed data in a cache memory 610.

A removable mass storage device 612 provides additional data storage capacity for the computer system 600, and is coupled either bi-directionally or uni-directionally to CPU 602 via a peripheral bus 614. For example, a specific removable mass storage device commonly known as a CD-ROM typically passes data uni-directionally to the CPU 602, whereas a floppy disk can pass data bi-directionally to the CPU 602. Storage 612 may also include computer-readable media such as magnetic tape, flash memory, signals embodied on a carrier wave, PC-CARDS, portable mass storage devices, holographic storage devices, and other storage devices. A fixed mass storage 616 also provides additional data storage capacity and is coupled bi-directionally to CPU 602 via peripheral bus 614. The most common example of mass storage 616 is a hard disk drive. Generally, access to these media is slower than access to primary storages 604 and 606.

Mass storage 612 and 616 generally store additional programming instructions, data, and the like that typically are not in active use by the CPU 602. It will be appreciated that the information retained within mass storage 612 and 616 may be incorporated, if needed, in standard fashion as part of primary storage 604 (e.g., RAM) as virtual memory.

In addition to providing CPU 602 access to storage subsystems, the peripheral bus 614 is used to provide access other subsystems and devices as well. In the described embodiment, these include a display monitor 618 and adapter 620, a printer device 622, a network interface 624, an auxiliary input/output device interface 626, a sound card 628 and speakers 630, and other subsystems as needed.

The network interface 624 allows CPU 602 to be coupled to another computer, computer network, or telecommunications network using a network

connection as shown. Through the network interface 624, it is contemplated that the CPU 602 might receive information, e.g., data objects or program instructions, from another network, or might output information to another network in the course of performing the above-described method steps. Information, often represented as a sequence of instructions to be executed on a CPU, may be received from and outputted to another network, for example, in the form of a computer data signal embodied in a carrier wave. An interface card or similar device and appropriate software implemented by CPU 602 can be used to connect the computer system 600 to an external network and transfer data according to standard protocols. That is, method embodiments of the present invention may execute solely upon CPU 602, or may be performed across a network such as the Internet, intranet networks, or local area networks, in conjunction with a remote CPU that shares a portion of the processing. Additional mass storage devices (not shown) may also be connected to CPU 602 through network interface 624.

Auxiliary I/O device interface 626 represents general and customized interfaces that allow the CPU 602 to send and, more typically, receive data from other devices such as microphones, touch-sensitive displays, transducer card readers, tape readers, voice or handwriting recognizers, biometrics readers, cameras, portable mass storage devices, and other computers.

Also coupled to the CPU 602 is a keyboard controller 632 via a local bus 634 for receiving input from a keyboard 636 or a pointer device 638, and sending decoded symbols from the keyboard 636 or pointer device 638 to the CPU 602. The pointer device may be a mouse, stylus, track ball, or tablet, and is useful for interacting with a graphical user interface.

In addition, embodiments of the present invention further relate to computer storage products with a computer readable medium that contain program code for performing various computer-implemented operations. The computer-readable medium is any data storage device that can store data which can thereafter be read by a computer system. The media and program code may be those specially designed and constructed for the purposes of the present invention, or they may be of the kind well known to those of ordinary skill in the computer software arts. Examples of computer-readable media include, but are not limited to, all the media mentioned above: magnetic media such as hard disks, floppy disks, and magnetic tape; optical media such as CD-ROM disks; magneto-optical media such as floptical disks; and specially configured hardware devices such as application-specific integrated circuits

(ASICs), programmable logic devices (PLDs), and ROM and RAM devices. The computer-readable medium can also be distributed as a data signal embodied in a carrier wave over a network of coupled computer systems so that the computer-readable code is stored and executed in a distributed fashion. Examples of program code include both machine code, as produced, for example, by a compiler, or files containing higher level code that may be executed using an interpreter.

It will be appreciated by those skilled in the art that the above described hardware and software elements are of standard design and construction. Other computer systems suitable for use with the invention may include additional or fewer subsystems. In addition, memory bus 608, peripheral bus 614, and local bus 634 are illustrative of any interconnection scheme serving to link the subsystems. For example, a local bus could be used to connect the CPU to fixed mass storage 616 and display adapter 620. The computer system shown in FIG. 6 is but an example of a computer system suitable for use with the invention. Other computer architectures having different configurations of subsystems may also be utilized.

Although the foregoing invention has been described in some detail for purposes of clarity of understanding, it will be apparent that certain changes and modifications may be practiced within the scope of the appended claims. Furthermore, it should be noted that there are alternative ways of implementing both the process and apparatus of the present invention. For example, a Bayesian network or neural network can be used instead of a linear algebra based learning system to create the list of predicted standard field names and maintain the master knowledge base. Accordingly, the present embodiments are to be considered as illustrative and not restrictive, and the invention is not to be limited to the details given herein, but may be modified within the scope and equivalents of the appended claims.

What is claimed is:

1. A method of mapping a standard field name with a legacy field name from an electronic legacy form, the method comprising:

extracting a legacy field name from an electronic legacy form;

creating a list of one or more predicted standard field names that are most likely to map to the legacy field name;

selecting a predicted standard field name from the list that maps to the legacy field name; and

adjusting a knowledge base used to create the list of one or more predicted standard field names to reflect the selection of the predicted standard field name that maps to the legacy field name.

2. A method as recited in claim 1 wherein extracting a legacy field name further comprises:

parsing the electronic legacy form; and

creating a document object model.

3. A method as recited in claim 2 wherein the document object model is a linear object model.

4. A method as recited in claim 1 wherein the list of one or more predicted standard field names are drawn from a standard field name list containing a plurality of field names commonly found in vendor forms.

5. A method as recited in claim 1 further comprising:

creating an initial training set containing manually entered field mapping data.

6. A method as recited in claim 1 wherein the knowledge base is stored in a field map domain database.

7. A method as recited in claim 1 wherein creating a list of one or more predicted standard field names further comprises:

utilizing one or more evidence variables to determine standard field names most likely to map to the legacy field name.

8. A method as recited in claim 7 wherein at least one evidence variable is relative distance of a term from the legacy field name being examined.

9. A method as recited in claim 1 wherein the knowledge base is a vector set having a plurality of vectors, wherein a vector represents a standard field name.

10. A method as recited in claim 1 wherein the list of one or more standard field names is created using a linear algebra algorithm.

11. A computer-readable medium containing programmed instructions arranged to map a standard field name with a legacy field name from an electronic legacy form, the computer-readable medium including programmed instructions for:

extracting a legacy field name from an electronic legacy form;

creating a list of one or more predicted standard field names that are most likely to map to the legacy field name;

selecting a predicted standard field name from the list that maps to the legacy field name; and

adjusting a knowledge base used to create the list of one or more predicted standard field names to reflect the selection of the predicted standard field name that maps to the legacy field name.

FIG. 1

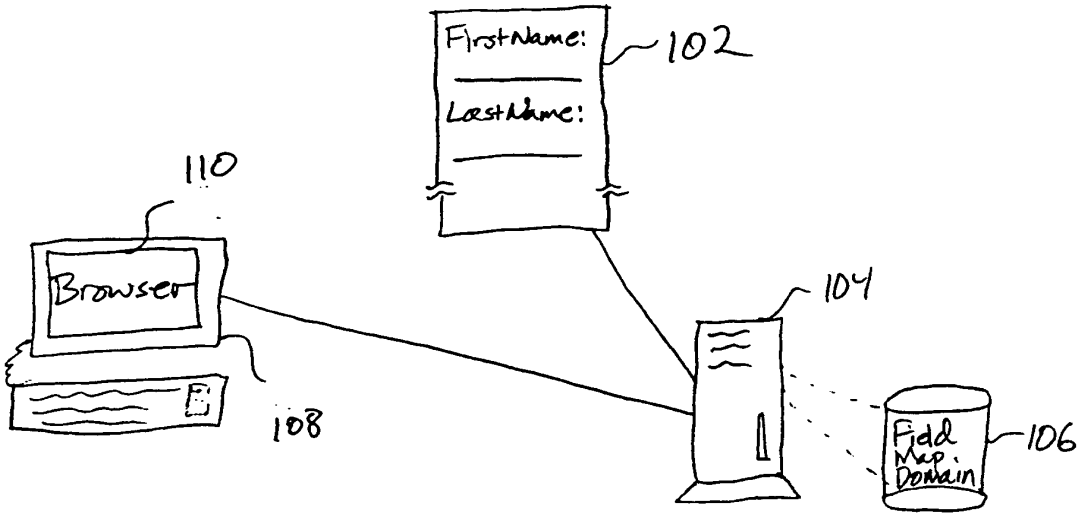

FirstName:
LastName:
102
110
Browser
108
104
Field Map Domain
106

FIG. 2

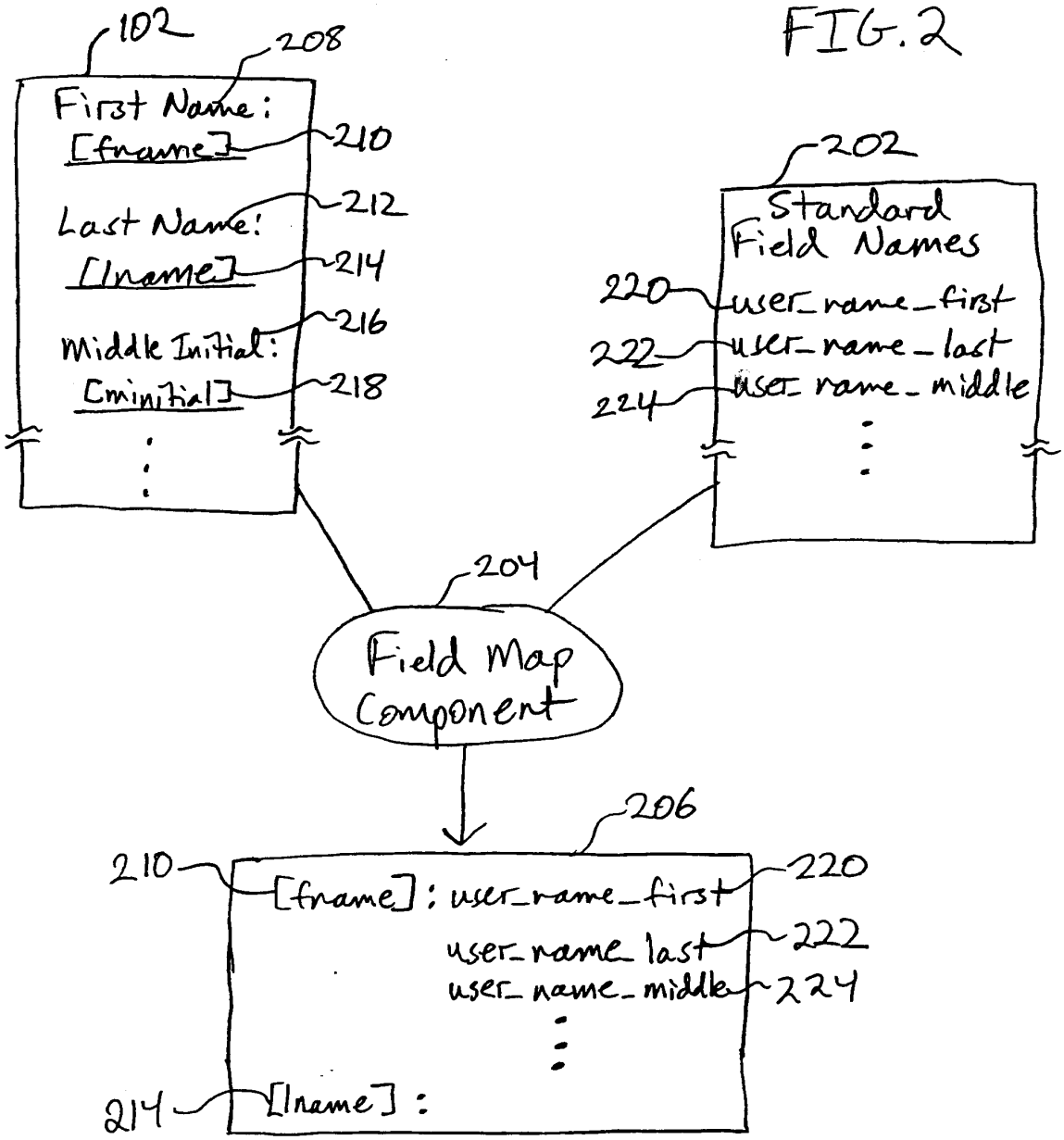

102
208
First Name:
[fname]
210
Last Name:
212
[lname]
214
Middle Initial:
216
[minitial]
218
202
Standard
Field Names
220
user_name_first
222
user_name_last
224
user_name_middle
204
Field Map
Component
206
210
[fname]: user_name_first
220
user_name_last
222
user_name_middle
224
214
[lname]:

FIG. 3A

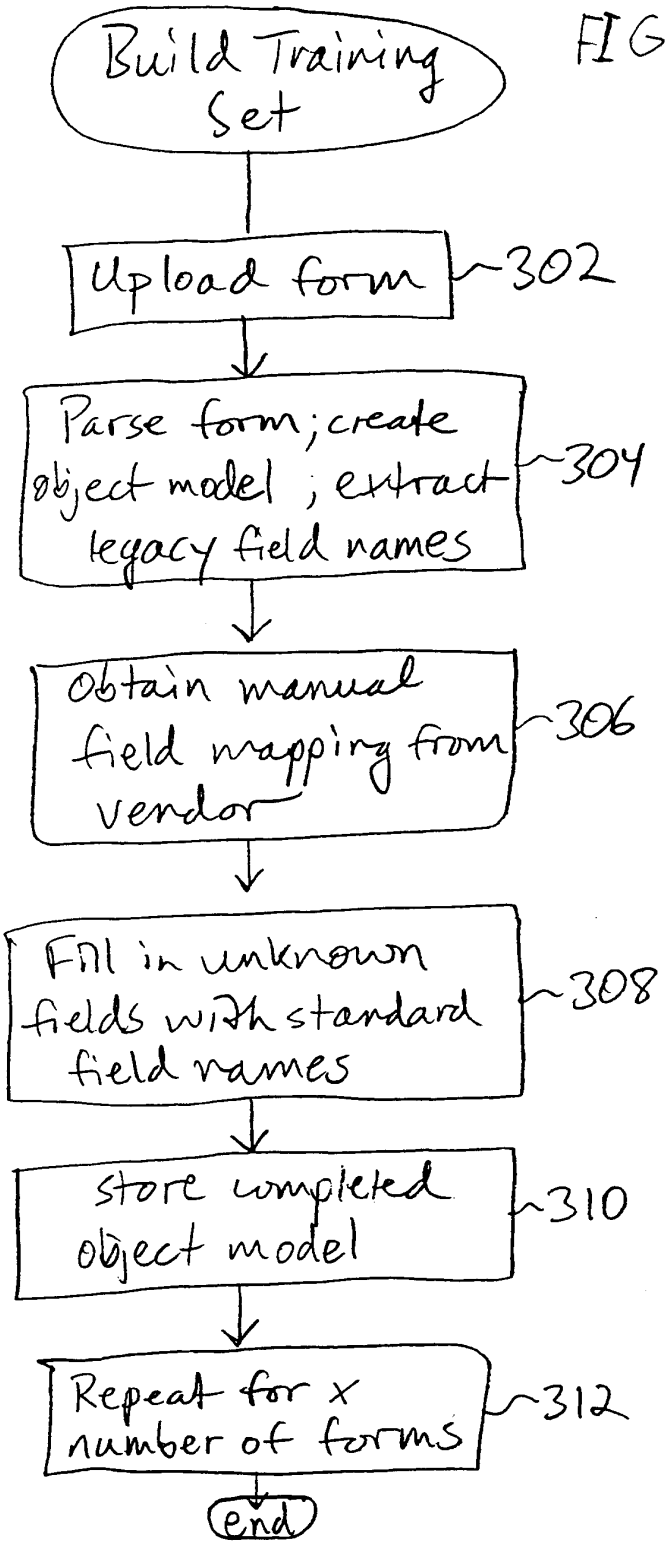
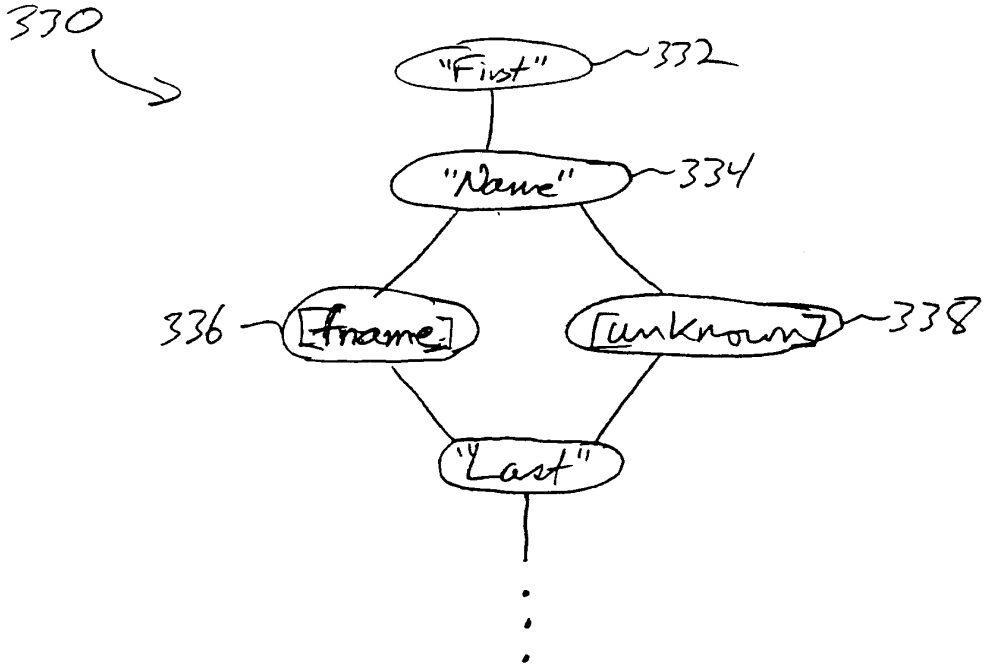

Build Training Set
Upload form
302
Parse form; create object model; extract legacy field names
304
Obtain manual field mapping from vendor
306
Fill in unknown fields with standard field names
308
store completed object model
310
Repeat for x number of forms
312
end

FIG. 3B



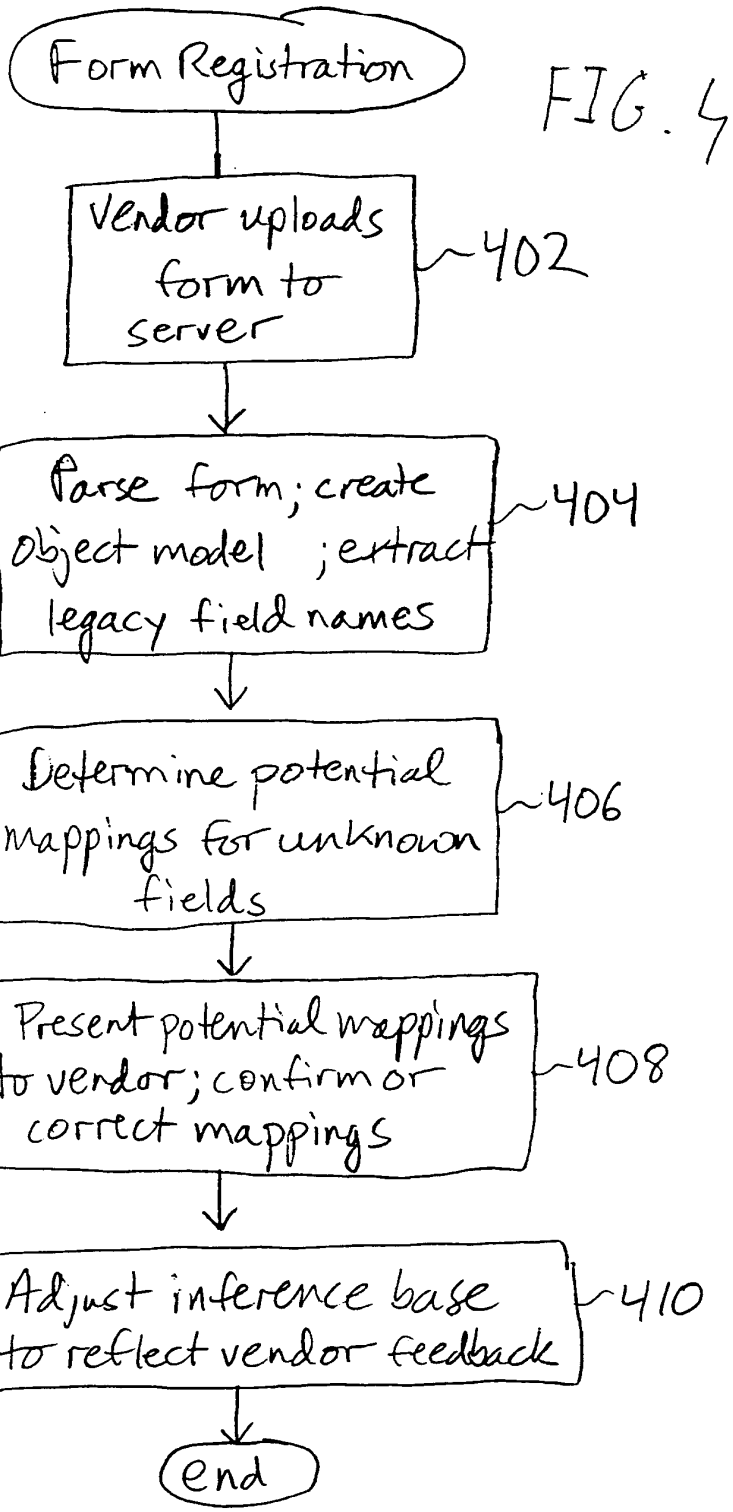
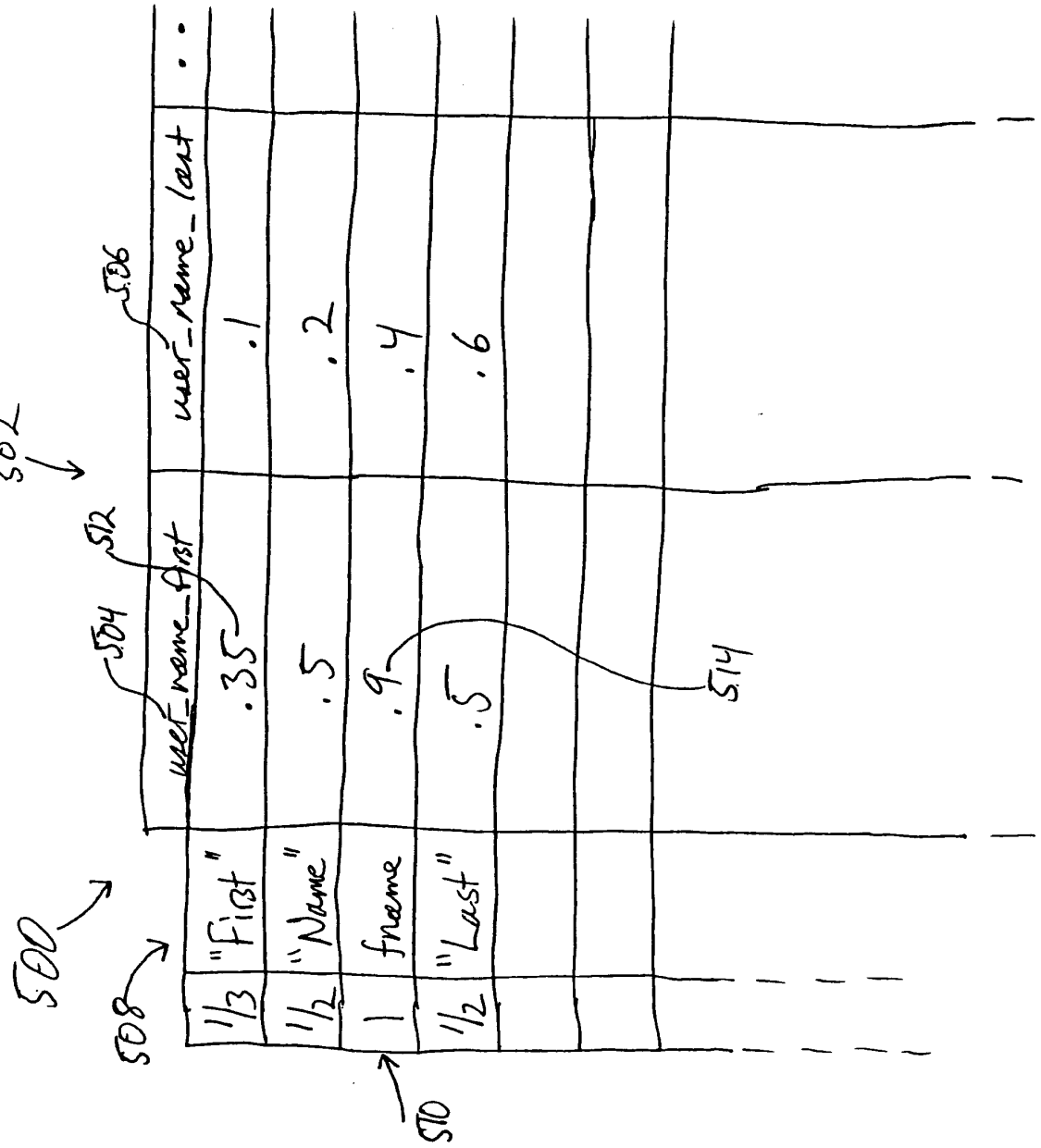

Form Registration
Vendor uploads form to server
402
Parse form; create object model; extract legacy field names
404
Determine potential mappings for unknown fields
406
Present potential mappings to vendor; confirm or correct mappings
408
Adjust inference base to reflect vendor feedback
410
end

FIG. 4

FIG. 5


500
502
504
506
508
510
512
514
user_name_first
user_name_last
1/3 "Fist" .35 .1
1/2 "Name" .5 .2
1 fname .9 .4
1/2 "Last" .5 .6

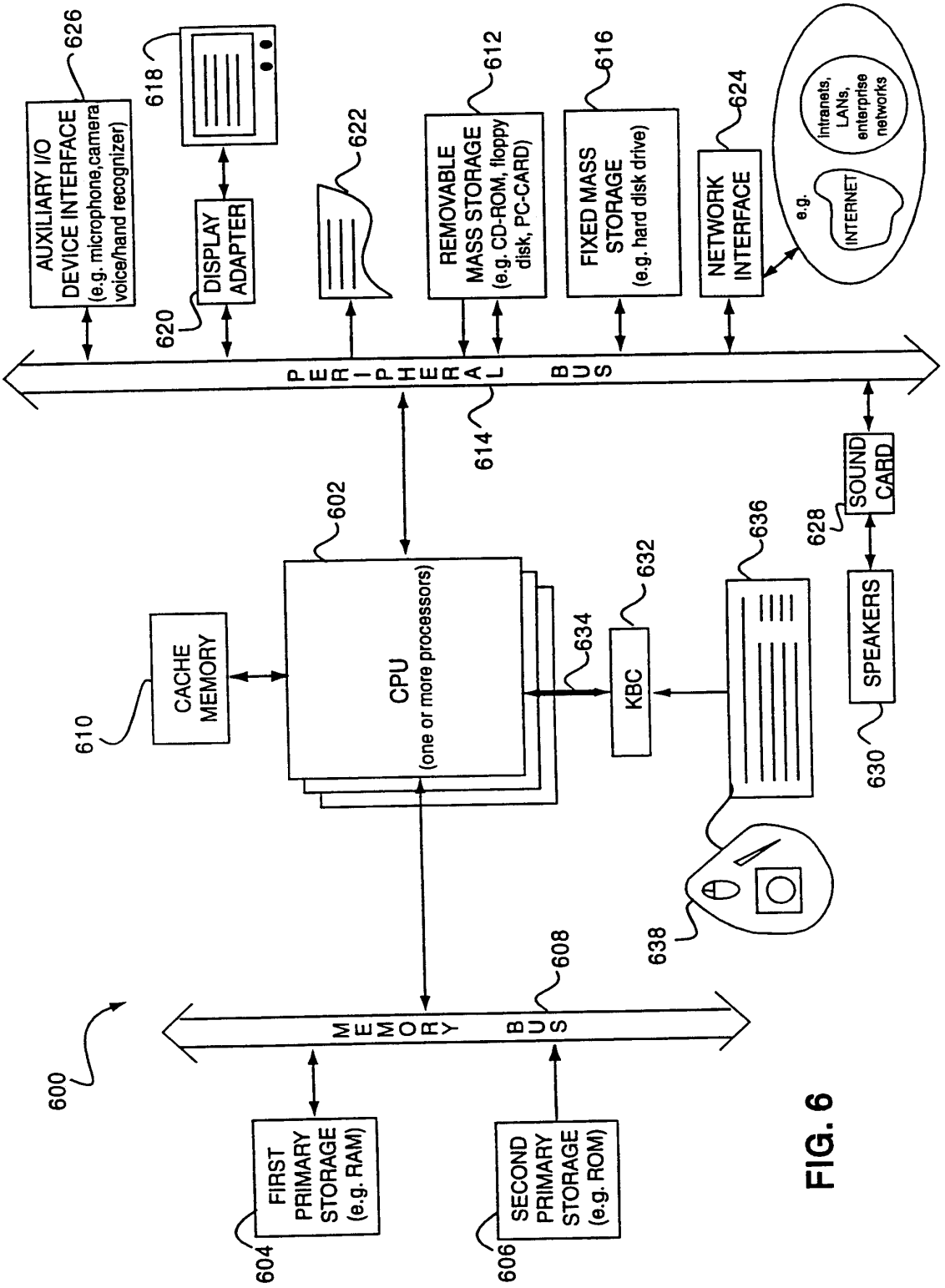

600
602
604
606
608
610
612
614
616
618
620
622
624
626
628
630
632
634
636
638
CPU
(one or more processors)
CACHE MEMORY
FIRST PRIMARY STORAGE (e.g. RAM)
SECOND PRIMARY STORAGE (e.g. ROM)
MEMORY BUS
PERI-PHERAL BUS
AUXILIARY I/O DEVICE INTERFACE (e.g. microphone,camera voice/hand recognizer)
DISPLAY ADAPTER
REMOVABLE MASS STORAGE (e.g. CD-ROM, floppy disk, PC-CARD)
FIXED MASS STORAGE (e.g. hard disk drive)
NETWORK INTERFACE
e.g.
INTERNET
Intranets, LANs, enterprise networks
KBC
SOUND CARD
SPEAKERS

FIG. 6

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q30/02	12/12/2013	AK
G06Q30/0257	12/12/2013	AK
G06Q30/0276	12/12/2013	AK
G06Q30/0277	12/12/2013	AK
G06Q30/00	12/12/2013	AK
G06F17/30864	12/12/2013	AK
G06Q30/0277	02/22/2017	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	14.4	12/12/2013	AK
705	14.73, 14.51	2/22/2017	AK

SEARCH NOTES		
Search Notes	Date	Examiner
STIC PLUS Search	12/4/2013	AK
Inventor name search	12/12/2013	AK
EAST keyword search	12/12/2013	AK
Google Scholar keyword search	12/12/2013	AK
EAST keyword search	06/25/2014	AK
EAST keyword search	06/23/2015	AK
EAST keyword search-see attached	08/19/2016	AK
Google keyword search	08/19/2016	AK
EAST keyword search within USPAT,USPGPUB, EPO, JPO DBs including within G06Q30/0277, 705/14.73m 705/14.51	02/22/2017	AK
Interference search	02/22/2017	AK

/ALISSA KARMIS/ Examiner.Art Unit 3683	

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
NPL search - keyword search inGoogleScholar	02/22/2017	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**
705	14.73, 14.51	02/22/2017	AK
G06Q30/	0277	02/22/2017	AK

/ALISSA KARMIS/ Examiner.Art Unit 3683	

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BIB DATA SHEET

CONFIRMATION NO. 9029

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/308,004	11/30/2011 RULE	705	3683	WAYF1100-1

APPLICANTS

INVENTORS

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Mallikarjun Hiremani, Fremont, CA;

**** CONTINUING DATA ***************************

This appln claims benefit of 61/420,193 12/06/2010

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
12/13/2011

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☐ Yes ☑ No	☐ Yes ☑ No	/ALISSA D KARMIS/ Examiner's Signature	☐ Initials	CA	9	24	3

ADDRESS

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UNITED STATES

TITLE

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

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FAXNUMBER	15712708277
FROM	Sprinkle IP Law Group
DATE	2017-01-12 18:50:43 GMT
RE	Serial No. 13/308,004 (WAYF1100-1)Proposed Agenda/Amendment (NOT FOR ENTRY)

COVER MESSAGE

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
PROPOSED AGENDA AND CLAIM AMENDMENT (NOT FOR ENTRY)	Atty. Docket No. **WAYF1100-1**

Applicants **Narendra Nath**	
Application Number **13/308,004**	Date Filed **November 30, 2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Alissa D. Karmis**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant wishes to discuss the patent-eligibility of the claims in the above-identified patent application. To facilitate this discussion, Applicant proposes to amend a representative independent claim as follows. Support for the proposed amendments presented herein can be found in the specification as originally filed. *See e.g.,* specification, paras. [0065], [0077]-[0079], [0084]-[0086], and [0088]-[0089]. Should the proposed changes to the representative independent claim be agreeable, the same or similar changes will be made to other independent claims for the sole purpose of placing the instant application in condition for allowance.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicants

Katharina W. Schuster
Reg. No. 50,000

Date: January _____, 2017

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PROPOSED AGENDA:

1. Discuss the claim rejections under 35 U.S.C. § 101 in view of the recent subject matter eligibility decisions.
    a. According to Mr. Robert W. Bahr, Deputy Commissioner for Patent Examination Policy, in a memorandum dated November 2, 2016 (the "November Bahr Memo"), Examiners should consider the claim as a whole under Step 1[1] of the *Mayo* test outlined by the Supreme Court in *Alice*, and should not overgeneralize the claim or simplify it into its "gist" or core principles, when identifying a concept as a judicial expression" (emphasis in original). The rejection has overgeneralized the invention as "clicking on an ad and being transported away from a host's website to a third party website." Office Action at 4. Contrary to the rejection's overgeneralization, when considering the claim limitations as a whole, following the Federal Circuit's analysis in *McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc.*, No. 2015-1080 (Fed. Cir. Sept. 13, 2016), the invention is not directed to an abstract idea under Step 1.
    b. Furthermore, according to the November Bahr Memo, Examiners should avoid relying upon or citing cases, such as *SmartGene* and *Cyberfone* (citations omitted), where the facts of the application under examination do not match the facts at issue in those cited cases. In contrast to the guidance from the November Bahr memo, the rejection cited both *SmartGene* and *Cyberfone* which have fact patterns that do not match the facts at issue in the application under examination. *SmartGene* and *Cyberfone* do not apply here. Deputy Commissioner Bahr, in an earlier memorandum dated May 4, 2016 (the "May Bahr Memo"), invites the use of the most analogous case in order to make a subject matter eligibility determination ("Citing to an appropriate court decision that supports the identification of the subject matter recited in the claim language as an abstract idea is a best practice that will advance prosecution."). *See* May Bahr Memo at 2. Applicant will discuss how *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) and *McRO* are more analogous than *SmartGene* and *Cyberfone* to the application under examination.

[1] The USPTO's subject matter eligibility (SME) guidance implements the Supreme Court's two-part framework set forth in *Alice Corp.* (also called the *Mayo* test) as Steps 2A and 2B of the subject matter eligibility analysis.

c. *DDR* – The Federal Circuit, applying the *Alice* analytical framework, upheld the validity of *DDR*'s computer-implemented patent claims on webpage display technology.
    i. Like *DDR*, the "claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." DDR Holdings, 773 F.3d at 1257.

d. *McRO* – The Federal Circuit held that McRO's ordered combination of claimed steps, using unconventional rules that relate sub-sequences of phonemes, timings, and morph weight sets, is not directed to an abstract idea and is therefore patent-eligible subject matter under § 101.
    i. The Federal Circuit clarified that "processes that automate tasks that humans are capable of performing are patent eligible if properly claimed." *McRO* at 22 (slip op.).
    ii. The Federal Circuit explained that the claims do not need to recite specific rules in order to be patent-eligible under Step 1. *Id.* at 22, 24 ("Defendants ... argue that the claims here are abstract because they do not claim specific rules ... We disagree with Defendants' arguments that the claims simply use a computer as a tool to automate conventional activity. While the rules are embodied in computer software that is processed by general-purpose computers, [there is] no evidence that the process previously used by animators is the same as the process required by the claims ... It is the incorporation of the claimed rules, not the use of the computer, that "improved [the] existing technological process" by allowing the automation of further tasks. *Alice*, 134 S. Ct. at 2358.").
    iii. Like *McRO*, the claims at issue are directed to a specific improvement in computer-related technology using computer-implemented rules (e.g., rules to automatically programmatically generate a deep-linked ad utilizing a universal variable map). As a whole, the invention provides an improvement to the prior art through automated application of rules in a computer network environment to achieve the improvement.

2. Discuss a proposed amendment to a representative independent claim.

PROPOSED AMENDMENTS TO THE CLAIMS:

25. (Currently Amended) A method, comprising:

at and by a server computer operating in a network environment and having at least one processor and non-transitory computer memory:

obtaining ~~or inferring,~~ utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of computer-readable field identifiers used by the second site or application such that one or more fields on the ~~second~~ page of the second site or application are explicitly or implicitly pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015	08/22/2016	02/22/2017				
	1	✓	✓	-	-	-				
	2	✓	✓	-	-	-				
	3	✓	✓	-	-	-				
	4	✓	✓	-	-	-				
	5	✓	✓	-	-	-				
	6	✓	✓	-	-	-				
	7	✓	✓	-	-	-				
	8	✓	✓	-	-	-				
	9	✓	✓	-	-	-				
	10	✓	✓	-	-	-				
	11	✓	✓	-	-	-				
	12	✓	✓	-	-	-				
	13	✓	✓	-	-	-				
	14	✓	✓	-	-	-				
	15	✓	✓	-	-	-				
	16	✓	✓	-	-	-				
	17	✓	✓	-	-	-				
	18	✓	✓	-	-	-				
	19	✓	✓	-	-	-				
	20	✓	✓	-	-	-				
	21	✓	✓	-	-	-				
	22	✓	✓	-	-	-				
	23	✓	✓	-	-	-				
	24	✓	✓	-	-	-				
1	25			✓	✓	=				
2	26			✓	✓	=				
3	27			✓	✓	=				
4	28			✓	✓	=				
5	29			✓	✓	=				
6	30			✓	✓	=				
7	31			✓	✓	=				
8	32			✓	✓	=				
9	33			✓	✓	=				
10	34			✓	✓	=				
11	35			✓	✓	=				
12	36			✓	✓	=				

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
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	Examiner	Art Unit
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✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

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CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015	08/22/2016	02/22/2017				
13	37			✓	✓	=				
14	38			✓	✓	=				
15	39			✓	✓	=				
16	40			✓	✓	=				
17	41			✓	✓	=				
18	42			✓	✓	=				
19	43			✓	✓	=				
20	44			✓	✓	=				
21	45			✓	✓	=				
22	46			✓	✓	=				
23	47			✓	✓	=				
24	48			✓	✓	=				
25	49			✓	✓	=				
26	50			✓	✓	=				

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	**Art Unit**
	ALISSA KARMIS	3683

CPC						
Symbol					**Type**	**Version**
G06Q		30	/	0277	F	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

/ALISSA KARMIS/ Examiner.Art Unit 3683	02/22/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	26	
		O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	25	14

U.S. Patent and Trademark Office — Part of Paper No. 20170202

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION	
CLASS	SUBCLASS	CLAIMED	NON-CLAIMED
705	14.73		

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
705	14.51				

/ALISSA KARMIS/ Examiner.Art Unit 3683	02/22/2017	Total Claims Allowed:
(Assistant Examiner)	(Date)	26
		O.G. Print Claim(s) / O.G. Print Figure
(Primary Examiner)	(Date)	25 / 14

U.S. Patent and Trademark Office

Part of Paper No. 20170202

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17	9	33	25	49								
	2		18	10	34	26	50								
	3		19	11	35										
	4		20	12	36										
	5		21	13	37										
	6		22	14	38										
	7		23	15	39										
	8		24	16	40										
	9	1	25	17	41										
	10	2	26	18	42										
	11	3	27	19	43										
	12	4	28	20	44										
	13	5	29	21	45										
	14	6	30	22	46										
	15	7	31	23	47										
	16	8	32	24	48										

/ALISSA KARMIS/ Examiner.Art Unit 3683	02/22/2017	Total Claims Allowed:
(Assistant Examiner)	(Date)	26
		O.G. Print Claim(s) / O.G. Print Figure
(Primary Examiner)	(Date)	25 / 14

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	12	705/14.73.CCLS. and (deep near5 link$3)	US-PGPUB; USPAT	OR	ON	2017/02/22 10:41
L4	156	705/14.73.CCLS. and (map$4 near10 (variable or field or form))	US-PGPUB; USPAT	OR	ON	2017/02/22 10:44
L5	101	705/14.73.CCLS. and (map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site))	US-PGPUB; USPAT	OR	ON	2017/02/22 10:45
L6	315	G06Q30/0277.CPC. and (map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site))	US-PGPUB; USPAT	OR	ON	2017/02/22 10:51
L7	0	G06Q30/0277.CPC. and (map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site)) and ((pre-populat$3 or prepopulat$3) near10 (field or form))	US-PGPUB; USPAT	OR	ON	2017/02/22 10:52
L8	24	705/14.51.CCLS. and (map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site))	US-PGPUB; USPAT	OR	ON	2017/02/22 10:54
L9	11	705/14.51.CCLS. and (deep near5 link$3)	US-PGPUB; USPAT	OR	ON	2017/02/22 10:54
L10	67	(deep near5 link$3) near10 advertis$5	US-PGPUB; USPAT; EPO; JPO	OR	ON	2017/02/22 10:59
L11	15129	(map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site))	US-PGPUB; USPAT; EPO; JPO	OR	ON	2017/02/22 11:00
L12	322	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2017/02/22 11:01
L13	2	((map$3 or link$3) with (attribute or variable)) same (multiple with site) and ((pre-populat$3 or prepopulat$3) near10 (field or form or value))	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2017/02/22 11:02
L14	73	((map$3 or link$3) with (attribute or variable)) same (multiple with site) and advertis$5	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2017/02/22 11:02

L15	1	(map$4 near10 (variable or field or form)) and (link$3 near5 (web or page or site))	EPO; JPO	OR	ON	2017/02/22 11:04
L16	0	((map$3 or link$3) with (attribute or variable)) same (multiple with site) and advertis$5	EPO; JPO	ADJ	ON	2017/02/22 11:06
L17	1	(deep near5 link$3) near10 advertis$5	EPO; JPO	OR	ON	2017/02/22 11:06
S3	41	spidering with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 13:32
S4	12	("2010/0293221").URPN.	USPAT	ADJ	ON	2013/12/04 14:06
S5	77	(map$3 or link$3) with (attribute or variable) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:10
S6	2115	705/14.4.ccls.	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S7	0	S5 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S8	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S9	1	S6 and S8	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S10	1387	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:17
S11	4	S10 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:18
S12	926	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple near3 site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:19
S13	1979	((map$3 or link$3 or match$3) with (attribute or variable or content or field or context or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S14	8	S6 and S13	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S15	2671	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:25
S16	697	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) near10 ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:27
S17	331	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) near10 ((multiple or various or several or similar) near3 (site or	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:28

		website or web-site)) and ((ad or advertisement) with link or URL)				
S19	3	("7788245").URPN.	USPAT	ADJ	ON	2013/12/04 14:34
S21	1	("20120030551").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/04 16:31
S23	2	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page) and (populat$3 with (second or other or another))	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:18
S24	108	populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:22
S25	4	pre-populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:23
S27	14	(pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)) and (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:36
S29	8	("7996259").URPN.	USPAT	ADJ	ON	2013/12/05 11:43
S30	1	"5937392".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:46
S31	1	"5960409".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S32	1	"6029141".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S33	1	"6058417".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:51
S34	1	"6330575".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S35	1	"6401075".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S36	1	"6601057".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S37	2	("6061660" | "6334111").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 12:37
S38	66	(ad or advertisement) with (relat$3 or relationship or common or similar) with first with (another or second) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 13:39
S39	5	("20030078832" | "20030229531" | "20040093327" | "20080046429" | "20080059258").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:02
S40	2708	(ad or advertisement) with (relat$3 or similar) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:13
S41	2599	(ad or advertisement) with (relat$3 or similar) with (webpage or website)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:13
S42	4066	(ad or advertisement) with (relat$3 or	US-	ADJ	ON	2013/12/05

		similar or associat$3) with (webpage or website)	PGPUB; USPAT			14:14
S44	0	("2009/0313127").URPN.	USPAT	ADJ	ON	2013/12/05 15:12
S45	676	(ad or advertisement) with (common or alternative) with (keyword or text)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S46	171	(ad or advertisement) with (common or alternative) with (keyword or text) with (match$3 or link$3)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S47	11	("2002/0107882").URPN.	USPAT	ADJ	ON	2013/12/05 16:17
S48	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	USPAT	ADJ	ON	2013/12/05 16:18
S50	1	("20070239494").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/06 11:31
S51	56	("20020010639" | "20020087367" | "20020169643" | "20030040944" | "5715453" | "20020194037" | "20040030593" | "20050246275" | "20100106623" | "3665397" | "20020133430" | "20060190314" | "20020186144" | "20020087367" | "20020165735" | "20070239494" | "20020077871" | "20070094055" | "20070179819" | "20020010604" | "20020007327" | "20040148179" | "20010034723" | "20020065688" | "20030004761" | "20040006498" | "20040010338" | "5289369" | "6477503" | "20030158761" | "20020198758" | "20030046117" | "20040030593" | "20050216139" | "20050246275" | "6711548" | "20020165735" | "20070198311" | "20070239494" | "20020007327" | "20030061145" | "20040148179" | "20020069093" | "20020184041" | "20100106608" | "6519576" | "7124096" | "7769601" | "20040107144" | "7617136" | "20050216139" | "20020186144" | "20010056363" | "4965821" | "5253166" | "5389773" | "6360254" | "6539424" | "6757710" | "20030061145" | "20030195811" | "20030195811" | "20070198311" | "20030061146" | "20070027708" | "5066853" | "7050986" | "8108231").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 11:33
S54	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 16:59
S55	6135	(universal or common or general) with (term or variable or text) with (map or database)	US-PGPUB; USPAT	ADJ	ON	2013/12/11 11:43
S58	190	("2005/0222989").URPN.	USPAT	ADJ	ON	2013/12/11 12:04

S59	19	((deep adj link$3) or deep-link$3) with (ad or advertisement) and hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/11 16:32
S61	53	(select$3 or activat$3 or interact$3) near5 (ad or advertisement) near5 hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/11 16:40
S62	1278	spidering	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S63	126	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S64	27	pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:49
S65	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:52
S66	3618	G06Q30/02.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S67	0	G06Q30/0257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S68	0	G06Q30/0277.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S69	0	G06Q30/0276.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S70	0	G06Q30/0276.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S71	1502	G06F17/24.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S72	0	G06F17/30864.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S73	0	G06F17/30864.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S74	26673	G06Q30/00.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S75	0	G06Q30/257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:06
S76	33	((deep adj link$3) or deep-link$3) with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:09
S77	1574	G06Q30/02.CLPP. and ad	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:10
S78	0	G06Q30/02.CLPP. and (deep-link$3 adj (ad or advertisement))	US-PGPUB;	ADJ	ON	2013/12/12 02:10

			USPAT			
S79	0	G06Q30/02.CLPP. and (deep-link$3 near5 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S80	0	G06Q30/02.CLPP. and (deep-link$3 near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S81	723	G06Q30/02.CLPP. and (link near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S82	500	G06Q30/02.CLPP. and (link near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S83	69	G06Q30/02.CLPP. and (link near3 (ad or advertisement)) and hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S84	0	G06F17/30864.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:13
S85	0	G0630/00.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:14
S86	122355	(map$3 or link$3) with (attribute or variable)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:20
S87	122355	(map$3 or link$3) with (attribute or variable or (programming adj container))	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S88	1	(map$3 or link$3) same (programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S89	55	(programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S90	346	(program$4 adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S91	4	(programming adj container) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:52
S92	2493	(program$4 near3 (container or variable)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:52
S93	2215	(program$4 near3 (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S94	333	(program$4 adj (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S95	47	((program$4 adj (container or variable)) same (link$3 or map$4)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S96	675	(map$3 or link$3) with (form or field or (site adj map) or header or tag) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:02
S97	23	((map$3 or link$3) with (form or field or (site adj map) or header or tag) with	US-PGPUB;	ADJ	ON	2014/06/24 11:02

		multiple with site) same (advertising or advertisement)	USPAT			
S98	12	((map$3 or link$3 or match$3) with (field or (site adj map) or header or tag) with multiple with site) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:08
S99	27	("2008/0010142").URPN.	USPAT	ADJ	ON	2014/06/24 12:39
S100	2	("2012/0123859").URPN.	USPAT	ADJ	ON	2014/06/24 12:56
S101	214	indexing near3 (website or (web adj site) or web-site)	USPAT	ADJ	ON	2014/06/24 13:04
S102	75	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	USPAT	ADJ	ON	2014/06/24 13:05
S103	194	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S104	194	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S105	91	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S106	68	(advertising or advertisement) and ((first same second same page same site) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:28
S107	92	(advertising or advertisement) and ((first same second same (page or webpage or (web adj page) or web-page) same (site or website or (web adj site) or web-site)) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:29
S108	1	("20080201220").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/24 16:57
S109	1825	((generat$5 or creat$5) with (ad or advertisment) with (field or category))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:53
S110	996	S109 and ((map or mapping))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S111	355	S110 and ((tavel or plane or airplane or flight) same (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S112	330	S111 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S113	430	((map or mapping) with (ad or advertisement) with (category or field or container))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57
S114	155	S113 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57
S115	484	S110 and ((travel or plane or airplane or	US-	ADJ	ON	2014/06/29

		flight) same (ad or advertisement))	PGPUB; USPAT			23:16
S116	443	S115 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:16
S117	69	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:19
S118	5	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:20
S119	5	(standardiz$5 or normaliz$5) with (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:20
S120	0	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S121	34	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S122	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/29 23:23
S123	2	(standardiz$5 or normaliz$5) near5 (field or form or section) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:34
S124	3	(standardiz$5 or normaliz$5) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:35
S125	4	(similar or similarities) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:37
S126	4	((similar or similarities) near5 (field or form or section or tag or header or (site adj map))) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:38
S127	10037	similar near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S128	102	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S129	47	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:48
S130	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/30 01:00
S131	30	common near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 01:19
S132	8	("7865414").URPN.	USPAT	ADJ	ON	2014/06/30 01:25

S133	11118	(advertising or advertisement) near5 (match$3 or map$4)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:58
S134	256	(advertising or advertisement) near5 (match$3 or map$4) near5 (field or (search adj box) or header or title or container or box)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:59
S135	100	S134 and "705".clas.	US-PGPUB; USPAT	ADJ	ON	2014/06/30 03:01
S136	24	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29
S137	19	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29
S138	25	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:32
S139	36	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:35
S140	19963	(ad or advertisement or advertising) near5 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S141	15598	(ad or advertisement or advertising) near3 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S142	73	(ad or advertisement or advertising) near3 link same (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S143	21	(ad or advertisement or advertising) near3 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S144	39	(ad or advertisement or advertising) near10 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S145	403	(ad or advertisement or advertising) near10 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S146	243	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S147	175	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page)) and (map$4 or match$3)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:10
S148	23	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page)) same (map$4 or match$3)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:10
S149	1	("20090144124").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/30 11:45

S150	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) with (field near3 (name or description or identifier)) with mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:29
S151	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) with (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:29
S152	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S153	0	advertis$5 with based same (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S154	0	advertis$5 same based same (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S155	0	advertis$5 same based same (webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S156	164	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S157	0	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping same advertis$5	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:31
S158	62	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping and advertis$5	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:31
S159	82	(webpage or website or web-site or (web adj site) or (web adj page)) with map$4 with (field near3 (name or description or identifier))	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:37
S160	73	S159 not S158	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:38
S161	1	("20100312667").PN.	US-PGPUB; USPAT	OR	OFF	2014/10/07 13:00
S162	2184	mapping with (field near3 (label or tag or identifier or name))	US-PGPUB; USPAT	ADJ	ON	2014/10/07 14:55
S163	9	mapping with (field near3 (label or tag or identifier or name)) and (match$3 near5 advertis$5)	US-PGPUB; USPAT	ADJ	ON	2014/10/07 14:55
S164	8	("20080120305" | "6847967" | "6895551" | "20110258535" | "20020156799" | "20110093773" | "6601066" | "20110119220" | "6601066" | "6847967").PN.	US-PGPUB; USPAT	ADJ	ON	2015/02/17 10:47
S165	171	map$4 near5 field near5 ((web adj site) or	US-	ADJ	ON	2015/02/17

		website or webpage or (web adj page))	PGPUB; USPAT			11:04
S166	13	map$4 near5 label near5 ((web adj site) or website or webpage or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/02/17 11:25
S167	3319	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:32
S168	2975	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and (link$3 or hyperlink)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:37
S169	1285	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and (link$3 or hyperlink) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:38
S170	958	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:40
S171	490	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (populat$3 or pre-populat$3) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:42
S172	39	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (populat$3 or pre-populat$3) and (advertisement or advertising) and vertical and heuristic	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:45
S173	96	("5905862").URPN.	USPAT	ADJ	ON	2015/02/18 16:43
S174	8669	(match$3 or map$4) near5 (field near3 (identifier or name or ID))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:03
S175	697	(match$3 or map$4) near5 (field near3 (identifier or name or ID)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:04
S176	243	(match$3 or map$4) near5 (field near3 (identifier or name or ID)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site))) and advertising	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:05
S177	309	(match$3 or map$4) near5 (field near3 (identifier or name or ID or defin$5)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site))) and advertising	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:14
S178	800	semantic adj map$4	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:19
S179	4	semantic adj map$4 and (field adj (identifier or ID))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:19
S180	0	("2011/0016228").URPN.	USPAT	ADJ	ON	2015/04/24 09:28

S181	10	semantic adj map$4 and (field adj (identifier or ID or descript$3))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:30
S182	2	semantic adj map$4 adj dictionary and (field adj (identifier or ID or descript$3))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:36
S183	2	semantic adj map$4 adj dictionary	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:37
S184	0	semantic adj map$4 and map$4 near4 data near4 field near4 (descrip$3 or identifier or definition)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:38
S185	7	semantic adj map$4 and map$4 with data with field with (descrip$3 or identifier or definition)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:38
S186	0	advertising with using with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:11
S187	3	(advertising or advertisement or (deep near3 ad)) with (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:12
S188	3	(advertising or advertisement or ad) with (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:14
S189	17	(advertising or advertisement or ad) same (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:15
S190	52	("2010/0063880").URPN.	USPAT	ADJ	ON	2015/04/24 10:16
S191	439	map$4 same (field adj identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S192	3	map$4 same (field adj identifier) and (link$3 near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S193	73	map$4 same (field near4 identifier) and (link$3 near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S194	666	map$4 same (field near4 identifier) and (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:15
S195	190	map$4 same (field near4 identifier) and ((ad or advertisement) same identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:15
S196	281	map$4 same (field near4 (ID or identifier)) and ((ad or advertisement) same identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:17
S197	342	map$4 same (field near4 (ID or identifier or name)) and ((ad or advertisement) same (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:18
S198	52	map$4 near10 (field near4 (ID or identifier or name)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:18
S199	1	("6490601").PN.	US-PGPUB;	OR	OFF	2015/06/22 18:21

			USPAT			
S200	128	map$4 same (field near4 (ID or identifier or name)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:23
S201	128	map$4 same (field near4 (ID or identifier or names)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:23
S202	932	map$4 same (field near4 (ID or identifier or names)) and ((ad or advertisement) same link$3)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:24
S203	1	("20050144048").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 18:29
S204	337	("20010011250" | "5537586" | "5987440" | "6192380" | "6199079" | "6327598" | "6345278").PN. OR ("6490601").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2015/06/22 23:08
S205	113	(ad or advertis$5) same (semantic adj (match$3 or map$4))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:31
S206	1	("20110016228").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:38
S207	1	("20100070448").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:39
S208	1	("20100063880").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:43
S209	2	("6718551" | "7752642").PN.	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:47
S210	12	(webpage or (web adj page)) near3 content with (field adj name)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:51
S211	15	(webpage or (web adj page) or website or (web adj site)) near3 content with (field adj name)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:53
S212	16	(map$3 or link$3 or match$3) same (common or universal or global) same (field near3 (name or identifier or label)) same (plurality or multiple) near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:06
S213	23	(map$3 or link$3 or match$3) same (common or universal or global or standard) same (field near3 (name or identifier or label)) same (plurality or multiple) near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:06
S214	3178	(map$3 or link$3 or match$3) near5 similar near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:10
S215	4035	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 (website or	US-PGPUB;	ADJ	ON	2015/06/23 00:10

		site or (web adj site) or webpage or page or (web adj page))	USPAT			
S216	10	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 field near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:11
S217	104	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 (website or site or (web adj site) or webpage or page or (web adj page)) and (map$3 or link$3 or match$3 or connect$3) near5 ((field near3 (name or label or identifier)) or (data adj label))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:14
S218	18	("2009/0024718").URPN.	USPAT	ADJ	ON	2015/06/23 00:29
S219	7	deep-link$3 near3 (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 01:44
S221	44	((deep adj link$3) or deep-link$3) with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 01:45
S222	8	deep-link$3 with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 14:57
S223	2217	map$3 with field with identifier	US-PGPUB; USPAT	OR	ON	2015/10/16 16:37
S224	1296	map$3 with field near5 identifier	US-PGPUB; USPAT	OR	ON	2015/10/16 16:38
S225	697	map$3 near5 field near5 identifier	US-PGPUB; USPAT	OR	ON	2015/10/16 16:38
S226	24	map$3 near5 field near5 identifier and heuristic	US-PGPUB; USPAT	OR	ON	2015/10/16 16:38
S227	1	("6363376").PN.	US-PGPUB; USPAT	OR	OFF	2015/10/16 16:39
S228	1	("20090164581").PN.	US-PGPUB; USPAT	OR	OFF	2015/10/16 16:39
S229	1	("20020186255").PN.	US-PGPUB; USPAT	OR	OFF	2015/10/16 16:39
S230	1	("20040243520").PN.	US-PGPUB; USPAT	OR	OFF	2015/10/16 16:39
S231	5	(US-20020186255-$ or US-20040243520-$ or US-20090164581-$).did. or (US-7216292-$ or US-6363376-$).did.	US-PGPUB; USPAT	OR	ON	2015/10/16 16:41
S232	1	S231 and map$5 with field with identifier	US-PGPUB; USPAT	OR	ON	2015/10/16 16:41
S233	3	S231 and map$5 with field with (name or identifier)	US-PGPUB; USPAT	OR	ON	2015/10/16 16:42

S234	3	S231 and map$5 with field with (name or identifier) same (webpage or (web adj page) or website or (web adj site))	US-PGPUB; USPAT	OR	ON	2015/10/16 16:48
S235	279	map$5 with field with (name or identifier) same (webpage or (web adj page) or website or (web adj site))	US-PGPUB; USPAT	OR	ON	2015/10/16 16:48
S236	5	(("7216292") or ("20040243520") or ("20090164581") or ("20070250520") or ("20110016228")).PN.	US-PGPUB; USPAT	OR	OFF	2016/08/12 12:58
S237	12	(ad or advertis$5) near5 second near5 (page or webpage or web-page or (web adj page) or site or website or web-site or (web adj site)) with based with first near5 (page or webpage or web-page or (web adj page) or site or website or web-site or (web adj site)) near5 (interaction or click$3 or hover$3 or select$3)	US-PGPUB; USPAT	OR	ON	2016/08/12 15:10
S238	3244	(ad or advertis$5) near5 related near5 (page or webpage or web-page or (web adj page) or site or website or web-site or (web adj site))	US-PGPUB; USPAT	OR	ON	2016/08/12 16:13
S239	322	(select$3 or plac$3) near3 (ad or advertis$5) near5 related near5 (page or webpage or web-page or (web adj page) or site or website or web-site or (web adj site))	US-PGPUB; USPAT	OR	ON	2016/08/12 16:14
S242	5996	match$3 with field near (identifier or ID or name)	US-PGPUB; USPAT	OR	ON	2016/08/15 14:01
S246	2	match$3 with field near3 (identifier or ID or name) with (across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:05
S247	2	match$3 with field near5 (identifier or ID or name) with (across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:05
S248	7	(map$4 or match$3 or similar) with field near5 (identifier or ID or name) with (across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:06
S249	8	(map$4 or match$3 or equal or equat$3) with field near5 (identifier or ID or name) with (across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:17
S250	8	(map$4 or match$3 or equal or equat$3) with field near5 (identifier or ID or name) with (bewteen or across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:20
S251	57	(map$4 or match$3 or equal or equat$3) with field near5 (identifier or ID or name) with (between or across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/15 14:20
S252	61	(map$4 or match$3 or equal or equat$3) with field near5 (identifier or ID or name or label) with (between or across or among$2) same web$5	US-PGPUB; USPAT	OR	ON	2016/08/16 13:22
S253	5891	(find$3 or search$3) near5 related near5 web$6	US-PGPUB; USPAT	OR	ON	2016/08/16 17:12
S254	105	(find$3 or search$3) near5 related near5 web$6 and determin$5 near5 web$6 near5	US-PGPUB;	OR	ON	2016/08/16 17:14

		similar	USPAT			
S255	6	(find$3 or search$3) near5 related near5 web$6 and determin$5 near5 web$6 near5 similar and (tag or metatag) and (header or (site adj map))	US-PGPUB; USPAT	OR	ON	2016/08/16 17:15
S256	19990	vertical same horizontal same web$6	US-PGPUB; USPAT	OR	ON	2016/08/16 17:18
S257	274	vertical same horizontal same web$6 same (categor$7 or classif$7)	US-PGPUB; USPAT	OR	ON	2016/08/16 17:18
S258	94	vertical same horizontal same web$6 same (categor$7 or classif$7) and (pars$3 or crawl$3 or spider$3)	US-PGPUB; USPAT	OR	ON	2016/08/16 17:19
S259	82	vertical same horizontal same web$6 same (categor$7 or classif$7) and (pars$3 or crawl$3 or spider$3) and (header or tag or meta$5 or (site adj map))	US-PGPUB; USPAT	OR	ON	2016/08/16 17:19
S260	92	vertical same horizontal same web$6 same (categor$7 or classif$7) and (pars$3 or crawl$3 or spider$3) and (header or tag or meta$5 or (site adj map) or field or drop$4)	US-PGPUB; USPAT	OR	ON	2016/08/16 17:39
S261	45	sister near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/16 17:46
S262	17	pre-populat$3 near3 (field or form) with value with web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 10:15
S263	0	("2006/0212434").URPN.	USPAT	OR	ON	2016/08/17 10:32
S264	2	("5960411" | "6976090").PN.	USPAT	OR	ON	2016/08/17 10:33
S265	310	(prefill$3 or pre-fill$3 or prepopulat$3 or pre-populat$3) near3 (field or form) with web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 10:37
S266	13	(prefill$3 or pre-fill$3 or prepopulat$3 or pre-populat$3) near3 (field or form) and (pass$3 or transfer$4) near5 (value or parameter or attribute) near5 web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 11:20
S267	13	(prefill$3 or pre-fill$3 or prepopulat$3 or pre-populat$3) near3 (field or form) and (exchang$3 or pass$3 or transfer$4) near5 (value or parameter or attribute) near5 web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 11:20
S268	40	(prefill$3 or pre-fill$3 or prepopulat$3 or pre-populat$3) near3 (field or form) and (exchang$3 or pass$3 or transfer$4 or transmi$5) near5 (value or parameter or attribute) near5 web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 11:20
S269	1602	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5	US-PGPUB; USPAT	ADJ	ON	2016/08/17 14:15
S270	695	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and banner	US-PGPUB; USPAT	ADJ	ON	2016/08/17 14:20
S271	321	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and	US-PGPUB;	ADJ	ON	2016/08/17 14:21

		banner and (chang$3 or modif$7) near3 (content or object or display)	USPAT			
S272	101	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and banner and (chang$3 or modif$7) near3 (content or object or display) and hover$3	US-PGPUB; USPAT	ADJ	ON	2016/08/17 14:23
S273	14	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and banner and (chang$3 or modif$7) near3 (content or object or display) near5 advertis$5 and hover$3	US-PGPUB; USPAT	ADJ	ON	2016/08/17 15:11
S274	20	(dynamic or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and (chang$3 or modif$7) near3 (content or object or display) near5 advertis$5 and hover$3	US-PGPUB; USPAT	ADJ	ON	2016/08/17 15:12
S275	17	(dynamic$4 or real-time) near5 (generat$3 or creat$3 or select$3) near10 advertis$5 and (chang$3 or modif$7) near3 (content or object or display) near5 advertis$5 with user near5 (interaction or behavior or select$3 or click$3 or hover$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/17 15:25
S276	203	(dynamic$4 or real-time) near5 advertis$5 and (chang$3 or modif$7) near5 advertis$5 with user near5 (interaction or behavior or select$3 or click$3 or hover$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/17 15:31
S277	8631	advertis$5 with based with user near5 (interaction or behavior or select$3 or click$3 or hover$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:15
S278	6737	advertis$5 with based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:15
S279	5179	advertis$5 near5 based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:15
S280	0	advertis$5 near5 based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3) with web%6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:17
S281	555	advertis$5 near5 based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3) with web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:17
S282	261	advertis$5 near5 based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3) with web$6 and related near3 web$6	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:18
S283	5	advertis$5 near5 based near5 user near5 (interaction or behavior or select$3 or click$3 or hover$3) with web$6 and related near3 web$6 near5 link$3	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:19
S284	28	advertis$5 near5 based near5 user near5 web$6 near5 link$3	US-PGPUB; USPAT	ADJ	ON	2016/08/17 16:22
S285	392	link$3 with related with (web$6 or site or page) with together	US-PGPUB; USPAT	ADJ	ON	2016/08/18 08:57
S286	45	link$3 with related with (web$6 or site or page) with together and (crawl$3 or spider$3)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 08:57

S287	12	advertiser with search$3 with publisher with similar$5 with (content or product or service or categor$3 or horizontal or vertical)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 09:05
S288	7	advertiser near5 (locat$3 or find$3 or choos$3 or search$3) near5 (host or (third adj part$3) or publisher) with similar$5 near5(content or product or service or categor$3 or horizontal or vertical)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 09:06
S289	1	search engine optimization tag	US-PGPUB; USPAT	ADJ	ON	2016/08/18 09:21
S290	1	(search adj engine) with (optimization adj tag)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 09:22
S291	46	(search adj engine adj tag)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 09:22
S292	4	(search adj box adj tag)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 10:08
S293	7	pars$3 near10 (name or title) near10 (search$3 near3 box)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 10:41
S294	36	(scan$4 or pars$3 or crawl$3 or spider$3) near10 (name or title or code or tag or metatag or meta-tag or (meta adj tag)) near10 (search$3 near3 box)	US-PGPUB; USPAT	ADJ	ON	2016/08/18 10:45
S295	189	(scan$4 or pars$3 or crawl$3 or spider$3) near10 (name or title or code or tag or metatag or meta-tag or (meta adj tag)) near10 ((search$3 near3 box) or (form near3 field))	US-PGPUB; USPAT	ADJ	ON	2016/08/18 10:46
S296	56	(scan$4 or pars$3 or crawl$3 or spider$3) near10 (name or title or code or tag or metatag or meta-tag or (meta adj tag)) near10 ((search$3 near3 box) or (form near3 field)) and advertis$5	US-PGPUB; USPAT	ADJ	ON	2016/08/18 10:47
S297	221	(scan$4 or pars$3 or crawl$3 or spider$3) near10 (name or title or code or tag or metatag or meta-tag or (meta adj tag)) near10 ((search$3 near3 box) or ((entry or input or form or submission) near3 (form or field))) and advertis$5	US-PGPUB; USPAT	ADJ	ON	2016/08/18 11:12
S298	5	(US-20020023108-$ or US-20010054046-$ or US-20010037361-$ or US-20050209874-$ or US-20060212434-$).did.	US-PGPUB	OR	ON	2016/08/22 16:43
S299	6	(US-20020023108-$ or US-20010054046-$ or US-20010037361-$ or US-20050209874-$ or US-20060212434-$ or US-20040088713-$).did.	US-PGPUB	OR	ON	2016/08/22 16:44
S300	42244	(related or similar) near3 web$6	US-PGPUB	OR	ON	2016/08/22 16:48
S301	3087	(related or similar) near3 web$6 near5 (link$3 or index$3)	US-PGPUB	OR	ON	2016/08/22 16:48
S302	1673	(related or similar) near3 web$6 near5 (link$3 or index$3) and advertis$5	US-PGPUB	OR	ON	2016/08/22 16:48
S303	329	(related or similar) near3 web$6 near5	US-	OR	ON	2016/08/22

		(link$3 or index$3) same advertis$5	PGPUB			16:48
S304	480	(related or similar) near3 web$6 near5 (link$3 or index$3) same advertis$5	US-PGPUB; USPAT	OR	ON	2016/08/22 16:49
S305	140	content near3 (related or similar) near3 web$6 near5 (link$3 or index$3) same advertis$5	US-PGPUB; USPAT	OR	ON	2016/08/22 16:50
S307	16	web$6 with match$3 with (field or form) with (another or other) with web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:21
S308	224	web$6 with (map$4 or link$3) with (field or box) with (another or other or similar) with web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:23
S309	407	web$6 with (map$4 or link$3 or associat$3 or correlat$3) with (field or box) with (another or other or similar) with web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:27
S310	44	web$6 near3 (map$4 or link$3 or associat$3 or correlat$3) near10 (field or box) near10 (another or other or similar) near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:27
S311	0	sav$3 near5 similarit$3 near3 between near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:41
S312	11	stor$3 near5 similarit$3 near3 between near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:41
S313	12	(extract$3 or find$3) near5 similarit$3 near3 between near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:51
S314	16	(extract$3 or find$3) near5 similarit$3 near3 (among$2 or between) near3 web$6	US-PGPUB; USPAT	OR	ON	2016/08/22 17:57
S315	15	"8234134"	US-PGPUB; USPAT	OR	ON	2016/08/22 19:16

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L18	49	(deep near5 link$3) near5 advertis$5	US-PGPUB; USPAT	OR	ON	2017/02/22 11:11
L21	11	universal with variable with map.CLM.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:13
L28	0	(explicitly or implicitly) with pre-populat$3 with values with extract$3 with interaction with (ad or advertis$5) with (site or page or web or application).CLM.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:24
L29	0	extract$3 with value with correspond$3 with field with interaction with (ad or advertis$5) with (site or page or web or application).CLM.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:25
L30	308	mapping with field with identifier.CLM.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:25
L31	0	mapping with field with identifier with	US-	OR	ON	2017/02/22

		normalized with variable.CLM.	PGPUB; USPAT			11:26
L32	9	pass$3 with value with correspond$3 with first with second with (site or web or page or application).CLM.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:27
L35	0	universal with variable with map and 705/14.73.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:31
L36	0	universal with variable with map and 705/14.4.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:32
L37	0	universal with variable with map and 705/14.51.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:32
L38	0	universal with variable with map and G06Q30/0277.CPC.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:32
L39	1	(deep near5 link$3) near5 advertis$5 and 705/14.73.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:32
L40	1	(deep near5 link$3) near5 advertis$5 and 705/14.4.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:33
L41	7	(deep near5 link$3) near5 advertis$5 and 705/14.51.CCLS.	US-PGPUB; USPAT	OR	ON	2017/02/22 11:33
L42	49	(deep-link$4 or (deep near5 link$3)) near5 advertis$5	US-PGPUB; USPAT	OR	ON	2017/02/22 11:34

2/ 22/ 2017 11:51:17 AM
C:\ Users\ akarmis\ Documents\ EAST\ Workspaces\ 13308004-AdLinking2.wsp

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/308,004	Filing Date 11/30/2011	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **03/06/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 26	Minus	** 26	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
KIM WATSON

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 09/06/2016	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **November 30, 2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Alissa D. Karmiss**
Confirmation Number: **9029**	

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on March 6, 2017.

Shenise Ramdeen

Shenise Ramdeen

Dear Sir:

This paper is submitted in response to the Official Action mailed on September 6, 2016 and the Applicant-Initiated In-Person Examiner Interview held on January 19, 2017. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1.-24. (Cancelled).

25. (Currently Amended) A method, comprising:

at and by a server computer operating in a network environment and having at least one processor and non-transitory computer memory:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of computer-readable field identifiers used by the second

site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are explicitly or implicitly pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

26. (Previously Presented) The method according to claim 25, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

27. (Previously Presented) The method according to claim 26, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

28. (Previously Presented) The method according to claim 25, wherein field identifiers are programmatically searched or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map.

29. (Previously Presented) The method according to claim 28, wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping.

30. (Previously Presented) The method according to claim 25, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

31. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the ~~first~~ page of the first site or application.

32. (Currently Amended) The method according to claim [[30]]31, wherein the user's implicit action comprises the user hovering over a target of interest on the ~~first~~ page of the first site or application.

33. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

34. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is displayed on the ~~first~~ page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest.

35. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

36. (Currently Amended) The method according to claim [[34]]35, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the second site or application; and

populating the at least one form associated with the second site or application with the values extracted or inferred from the query string.

37. (Currently Amended) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of ~~explicit or implicit~~ computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the explicit or implicit~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application to the correspondingly linked one or more of the ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the second site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

38. (Previously Presented) The system of claim 37, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more

verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

39. (Previously Presented) The system of claim 38, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

40. (Previously Presented) The system of claim 37, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

41. (Currently Amended) The system of claim 37, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the ~~first~~ page of the first site or application.

42. (Currently Amended) The system of claim 41, wherein the user's implicit action comprises the user hovering over a target of interest on the ~~first~~ page of the first site or application.

43. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

44. (Currently Amended) The system of claim 37, wherein the deep-linked ad is displayed on the ~~first~~ page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or an element of interest.

45. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

46. (Previously Presented) The system of claim 45, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the second site or application; and

populating the at least one form associated with the second site or application with the values extracted or inferred from the query string.

47. (Currently Amended) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by at least one processor to perform:

obtaining ~~or inferring~~, utilizing a set of obtaining rules, a plurality of explicit or implicit computer-readable field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

applying via programming code a set of enhancing rules to enhance results of the obtaining of the plurality of computer-readable field identifiers;

mapping the plurality of ~~explicit or implicit~~ computer-readable field identifiers ~~via~~ to one another using a set of normalized variables ~~to thereby create~~ stored in a normalized variable data database, the normalized variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet, the mapping ~~arbitrarily~~ linking ~~the explicit or implicit~~ computer-readable field identifiers of the plurality of sites or applications;

automatically programmatically generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a first site or application with one or more of a ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by a second site or application;

placing the deep-linked ad on a ~~first~~ page of the first site or application; and

in response to user interaction with the deep-linked ad on the ~~first~~ page of the first site or application on a user device:

extracting ~~or inferring~~, from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application, values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application;

automatically directing the user device to display a ~~second~~ page of the second site or application; and

passing the values corresponding to the one or more of the ~~first~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the first site or application to the

correspondingly linked one or more of the ~~second~~ set of ~~explicit or implicit~~ computer-readable field identifiers used by the second site or application such that the correspondingly linked one or more of the set of computer-readable field identifiers used by the second site or application are determined using the universal variable map and such that one or more fields on the ~~second~~ page of the second set or application are pre-populated with the values extracted ~~or inferred~~ from the user interaction with the deep-linked ad on the ~~first~~ page of the first site or application without necessitating any pre-existing relationship between the pages.

48. (Previously Presented) The computer program product of claim 47, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

49. (Currently Amended) The computer program product of claim 47, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the ~~first~~ page of the first site or application.

50. (Previously Presented) The computer program product of claim 47, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed on September 6, 2016 ("Office Action") and the Applicant-Initiated In-Person Examiner Interview held on January 19, 2017. In view of the agreement reached during the January 19, 2017 Applicant Initiated In-Person Examiner Interview and as a good faith effort to expedite the prosecution, Applicant submitted a full set of claims with the agreed changes applied to all independent claims 25, 27, and 47 and their dependent claims to the Examiner on February 3, 2017. As of March 6, 2017, the Office has not processed the agreed changes to the claims. Accordingly, Applicant respectfully submits herewith the same set of claims with the agreed changes for formal entry to the record. Applicant respectfully requests a timely Notice of Allowance be issued in this case.

Interview Summary

Pursuant to the Applicant Initiated Interview Request submitted on December 12, 2016, an in-person interview was conducted on January 19, 2017 between Primary Examiner David Robert Rines, Examiner Karmis, Inventor/Applicant Narendra Nath, Attorney Richard L. Torczon, Jr., and the undersigned. During the interview, the participants discussed a proposed amendment and reached an agreement that the claims sufficiently overcome the only outstanding rejection under 35 U.S.C. § 101.

Applicant appreciates the time and effort taken by the Examiners to review Applicant's present application and discuss the pending claims.

Claim Objections

Claim 32 was objected to due to an informality. Claim 32 is amended herein to properly depend from claim 31. Accordingly, withdrawal of this objection is respectfully requested.

Rejections under 35 U.S.C. § 101

Claims 25-50 were rejected under 35 U.S.C. § 101. In view of the agreement reached during the January 19, 2017 Applicant Initiated In-Person Examiner Interview, Applicant

respectfully submits that this rejection has been overcome or otherwise rendered moot. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims 25-50.

An extension of three (3) months is requested and a Notification of Extension of Time Under 37 C.F.R. § 1.136 with the appropriate fee is enclosed herewith.

The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain. The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant



Katharina W. Schuster
Reg. No. 50,000

Date: March 6, 2017

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
NOTIFICATION OF EXTENSION OF TIME UNDER 37 C.F.R § 1.136	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **November 30, 2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Alissa D. Karmiss**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on **March 6, 2017.**

Shenise Ramdeen
SHENISE RAMDEEN

Dear Sir:

Applicant hereby takes an Extension of Time for responding to the **Office Action** mailed **September 6, 2016** for a period of **3** months.

		Small Entity	*Large Entity*
	First Month	$ 100.00	$ 200.00
	Second Month	$ 300.00	$ 600.00
X	Third Month	$ 700.00	$ 1,400.00
	Fourth Month	$ 1,100.00	$ 2,200.00
	Fifth Month	$ 1,500.00	$ 3,000.00
	TOTAL	**$ 700.00**	**$**

The Commissioner is hereby authorized to deduct the above-noted fee from Deposit Account 50-3183 of Sprinkle IP Law Group. If any fees are inadvertently omitted, additional fees are required, or if any amounts have been overpaid, please appropriately charge or credit those fees to Deposit Account No. 50-3183 of SPRINKLE IP LAW GROUP.

Respectfully submitted,

SPRINKLE IP LAW GROUP

Katharina W. Schuster
Reg. No. 50,000

Date: March 6, 2017
1301 W. 25th Street, Suite 408
Austin, Texas 78705
(512) 637.9220 - Telephone
(512) 371.9088 - Facsimile

Electronic Patent Application Fee Transmittal

Application Number:	13308004
Filing Date:	30-Nov-2011
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Filer:	Katharina W. Schuster/Shenise Ramdeen
Attorney Docket Number:	WAYF1100-1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 3 months with $0 paid	2253	1	700	700
Miscellaneous:				
		Total in USD ($)		**700**

Electronic Acknowledgement Receipt	
EFS ID:	28548449
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Shenise Ramdeen
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	06-MAR-2017
Filing Date:	30-NOV-2011
Time Stamp:	17:50:02
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$700
RAM confirmation Number	030717INTEFSW00005712503183
Deposit Account	503183
Authorized User	Shenise Ramdeen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_ROA03-06-17.pdf	880668 629888e32d7ab00e8711d9a61ca3c6d20d77dd3e	yes	10
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Applicant Arguments/Remarks Made in an Amendment		1	1	
	Claims		2	8	
	Applicant Arguments/Remarks Made in an Amendment		9	10	
Warnings:					
Information:					
2	Extension of Time	WAYF1100-1_EOT03-06-17.pdf	629705 24ddb349a99f19865cee77a14b03fda8d2d7bffb	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30761 e131d2c2f773b993fe74fc417b6cf837226b4dd2	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1541134		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1

CONFIRMATION NO. 9029

44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

POA ACCEPTANCE LETTER

OC000000088695132

Date Mailed: 01/26/2017

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 01/23/2017.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/sleutchit/

Power of Attorney to Transact Business with the United States Patent and Trademark Office

I hereby revoke all previous Powers of Attorney given in the application(s) identified in the attached Transmittal for Power of Attorney to One or More Registered Practitioners ("Transmittal Form").

I hereby appoint practitioners associated with the following Customer Number associated with Sprinkle IP Law Group, PC:

44654

as my/our attorney(s) or agent(s) and to transact all business before the United States Patent and Trademark Office (USPTO) in connection with any and all patents and patent applications that are assigned to **Wayfare Interactive, Inc.** (the "assignee's patents/patent applications") in which they shall appear, any and all assignee's patents/patent applications associated with the above-referenced customer number, and any and all patents and patent applications referenced in the attached Transmittal Form.

Please recognize or change the correspondence address for the patents and patent applications referenced in the attached Transmittal Form to the address associated with the above-referenced customer number.

The undersigned is:

- ☐ Inventor or Joint Inventor
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign
  *the undersigned has authority to act on behalf of the Assignee or Person to Whom the Inventor is Under an Obligation to Assign.
- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is currently being filed in this document)

The Transmittal Form may be completed and executed by one of the practitioners associated with the above-referenced customer number.

SIGNATURE

Signature:	Narendra Nath	**Date:**	4/7/14
Name:	**Narendra Nath**		
Title:	**Chief Executive Officer**		
Company:	**Wayfare Interactive, Inc.**		

Electronic Acknowledgement Receipt

EFS ID:	28134671
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Shenise Ramdeen
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	23-JAN-2017
Filing Date:	30-NOV-2011
Time Stamp:	14:09:58
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_POA01-23-17.pdf	687187 47cb0bc4804598a9e335aea460826c4854032c35	yes	4

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	1
	Assignee showing of ownership per 37 CFR 3.73	2	3
	Power of Attorney	4	4
Warnings:			
Information:			
	Total Files Size (in bytes):	687187	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE		
CERTIFICATE OF TRANSMISSION VIA EFS-WEB SYSTEM		Atty. Docket No. **WAYF1100-1**
	First Named Inventor: **Narendra Nath**	
	Application Number **13/308,004**	Filing or 371(c) Date **November 30, 2011**
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 **Dear Sir**	Title: **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
	Group Art Unit **3683**	Examiner Name **Alissa D. Karmiss**
	Conf. No. **9029**	

I hereby certify that the attached Power of Attorney and Transmittal for Power of Attorney are being deposited electronically using the United States Patent and Trademark Office EFS-Web System on January 23, **2017**.

Respectfully submitted,

Sprinkle IP Law Group

Shenise Ramdeen

Shenise Ramdeen

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

Patent No./Application No.:	**13/308,004**
Issue Date/Filing Date:	**November 30, 2011**
First Named Inventor:	**Narendra Nath**
Title:	**DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**
Assignee:	**Wayfare Interactive, Inc.**

Assignee is:

1. ☒ Assignee of the entire right, title and interest in the above-referenced patent/patent application;

2. ☐ Assignee of less than the entire right, title and interest in the above-referenced patent/patent application:

☐ The extent (by percentage) of its ownership interest is _____%; or

☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ Assignee of an undivided interest in the entirety of the above-referenced patent/patent application (a complete assignment by one or more of the joint inventors was made). The other parties, including inventor, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ Recipient, via court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is/are attached.

The interest identified in option 1, 2 or 3 above as evidenced by either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 028594, Frame 0126, or for which a copy thereof is attached.

or

B. ☐ A chain of title from the inventor(s) of the patent/patent application identified above, to the current assignee;

1. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame_____, or for which a copy thereof is attached hereto.

2. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame_____, or for which a copy thereof is attached hereto.

3. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame_____, or for which a copy thereof is attached hereto.

☐ Additional documents in the chain of title are listed on the supplemental sheet(s).

☒ Documentary evidence of chain of title from the original owner to the assignee was, or concurrently is being submitted for recordation pursuant to 37 CFR 3.11 [NOTE: A separate copy (i.e., a true copy the original assignment document(s)) must be/have been submitted to the Assignment Division to record the assignment in the records of the USPTO]

Signature of Applicant or Practitioner		
Signature:	Katharina Schuster	**Date:** Jan. 23, 2017
Name:	Katharina W. Schuster	**Telephone: 512-637-9220**
Registration No.	50,000	

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PTOL-413A (09-08)
Approved for use through 10/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/308,004 (WAYF1100-1) First Named Applicant: Narendra Nath

Examiner: Alissa D. Karmis Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina Schuster, Reg. No. 50,000

(3) Attorney Steve Sprinkle, Reg. No. 40,825 (4) Attorney Richard L Torczon, Jr., Reg. No. 34,448

(5) Supervisory Patent Examiner: TBD (6) Applicant Narendra Nath

Proposed Date of Interview: January 19, 2017 **Proposed Time:** 11:00 EST ~~AM/PM~~

Type of Interview Requested:

(1) ☐ **Telephonic** (2) ☑ **Personal** (3) ☐ **Video Conference**

Exhibit To Be Shown or Demonstrated: ☐ **YES** ☑ **NO**

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 101 Rejection	25-50		☐	☐	☐
(2)			☐	☐	☐
(3)			☐	☐	☐
(4)			☐	☐	☐

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

Applicant would like to discuss elements not found in the cited prior art and would welcome any claim amendment suggestions from the Examiner that would forward prosecution and place the present application in a condition for allowance. Applicant respectfully requests the presence of a Primary Examiner or Supervisory Examiner.

An interview was conduction on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature

Katharina W. Schuster

Typed/Printed Name of Applicant or Representative

50,000

Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FAX COVER SHEET

TO	
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FAXNUMBER	15712738300
FROM	Sprinkle IP Law Group
DATE	2016-12-12 22:32:45 GMT
RE	Serial No. 13/308,004 (WAYF1100-1)InterviewRequest

COVER MESSAGE

Shenise Ramdeen
IP Legal Assistant
1301 W. 25th Street, Suite 408
Austin, Texas 78705
(o) 512.366.7296
(f) 512.371.9088

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 09/06/2016

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	

ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
09/06/2016	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/308,004	Applicant(s) NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09/25/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *25-50* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *25-50* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/09/2015*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The following non-final Office action is in response to Applicant's submission filed on September 25, 2015.

Status of the Claims

3. Claims 25, 28, 29, 36 and 46 have been amended. Claims 25-50 are pending.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 25, 2015 has been entered.

Response to Arguments

5. Applicant's arguments received September 25, 2015 regarding the 35 U.S.C. 101 rejection have been fully considered but they are not persuasive.

Applicant argues that the claimed limitations are not found in the art of record. Examiner notes that eligibility under 35 U.S.C. 101 is not based on novelty. Judicial exceptions need not be old or long-prevalent. Even newly discovered judicial exceptions are still exceptions despite their novelty. See the Office's *July 2015 Update on Subject Matter Eligibility* pg. 3.

Applicant argues that the claim limitations do not involve human activities. Examiner respectfully disagrees. Based on the language of the claim and the broadest reasonable interpretation of that language, the scope of the universal variable map limitation includes inferring more than one field identifier from more than one site on the Internet. While Applicant may intend for the term plurality to mean a certain number, Examiners are instructed to interpret claim limitations using the broadest reasonable interpretation and therefore 'plurality' could mean as few as two or three or ten or as many as one million for example. As such, a human can look at more than one site and infer a plurality of field identifiers on the site such as explicit ones as recited in the claims which conveys the field identifiers are visible. As an example, Applicant's specification in paragraph [0056] describes a field identifier as associated with a forms section and input field of a site and would seemingly be visible and readable to a person. Also, Applicant's specification in paragraphs [0079], [0080] and Figs. 11A and 11B seems to provide an example of mapping explicit visible field identifiers labeled as Year, Make, Type and Features on one site and field identifiers Select a Make and Select a Model on another site. It's unclear how a person would not be able to infer and map the field identifiers such as those mentioned above in Applicant's specification.

Applicant argues that the claims are patent-eligible under the same rationale reasoned by the Federal Circuit in the *DDR Holdings* decision in that as a whole the limitations specify how interactions with the Internet are manipulated to yield a desired result and that the solution the claims provide is tethered to the technology that created the problem – how to direct a user device to display a second page of a second site or application in response to user interaction with a deep-linked ad on a first page of a first site or application, with the correct E-commerce

information passed to the correct field identifiers, without any pre-existing relationship between the two pages and corresponding sites/applications. Examiner respectfully disagrees. Examiner also notes the "E-commerce information" and "without any pre-existing relationship" do not appear to be recited in the claims. The technical aspect of directing a user device to display a second site in response to a user clicking on an ad on a first site is well-known and conventional and a basic function capable of being performed by a general purpose computer. This technical feature is actually similar to the routine and conventional functionality mentioned in *DDR Holdings* of a user clicking on an ad and being transported away from a host's website to a third-party website and is in contrast to the features that made *DDR Holdings* eligible under 35 U.S.C. 101 namely the unconventional features of retaining website visitors and directing them to a composite hybrid web page, overriding the routine and conventional events after clicking on a link and changing the normal operation of the Internet. Rather than manipulating the normal operation of the Internet, the limitations convey a methodology for targeted personalized advertising enabled through the normal operation of the Internet. Also, the concept of passing values from one site or application or pre-populating data entry fields based on previous user input is well-known and conventional. Further, receiving or transmitting data over a network, e.g., using the Internet to gather data is a conventional computer function (*see pg. 7 of Office's July 2015 Update on Subject Matter Eligibility*) and is considered similar to the limitation of passing values or pre-populating. Also, while some advertising is pre-negotiated, it is also well-known and conventional that some advertising methods employ dynamic functionality to react to the website a user is currently viewing or interacting with. Whether the sites have a pre-existing relationship or not conveys non-functional descriptive material and does not appear to affect the

other technical functionality of being able to direct a user device to display a second site in response to a user clicking on an ad on a first site or of being able to pre-populate values from one site or application to another. In view of these findings and when looking at the limitations as a combination does not add anything more than what is already present when looking at the limitations individually.

Applicant argues that the claims do not attempt to preempt every application of the idea of deep-linking advertising on the Internet but rather recite a specific way. The Examiner points Applicant to the Office's July 2015 Guidance (pg. 8) that discusses the courts do not use preemption as a stand-alone test, but instead, questions of preemption are inherent in the two-part framework from Alice Corp. and Mayo and are resolved by using this framework.

6. Applicant's arguments received September 25, 2015 regarding the 35 U.S.C. 103 rejection have been fully considered and are persuasive in part but some of Applicant's arguments appear to rely on features not claimed such as the timing element of when the ad does or does not exist and no pre-existing relationship between the sites. However, upon further examination of the cited prior art, the rejections under 35 U.S.C. 103 are withdrawn and while some of Applicant's arguments appear to rely on features not claimed, the Examiner suggests Applicant consider incorporating some of these features for evaluation purposes under 35 U.S.C. 101.

Claim Objections

7. **Claim 32** is objected to for the following reason as possibly being misnumbered. Claim 32 is recited as depending from claim 30 but appears to actually further limit claim 31. Claim 30 describes the universal variable map comprises a database. Claim 31 describes generating or refining based on user's implicit action. Claim 32 describes wherein the user's implicit action comprises the user hovering. Claim 32 therefore appears to depend from claim 31. Appropriate correction is respectfully requested.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 25-50** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

As part of Step 1 of the subject matter eligibility test detailed in the Office's *2014 Interim Guidance on Patent Subject Matter Eligibility (See Federal Register Vol. 79, No. 241)*, it must be determined whether the claims are directed to one of the four statutory categories of invention, i.e., process, machine, manufacture, or composition of matter. Claims 25-36 are directed to a method, claims 37-46 are directed to a system and claims 47-50 are directed to a computer program product. Therefore, Applicant's claims pass Step 1.

However, as part of Step 2A of the subject matter eligibility test, the claim is directed to a judicial exception because an abstract idea is set forth or described in the claim. The limitations that set forth or describe an abstract idea in exemplary claim 25 are:

obtaining or inferring a plurality of explicit or implicit field identifiers;

mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers with one or more of a second set of field identifiers;

placing the deep-linked ad;

in response to user interaction with the deep-linked ad:

extracting or inferring, from the user interaction with the deep-linked ad, values corresponding to the one or more of the first set of field identifiers;

passing the values corresponding to the one or more of the first set of field identifiers to the correspondingly linked one or more of the second set of field identifiers such that one or more fields are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad

These limitations describe the concepts of collecting, organizing and linking data, generating and placing an advertisement based on the collected, organized and linked data and also inferring and passing values of a first set of field identifiers to a second set of field identifiers from user interaction. These concepts would be directed towards an idea of itself because they can be performed by a human mentally and using pen and paper. Further, the data collection, organizing and linking elements are similar to abstract ideas found by the courts such as the concept of collecting and comparing known information in *Classen*, the concept of using categories to organize, store, and transmit information in *Cyberfone* and the concept of comparing new and stored information and using rules to identify options in *SmartGene*. The

generating and placing an advertisement based on the collected, organized and linked data would also be similar to the comparing new and stored information and using rules to identify options in *SmartGene*. Further, inferring and passing values of the field identifiers from user interaction involves collecting, comparing and transmitting information and would therefore be similar to such collecting, comparing and transmitting abstract ideas identified in *Classen*, *Cyberfone* and *SmartGene*. Although of different subject matter, Applicant's limitations are not significantly different from those referenced in the above court cases.

A claim directed to a judicial exception (an abstract idea), must be analyzed to determine if the claim as a whole amounts to significantly more than the judicial exception itself. Limitations that may be enough to qualify as significantly more include: improvements to another technology or technical field; improvements to the functioning of the computer itself; applying the judicial exception with, or by use of, a particular machine; effecting a transformation or reduction of a particular article to a different state or thing; adding a specific limitation other than what is well-understood, routine and conventional in the field, or adding unconventional steps that confine the claim to a particular useful application. In this case, the claims do not include limitations that meet the criteria listed above.

For example implementation of the abstract idea addressed above involves limitations recited in association with a computer and the Internet (i.e., sites or applications) that limit the abstract idea to a particular technological environment and involve conventional and well-understood functions. Therefore, these limitations are not considered significantly more. For example, the limitation regarding directing the user device to display a second page of the second site or application in response to user interaction with the deep-linked ad on the first page of the

first site or application is not considered significantly more because this is well-known and conventional and a basic function capable of being performed by a general purpose computer. Also, the concept of directing the user device for passing values from one site or application or pre-populating data entry fields based on previous user input is considered well-known and conventional. Further, receiving or transmitting data over a network, e.g., using the Internet to gather data is a conventional computer function (*see pg. 7 of Office's July 2015 Update on Subject Matter Eligibility*) and is considered similar to the claimed limitation of passing values or pre-populating. In addition to the elements of a server computer, processor, and computer memory are specified at a high level of generality, they are also claimed for performing their basic computer functions such as collecting, organizing and transmitting information. These functions are similar to those identified in the Office's *July 2015 Update on Subject Matter Eligibility* (pg. 7) such as receiving, processing and storing data, automating mental tasks and receiving or transmitting data over a network, e.g., using the Internet to gather data. Also, Applicant's specification indicates in Para. [0105] and [0107], that the limitations require no more than a general purpose digital computer and CPU. Taken alone the additional elements do no amount to significantly more than the above-identified abstract idea. Also, looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements individually. Independent system claim 37 and independent computer program product claim 47 recite substantially similar limitations to those addressed above with regards to independent method claim 25. Therefore, the same rationale applies to claims 37 and 47.

The limitations recited in the dependent claims are further directed to the abstract idea and conclusions discussed above and only limit the abstract idea to a narrower abstract idea (e.g.,

categorizing sites – claim 26) and further involve well-known and conventional computer functions (e.g., universal variable map comprises a database – claim 30 and parsing a query string – claim 35).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rossini US 0050209874 A1

Crawford US 20060212434 A1

Daswani US 20020023108 A1

Mikhailov US 20010054046 A1

Croy US 20010037361 A1

Myllymaki US 20040088713 A1

"New advertising technology delivers results for travel marketers: TripAdvisor's contextual links produce response rates 32x better than banner advertising." December 3, 2001. TripAdvisor.com. https://www.tripadvisor.com/PressCenter-i2369-c1-Press_Releases.html

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA KARMIS whose telephone number is (571)270-7277. The examiner can normally be reached on Monday - Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter H. Choi can be reached on 571-272-6971. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALISSA KARMIS/
Examiner, Art Unit 3683

/PETER CHOI/
Supervisory Patent Examiner, Art Unit 3683

Notice of References Cited	Application/Control No. 13/308,004	Applicant(s)/Patent Under Reexamination NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2001/0037361 A1	11-2001	Croy, John Charles	G06Q20/10	709/203
*	B	US-2001/0054046 A1	12-2001	Mikhailov, Dmitry	G06F17/243	715/221
*	C	US-2002/0023108 A1	02-2002	DASWANI, NEIL	G06F17/243	715/224
*	D	US-2004/0088713 A1	05-2004	Myllymaki, Jussi Petri	G06F17/30864	719/315
*	E	US-2005/0209874 A1	09-2005	Rossini, Pascal	G06F17/3089	705/1.1
*	F	US-2006/0212434 A1	09-2006	Crawford; Blanche I.	G06F17/30899	1/1
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FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
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	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	"New advertising technology delivers results for travel marketers: TripAdvisor's contextual links produce response rates 32x better than banner advertising." December 3, 2001. TripAdvisor.com. https://www.tripadvisor.com/PressCenter-i2369-c1-Press_Releases.html
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q30/02	12/12/2013	AK
G06Q30/0257	12/12/2013	AK
G06Q30/0276	12/12/2013	AK
G06Q30/0277	12/12/2013	AK
G06Q30/00	12/12/2013	AK
G06F17/30864	12/12/2013	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	14.4	12/12/2013	AK

SEARCH NOTES		
Search Notes	Date	Examiner
STIC PLUS Search	12/4/2013	AK
Inventor name search	12/12/2013	AK
EAST keyword search	12/12/2013	AK
Google Scholar keyword search	12/12/2013	AK
EAST keyword search	06/25/2014	AK
EAST keyword search	06/23/2015	AK
EAST keyword search-see attached	08/19/2016	AK
Google keyword search	08/19/2016	AK

INTERFERENCE SEARCH

/ALISSA KARMIS/ Examiner.Art Unit 3683	

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/ALISSA KARMIS/ Examiner.Art Unit 3683	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015	08/22/2016					
	1	✓	✓	-	-					
	2	✓	✓	-	-					
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	36			✓	✓					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015	08/22/2016					
	37			✓	✓					
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	49			✓	✓					
	50			✓	✓					

Substitute Form PTO/SB/08a

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/308,004
				Filing Date	November 30, 2011
				First Named Inventor	Narendra Nath
				Group Art Unit	3683
				Examiner Name	Karmis, Alissa D.
Sheet	1	of	1	Attorney Docket Number	WAYF1100-1

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	A42	US 7216292	05-08-2007	Snapper et al.	
	A43	US 20040243520	12-02-2004	Bishop et al.	
	A44	US 20090164581	06-25-2009	Bove et al.	
	A45	US 20070250520	10-25-2007	Dettinger et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature	/Alissa Karmis/	Date Considered	08/12/2016

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.K./

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO EXAMINER'S INTERVIEW SUMMARY MAILED 10/29/2015	Atty. Docket No. **WAYF1100-1**

First Named Inventor: **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on November 23, 2015.

Janice Pampell
Janice Pampell

Dear Sir:

This paper is submitted in response to the Examiner Interview Summary mailed on October 29, 2015. Pursuant to Applicant Initiated Interview Request filed with a formal Reply to Office Action on September 25, 2015, an interview was conducted on October 9, 2015 between Examiner Alissa D. Karmis, Inventor Narendra Nath, and the undersigned. During the interview, the participants discussed the 35 U.S.C. §§ 101 and 103 rejections set forth in the Final Office Action mailed on June 25, 2015 as well as possible amendments to the claims. No specific agreement was reached.

Applicant appreciates the time and effort taken by Examiner Karmis to review Applicant's present application and discuss the pending claims and the rejections. The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Katharina Schuster

Katharina W. Schuster
Reg. No. 50,000

Date: November 23, 2015

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220/Fax. (512) 371-9088

Electronic Acknowledgement Receipt

EFS ID:	24167657
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Janice Pampell
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	23-NOV-2015
Filing Date:	30-NOV-2011
Time Stamp:	17:28:10
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant summary of interview with examiner	WAYF1100-1_Reply_to_Int_Summ_Mailed_10-29-15.pdf	700895 1007b27c3ca4ff8a49f3e686ea7a31f126287cef	no	1
Warnings:					
Information:					

Total Files Size (in bytes):	700895

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Substitute Form PTO/SB/08a

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/308,004
				Filing Date	November 30, 2011
				First Named Inventor	Narendra Nath
				Group Art Unit	3683
				Examiner Name	Karmis, Alissa D.
Sheet	1	of	1	Attorney Docket Number	WAYF1100-1

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	A42	US 7216292	05-08-2007	Snapper et al.	
	A43	US 20040243520	12-02-2004	Bishop et al.	
	A44	US 20090164581	06-25-2009	Bove et al.	
	A45	US 20070250520	10-25-2007	Dettinger et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	**Foreign Patent Document** Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature		Date Considered	

Electronic Acknowledgement Receipt

EFS ID:	24031023
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Delia Narvaiz
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	09-NOV-2015
Filing Date:	30-NOV-2011
Time Stamp:	19:16:24
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_IDS_110915.pdf	1329699 27a4d674b2db71f60459410d1b2c58ac8756b386	yes	3

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	2
	Information Disclosure Statement (IDS) Form (SB08)	3	3
Warnings:			
Information:			
	Total Files Size (in bytes):	1329699	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Atty. Docket No. (Opt.) **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **November 30, 2011**
Title **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on **November 9, 2015**.

Delia Narvaiz

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

☐ This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

☐ This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application;

☐ This Information Disclosure Statement is being submitted before the mailing of a First Office Action on the merits; or

☒ This Information Disclosure Statement is being submitted before the mailing of a First Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

☐ This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

- ☐ The statement specified in 37 C.F.R. § 1.97(e); or
- ☐ The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of $90 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

☐ This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(c) and on or before payment of the issue fee and is accompanied by:

- ☐ The statement specified in 37 C.F.R. § 1.97(e); and
- ☐ The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of $90 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Applicant does not believe any fees are due and owing at this time. If Applicant is in error, the Director is hereby authorized to deduct any and all appropriate fees from Deposit Account 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

SPRINKLE IP LAW GROUP
Attorneys for Applicant

Katharina W. Schuster
Reg. No. 50,000

Dated: Nov. 9, 2015

1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 10/29/2015

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	

ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
10/29/2015	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	**Application No.**	**Applicant(s)**	
	13/308,004	NATH ET AL.	
	Examiner	**Art Unit**	
	ALISSA KARMIS	3683	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ALISSA KARMIS, Examiner*. (3) *Narendra Nath, Applicant*.

(2) *Katharina Schuster, Applicant's representative*. (4)_____.

Date of Interview: *09 October 2015*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *25*.

Identification of prior art discussed: *Anagnostopoulos 2009/0313127 Markus 6,490,601 Stephens 2007/0239494*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Participants discussed the outstanding 101 rejection and decisions resulting from Cyberfone Sys. v. CNN Interactive Grp and DDR Holdings, LLC v. Hotels.com. Potential amendments were discussed to further specify the technology behind the claimed functions. No agreement was reached regarding the outstanding 101 and 103 rejections.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/ALISSA KARMIS/ Examiner, Art Unit 3683	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	13308004	Filing Date	2011-11-30	Docket Number (if applicable)	WAYF1100-1	Art Unit	3683
First Named Inventor	Narendra Nath			Examiner Name	Alissa D. Karmis		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Applicant Initiated Interview Request Form

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 503183

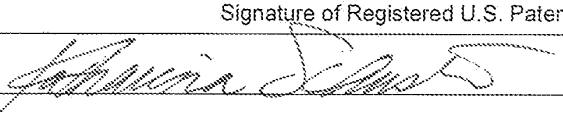
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature		Date (YYYY-MM-DD)	2015-09-25
Name	Katharina W. Schuster	Registration Number	50000

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 06/26/15	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **November 30, 2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on September 25, 2015.

Delia Narvaiz

This paper is submitted in response to the Official Action mailed on June 26, 2015. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1.-24. (Cancelled).

25. (Currently Amended) A method, comprising:

at and by a server computer having at least one processor and non-transitory computer memory:

obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet;

mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

26. (Previously Presented) The method according to claim 25, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

27. (Previously Presented) The method according to claim 26, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

28. (Currently Amended) The method according to claim 25, wherein field identifiers are programmatically searched or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map.

29. (Currently Amended) The method according to claim 28, wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping.

30. (Previously Presented) The method according to claim 25, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

31. (Previously Presented) The method according to claim 25, wherein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the first page of the first site or application.

32. (Previously Presented) The method according to claim 30, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

33. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

34. (Previously Presented) The method according to claim 25, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest.

35. (Previously Presented) The method according to claim 25, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

36. (Currently Amended) The method according to claim 34, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the [[the]] second site or application; and

populating the at least one form associated with the [[the]] second site or application with the values extracted or inferred from the query string.

37. (Previously Presented) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

38. (Previously Presented) The system of claim 37, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

39. (Previously Presented) The system of claim 38, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

40. (Previously Presented) The system of claim 37, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

41. (Previously Presented) The system of claim 37, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

42. (Previously Presented) The system of claim 41, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

43. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

44. (Previously Presented) The system of claim 37, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or an element of interest.

45. (Previously Presented) The system of claim 37, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

46. (Currently Amended) The system of claim 45, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the [[the]] second site or application; and

populating the at least one form associated with the [[the]] second site or application with the values extracted or inferred from the query string.

47. (Previously Presented) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

48. (Previously Presented) The computer program product of claim 47, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

49. (Previously Presented) The computer program product of claim 47, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

50. (Previously Presented) The computer program product of claim 47, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed on June 26, 2015. Applicant respectfully requests reconsideration and favorable action in this case.

Rejections under 35 U.S.C. § 101

Claims 25-50 stand rejected under 35 U.S.C. § 101. The Examiner alleges that "the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more." In particular, the Examiner states on pages 3-4 of the Office Action "[although] the claim limitations are among the four statutory classes of invention, the claims are directed to an abstract idea. Specifically, the concept of selecting a deep-linked ad based on a universal variable map and placing the ad on a page would be directed towards a method of organizing human activities, which is an example identified by the courts as an abstract idea. Further, the claims are essentially directed to using categories to organize, store, and transmit information (i.e., mapping field identifiers and generating an ad based on the mapping). This concept of using categories to organize, store, and transmit information was found to be an abstract idea by the Courts. *See Federal Register/Vol.* 79 *No.* 241. *See Cyberfone Sys. v. CNN Interactive Grp.,* 558 Fed. Appx. 988 (Fed. Cir. 2014) (nonprecedential)."

As an initial matter, Applicant respectfully disagrees with the Examiner's overly broad and tangential characterization that "the claims are essentially directed to using categories to organize, store, and transmit information" and submits that the claimed invention is significantly more than the "concept of using categories to organize, store, and transmit information." The fact that this concept of using categories to organize, store, and transmit information was found to be an abstract idea in *Cyberfone* does not preclude the claims at issue from being patent-eligible under 35 U.S.C. § 101. Since the issue of patent-eligibility under 35 U.S.C. § 101 presents a question of law, the claims should be analyzed in view of a two-step test established by the Supreme Court in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 182 L.Ed.2d 321 (2012). The *Mayo* test entails the following two steps:

Step one – determine if the claims at issue are directed at a patent-ineligible concept. *See Alice Corp. Pty. Ltd. v. CLS Bank Int'l,* 134 S.Ct. 2347, 189 L.Ed.2d 296 (2014).

Step two – if the claims are directed at a patent-ineligible concept, determine whether the claims include an "'inventive concept'-- i.e., an element of combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S.Ct. at 2355.

Analysis:

I. Step One of the Mayo Test

The Examiner argued that the concept of selecting a deep-linked ad based on a universal variable map and placing the ad on a page would be directed towards a method of organizing human activities, which is an example identified by the courts as an abstract idea. This is incorrect.

First, the claims at issue do not merely recite "selecting a deep-linked ad based on a universal variable map and placing the ad on a page," as the Examiner stated. Rather, the claims recite specific limitations including "obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet"; "mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers of the plurality of sites or applications"; "generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application" and "placing the deep-linked ad on a first page of the first site or application." As submitted below, there are not found in the art of record.

Second, there is no documentary evidence on the record (and the Examiner has not provided any) that these claim limitations "would be directed towards a method of organizing human activities," as the Examiner alleged. Skilled artisans recognize and appreciate that humans such as users of the Internet could not perform, for instance, "obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet," as recited in the claims at issue. Field identifiers (whether explicit or implicit) used by sites or applications on the Internet are not visible to users of the sites/applications. These claim limitations do not recite human activities, nor do they have anything to do with organizing human activities.

The claimed invention is directed to the field of online advertising and E-commerce and, more particularly, to deep-linked advertising and E-commerce. Even if online advertising is generally known by now, there is not a viable solution to automatically directing a user device to display a second page of a second site or application in response to user interaction with a deep-linked ad on a first page of a first site or application, with the correct E-commerce information passed to the correct field identifiers, on the user device. To this end, step two of the *Mayo* test is applied below.

II. Step Two of the Mayo Test

Even if the claims were directed to an abstract idea, under step two of the *Mayo* test, the claims may still be patent eligible if they include an "inventive concept" sufficient to "ensure that the patent in practice amounts to significantly more" than a patent upon an abstract idea. *Alice*, 134 S.Ct. at 2355.

On page 4 of the Office Action, the Examiner states that "[a] claim directed to a judicial exception (an abstract idea), must be analyzed to determine if the claim as a whole amounts to significantly more than the judicial exception itself." The Examiner then picks and generalizes individual limitations out of the context of the claim and states how each individual limitation (instead of the claim as a whole) is either "similar to the concepts in the *Cyberfone* court decision" or "well-understood and conventional" and therefore is "not significantly more." Following this generalization, any invention is simply a permutation and combination of 1's and 0's which are well understood mathematical constructs.

Applicant submits that the claimed invention should be analyzed as a whole and that, as a whole, the limitations specify how interactions with the Internet are manipulated to yield a desired result. This rational is discussed by the Court of Appeals for the Federal Circuit in *DDR Holdings, LLC v. Hotels.com, L.P,* 773 F.3d 1245, 1257 (Fed. Cir. 2014). *See also,* the 2014 Interim Guidance on Patent Subject Matter Eligibility (Interim Eligibility Guidance) issued by the U.S. Patent and Trademark Office.

The claims at issue in *DDR Holdings* addressed the problem of Internet users being transported away from a host website after clicking on a hyperlink in an advertisement. *Id.* at 1257. Rather than transporting the user to a third-party advertiser's website, as would normally occur when a user clicks a hyperlink, the claimed method sent the user to an automatically generated hybrid website with the "look and feel" of the advertiser's website. *Id.* That way, the

host website did not lose visitors to a third-party website, but users were still able to purchase products from the third party on a website with the "look and feel" of the third-party website. *Id.* at 1257-58.

In finding the claims patent-eligible, the Federal Circuit stated "the claims at issue here specify how interactions with the Internet are manipulated to yield a desired result." "When the limitations of the '399 patent's asserted claims are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet." "It is also clear that the claims at issue do not attempt to preempt every application of the idea of increasing sales by making two web pages look the same, or of any other variant suggested by NLG. Rather, they recite a specific way to automate the creation of a composite web page by an "outsource provider" that incorporates elements from multiple sources in order to solve a problem faced by websites on the Internet. As a result, the '399 patent's claims include "additional features" that ensure the claims are "more than a drafting effort designed to monopolize the [abstract idea]." *Alice*, 134 S. Ct. at 2357. In short, the claimed solution amounts to an inventive concept for resolving this particular Internet-centric problem, rendering the claims patent-eligible." The claims were found patent eligible because they did not "merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet." *Id.* Rather, they solved a problem specific to the realm of computer networks in a way that was rooted in computer technology. *Id.*

The claims in the instant application are patent-eligible under the same rationale reasoned by the Federal Circuit. That is, when the limitations of the claimed invention are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet and that is significantly more than the alleged abstract idea of organizing human activities and/or the alleged concept of using categories to organize, store, and transmit information. Indeed, skilled artisans recognize and appreciate that the claimed invention solved a problem specific to the realm of Internet in a way that was firmly rooted in computer technology. The solution that the claims provide is tethered to the technology that created the problem – how to direct a user device to display a second page of a second site or application, responsive to user interaction with a deep-linked ad on a first page of first site or application, with the correct E-commerce information passed to the correct field identifiers, without any pre-existing relationship between the two pages and corresponding sites/applications.

Furthermore, the claims at issue do not attempt to preempt every application of the idea of deep-linked advertising on the Internet. Rather, they recite a specific way to respond to user interaction with a deep-linked ad on a first page of a first site or application on a user device that incorporates explicit or implicit field identifiers obtained or inferred from a plurality of sites or applications on the Internet in order to solve the aforementioned problem faced by sites/applications on the Internet. Although the claims at issue involve the implementation of deep-linked advertising on the Internet, the solution provided by the claims does more than "broadly and generically claim 'use of the Internet' to perform an abstract business practice." *DDR Holdings*, 773 F.3d at 1258.

For example, as recited in claim 1, explicit or implicit field identifiers are obtained or inferred from sites/applications on the Internet and then mapped via normalized variables to create a universal variable map. This mapping results in the arbitrarily linking of the field identifiers of the sites/applications on the Internet. Using the Internet in a generic manner could not have produced this result. With the linking of the field identifiers of the sites/applications on the Internet established via the universal variable map, a deep-linked ad can be generated to link "one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application," as recited in claim 1. The deep-linked ad thus generated can be placed on a first page of the first site or application such that "in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device ... values corresponding to the one or more of the first set of field identifiers used by the first site or application" can be extracted or inferred and then passed "to the correspondingly linked one or more of the second set of field identifiers used by the second site or application," as recited in claim 1. This allows the second site or application to explicitly or implicitly pre-populate one or more fields on the second page with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application, thereby solving the technical problem of how to direct a user device to display a second page of a second site or application, responsive to user interaction with a deep-linked ad on a first page of first site or application, with the correct E-commerce information passed to the correct field identifiers, without any pre-existing relationship between the two pages and corresponding sites/applications.

The problem addressed by the claims are similar to the ones that "arose uniquely in the context of the Internet, and the solution proposed was a specific method of solving that

problem." *Id.* at 1257. As a result, the claims of the instant application are patent eligible under the *Mayo* and *Alice* analytical framework.

In view of the foregoing, Applicant respectfully submits that claims 25-50 include an inventive concept for solving a particular Internet-centric problem and are patent-eligible under 35 U.S.C. § 101. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 25-31, 33-41 and 43-50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2009/0313127 ("Anagnostopoulos") in view of U.S. Patent No. 6,490,601 ("Markus") and further in view of U.S. Patent Application Publication No. 2007/0239494 ("Stephens").

Claims 32 and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Anagnostopolous in view of Markus and further in view of Stephens and in further view of U.S. Patent Application Publication No. 2009/0144124 ("Surendran").

The rejections are respectfully traversed. Arguments submitted in the previously filed replies remain pertinent with respect to Anagnostopoulos, Stephens, and Surendran and the current rejections and are incorporated by reference herein.

Anagnostopoulos appears to focus on mapping visible, static content on web pages for ad targeting, in contrast to the current invention that addresses the mapping of invisible field identifiers that contain dynamic content. Specifically, Anagnostopoulos describes extracting text and associated metadata from web pages. *See* Anagnostopoulos, para. [0045]. In Anagnostopoulos, a web page requested by a user or an agent of the user (e.g., a content page 300), incorporates content information provided by publishers 240 and advertisements provided by advertisers 250. *See* Anagnostopoulos, para. [0039]. When the request from the user is received, a text and metadata extractor 440 running on a processing and matching platform 208 extracts keywords and associated metadata from the web page (or, more specifically, the content information provided by publishers 240 incorporated in the web page) and provides the extracted text and associated metadata to a syntactic matching engine 420. *See* Anagnostopoulos, para. [0045]. The syntactic matching engine 420 select advertisements that closely match the extracted keywords and metadata and provides the selected advertisements

to an optimization engine 430 to filter and select specific advertisements to be displayed for the user. *See* Anagnostopoulos, para. [0046].

Skilled artisans recognize and appreciate that this real-time matching of content to advertising information occurs subsequent to receiving a user request for content and before the requested content is delivered to the user and does not require "obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet," recited in independent claims 25, 37, and 47. Skilled artisans also recognize and appreciate that keywords and metadata extracted from the web page refer to content or values, rather than field identifiers (or programming containers or variables) of such content.

Furthermore, in Anagnostopoulos, advertisements are selected in real-time, but they are not generated in real-time. Contrastingly, a deep-linked ad in the claimed invention is not selected from pre-existing ads, but is actually generated at ad serving time. This is because the deep-linked ad may be dependent on information provided in real-time from the field identifiers to generate or act upon the creation of the deep-linked ad. In some embodiments, a deep-linked ad does not exist before an ad request was generated, and is created in real-time using the field identifier data passed thereto. This is not possible with any of the art of record at least because they lack a universal variable map (and hence its contained data), as disclosed and claimed in the instant application.

Markus fails to remedy the deficiencies of Anagnostopoulos at least because Markus also fails to disclose "obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet," recited in independent claims 25, 37, and 47. Rather, Markus describes a privacy bank server computer that maps one form of field names to another form of field names for affiliate members (registered websites). To use the privacy bank service provided by Markus, a user must also be a member. It would seem that the privacy bank server computer of Markus is privileged to have knowledge of field names used by its affiliate members and therefore has no need to create a universal variable map and/or has no ability to connect fields to non-affiliated or arbitrary sites.

Stephens fails to remedy the deficiencies of Anagnostopoulos and Markus. Stephens describes, in the cited portions including paragraphs [0056] and [0057], a "deep-linking" concept of how a user can jump to an intermediate page through selection of a deep-link "that is a URL to an intermediate page of the website wherein the promotional offer's pre-selected characteristic(s) has already been set for the reservation." However, Stephens do not describe

a deep-linked ad in the cited portions. Rather, the cited portions of Stephens describe a particular URL to an intermediate page where the user can view the offers. When an offer is selected, the user is dropped into the same website, albeit a different page. *See* Stephens, para. [0057]. Stephens does not describe these offers as deep-linked ads that were generated "utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application."

Furthermore, Stephens does not describe that interaction with such offers would cause "extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application"; "automatically directing the user device to display a second page of the second site or application"; and "passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application," as recited in claim 25 and similarly in claims 37 and 47. Indeed, Stephens makes no reference to leveraging a universal variable map to arbitrarily deep-link from one site or mobile application to any other site or mobile application with no pre-determined relationship existing between the first site or mobile application and the second site or application.

In view of the foregoing, Applicant respectfully submits that the combined teachings of Anagnostopolous, Markus, and Stephens fail to render claims 25-31, 33-41 and 43-50 unpatentable under 35 U.S.C. § 103(a), motivation to combine Anagnostopolous, Markus, and Stephens notwithstanding.

Surendran fails to remedy the deficiencies of Anagnostopolous, Markus, and Stephens. Claims 32 and 42 depend from and include the limitations of claims 25 and 37, respectively, and are consequently distinguished from Anagnostopolous, Markus, and Stephens in the same or similar manner as claims 25 and 37.

In view of the foregoing, Applicant respectfully submits that the combined teachings of Anagnostopolous, Markus, Stephens, and Surendran fail to render claims 32 and 42

unpatentable under 35 U.S.C. § 103(a), motivation to combine Anagnostopolous, Markus, Stephens, and Surendran notwithstanding.

Accordingly, withdrawal of these rejections is respectfully requested.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims 25-50. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant



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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/308,004 (WAYF1100-1) First Named Applicant: Narendra Nath

Examiner: Alissa D. Karmis Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina Schuster, Reg. No. 50,000

(3) Inventor Narendra Nath (4) _____

Proposed Date of Interview: TBD **Proposed Time:** 2:00 EST ~~AM~~/PM

Type of Interview Requested:

(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 101 Rejection	25-50		☐	☐	☐
(2) 103 Rejection	25-31,33-41,43-50	Anagnostoloulos/ Markus/Stephens	☐	☐	☐
(3) 103 Rejection	32, 42	Anagnostoloulos/Markus/ Stephens/Surendran	☐	☐	☐
(4)			☐	☐	☐

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

Applicant would like to discuss elements not found in the cited prior art and would welcome any claim amendment suggestions from the Examiner that would forward prosecution and place the present application in a condition for allowance. Applicant respectfully requests the presence of a Primary Examiner or Supervisory Examiner.

An interview was conduction on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature	Examiner/SPE Signature
Katharina W. Schuster	
Typed/Printed Name of Applicant or Representative	
50,000	
Registration Number, if applicable	

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	13308004
Filing Date:	30-Nov-2011
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Filer:	Katharina W. Schuster/Delia Narvaiz
Attorney Docket Number:	WAYF1100-1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
		Total in USD ($)		**600**

Electronic Acknowledgement Receipt	
EFS ID:	23611400
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Delia Narvaiz
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	25-SEP-2015
Filing Date:	30-NOV-2011
Time Stamp:	17:25:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$600
RAM confirmation Number	4661
Deposit Account	503183
Authorized User	SCHUSTER, KATHARINA WANG
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	WAYF1100-1_RCE.pdf	436037 2e04f71e2965cb82746fc855f42a25a075cde76d	no	2
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
2		WAYF1100-1_ROA_092515.pdf	1652512 7d6966b2a71f5d6f45c197ed3fb2838e88b0d72c	yes	16

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	7
Applicant Arguments/Remarks Made in an Amendment	8	16

Warnings:					
Information:					
3	Letter Requesting Interview with Examiner	WAYF1100-1_AIIRF.pdf	835594 1eeebb7dbfb586c3c81c5b7e233f510f17de8e6b	no	1
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30670 09c1015e92d5ba3723880bb7c4f180464fa7b168	no	2
Warnings:					
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If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/308,004	Filing Date 11/30/2011	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	09/25/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 26	Minus	** 26	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/MARY HOLMES/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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PTOL-413A (09-08)
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Applicant Initiated Interview Request Form

Application No.: 13/308,004 (WAYF1100-1) First Named Applicant: Narendra Nath

Examiner: Alissa D. Karmis Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina Schuster, Reg. No. 50,000

(3) Inventor Narendra Nath (4)

Proposed Date of Interview: 09/15/2015 **Proposed Time:** 3:00 EST ~~AM~~/PM

Type of Interview Requested:

(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO

If yes, provide brief description:

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 101 Rejection	25-50		☐	☐	☐
(2) 103 Rejection	25-31,33-41,43-50	Anagnostoloulos/ Markus/Stephens	☐	☐	☐
(3) 103 Rejection	32, 42	Anagnostoloulos/Markus/ Stephens/Surendran	☐	☐	☐
(4)			☐	☐	☐

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

Applicant would like to discuss elements not found in the cited prior art and would welcome any claim amendment suggestions from the Examiner that would forward prosecution and place the present application in a condition for allowance. Applicant respectfully requests the presence of a Primary Examiner or Supervisory Examiner.

An interview was conduction on the above-identified application on _____ .

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature	Examiner/SPE Signature
Katharina W. Schuster	
Typed/Printed Name of Applicant or Representative	
50,000	
Registration Number, if applicable	

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TO	
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FAX NUMBER	15712738300
FROM	Sprinkle IP Law Group
DATE	2015-08-17 21:30:37 GMT
RE	Serial No. 13/308,004 (WAYF1100-1) Interview Request

COVER MESSAGE

Shenise Ramdeen
IP Legal Assistant
1301 W. 25th Street, Suite 408
Austin, Texas 78705
(o) 512.366.7296
(f) 512.371.9088

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 06/26/2015

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	

ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
06/26/2015	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/308,004	Applicant(s) NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *March 12, 2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *25-50* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *25-50* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The following final Office action is in response to Applicant's submission filed on March 12, 2015.

Status of the Claims

3. Claims 1-24 have been cancelled. Claims 25-50 have been added. Claims 25-50 have been reviewed and are pending.

Response to Arguments

4. There are no arguments to address as all claims pertaining to the previous Office Action mailed July 2, 2014 have been cancelled.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 25-50** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claims 25-36 are directed to a method, claims 37-46 are directed to a system and claims 47-50 are directed to a computer program product for:

obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet;

mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

Although the claim limitations are among the four statutory classes of invention, the claims are directed to an abstract idea. Specifically, the concept of selecting a deep-linked ad based on a universal variable map and placing the ad on a page would be directed towards a method of organizing human activities, which is an example identified by the courts as an abstract idea. Further, the claims are essentially directed to using categories to organize, store, and transmit information (i.e., mapping field identifiers and generating an ad based on the mapping). This concept of using categories to organize, store, and transmit information was

found to be an abstract idea by the Courts. *See Federal Register/Vol. 79 No. 241. See Cyberfone Sys. v. CNN Interactive Grp., 558 Fed. Appx. 988 (Fed. Cir. 2014) (nonprecedential).*

A claim directed to a judicial exception (an abstract idea), must be analyzed to determine if the claim as a whole amounts to significantly more than the judicial exception itself. Limitations that may be enough to qualify as significantly more include: improvements to another technology or technical field; improvements to the functioning of the computer itself; applying the judicial exception with, or by use of, a particular machine; effecting a transformation or reduction of a particular article to a different state or thing; adding a specific limitation other than what is well-understood, routine and conventional in the field, or adding unconventional steps that confine the claim to a particular useful application. In this case, the claims do not include limitations that meet the criteria listed above. The limitation regarding obtaining field identifiers is considered mere data gathering and not significantly more. The limitations regarding mapping and selecting based on the mapping are similar to the concepts in the *Cyberfone* court decision and therefore not significantly more. The limitations regarding directing the user to a second site in response to user interaction with the deep-linked ad and pre-populating values is not considered significantly more because the cited Stephens reference indicates this limitation is well-understood and conventional. The computer limitations of the claims are specified at a high level of generality and do not offer a meaningful limitation because for instance a processor is recited for performing its basic function of translating computer readable medium instructions. The limitations recited in the dependent claims are further directed to mapping which has been addressed above in regards to the *Cyberfone* court decision.

Claim Rejections - 35 USC § 103

7. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 25-31, 33-41 and 43-50** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Anagnostopoulos et al., U.S. Patent Application No. 2009/0313127 A1 (hereinafter "Anagnostopoulos") in view of Markus U.S Patent No. 6,490,601 (hereinafter "Markus") and further in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1 (hereinafter "Stephens").

Regarding claim 25, Anagnostopoulos discloses a method comprising:

at a server computer having at least one processor and non-transitory computer memory (system – Fig. 2, Para. [0095]-[0098])

obtaining or inferring a plurality of explicit or implicit identifiers from a plurality of sites or applications on the Internet (extract text and metadata – Para. [0045]; analyze web page content

– Para. [0047; analyze page parameters – Para. [0050]; parsing, extracting, analyzing advertisement parameters and features – Para. [0051], [0073];]; taking cues from the structure of the document – Para. [0065]; classify information according to categories, themes, taxonomy – Para. [0047], [0048], [0050], [0051], [0053], [0056]);

mapping the plurality of identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the identifiers of the plurality of sites or applications (mapping database stores a mapping matrix which includes links between web page information stored within the content database and corresponding advertisements stored within the advertising database – Para. [0049], [0054]-[0056]; classify information according to categories, themes, taxonomy – Para. [0047], [0048], [0050], [0051], [0053], [0056]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]);

generating a deep-linked ad utilizing a universal variable map, the deep-linking ad linking one or more of a first set of identifiers used by a first site or application with one or more of a second set of identifiers used by a second site or application (incorporate an advertisement in to a web page using a mapping database linking webpage content information to advertisement information where the analyzed webpage content includes analyzing various page parameters and structure of the analyzed document, such as, for example, page ancestors, anchor text metadata, publisher entity associated with each respective web page, and any other features or additional data related to the web pages and the analyzed advertisement information is associated

with parsing the advertisement and analyzing various advertisement parameters such as text of each advertisement, advertiser entity associated with each respective advertisement, advertiser industry, target page and other features to extract predetermined features - Para. [0029], [0033], [0034], [0045], [0049], [0050], [0054], [0063], [0065], [0080], [0082], Fig. 5; classify both web pages and advertisements within the respective taxonomies – Para. [0053]; mapping database includes a mapping matrix which includes links between web page information and corresponding advertisements – Para. [0049]; mapping database includes advertising tables 540 linked to page tables 530 – Para. [0055]; advertisement including a hyperlink is provided and displayed within a web page where the hyperlink can be a sponsor link, an integrated link, an inside link, or other known link - Para. [0033]; retrieve advertisements that match the mapping information – Para. [0080]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]);

placing the deep-linked ad on a first page of the first site or application (advertisement including a hyperlink is provided and displayed within a web page where the hyperlink can be a sponsor link, an integrated link, an inside link, or other known link - Para. [0033], [0040]),

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device: extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application (the mapping matrix is

learned and populated by aggregating feedback information on click events performed by user entities and by tracking the number of advertisement impressions on particular web pages – Para. [0059]; use prior advertisement/page feedback data for selecting advertisement – Para. [0089]-[0090]; updating the mapping database – Para. [0091]; determine a match in the mapping database based on probability scoring - Para. [0056]-[0059]).

Anagnostopoulos discloses the limitations above including a mapping database using a mapping matrix which includes links between web page information and advertisement information by analyzing web page content including various page parameters, taking cues from the structure of the document being analyzed, parsing the advertisement and analyzing various advertisement parameters such as text of each advertisement, advertiser entity associated with each respective advertisement, advertiser industry, target page and other features to extract predetermined features and using categories, themes and taxonomies to the analyzed web page and advertising information (Para. [0044], [0045], [0047] [0050], [0054], [0065], [0073], [0080], [0082]…e.g., golf, sports, travel – Para. [0057]-[0059], [0080]), but does not explicitly disclose that the extracted web page content and advertising features (i.e., identifiers) are called "field identifiers" although based on the broadest reasonable interpretation the extracted web page content and advertising features describing and specifying various elements of the web page and advertisements are interpreted as identifying fields or parts of the web page and advertisement.

However, Markus teaches the concept of mapping "field identifiers". For example, Markus teaches mapping "non-standard fields" in an electronic form to pre-named fields called "standard fields" in a personal information server (col 7:1-5, col. 8:66-67 and col. 9:1-12, col. 13:56-61).

Markus teaches that a non-standard field name for a person's last name could be "Last Name," "Surname" or simply "Last". Different forms use different variations of names for this field and for other fields. This would be mapped against the privacy bank "standard" field name, which in the described embodiment is "Person-Name.Last." (col. 9:6-12). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicants' invention to modify the mapping teachings of Anagnostopoulos to specify the inclusion of mapping field names as taught by Markus because different websites use different variations of names for various fields (Markus, col. 9:6-12) and being able to further analyze and classify web pages can enhance the probability of providing highly relevant advertisements where the advertisements "match" the web page which is a goal of the Anagnostopoulos reference (Anagnostopoulos, Para. [0006], [0056]).

The combination of Anagnostopoulos and Markus does not explicitly disclose automatically directing the user device to display a second page of the second site or application; and passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

However, Stephens teaches in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application (user clicks on deep-link which takes user to intermediate page containing pre-selected characteristics such as the time, location, and vehicle type – Para. [0056], [0057], [0135], Fig. 2)

automatically directing the user device to display a second page of the second site or application (user clicks on deep-link which takes user to intermediate page such as Choose Vehicle page- Para. [0056], [0057], Fig. 2); and

passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application (values for characteristics such as the time, location, and vehicle type are passed and automatically loaded in intermediate page after user selects deep-link – Para. [0056], [0057], [0135], Fig. 2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combined advertising and mapping teachings of Anagnostopoulos and Markus to include the deep-linking teachings of Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Regarding claim 26, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses comprising: wherein the

plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories (using categories to categorize the taxonomy of web page and advertisement – Para. [0050], [0051], [0053], [0057]-[0059], [0070], [0074], [0080]; matching taxonomy – Para. [0056]; retrieve mapping of web page to advertisements stored within the advertising taxonomy and retrieve advertisements matching categories/taxonomy– Para. [0079], [0080]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]).

Regarding claim 27, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 26 as shown above. Anagnostopoulos further discloses wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application (analyze and extract web page content and advertisement features including metadata (Para. [0050]) to categorize the taxonomy of web page and advertisement – Para. [0050], [0051], [0053], [0057]-[0059], [0070], [0074], [0080]; matching taxonomy – Para. [0056]; retrieve mapping of web page to advertisements stored within the advertising taxonomy and retrieve advertisements matching categories/taxonomy– Para. [0079], [0080]; web page is associated

with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]).

Regarding claim 28, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above including the combination of Anagnostopoulos and Markus teaches the mapping of field identifiers and a universal variable map. Anagnostopoulos further discloses programmatically searched or scanned or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map (mapping database using a mapping matrix which includes links between web page information and advertisement information by analyzing web page content including various page parameters, taking cues from the structure of the document being analyzed, parsing the advertisement and analyzing various advertisement parameters such as text of each advertisement, advertiser entity associated with each respective advertisement, advertiser industry, target page and other features to extract predetermined features and using categories, themes and taxonomies to the analyzed web page and advertising information (Para. [0044], [0045], [0047] [0050], [0054], [0065], [0073], [0080], [0082]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]).).

Regarding claim 29, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above including the combination of Anagnostopoulos and Markus teaches the mapping of field identifiers and a universal variable map. Anagnostopoulos further discloses wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping (determine a match in the mapping database based on probability scoring - Para. [0056]-[0059]; the mapping matrix is learned and populated by aggregating feedback information on click events performed by user entities and by tracking the number of advertisement impressions on particular web pages – Para. [0059]; use prior advertisement/page feedback data for selecting advertisement – Para. [0089]-[0090]; updating the mapping database – Para. [0091]).

Regarding claim 30, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet (mapping database may be implemented as a relational database or implemented as a collection of objects in an object-oriented database– Para. [0055]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]).

Regarding claim 31, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses herein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the first page of the first site or application (the mapping matrix is learned and populated by aggregating feedback information on click events performed by user entities and by tracking the number of advertisement impressions on particular web pages – Para. [0059]; use prior advertisement/page feedback data for selecting advertisement – Para. [0089]-[0090]; updating the mapping database – Para. [0091]; determine a match in the mapping database based on probability scoring - Para. [0056]-[0059]).

Regarding claim 33, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses wherein the user interaction with the deep-linked ad comprises the user explicitly or implicity selecting the deep-linked ad (the mapping matrix is learned and populated by aggregating feedback information on click events performed by user entities and by tracking the number of advertisement impressions on particular web pages – Para. [0059]; use prior advertisement/page feedback data for selecting advertisement – Para. [0089]-[0090]; updating the mapping database – Para. [0091]; determine a match in the mapping database based on probability scoring - Para. [0056]-[0059]).

Regarding claim 34, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses wherein the deep-linked

ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest (advertisement including a hyperlink is provided and displayed within a web page where the hyperlink can be a sponsor link, an integrated link, an inside link, or other known link - Para. [0033], [0040]).

Regarding claim 35, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 25 as shown above. Anagnostopoulos further discloses wherein the user interaction provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map (The page processor 460 further analyzes data associated with, the web page, such as, for example, the page URL and the referrer URL, to extract one or more keywords relevant to the page content. The page classifier 470 is a hardware and/or software module configured to classify the web page and its associated content information into respective categories of a content database 451 in order to increase the page representation for subsequent advertisement matching – Para. [0047]; the mapping matrix is learned and populated by aggregating feedback information on click events performed by user entities and by tracking the number of advertisement impressions on particular web pages – Para. [0059]; use prior advertisement/page feedback data for selecting advertisement – Para. [0089]-[0090]; updating the mapping database – Para. [0091]). Anagnostopoulos does not disclose that the interaction with the deep-linked ad provides the query string. However, Stephens teaches a user using a specified URL with a deep-link that indicates certain items within the URL such as

division name or division URL (Para. [0056], [0057], [0067], [0121], [0132], [0135], Fig. 2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combined advertising and mapping teachings of Anagnostopoulos and Markus to include the deep-linking teachings of Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Regarding claim 36, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 34 as shown above. Anagnostopoulos further discloses identifying a product or service category using the normalized product attributes in the universal variable map; identifying at least one form associated with the product or service category, the at least one form associated with the second site or application; (Para. [0050]) to categorize the taxonomy of web page and advertisement – Para. [0050], [0051], [0053], [0057]-[0059], [0070], [0074], [0080]; matching taxonomy – Para. [0056]; retrieve mapping of web page to advertisements stored within the advertising taxonomy and retrieve advertisements matching categories/taxonomy– Para. [0079], [0080]; web page is associated with golf-related categories of the content taxonomy such as "sports" and "travel"… advertising taxonomy 520 may contain a similar hierarchical representation and may store, for example, advertisements for golf courses, golf apparel, travel trips, luxury watches, at respective nodes within the taxonomy 520 – Para. [0057]-[0059], [0080]). Anagnostopoulos does not disclose populating the at least one form associated with the second site or application with the values extracted or inferred from the query string. However, Stephens teaches a user using a specified URL with a deep-link that indicates

certain items within the URL such as division name or division URL (Para. [0056], [0057], [0067], [0121], [0132], [0135], Fig. 2). Stephens further discloses values for characteristics such as the time, location, and vehicle type are passed and automatically loaded in intermediate page after user selects deep-link – Para. [0056], [0057], [0135], Fig. 2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combined advertising and mapping teachings of Anagnostopoulos and Markus to include the deep-linking teachings of Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Claim 37-41 and 43-46 are directed to the system for performing the method in claims 25-31 and 33-36. Since the combination of Anagnostopoulos, Markus and Stephens teaches the method, the same art and rationale apply to claims 37-41 and 43-46.

Claims 47-50 are directed to the computer program product for performing the method in claims 25, 26, 31 and 33. Since the combination of Anagnostopoulos, Markus and Stephens teaches the method, the same art and rationale apply to claims 47-50.

10. **Claims 32 and 42** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Anagnostopoulos et al., U.S. Patent Application No. 2009/0313127 A1 (hereinafter "Anagnostopoulos") in view of Markus U.S Patent No. 6,490,601 (hereinafter "Markus") and further in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1 (hereinafter

"Stephens") and in further view of Surendran et al., U.S. Patent Application No. 2009/0144124 A1.

Regarding claim 32, the combination of Anagnostopoulos, Markus and Stephens teaches the method of claim 30 as shown above but fails to teach wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click. However, Surendran teaches a method of adding an advertisement to a webpage and wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click (examples of interaction that may initiate presentation of the advertisement include clicking or hovering on the visual object – Para. [0035], [0041]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combined mapping and deep-linking teachings of Anagnostopoulos, Markus and Stephens to include the user interaction teachings of Surendran because it is an example of user interaction that may cause an advertisement to be displayed by sending a message to the web browser that is displaying the web page (Surendran, Para. [0003], [0035], [0041]).

Claim 42 is directed to the system for performing the method in claim 32. Since the combination of Anagnostopoulos, Markus, Stephens and Surendran teaches the method, the same art and rationale apply to claim 42.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Montgomery et al. US 20070061199 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA KARMIS whose telephone number is (571)270-7277. The examiner can normally be reached on Monday - Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter H. Choi can be reached on 571-272-6971. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALISSA KARMIS/
Examiner, Art Unit 3683

/JOHNNA LOFTIS/
Primary Examiner, Art Unit 3683

Notice of References Cited	Application/Control No. 13/308,004	Applicant(s)/Patent Under Reexamination NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0061199	03-2007	Montgomery et al.	705/014
*	B	US-6,490,601	12-2002	Markus et al.	715/207
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q30/02	12/12/2013	AK
G06Q30/0257	12/12/2013	AK
G06Q30/0276	12/12/2013	AK
G06Q30/0277	12/12/2013	AK
G06Q30/00	12/12/2013	AK
G06F17/30864	12/12/2013	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	14.4	12/12/2013	AK

SEARCH NOTES		
Search Notes	Date	Examiner
STIC PLUS Search	12/4/2013	AK
Inventor name search	12/12/2013	AK
EAST keyword search	12/12/2013	AK
Google Scholar keyword search	12/12/2013	AK
EAST keyword search	06/25/2014	AK
EAST keyword search	06/23/2015	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/ALISSA KARMIS/ Examiner.Art Unit 3683	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	8	deep-link$3 with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 14:57
S3	41	spidering with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 13:32
S4	12	("2010/0293221").URPN.	USPAT	ADJ	ON	2013/12/04 14:06
S5	77	(map$3 or link$3) with (attribute or variable) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:10
S6	2115	705/14.4.ccls.	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S7	0	S5 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S8	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S9	1	S6 and S8	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S10	1387	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:17
S11	4	S10 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:18
S12	926	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple near3 site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:19
S13	1979	((map$3 or link$3 or match$3) with (attribute or variable or content or field or context or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S14	8	S6 and S13	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S15	2671	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:25
S16	697	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) near10	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:27

		((multiple or various or several or similar) near3 (site or website or web-site))				
S17	331	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) near10 ((multiple or various or several or similar) near3 (site or website or web-site)) and ((ad or advertisement) with link or URL)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:28
S19	3	("7788245").URPN.	USPAT	ADJ	ON	2013/12/04 14:34
S21	1	("20120030551").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/04 16:31
S23	2	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page) and (populat$3 with (second or other or another))	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:18
S24	108	populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:22
S25	4	pre-populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:23
S27	14	(pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)) and (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:36
S29	8	("7996259").URPN.	USPAT	ADJ	ON	2013/12/05 11:43
S30	1	"5937392".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:46
S31	1	"5960409".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S32	1	"6029141".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S33	1	"6058417".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:51
S34	1	"6330575".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S35	1	"6401075".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S36	1	"6601057".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S37	2	("6061660" | "6334111").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 12:37
S38	66	(ad or advertisement) with (relat$3 or relationship or common or similar) with first with (another or second) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 13:39
S39	5	("20030078832" | "20030229531" | "20040093327" | "20080046429" | "20080059258").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:02
S40	2708	(ad or advertisement) with (relat$3 or similar) with (webpage or website or web-	US-PGPUB;	ADJ	ON	2013/12/05 14:13

		page or web-site)	USPAT			
S41	2599	(ad or advertisement) with (relat$3 or similar) with (webpage or website)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:13
S42	4066	(ad or advertisement) with (relat$3 or similar or associat$3) with (webpage or website)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:14
S44	0	("2009/0313127").URPN.	USPAT	ADJ	ON	2013/12/05 15:12
S45	676	(ad or advertisement) with (common or alternative) with (keyword or text)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S46	171	(ad or advertisement) with (common or alternative) with (keyword or text) with (match$3 or link$3)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S47	11	("2002/0107882").URPN.	USPAT	ADJ	ON	2013/12/05 16:17
S48	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	USPAT	ADJ	ON	2013/12/05 16:18
S50	1	("20070239494").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/06 11:31
S51	56	("20020010639" | "20020087367" | "20020169643" | "20030040944" | "5715453" | "20020194037" | "20040030593" | "20050246275" | "20100106623" | "3665397" | "20020133430" | "20060190314" | "20020186144" | "20020087367" | "20020165735" | "20070239494" | "20020077871" | "20070094055" | "20070179819" | "20020010604" | "20020007327" | "20040148179" | "20010034723" | "20020065688" | "20030004761" | "20040006498" | "20040010338" | "5289369" | "6477503" | "20030158761" | "20020198758" | "20030046117" | "20040030593" | "20050216139" | "20050246275" | "6711548" | "20020165735" | "20070198311" | "20070239494" | "20020007327" | "20030061145" | "20040148179" | "20020069093" | "20020184041" | "20100106608" | "6519576" | "7124096" | "7769601" | "20040107144" | "7617136" | "20050216139" | "20020186144" | "20010056363" | "4965821" | "5253166" | "5389773" | "6360254" | "6539424" | "6757710" | "20030061145" | "20030195811" | "20030195811" | "20070198311" | "20030061146" | "20070027708" | "5066853" | "7050986" | "8108231").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 11:33
S54	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 16:59

S55	6135	(universal or common or general) with (term or variable or text) with (map or database)	US-PGPUB; USPAT	ADJ	ON	2013/12/11 11:43
S58	190	("2005/0222989").URPN.	USPAT	ADJ	ON	2013/12/11 12:04
S59	19	((deep adj link$3) or deep-link$3) with (ad or advertisement) and hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/11 16:32
S61	53	(select$3 or activat$3 or interact$3) near5 (ad or advertisement) near5 hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/11 16:40
S62	1278	spidering	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S63	126	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S64	27	pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:49
S65	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:52
S66	3618	G06Q30/02.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S67	0	G06Q30/0257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S68	0	G06Q30/0277.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S69	0	G06Q30/0276.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S70	0	G06Q30/0276.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S71	1502	G06F17/24.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S72	0	G06F17/30864.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S73	0	G06F17/30864.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S74	26673	G06Q30/00.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S75	0	G06Q30/257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:06
S76	33	((deep adj link$3) or deep-link$3) with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:09

S77	1574	G06Q30/02.CLPP. and ad	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:10
S78	0	G06Q30/02.CLPP. and (deep-link$3 adj (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:10
S79	0	G06Q30/02.CLPP. and (deep-link$3 near5 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S80	0	G06Q30/02.CLPP. and (deep-link$3 near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S81	723	G06Q30/02.CLPP. and (link near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S82	500	G06Q30/02.CLPP. and (link near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S83	69	G06Q30/02.CLPP. and (link near3 (ad or advertisement)) and hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S84	0	G06F17/30864.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:13
S85	0	G0630/00.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:14
S86	122355	(map$3 or link$3) with (attribute or variable)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:20
S87	122355	(map$3 or link$3) with (attribute or variable or (programming adj container))	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S88	1	(map$3 or link$3) same (programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S89	55	(programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S90	346	(program$4 adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S91	4	(programming adj container) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:52
S92	2493	(program$4 near3 (container or variable)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:52
S93	2215	(program$4 near3 (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S94	333	(program$4 adj (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S95	47	((program$4 adj (container or variable)) same (link$3 or map$4)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53

S96	675	(map$3 or link$3) with (form or field or (site adj map) or header or tag) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:02
S97	23	((map$3 or link$3) with (form or field or (site adj map) or header or tag) with multiple with site) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:02
S98	12	((map$3 or link$3 or match$3) with (field or (site adj map) or header or tag) with multiple with site) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:08
S99	27	("2008/0010142").URPN.	USPAT	ADJ	ON	2014/06/24 12:39
S100	2	("2012/0123859").URPN.	USPAT	ADJ	ON	2014/06/24 12:56
S101	214	indexing near3 (website or (web adj site) or web-site)	USPAT	ADJ	ON	2014/06/24 13:04
S102	75	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	USPAT	ADJ	ON	2014/06/24 13:05
S103	194	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S104	194	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S105	91	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S106	68	(advertising or advertisement) and ((first same second same page same site) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:28
S107	92	(advertising or advertisement) and ((first same second same (page or webpage or (web adj page) or web-page) same (site or website or (web adj site) or web-site)) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:29
S108	1	("20080201220").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/24 16:57
S109	1825	((generat$5 or creat$5) with (ad or advertisment) with (field or category))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:53
S110	996	S109 and ((map or mapping))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S111	355	S110 and ((tavel or plane or airplane or flight) same (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S112	330	S111 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S113	430	((map or mapping) with (ad or advertisement) with (category or field or container))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57

S114	155	S113 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57
S115	484	S110 and ((travel or plane or airplane or flight) same (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:16
S116	443	S115 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:16
S117	69	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:19
S118	5	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:20
S119	5	(standardiz$5 or normaliz$5) with (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:20
S120	0	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S121	34	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S122	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/29 23:23
S123	2	(standardiz$5 or normaliz$5) near5 (field or form or section) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:34
S124	3	(standardiz$5 or normaliz$5) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:35
S125	4	(similar or similarities) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:37
S126	4	((similar or similarities) near5 (field or form or section or tag or header or (site adj map))) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:38
S127	10037	similar near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S128	102	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S129	47	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:48
S130	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/30 01:00
S131	30	common near3 (field or section) near3	US-	ADJ	ON	2014/06/30

		(website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	PGPUB; USPAT			01:19
S132	8	("7865414").URPN.	USPAT	ADJ	ON	2014/06/30 01:25
S133	11118	(advertising or advertisement) near5 (match$3 or map$4)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:58
S134	256	(advertising or advertisement) near5 (match$3 or map$4) near5 (field or (search adj box) or header or title or container or box)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:59
S135	100	S134 and "705".clas.	US-PGPUB; USPAT	ADJ	ON	2014/06/30 03:01
S136	24	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29
S137	19	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29
S138	25	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:32
S139	36	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:35
S140	19963	(ad or advertisement or advertising) near5 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S141	15598	(ad or advertisement or advertising) near3 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S142	73	(ad or advertisement or advertising) near3 link same (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S143	21	(ad or advertisement or advertising) near3 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S144	39	(ad or advertisement or advertising) near10 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S145	403	(ad or advertisement or advertising) near10 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S146	243	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S147	175	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page)) and (map$4 or match$3)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:10
S148	23	(ad or advertisement or advertising) near5 link with ((similar or common or related)	US-PGPUB;	ADJ	ON	2014/06/30 07:10

		near5 (website or site or web-site or webpage or web-page)) same (map$4 or match$3)	USPAT			
S149	1	("20090144124").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/30 11:45
S150	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) with (field near3 (name or description or identifier)) with mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:29
S151	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) with (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:29
S152	0	advertis$5 with based with (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S153	0	advertis$5 with based same (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S154	0	advertis$5 same based same (website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S155	0	advertis$5 same based same (webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S156	164	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:30
S157	0	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping same advertis$5	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:31
S158	62	(webpage or website or web-site or (web adj site) or (web adj page)) same (field near3 (name or description or identifier)) same mapping and advertis$5	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:31
S159	82	(webpage or website or web-site or (web adj site) or (web adj page)) with map$4 with (field near3 (name or description or identifier))	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:37
S160	73	S159 not S158	US-PGPUB; USPAT	ADJ	ON	2014/10/07 12:38
S161	1	("20100312667").PN.	US-PGPUB; USPAT	OR	OFF	2014/10/07 13:00
S162	2184	mapping with (field near3 (label or tag or identifier or name))	US-PGPUB; USPAT	ADJ	ON	2014/10/07 14:55
S163	9	mapping with (field near3 (label or tag or identifier or name)) and (match$3 near5	US-PGPUB;	ADJ	ON	2014/10/07 14:55

		advertis$5)	USPAT			
S164	8	("20080120305" | "6847967" | "6895551" | "20110258535" | "20020156799" | "20110093773" | "6601066" | "20110119220" | "6601066" | "6847967").PN.	US-PGPUB; USPAT	ADJ	ON	2015/02/17 10:47
S165	171	map$4 near5 field near5 ((web adj site) or website or webpage or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/02/17 11:04
S166	13	map$4 near5 label near5 ((web adj site) or website or webpage or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/02/17 11:25
S167	3319	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:32
S168	2975	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and (link$3 or hyperlink)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:37
S169	1285	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and (link$3 or hyperlink) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:38
S170	958	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:40
S171	490	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (populat$3 or pre-populat$3) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:42
S172	39	map$4 same (field or label) same((web adj site) or website or webpage or (web adj page)) and ((link$3 or hyperlink) same (field or label)) and (populat$3 or pre-populat$3) and (advertisement or advertising) and vertical and heuristic	US-PGPUB; USPAT	ADJ	ON	2015/02/17 16:45
S173	96	("5905862").URPN.	USPAT	ADJ	ON	2015/02/18 16:43
S174	8669	(match$3 or map$4) near5 (field near3 (identifier or name or ID))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:03
S175	697	(match$3 or map$4) near5 (field near3 (identifier or name or ID)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:04
S176	243	(match$3 or map$4) near5 (field near3 (identifier or name or ID)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site))) and advertising	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:05
S177	309	(match$3 or map$4) near5 (field near3 (identifier or name or ID or defin$5)) and (link$3 near5 (webpage or (web adj page) or website or (web adj site))) and advertising	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:14

S178	800	semantic adj map$4	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:19
S179	4	semantic adj map$4 and (field adj (identifier or ID))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:19
S180	0	("2011/0016228").URPN.	USPAT	ADJ	ON	2015/04/24 09:28
S181	10	semantic adj map$4 and (field adj (identifier or ID or descript$3))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:30
S182	2	semantic adj map$4 adj dictionary and (field adj (identifier or ID or descript$3))	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:36
S183	2	semantic adj map$4 adj dictionary	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:37
S184	0	semantic adj map$4 and map$4 near4 data near4 field near4 (descrip$3 or identifier or definition)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:38
S185	7	semantic adj map$4 and map$4 with data with field with (descrip$3 or identifier or definition)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 09:38
S186	0	advertising with using with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:11
S187	3	(advertising or advertisement or (deep near3 ad)) with (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:12
S188	3	(advertising or advertisement or ad) with (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:14
S189	17	(advertising or advertisement or ad) same (us$3 or based) with (semantic adj map$4)	US-PGPUB; USPAT	ADJ	ON	2015/04/24 10:15
S190	52	("2010/0063880").URPN.	USPAT	ADJ	ON	2015/04/24 10:16
S191	439	map$4 same (field adj identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S192	3	map$4 same (field adj identifier) and (link$3 near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S193	73	map$4 same (field near4 identifier) and (link$3 near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:13
S194	666	map$4 same (field near4 identifier) and (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:15
S195	190	map$4 same (field near4 identifier) and ((ad or advertisement) same identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:15
S196	281	map$4 same (field near4 (ID or identifier)) and ((ad or advertisement) same identifier)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:17
S197	342	map$4 same (field near4 (ID or identifier or name)) and ((ad or advertisement)	US-PGPUB;	ADJ	ON	2015/06/22 18:18

		same (field near4 (ID or identifier or name)))	USPAT			
S198	52	map$4 near10 (field near4 (ID or identifier or name)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:18
S199	1	("6490601").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 18:21
S200	128	map$4 same (field near4 (ID or identifier or name)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:23
S201	128	map$4 same (field near4 (ID or identifier or names)) and ((ad or advertisement) near20 (field near4 (ID or identifier or name)))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:23
S202	932	map$4 same (field near4 (ID or identifier or names)) and ((ad or advertisement) same link$3)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 18:24
S203	1	("20050144048").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 18:29
S204	337	("20010011250" | "5537586" | "5987440" | "6192380" | "6199079" | "6327598" | "6345278").PN. OR ("6490601").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2015/06/22 23:08
S205	113	(ad or advertis$5) same (semantic adj (match$3 or map$4))	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:31
S206	1	("20110016228").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:38
S207	1	("20100070448").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:39
S208	1	("20100063880").PN.	US-PGPUB; USPAT	OR	OFF	2015/06/22 23:43
S209	2	("6718551" | "7752642").PN.	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:47
S210	12	(webpage or (web adj page)) near3 content with (field adj name)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:51
S211	15	(webpage or (web adj page) or website or (web adj site)) near3 content with (field adj name)	US-PGPUB; USPAT	ADJ	ON	2015/06/22 23:53
S212	16	(map$3 or link$3 or match$3) same (common or universal or global) same (field near3 (name or identifier or label)) same (plurality or multiple) near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:06
S213	23	(map$3 or link$3 or match$3) same (common or universal or global or standard) same (field near3 (name or identifier or label)) same (plurality or	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:06

		multiple) near5 (website or site or (web adj site) or webpage or page or (web adj page))				
S214	3178	(map$3 or link$3 or match$3) near5 similar near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:10
S215	4035	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:10
S216	10	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 field near5 (website or site or (web adj site) or webpage or page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:11
S217	104	(map$3 or link$3 or match$3 or connect$3) near5 similar near5 (website or site or (web adj site) or webpage or page or (web adj page)) and (map$3 or link$3 or match$3 or connect$3) near5 ((field near3 (name or label or identifier)) or (data adj label))	US-PGPUB; USPAT	ADJ	ON	2015/06/23 00:14
S218	18	("2009/0024718").URPN.	USPAT	ADJ	ON	2015/06/23 00:29
S219	7	deep-link$3 near3 (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 01:44
S221	44	((deep adj link$3) or deep-link$3) with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2015/06/23 01:45

EAST Search History (Interference)

<This search history is empty>

6/23/2015 3:11:19 PM
C:\Users\akarmis\Documents\EAST\Workspaces\13308004-AdLinking2.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015						
	1	✓	✓	-						
	2	✓	✓	-						
	3	✓	✓	-						
	4	✓	✓	-						
	5	✓	✓	-						
	6	✓	✓	-						
	7	✓	✓	-						
	8	✓	✓	-						
	9	✓	✓	-						
	10	✓	✓	-						
	11	✓	✓	-						
	12	✓	✓	-						
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	16	✓	✓	-						
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	18	✓	✓	-						
	19	✓	✓	-						
	20	✓	✓	-						
	21	✓	✓	-						
	22	✓	✓	-						
	23	✓	✓	-						
	24	✓	✓	-						
	25			✓						
	26			✓						
	27			✓						
	28			✓						
	29			✓						
	30			✓						
	31			✓						
	32			✓						
	33			✓						
	34			✓						
	35			✓						
	36			✓						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014	06/23/2015						
	37			✓						
	38			✓						
	39			✓						
	40			✓						
	41			✓						
	42			✓						
	43			✓						
	44			✓						
	45			✓						
	46			✓						
	47			✓						
	48			✓						
	49			✓						
	50			✓						

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO NOTICE OF NON-COMPLIANT AMENDMENT DATED 03/02/2015	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on March 12, 2015.

Shenise Ramdeen

Dear Sir:

This paper is submitted in response to the Notice of Non-Compliant Amendment mailed on March 2, 2015. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Claims begin on page 2 of this paper.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Katharina W. Schuster
Reg. No. 50,000

Date: March 12, 2015

1301 W. 25th Street, Suite 408
Austin, TX 78705
Tel. (512) 637-9220
Fax. (512) 371-9088

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1.-24. (Cancelled)

25. (Previously Presented) A method, comprising:

at a server computer having at least one processor and non-transitory computer memory:

obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet;

mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

26. (Previously Presented) The method according to claim 25, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

27. (Previously Presented) The method according to claim 26, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

28. (Previously Presented) The method according to claim 25, wherein field identifiers are programmatically searched or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map

29. (Previously Presented) The method according to claim 28, wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping

[[29]]30. (Currently Amended) The method according to claim 25, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

[[30]]31. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the first page of the first site or application.

[[31]]32. (Currently Amended) The method according to claim [[29]] 30, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

[[32]]33. (Currently Amended) The method according to claim 25, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

[[33]]34. (Currently Amended) The method according to claim 25, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest.

[[34]]35. (Currently Amended) The method according to claim 25, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

[[35]]36. (Currently Amended) The method according to claim [[33]]34, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the the second site or application; and

populating the at least one form associated with the the second site or application with the values extracted or inferred from the query string.

[[35]]37. (Currently Amended) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

[[36]]38. (Currently Amended) The system of claim [[35]]37, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

[[37]]39. (Currently Amended) The system of claim [[36]]38, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

[[38]]40. (Currently Amended) The system of claim [[35]]37, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

[[39]]41. (Currently Amended) The system of claim [[35]]37, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

[[40]]42. (Currently Amended) The system of claim [[39]]41, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

[[41]]43. (Currently Amended) The system of claim [[35]]37, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

[[42]]44. (Currently Amended) The system of claim [[35]]37, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or an element of interest.

[[43]]45. (Currently Amended) The system of claim [[35]]37, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

[[44]]46. (Currently Amended) The system of claim [[43]]45, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the the second site or application; and

populating the at least one form associated with the the second site or application with the values extracted or inferred from the query string.

[[45]]47. (Currently Amended) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

[[46]]48. (Currently Amended) The computer program product of claim [[45]]47, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

[[47]]49. (Currently Amended) The computer program product of claim [[45]]47, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

[[48]]50. (Currently Amended) The computer program product of claim [[45]]47, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

Electronic Acknowledgement Receipt

EFS ID:	21754359
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Shenise Ramdeen
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	12-MAR-2015
Filing Date:	30-NOV-2011
Time Stamp:	16:49:18
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_CompliantAmendment03-12-15.pdf	869698 63d91a6a3b7d443859c390391ef27600796 86cce	yes	7

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	1	1
	Claims	2	7
Warnings:			
Information:			
	Total Files Size (in bytes):	869698	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/308,004	Filing Date 11/30/2011	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	03/12/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 26	Minus	** 26	=	X $ =	
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/DEBRA R. WYATT/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 03/02/2015

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	

ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
03/02/2015	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No. 13/308,004	Applicant(s) NATH ET AL.
	Examiner ALISSA KARMIS	Art Unit 3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on *31 October 2014* is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☒ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☐ E. Other: _____.
- ☐ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4):

  _____

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **two months** from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action. If any of above boxes 1. to 4. are checked, the correction required is only the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121.

   Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

   Failure to timely respond to this notice will result in:
   Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
   Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

/JOHNNA LOFTIS/ Primary Examiner, Art Unit 3683	/ALISSA KARMIS/ Examiner, Art Unit 3683

Continuation of 4D: The amendment filed on 31 October 2014 is non-compliant because claims 29 and 35 both appear twice. Therefore the claims should be from 25-50 rather than 25-48 as submitted. For this reason the claims are not presented in ascending numerical order. Appropriate correction is required.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO EXAMINER'S INTERVIEW SUMMARY MAILED 10/29/2014	Atty. Docket No. **WAYF1100-1**

First Named Inventor: **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on 11-14-14

Janice Pampell

Janice Pampell

Dear Sir:

In response to the Examiner's Interview Summary mailed October 29, 2014, Applicant respectfully notes that a statement of the substance of the interview was submitted on October 31, 2014 with the Reply to Office Action dated July 2, 2014. See "Interview Summary", page 10 of the Reply. In addition, the Examiner indicates on the Applicant-Initiated Interview Summary that the date of the interview was October 1, 2014. Applicant believes this is a typo. The date of the interview was on October 7, 2014.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Katharina W. Schuster
Reg. No. 50,000

Date: Nov. 14, 2014

1301 W. 25th Street, Suite 408
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Electronic Acknowledgement Receipt

EFS ID:	20701948
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Janice Pampell
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	14-NOV-2014
Filing Date:	30-NOV-2011
Time Stamp:	15:08:26
Application Type:	Utility under 35 USC 111(a)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant summary of interview with examiner	WAYF1100-1_Reply_to_Int_Summ_Mailed_10-29-14.pdf	624879 cac3ae81fdf8c1569ad25c8d7ebf682f4f124a7e	no	1

Warnings:	
Information:	

Total Files Size (in bytes):	624879

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 07/02/2014	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on October 31, 2014.

Delia Narvaiz

This paper is submitted in response to the Official Action mailed on July 2, 2014 and the Examiner Interview held on October 7, 2014. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims begin on page 3 of this paper.

Remarks begin on page 10 of this paper.

AMENDMENTS TO THE SPECIFICATION:

Please amend paragraph [0109] of the Specification as follows:

[0109] As used herein, the terms "comprises," "comprising," "includes," "including," "has," "having," or any other variation thereof, are intended to cover a non-exclusive inclusion. For example, a process, product, article, or apparatus that comprises a list of elements is not necessarily limited only those elements but may include other elements not expressly listed or inherent to such process, ~~process~~product, article, or apparatus.

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1.-24. (Cancelled).

25. (New) A method, comprising:

at a server computer having at least one processor and non-transitory computer memory:

obtaining or inferring a plurality of explicit or implicit field identifiers from a plurality of sites or applications on the Internet;

mapping the plurality of field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of field identifiers used by a first site or application with one or more of a second set of field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of field identifiers used by the first site or application to the correspondingly linked one or more of the second set of field identifiers used by the second site or application such that one or more fields on the second page are explicitly or implicitly pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

26. (New) The method according to claim 25, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

27. (New) The method according to claim 26, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

28. (New) The method according to claim 25, wherein field identifiers are programmatically searched or scanned or received or gathered or inferred by content and mapped to normalized variables in the universal variable map

29. (New) The method according to claim 28, wherein the programmatic mapping of field identifiers to normalized variables in the universal variable map is based on heuristic patterns of typical forms and field identifiers on the Internet, the heuristic patterns being adaptable based on the accuracy of mapping

29. (New) The method according to claim 25, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

30. (New) The method according to claim 25, wherein the deep-linked ad is generated or refined based on information provided by a user's implicit action on the first page of the first site or application.

31. (New) The method according to claim 29, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

32. (New) The method according to claim 25, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

33. (New) The method according to claim 25, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or any element of interest.

34. (New) The method according to claim 25, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

35. (New) The method according to claim 33, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the the second site or application; and

populating the at least one form associated with the the second site or application with the values extracted or inferred from the query string.

35. (New) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

36. (New) The system of claim 35, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

37. (New) The system of claim 36, wherein selecting a vertical, sub-vertical or product or service category of the plurality of verticals, sub-verticals or product or service categories comprises examining meta tags associated with a site or application.

38. (New) The system of claim 35, wherein the universal variable map comprises a database containing classes and instances of products and services searchable on the Internet.

39. (New) The system of claim 35, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

40. (New) The system of claim 39, wherein the user's implicit action comprises the user hovering over a target of interest on the first page of the first site or application.

41. (New) The system of claim 35, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

42. (New) The system of claim 35, wherein the deep-linked ad is displayed on the first page of the first site or application as a product ad, a banner, an icon, an animated ad, a text ad, a check box, a link, a form, a video clip, or an element of interest.

43. (New) The system of claim 35, wherein the user interaction with the deep-linked ad provides a query string, wherein the extracting or inferring includes parsing the query string, and wherein the values extracted or inferred from the query string are used to identify normalized product attributes in the universal variable map.

44. (New) The system of claim 43, further comprising:

identifying a product or service category using the normalized product attributes in the universal variable map;

identifying at least one form associated with the product or service category, the at least one form associated with the the second site or application; and

populating the at least one form associated with the the second site or application with the values extracted or inferred from the query string.

45. (New) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by at least one processor to perform:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implicit field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

46. (New) The computer program product of claim 45, wherein the plurality of sites or applications is categorized by a plurality of verticals, sub-verticals or product or service categories, and wherein generating the deep-linked ad comprises selecting one or more verticals, sub-verticals or product or service categories of the plurality of verticals, sub-verticals or product or service categories.

47. (New) The computer program product of claim 45, wherein the deep-linked ad is generated or refined based on contextual information provided by a user's implicit action on the first page of the first site or application.

48. (New) The computer program product of claim 45, wherein the user interaction with the deep-linked ad comprises the user explicitly or implicitly selecting the deep-linked ad.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed July 2, 2014 ("Office Action") and the Examiner interview held on October 7, 2014. To expedite the prosecution, claims 1-24 are cancelled herein without prejudice or disclaimer. Claims 25-48 are newly added. Support for the amendments presented herein may be found at least from ¶¶ 15, 23, 52-61, 65, 78, 80, 89, 91, 94, 96, and 97 of the Specification as originally filed. The amendments are made without any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. This Reply encompasses a bona fide attempt to address the rejections raised and suggestions made by the Examiner and place the present application in condition for allowance. Claims 25-48 recite subject matter not reached by the art of record and are therefore allowable. Accordingly, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Interview Summary

Pursuant to an Applicant Initiated Interview Request, a telephonic interview was conducted on October 7, 2014 between Examiner Alissa D. Karmis, Inventor Narendra Nath, and the undersigned. During the interview, Applicant provided an overview of the invention, distinguished the cited art, and proposed amendments to the claims. Examiner Karmis indicated that amendments to the claims as proposed by Applicant may sufficiently overcome the current rejections, although an updated search might be required. Applicant appreciates the time and effort taken by Examiner Karmis to review Applicant's present application and discuss the pending claims, the cited art, and "the art" of distinguishing the current claims.

Rejections under 35 U.S.C. § 101

Claims 1-24 were rejected under 35 U.S.C. § 101. Claims 1-24 are cancelled herein, rendering this rejection moot. Accordingly, withdrawal of this rejection is respectfully requested.

Applicant respectfully submits that new claims 25-48 involve a computer in a significant and/or meaningful way. For example, claim 25 recites a server computer having at least one processor and non-transitory computer memory, the server computer performing a method comprising:

obtaining or inferring a plurality of explicit or implicit field identifiers or product or service attributes from a plurality of sites or applications on the Internet;

mapping the plurality of explicit or implicit field identifiers via normalized variables to thereby create a universal variable map, the mapping arbitrarily linking the explicit or implicit field identifiers of the plurality of sites or applications;

generating a deep-linked ad utilizing the universal variable map, the deep-linked ad linking one or more of a first set of explicit or implicit field identifiers used by a first site or application with one or more of a second set of explicit or implicit field identifiers used by a second site or application;

placing the deep-linked ad on a first page of the first site or application; and

in response to user interaction with the deep-linked ad on the first page of the first site or application on a user device:

extracting or inferring, from the user interaction with the deep-linked ad on the first page of the first site or application, values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application;

automatically directing the user device to display a second page of the second site or application; and

passing the values corresponding to the one or more of the first set of explicit or implicit field identifiers used by the first site or application to the correspondingly linked one or more of the second set of explicit or implict field identifiers used by the second site or application such that one or more fields on the second page are pre-populated with the values extracted or inferred from the user interaction with the deep-linked ad on the first page of the first site or application.

Accordingly, the claimed server computer performs meaningful, tangible functions and transforms an inventive concept into a patent eligible invention. The rationale applies *mutatis mutandis* to claims 26-48. Accordingly, claims 25-48 are patent eligible under 35 U.S.C. § 101.

Rejections under 35 U.S.C. § 103

Claims 1-6, 9 and 11-23 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2009/0024718 ("Anagnostopoulos") in view of U.S. Patent Application Publication No. 2007/0239494 ("Stephens").

Claims 7 and 8 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Anagnostopoulos in view of Stephens and further in view of U.S. Patent Application Publication No. 2008/0046313 ("Chen").

Claims 10 and 24 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Anagnostopoulos in view of Stephens and further in view of U.S. Patent Application Publication No. 2009/0144124 ("Surendran").

Claims 1-24 are cancelled herein, rendering this rejection moot. Accordingly, withdrawal of this rejection is respectfully requested.

New Claims 25-48

Claims 25-48 are newly added. Support for new claims 25-48 may be found at least from ¶¶ 15, 23, 52-61, 65, 78, 80, 89, 91, 94, 96, and 97 of the Specification as originally filed.

As submitted during the October 7, 2014 Examiner interview, embodiments as claimed are directed to a specific implementation of a universal variable map that is not disclosed or suggested by the art of record. Table 1, reproduced below, shows one embodiment of the universal variable map:

Web Sites	xxx.com	yyy.net	zzz.org	...	Normalized Variables
Variable 1	Orig	Depart_City	From	...	from
Variable 2	Dest	Arrival_City	To	...	to
Variable 3	...	...	...	...	...
...	...	...	...	...	...

Specifically, Table 1 shows at least three websites (e.g., sites xxx.com, yyy.net, zzz.org) that are grouped together purely because they have similar field identifiers (also referred to as programming containers). In this example, xxx.com has a set of programming containers "Orig," "Dest," etc., yyy.net has a set of field identifiers "Depart_City," "Arrival_City," etc., and zzz.org has

a set of field identifiers "From," "To," etc. These sets of field identifiers are obtained or inferred from their respective websites and are mapped to each other in the universal variable map, as illustrated in Table 1.

For example, for Variable 1, "Orig" of xxx.com is mapped to "Depart_City" of yyy.net which is mapped to "From" of zzz.org, etc. These field identifiers all contain the exact same information (which, in this example, is the departure location of a flight) and that information can be passed from site to site without any prior relationship between the sites. This enables a fundamental advance in the utility of the Internet, because now consumers can search for something to buy once, and then have their specific search details passed from site to site without them needing to re-type it, even if the sites themselves have no relationships or are not associated in any way. This invention thus is able to transform the entire Internet into one giant shopping mall where all online stores can communicate, via the claimed invention, with one another without the user having to re-notify each store about what they want.

As specific example, an implementation detail in Table 1 that is not disclosed or suggested by the art of record is that the field identifiers are not directly mapped to each other because that would make the universal variable map exponential in size. Instead, the field identifiers from various websites and/or applications all map to a single normalized variable each. For instance, "Orig" from xxx.com, "Depart_City" from yyy.net, and "From" from zzz.org all map to a single normalized variable "from" in Table 1.

In this way, the universal variable map provides a very tangible computer implementation that matches field identifiers with each other in a precisely structured manner in a database to transform how the Internet is utilized, making it significantly more meaningful and tangible than an abstract idea. No prior art deals with mapping field identifiers to one another in such a structured manner to accomplish such a major utility for users of the Internet.

Another feature that is not disclosed or suggested by the art of record relates to the range of mechanisms for programmatically creating and populating the universal variable map. Again, unlike the art of record, the invention is directed to the programmatic generation of programming container (field identifier) maps. For example, paragraph [0057] of the Specification describes one embodiment of a method of generating field identifier names through forms of search data on sites. Paragraph [0059] describes how to use the URL of a site to determine various field identifiers. Paragraph [0060] describes how to perform a simulated user request on the site, and from that programmatically parses the names of the field identifiers, where field identifier names

are not explicitly available on a page. Paragraph [0061] describes how field identifier names may be implicitly imputed from filtering options provided by a site if no explicit fields exist. All of these techniques are very specific implementations that have never been claimed before, and now can bring a substantial technology advance to the Internet.

As distinguished during the October 7, 2014 Examiner interview, prior approaches such as Angnostopoulos focus on mapping visible, static content on web pages for ad targeting. Contrastingly, embodiments as claimed are directed to mapping field identifiers for dynamic content. The field identifier names are computer programming elements – they are not visible to consumers who visit websites. Rather, these computer programming elements (containers) contain information that consumers type in or select when they visit sites such as one illustrated above. Linking these field identifiers with the appropriate corresponding field identifiers Internet-wide is a daunting challenge that has not been addressed in the prior art, and enables a very powerful ability to transmit consumers' commerce request specifics from arbitrary site to arbitrary site with no pre-existing relationship between each other, without requiring consumers to re-enter data as they have they do today without this invention.

Figure 9, reproduced below, further illustrates a specific example implementation of the universal variable map in the context of auto purchases.

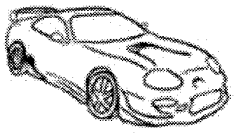
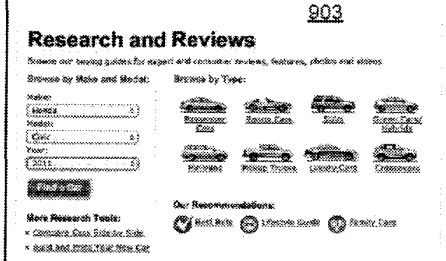
<table>
<tr><td>PRODUCT
901
  </td><td>FORM
903
 
</td></tr>
<tr><td>PRODUCT ATTRIBUTES
911
Vertical - Automotive
Make – CarManufacturer
Model – SuperSport
Year - 2011</td><td>FORM SOURCE CODE AND DATA
913
<form name="crpWidget" id="crpWidget" method="get"
onsubmit="goToResearch()">
<label for="makeid">Make:</label>
<select name="makeid" id="makeid" onchange="popModels();"></select>
<label for="modelid">Model:</label>
<select name="modelid" id="modelid" onchange="popYears();"></select>
<label for="year">Year:</label>
<select name="year" id="year"></select>
<!-- button -->
<a class="button primary" href="javascript:void(0)"
onclick="s_objectID="Find a Car_1";return
this.s_oc?this.s_oc(e):true">Find a Car
</form></td></tr>
</table>

FIG. 9

Here, Form 903 represents a website form with which a product 901 can be searched for. As submitted above, prior systems are directed to processing the visible, static content of pages on Form 903, for instance text strings like "Research and Reviews", "Browse our buying guides for expert and consumer reviews, featuresm photos and videos", "Passenger Cars", "Sports Cars", etc. The information "Honda," "Civic," and "2011" is entered by consumers in real-time, so the information is available to the host site (the site where Form 903 is hosted) but not actionable to ad systems (the systems that provide ads to the host site).

Contrastingly, according to embodiments and as illustrated in Figure 9, the form source code corresponding to Form 903 can be parsed and the (invisible) field identifiers corresponding to the (visible) data entry fields can be determined. In this case, the field identifier names "makeid," "modelid," and "year" are determined to correspond with the data entry fields "Make," "Model," and "Year." Again, these field identifiers are mapped, via the universal variable map, to the field identifiers of other websites or applications on the Internet, thereby enabling the user submitted values (e.g., "Honda," "Civic," and "2011") to be passed arbitrarily from site to site in the right locations without any prior relationship between them.

Yet another distinction of the claimed invention is that, unlike prior art, a deep-linked ad is not selected from pre-existing ads, but is actually generated at ad serving time. This is because the deep-linked ad may be dependent on information provided in real-time from the field identifiers to generate or act upon the creation of the deep-linked ad. In some embodiments, a deep-linked ad does not exist before an ad request was generated, and is created in real-time using the field identifier data passed thereto. This is not possible with any of the art of record at least because they lack a universal variable map and hence its contained data, as disclosed and claimed in the instant application.

Conclusion

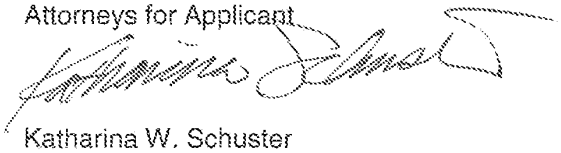
Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims 26-48. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

An extension of one (1) month is requested and a Notification of Extension of Time Under 37 C.F.R. § 1.136 with the appropriate fee is enclosed herewith.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant



Katharina W. Schuster
Reg. No. 50,000

Date: October 30, 2014

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
NOTIFICATION OF EXTENSION OF TIME UNDER 37 C.F.R § 1.136	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

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Delia Narvaiz

Applicant hereby takes an Extension of Time for responding to the Office Action date mailed July 2, 2014 for a period of one (1) month.

		Small Entity	*Large Entity*
X	First Month	$ 100.00	$ 200.00
	Second Month	$ 300.00	$ 600.00
	Third Month	$ 700.00	$ 1,400.00
	Fourth Month	$ 1,100.00	$ 2,200.00
	Fifth Month	$ 1,500.00	$ 3,000.00
	TOTAL	**$ 100.00**	**$**

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Respectfully submitted,

SPRINKLE IP LAW GROUP

Katharina W. Schuster
Reg. No. 50,000

Date: Oct. 30, 2014
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Electronic Patent Application Fee Transmittal

Application Number:	13308004
Filing Date:	30-Nov-2011
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Filer:	Katharina W. Schuster/Delia Narvaiz
Attorney Docket Number:	WAYF1100-1

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Claims in excess of 20	2202	2	40	80
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt	
EFS ID:	20570023
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Delia Narvaiz
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	31-OCT-2014
Filing Date:	30-NOV-2011
Time Stamp:	09:13:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	7664
Deposit Account	503183
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees) Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees) Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_ROA_103114.pdf	2183352 b3af1e6c5639b701b0c8b0697dd51a0d8c904e59	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Specification	2	2
	Claims	3	9
	Applicant Arguments/Remarks Made in an Amendment	10	16

Warnings:					
Information:					
2	Extension of Time	WAYF1100-1_EOT.pdf	940065 ff4915fb303a8b316c16edac22411021623c3ad5	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	32293 c5afbd7ae3d3f47f77758eed2400d4dd051913a8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	3155710		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/308,004	Filing Date 11/30/2011	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	10/31/2014	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 26	Minus	** 24	= 2	X $40 =	80
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**80**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/SHAREILL COLES/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 10/29/2014

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	
ART UNIT	PAPER NUMBER
3683	
MAIL DATE	DELIVERY MODE
10/29/2014	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/308,004	NATH ET AL.	
	Examiner	Art Unit	
	ALISSA KARMIS	3683	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ALISSA KARMIS, Examiner*. (3) *NARENDRA NATH, Applicant*.

(2) *KATHARINA SCHUSTER, Applicant's representative*. (4)_____.

Date of Interview: *01 October 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *25*.

Identification of prior art discussed: *Anagnostopoulos 20090024718*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant and Applicant's representative discussed features of the claimed invention and differences with the cited prior art. They also discussed proposed amendments to further clarify what is meant by "programming containers" and to further distinguish how the mapping feature is performed and utilized. Proposed amendments to overcome the 101 rejection were also discussed. No agreement was reached. Upon receipt of an official response, a subsequent review and updated search of prior art will be performed by the Examiner .

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/JOHNNA LOFTIS/ Primary Examiner, Art Unit 3683	/ALISSA KARMIS/ Examiner, Art Unit 3683

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

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PTOL-413A (09-08)
Approved for use through 10/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/308,004 (WAYF1100-1) First Named Applicant: Narendra Nath

Examiner: KARMIS, Alissa D. Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina W. Schuster, Reg. 50000

(3) Narendra Nath (4) _____

Proposed Date of Interview: October 7, 2014 **Proposed Time:** 3 EST ~~AM/PM~~

Type of Interview Requested:

(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 103 Rejection	1,6,9 and 11-23	Anagnostopoulos/Stephens	☐	☐	☐
(2) 103 Rejection	7-8	A/S + Chen	☐	☐	☐
(3) 103 Rejection	10 and 24	A/S + Surendran	☐	☐	☐
(4)			☐	☐	☐

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

Applicant would like to discuss elements not found in the cited prior art and would welcome any claim amendment suggestions from the Examiner that would forward prosecution and place the present application in a condition for allowance. Applicant respectfully requests the presence of a Primary Examiner or Supervisory Examiner.

An interview was conduction on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature	Examiner/SPE Signature
Katharina W. Schuster	
Typed/Printed Name of Applicant or Representative	
50,000	
Registration Number, if applicable	

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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sprinkle IP LAW GROUP

FAX COVER SHEET

TO:	**Examiner Alissa D. Kardis** **Art Unit 3683** **Commissioner for Patents**	Fax#: Fax#:	**571-270-8277** **571-273-8300**
		Serial No.	**13/308,004**
FROM:	**Katharina W. Schuster (dn)** **Sprinkle IP Law Group** **Customer No. 44654**	Client Matter #:	**WAYF1100-1**
DATE:	**October 1, 2014**	# of Pages:	**2**
RE:	**Applicant Initiated Interview Request Form**		

Please contact 512.637.9220 if there is a problem with this transmission.

CONFIDENTIALITY NOTICE
This communication is ONLY for the person named above. Unless otherwise indicated, it contains information that is confidential, privileged or exempt from disclosure under applicable law. If you are not the person named above, or responsible for delivering it to that person, be aware that disclosure, copying, distribution or use of this communication is strictly PROHIBITED. If you have received it in error, or are uncertain as to its proper handling, please immediately notify us by telephone and mail the original to us at the above address. Thank you.

1301 W. 25th STREET, SUITE 408
AUSTIN, TX 78705
(o) 512.637.9220 (f) 512.371.9088

PAGE 1/2 * RCVD AT 10/1/2014 2:37:23 PM [Eastern Daylight Time] * SVR:W-PTOFAX-002/5 * DNIS:2738300 * CSID:5123719088 * DURATION (mm-ss):01-05

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 07/02/2014

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	
ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
07/02/2014	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/308,004	Applicant(s) NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *March 17, 2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-24* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-24* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *November 30, 2011* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The following non-final Office action is in response to Applicant's submission filed on March 17, 2014.

Status of the Claims

3. Claims 1-6 and 11-22 have been amended. Claims 1-24 have been reviewed and are pending.

Response to Arguments

4. Applicant's arguments received on March 17, 2014 regarding the rejection of claims 1-24 under 35 U.S.C. 103(a) have been fully considered but are moot in light of the new grounds of rejection detailed below.

Claim Rejections - 35 USC § 101

5. Claims 1-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-24 are directed to a judicial exception (i.e., law of nature, natural phenomenon, or abstract idea), specifically the abstract idea of mapping programming containers and serving ads. After considering all claim elements, it has been determined that the claim(s) at issue are not significantly more than the abstract idea itself. The claim requires no more than a general purpose computer to perform generic computer functions that are well-understood in the art of targeted advertising. After considering all claim elements,

both individually and in combination, it has been determined that the claim does not amount to significantly more than the abstract idea itself or more than a mere instruction to apply the abstract idea. While the claim recites hardware and software elements, such as server computer and mobile application, these limitations are not sufficient to qualify as being "significantly more" than the abstract idea. Further, claims to a system and computer-readable storage medium are held ineligible for the same reason, e.g., the generically-recited computers add nothing of substance to the underlying abstract idea. Therefore, since there are no limitations in the claim that transform the exception into a patent eligible application such that the claim amounts to significantly more than the exception itself, the claims are rejected under 35 USC 101 as being directed to non-statutory subject matter. See *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*

Claim Rejections - 35 USC § 103

6. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1-6, 9, and 11-23** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Anagnostopoulos et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1.

Regarding claim 1, Anagnostopoulos discloses a method comprising:

at a server computer, automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking explicit or implicit programming containers for data across multiple sites and applications (incorporate an advertisement in to a web page using a mapping database linking webpage information including various page parameters, such as, for example, page ancestors, anchor text metadata, publisher entity associated with each respective web page, and other features of the web pages with advertisement information - Para. [0033], [0044], [0045], [0049]-[0051], [0054]-[0056], [0061]-[0065], [0079]-[0082], Fig. 5);

serving the ad on a first page of the first site or mobile application in response to a request, from a browser application running on a user device, the first page containing a first set of programming containers of the first site or mobile application (webpage requested by user contains various page segments and URL for analysis and subsequent matching and serving of advertisements – Para. [0033], [0061]-[0065]), the deep-linked ad containing a reference to a second page, the second page containing a second set of programming containers of a second site or mobile application, the first set of programming containers being arbitrarily linked with the second set of programming containers in the universal variable map (advertisements can be hyperlinks to a sponsor – Para. [0033], mapping database stores associations between the webpage and advertisements – Para. [0044], [0045], [0054]-[0056], [0079]-[0082]);

Anagnostopoulos does not explicitly disclose in response to user interaction with the deep-linked ad on the first page of the first site or mobile application, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from-the user interaction. However, Stephens teaches a webpage containing reservation characteristic fields

and a deep-link displayed on a user computer when the user uses the computer's browser to make a reservation (i.e., request) on the service provider's website - Para. [0007], [0008], [0011], [0056], [0057]). Stephens also teaches the deep-link can be an ad containing a reference to a second or intermediate page containing characteristics linked to the previous page (Para. [0056], [0057]. Stephens also teaches in response to user interaction with the deep-linked ad on the first page of the first site or mobile application, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from-the user interaction (user clicks on deep-link which takes user to intermediate page containing pre-selected characteristics selected by the user – Para. [0007], [0008], [0056], [0057]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify Anagnostopoulos's incorporation of advertisement hyperlinks into a website to include the deep-linking teachings of Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Regarding claim 2, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above. Anagnostopoulos further discloses comprising: programmatically receiving or gathering or inferring by content the programming containers across the multiple sites and applications (webpage content information analyzed including page segments and URL – Para. [0044], [0045], [0050], [0061-[0065], [0082]).

Regarding claim 3, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above. Anagnostopoulos further discloses associating each of the programming containers with a normalized programming container in the universal map (webpage content information analyzed including page segments and URL and associating classifications of the website and advertisements in the mapping database – Para. [0047]-[0051],[0055]-[0059], [0061-[0065], [0068]-[0070], [0072]-[0082]).

Regarding claim 4, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above. Anagnostopoulos further disclose wherein the programming containers comprises a composite text string, further comprising: mapping data in the composite text string to a set of non-composite containers in the universal variable map (extracting text, analyzing, and mapping - Para. [0076]-[0082]).

Regarding claim 5, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above. Anagnostopoulos further discloses determining correspondence between the programming containers and normalized programming containers in the universal variable map utilizing heuristics (determine a match in the mapping database based on probability scoring - Para. [0054], [0056], [0058], [0059]).

Regarding claim 6, the combination of Anagnostopoulos and Stephens teaches the method of claim 5 as shown above. Anagnostopoulos further discloses refining the correspondence

between the programming containers and the normalized programming containers in the universal variable map (optimize selected advertisements by filtering – Para. [0088]-[0092]).

Regarding claim 9, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above. Anagnostopoulos does not explicitly disclose wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry. However, Stephens teaches wherein the user interaction involves only a single click without data entry by the user (user selects deep-link to jump to another webpage; user can bypass at least one data entry task of the website – Para. [0056]. Stephens also teaches wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry (webpage includes a deep-link to another webpage for a promotional offer; alleviating users from submitting one or more reservation characteristics – Para. [0057]-[0062]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify Anagnostopoulos's serving of advertisements to include user interaction as taught by Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Claims 11-16 are directed to the computer program product for performing the method in claims 1-6. Since the combination of Anagnostopoulos and Stephens teaches the method, the same art and rationale apply to claims 11-16.

Claim 17-23 are directed to the system for performing the method in claims 1-6 and 9. Since the combination of Anagnostopoulos and Stephens teaches the method, the same art and rationale apply to claims 17-23.

8. **Claims 7 and 8** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Anagnostopoulos et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1 and further in view of Chen U.S. Patent Application No. 2008/0046313 A1.

Regarding claim 7, the combination of Anagnostopoulos and Stephens teaches the method of claim 6 as shown above. Anagnostopoulos fails to teach wherein the refining further comprises adjusting a weight assigned to at least one of the heuristics. However, Chen teaches a method of serving relevant advertisements in which a weight assigned to at least one of the heuristics is adjusted (weighting could be adjusted for approaches in determining correspondence - Para. [0048]-[0057]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the advertisement mapping as taught by Anagnostopoulos to include weighting as taught by Chen in order to determine which advertisements are relevant to the target page and may be presented on the web browser (Chen, Para. [0053], [0057]).

Regarding claim 8, the combination of Anagnostopoulos and Stephens teaches the method of claim 6 as shown above. Anagnostopoulos fails to teach wherein the refining further comprises creating new heuristics and weights associated therewith. However, Chen teaches a method of serving relevant advertisements and creating new heuristics and weights (terms in these fields can be added to the topic list or be given higher weight; the weighting could be adjusted to give lower weight to terms that appear in a collection of low-quality terms – Para. [0048]-[0057]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the advertisement mapping as taught by Anagnostopoulos to include the weighting teachings of Chen in order to determine which advertisements are relevant to the target page and may be presented on the web browser (Chen, Para. [0053], [0057]).

9. **Claims 10 and 24** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Anagnostopoulos et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1 and further in view of Surendran et al., U.S. Patent Application No. 2009/0144124 A1.

Regarding claim 10, the combination of Anagnostopoulos and Stephens teaches the method of claim 1 as shown above but fails to teach wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click. However, Surendran teaches a method of adding an advertisement to a webpage and wherein the user interaction

involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click (examples of interaction that may initiate presentation of the advertisement include clicking or hovering on the visual object – Para. [0035], [0041]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the advertisement teachings of Anagnostopoulos and Stephens to include the user interaction teachings of Surendran in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

Claim 24 is directed to the system for performing the method in claim 10. Since the combination of Anagnostopoulos/Stephens/ Surendran teaches the method, the same art and rationale applies to claim 24.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Darin et al., U.S. 2011/0099077 A1 System and method for providing storage, retrieval, customization, adaptation, distribution and management of electronic advertisements.
- Gupta, U.S. 2012/0123859 A1 Online Advertising with Enhanced Publisher Involvement
- Berger et al., U.S. 2008/0301562 A1 Systems and methods for accelerating access to web resources by linking browsers

- O'Brien et al., U.S. 2008/0010142 A1 On-line marketing optimization and design method and system

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA KARMIS whose telephone number is (571)270-7277. The examiner can normally be reached on Monday - Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter H. Choi can be reached on 571-272-6971. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALISSA KARMIS/
Examiner, Art Unit 3683

/JOHNNA LOFTIS/

Primary Examiner, Art Unit 3683

Notice of References Cited	Application/Control No. 13/308,004	Applicant(s)/Patent Under Reexamination NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2009/0024718	01-2009	Anagnostopoulos et al.	709/218
*	B	US-2012/0123859	05-2012	Gupta, Arpit	705/14.49
*	C	US-2008/0301562	12-2008	Berger et al.	715/733
*	D	US-2008/0010142	01-2008	O'Brien et al.	705/14
*	E	US-2011/0099077	04-2011	Darin et al.	705/14.72
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013	06/30/2014							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	✓							
	10	✓	✓							
	11	✓	✓							
	12	✓	✓							
	13	✓	✓							
	14	✓	✓							
	15	✓	✓							
	16	✓	✓							
	17	✓	✓							
	18	✓	✓							
	19	✓	✓							
	20	✓	✓							
	21	✓	✓							
	22	✓	✓							
	23	✓	✓							
	24	✓	✓							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S86	122355	(map$3 or link$3) with (attribute or variable)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:20
S87	122355	(map$3 or link$3) with (attribute or variable or (programming adj container))	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S88	1	(map$3 or link$3) same (programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:35
S89	55	(programming adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S90	346	(program$4 adj container)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:36
S91	4	(programming adj container) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/20 16:52
S92	2493	(program$4 near3 (container or variable)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:52
S93	2215	(program$4 near3 (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S94	333	(program$4 adj (container or variable)) and (link$3 or map$4) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S95	47	((program$4 adj (container or variable)) same (link$3 or map$4)) and (advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 10:53
S96	675	(map$3 or link$3) with (form or field or (site adj map) or header or tag) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:02
S97	23	((map$3 or link$3) with (form or field or (site adj map) or header or tag) with multiple with site) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:02
S98	12	((map$3 or link$3 or match$3) with (field or (site adj map) or header or tag) with multiple with site) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 11:08
S99	27	("2008/0010142").URPN.	USPAT	ADJ	ON	2014/06/24 12:39
S100	2	("2012/0123859").URPN.	USPAT	ADJ	ON	2014/06/24 12:56
S101	214	indexing near3 (website or (web adj site) or web-site)	USPAT	ADJ	ON	2014/06/24 13:04

S102	75	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	USPAT	ADJ	ON	2014/06/24 13:05
S103	194	index$3 near3 (website or (web adj site) or web-site) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S104	194	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S105	91	(index$3 near3 (website or (web adj site) or web-site)) same (map$4 near3 field or tag or header or (site adj map)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:06
S106	68	(advertising or advertisement) and ((first same second same page same site) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:28
S107	92	(advertising or advertisement) and ((first same second same (page or webpage or (web adj page) or web-page) same (site or website or (web adj site) or web-site)) same (match$3 or map$3 or link$3) same (travel or destination or from))	US-PGPUB; USPAT	ADJ	ON	2014/06/24 13:29
S108	1	("20080201220").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/24 16:57
S109	1825	((generat$5 or creat$5) with (ad or advertisment) with (field or category))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:53
S110	996	S109 and ((map or mapping))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S111	355	S110 and ((tavel or plane or airplane or flight) same (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S112	330	S111 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:54
S113	430	((map or mapping) with (ad or advertisement) with (category or field or container))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57
S114	155	S113 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 20:57
S115	484	S110 and ((travel or plane or airplane or flight) same (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:16
S116	443	S115 and ((click or clicking or hyperlink) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:16
S117	69	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:19
S118	5	standardiz$3 with (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:20
S119	5	(standardiz$5 or normaliz$5) with (website	US-	ADJ	ON	2014/06/29

		or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	PGPUB; USPAT			23:20
S120	0	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section) same (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S121	34	(standardiz$5 or normaliz$5) near5 (website or web-site or (web adj site)) with (field or form or section)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:21
S122	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/29 23:23
S123	2	(standardiz$5 or normaliz$5) near5 (field or form or section) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:34
S124	3	(standardiz$5 or normaliz$5) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:35
S125	4	(similar or similarities) near5 (field or form or section or tag or header or (site adj map)) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:37
S126	4	((similar or similarities) near5 (field or form or section or tag or header or (site adj map))) same (multiple adj (website or web-site or (web adj site)))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:38
S127	10037	similar near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S128	102	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page))	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:47
S129	47	similar near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/29 23:48
S130	11	("6851087").URPN.	USPAT	ADJ	ON	2014/06/30 01:00
S131	30	common near3 (field or section) near3 (website or web-site or (web adj site) or webpage or web-page or (web adj page)) and (advertising or advertisement)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 01:19
S132	8	("7865414").URPN.	USPAT	ADJ	ON	2014/06/30 01:25
S133	11118	(advertising or advertisement) near5 (match$3 or map$4)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:58
S134	256	(advertising or advertisement) near5 (match$3 or map$4) near5 (field or (search adj box) or header or title or container or box)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 02:59
S135	100	S134 and "705".clas.	US-PGPUB; USPAT	ADJ	ON	2014/06/30 03:01
S136	24	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29

S137	19	(deep-link$3 or (deep adj link$3)) near3 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:29
S138	25	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising) and (match$3 or mapping)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:32
S139	36	(deep-link$3 or (deep adj link$3)) near10 (ad or advertisement or advertising)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:35
S140	19963	(ad or advertisement or advertising) near5 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S141	15598	(ad or advertisement or advertising) near3 link	US-PGPUB; USPAT	ADJ	ON	2014/06/30 05:45
S142	73	(ad or advertisement or advertising) near3 link same (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S143	21	(ad or advertisement or advertising) near3 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 06:55
S144	39	(ad or advertisement or advertising) near10 link with (similar near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S145	403	(ad or advertisement or advertising) near10 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S146	243	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page))	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:08
S147	175	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page)) and (map$4 or match$3)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:10
S148	23	(ad or advertisement or advertising) near5 link with ((similar or common or related) near5 (website or site or web-site or webpage or web-page)) same (map$4 or match$3)	US-PGPUB; USPAT	ADJ	ON	2014/06/30 07:10
S149	1	("20090144124").PN.	US-PGPUB; USPAT	OR	OFF	2014/06/30 11:45

EAST Search History (Interference)

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6/30/2014 12:25:46 PM
C:\Users\akarmis\Documents\EAST\Workspaces\13308004-AdLinking2.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q30/02	12/12/2013	AK
G06Q30/0257	12/12/2013	AK
G06Q30/0276	12/12/2013	AK
G06Q30/0277	12/12/2013	AK
G06Q30/00	12/12/2013	AK
G06F17/30864	12/12/2013	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	14.4	12/12/2013	AK

SEARCH NOTES		
Search Notes	Date	Examiner
STIC PLUS Search	12/4/2013	AK
Inventor name search	12/12/2013	AK
EAST keyword search	12/12/2013	AK
Google Scholar keyword search	12/12/2013	AK
EAST keyword search	06/25/2014	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/ALISSA KARMIS/ Examiner.Art Unit 3683	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
REPLY TO OFFICE ACTION DATED 12/18/2013	Atty. Docket No. **WAYF1100-1**

First Named Inventor **Narendra Nath**	
Application Number **13/308,004**	Date Filed **11/30/2011**
Title **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **3683**	Examiner **Karmis, Alissa D.**
Confirmation Number: **9029**	

Mail Stop: AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate of Transmission Under 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited electronically with the U.S. Patent and Trademark Office using the United States Patent and Trademark Office's EFS-Web system on March 7, 2014.

M. Marquez
Signature

Margarita Marquez
Printed Name

Dear Madam:

This paper is submitted in response to the Official Action mailed on December 18, 2013, the Examiner Interview held on February 27, 2014, and the Interview Summary mailed on March 12, 2014. Please reconsider the above-identified application in view of the following amendments and remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 7 of this paper.

AMENDMENTS TO THE CLAIMS:

Please amend the claims as set forth in the following listing. This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently Amended) A method, comprising:

at a server computer, automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking explicit or implicit programming ~~variables~~ containers for data across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming ~~variables~~containers of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming ~~variables~~containers of a second site or mobile application, the first set of programming ~~variables~~containers being ~~associated~~ arbitrarily linked with the second set of programming ~~variables~~containers in the universal variable map; and

in response to user interaction with the deep-linked ad on the first page of the first site or mobile application, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

2. (Currently Amended) The method according to claim 1, further comprising:

programmatically receiving or gathering or inferring by content the programming ~~variables~~containers across the multiple sites and applications.

3. (Currently Amended) The method according to claim 1, further comprising:

associating each of the programming ~~variables~~containers with a normalized programming ~~variable~~ container in the universal variable map.

4. (Currently Amended) The method according to claim 1, wherein the programming ~~variables~~containers comprises a composite text string, further comprising:

mapping data in the composite text string to a set of non-composite ~~variables~~containers in the universal variable map.

5. (Currently Amended) The method according to claim 1, further comprising:

determining correspondence between the programming ~~variables~~containers and normalized programming ~~variables~~containers in the universal variable map utilizing heuristics.

6. (Currently Amended) The method according to claim 5, further comprising:

refining the correspondence between the programming ~~variables~~containers and the normalized programming ~~variables~~containers in the universal variable map.

7. (Original) The method according to claim 6, wherein the refining further comprises adjusting a weight assigned to at least one of the heuristics.

8. (Original) The method according to claim 6, wherein the refining further comprises creating new heuristics and weights associated therewith.

9. (Original) The method according to claim 1, wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry.

10. (Original) The method according to claim 1, wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click.

11. (Currently Amended) A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by a server computer to perform:

automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking explicit or implicit programming ~~variables~~containers for data across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming ~~variables~~containers of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming ~~variables~~containers of a second site or mobile application, the first set of programming ~~variables~~containers being arbitrarily linked~~associated~~ with the second set of programming ~~variables~~containers in the universal variable map; and

in response to user interaction with the deep-linked ad on the first page of the first site or mobile application, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

12. (Currently Amended) The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

programmatically receiving or gathering or inferring by content the programming ~~variables~~containers across the multiple sites and applications.

13. (Currently Amended) The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

associating each of the programming ~~variables~~containers with a normalized programming ~~variable~~ container in the universal variable map.

14. (Currently Amended) The computer program product according to claim 11, wherein the programming ~~variables~~containers comprise a composite text string and wherein the instructions are further translatable by the server computer to perform:

mapping data in the composite text string to a set of non-composite ~~variables~~containers in the universal variable map.

15. (Currently Amended) The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

determining correspondence between the programming ~~variables~~containers and normalized programming ~~variables~~containers in the universal variable map utilizing heuristics.

16. (Currently Amended) The computer program product according to claim 15, wherein the instructions are further translatable by the server computer to perform:

adjusting the correspondence between the programming ~~variables~~containers and the normalized programming ~~variables~~containers in the universal variable map.

17. (Currently Amended) A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking explicit or implicit programming ~~variables~~containers for data across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming ~~variables~~containers of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming ~~variables~~containers of a second site or mobile application, the first programming ~~variable~~ containers being arbitrarily linked~~associated~~ with the second set of programming ~~variables~~containers in the universal variable map; and

in response to user interaction with the deep-linked ad on the first page of the first site or mobile application, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

18. (Currently Amended) The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

programmatically receiving or gathering or inferring by content the programming ~~variables~~containers across the multiple sites and applications.

19. (Currently Amended) The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

associating each of the programming ~~variables~~containers with a normalized programming ~~variable~~ container in the universal variable map.

20. (Currently Amended) The system of claim 17, wherein the programming ~~variables~~containers comprise a composite text string and wherein the instructions are further translatable by the at least one processor to perform:

mapping data in the composite text string to a set of non-composite ~~variables~~containers in the universal variable map.

21. (Currently Amended) The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

determining correspondence between the programming ~~variables~~containers and normalized programming ~~variables~~containers in the universal variable map utilizing heuristics.

22. (Currently Amended) The system of claim 21, wherein the instructions are further translatable by the at least one processor to perform:

adjusting the correspondence between the programming ~~variables~~containers and normalized programming ~~variables~~containers in the universal variable map.

23. (Original) The system of claim 17, wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry.

24. (Original) The system of claim 17, wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click.

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed December 18, 2013 ("Office Action"), the Examiner Interview held on February 27, 2014, and the Interview Summary mailed on March 12, 2014. Claims 1-24 were pending. To expedite the prosecution, claims 1-6 and 11-22 are amended herein. The amendments are made without any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. Support for the amendments presented herein can be found in the specification as originally filed, at least from paragraphs [0011], [0015], [0061], [0092], and [0095]. No new matter is introduced. No claim is newly added. Through these changes, claims 1-24 remain pending. This Reply encompasses a bona fide attempt to address the rejections raised by the Examiner and place the present application in condition for allowance. Claims 1-24 recite subject matter not reached by the art of record and are therefore allowable. Accordingly, Applicant respectfully requests a timely Notice of Allowance be issued in this case.

Interview Summary

Pursuant to Applicant Initiated Interview Request submitted on February 24, 2014, a telephonic interview was conducted on February 27, 2014 between Examiner Alissa Karmis, Primary Examiner Johnna Loftis, Inventor Narendra Nath, and the undersigned. During the interview, differences between embodiments as claimed and the cited art were discussed as well as possible amendments to the claims. The Examiners indicated that the prosecution is heading in the right direction and that the cited art is likely overcome in view of clarification on certain claim terms, including programming variables. No specific agreement was reached.

Applicant appreciates the time and effort taken by the Examiners to review Applicant's present application and discuss the pending claims and the cited prior art.

Rejections under 35 U.S.C. § 103

Claims 1-6, 9, and 11-23 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2009/0313127 A1 ("Chaiken") in view

of U.S. Patent Application Publication No. 2007/0239494 A1 ("Stephens") and further in view of U.S. Patent Application Publication No. 2002/0107882 A1 ("Gorelick").

Claims 7 and 8 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Chaiken in view of Stephens, further in view of Gorelick, and further in view of U.S. Patent Application Publication No. 2008/0046313 A1 ("Chen").

Claims 10 and 24 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Chaiken in view of Stephens, further in view of Gorelick, and further in view of U.S. Patent Application Publication No. 2009/0144124 A1 ("Surendran").

The rejections are respectfully traversed. If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re* Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 2-10 depend from claim 1. Claim 11 is directed to a computer program product implementing the method of claim 1. Claim 17 is directed to a system implementing the method of claim 1. Claims 12-16 depend from claim 11. Claims 18-24 depend from claim 17. Thus, traversal to the rejections is collectively discussed herein with respect to independent claim 1.

The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1395; *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). "[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art. *See* M.P.E.P. 2143.

It is respectfully submitted that not all the claimed elements were known in the prior art, that one of ordinary skill in the art could not have combined the elements as claimed by known methods with no change in their respective functions, and that one of ordinary skill in the art could not have predicted what result the alleged combination might produce.

For example, as submitted during the February 27, 2014 Examiner interview, the primary reference Chaiken discloses using contextual sections of web page content for serving online advertisements. Specifically, when rendered by a web browser, content from marked sections of a web page may be extracted and sent to an advertisement server. The advertisement server then selectively matches advertisements for display to a user using the web browser. *See* Chaiken, Abstract.

Applicant first points out that selecting advertisements for display is a process distinct from generating advertisements in general and particularly distinct from "automatically generating a deep-linked ad utilizing a universal variable map," recited in claim 1. Furthermore, the Chaiken invention is based on reviewing the content of websites, and makes no reference to leveraging explicit or implicit programming variables or parameters or containers of data on websites. The Examiner acknowledged in the Official Action that Chaiken does not explicitly disclose the ad is a deep-linked ad, but alleged that Stephens teaches a deep-linked ad, citing paragraphs [0056] and [0057] of Stephens. Applicant points out that paragraphs [0056] and [0057] of Stephens describe the "deep-linking" concept by showing how a user can jump to an intermediate page through selection of a deep-link "that is a URL to an intermediate page of the website wherein the promotional offer's pre-selected characteristic(s) has already been set for the reservation." Paragraphs [0056] and [0057] of Stephens do not describe a deep-linked ad. Rather, paragraphs [0056] and [0057] of Stephens describe a particular URL to an intermediate page where the user can view the offers. These offers are not served "on a first page of the first site or mobile application in response to a request from a browser application running on a user device," as recited in claim 1. Furthermore, the Stephens invention makes no reference to leveraging a universal variable map to arbitrarily deep-link from one site or mobile application to any other site or mobile application with no pre-determined relationship existing between the first site or mobile application and the second site or application.

The Examiner also acknowledged in the Official Action that neither Chaiken nor Stephens describes "automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications," as recited in claim 1. However, the Examiner asserted that "Gorelick teaches automatically inserting relevant links such as advertisements into a webpage," citing paragraphs [0022] and [0035] of Gorelick. Applicant respectfully disagrees.

As submitted during the February 27, 2014 Examiner interview, Gorelick discloses in paragraphs [0022] and [0035] that a host may employ several techniques to create or obtain text

to display to users. Because automatically inserted links have little relevance to the specific contents of the text and are displayed regardless of the contents of the text, Gorelick provides a way to load the contents from the text into memory and compare the contents of the text to character strings contained in a database in order identify which, if any, of the character strings appears in the text. This character strings matching technique examines the content of websites and not programming variables. This is evident in that Gorelick clearly states that the database contains character strings and not programming variables. As those skilled in the art will readily recognize, character strings are not programming variables. Gorelick does not disclose, mention, or even suggest a universal variable map "linking programming variables across multiple sites and applications," as recited in claim 1.

In view of the foregoing and for other reasons clearly apparent, claim 1 is patentable over Chaiken, Stephens, and Gorelick, individually and in combination, under 35 U.S.C. § 103(a), motivation to combine Chaiken, Stephens, and Gorelick notwithstanding. The rationale discussed above applies *mutatis mutandis* to independent claims 11 and 17. Reliance is placed on *In re* Fine for the patentability of claims 2-10, 12-16, and 18-24, since they depend from claims 1, 11, and 17 which are patentable under 35 U.S.C. § 103(a).

Although Applicant respectfully disagrees with the rejections, Applicant has amended the claims as a good faith effort to expedite the prosecution and without conceding to the Examiner's positions. Accordingly, withdrawal of these rejections is respectfully requested.

* * * * * * * * * * * * *

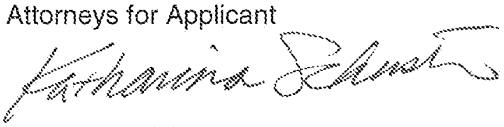
Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims 1-24. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant



Katharina W. Schuster
Reg. No. 50,000

Date: March 17, 2014

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Electronic Acknowledgement Receipt

EFS ID:	18497678
Application Number:	13308004
International Application Number:	
Confirmation Number:	9029
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
First Named Inventor/Applicant Name:	Narendra Nath
Customer Number:	44654
Filer:	Katharina W. Schuster/Margarita Marquez
Filer Authorized By:	Katharina W. Schuster
Attorney Docket Number:	WAYF1100-1
Receipt Date:	17-MAR-2014
Filing Date:	30-NOV-2011
Time Stamp:	17:10:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		WAYF1100-1_ROA_03-17-2014.pdf	1371458 cece92f4a649720c7ce3d97045e446141e1db897	yes	11

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	6
	Applicant Arguments/Remarks Made in an Amendment	7	11
Warnings:			
Information:			
	Total Files Size (in bytes):	1371458	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/308,004	Filing Date 11/30/2011	☒ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **03/17/2014**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 24	Minus	** 20	= 4	X $40 =	160
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**160**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/MONICA FRANCIS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 03/12/2014

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EXAMINER	
KARMIS, ALISSA D	
ART UNIT	PAPER NUMBER
3683	

MAIL DATE	DELIVERY MODE
03/12/2014	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/308,004	NATH ET AL.	
	Examiner	Art Unit	
	ALISSA KARMIS	3683	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ALISSA KARMIS, Examiner*.

(2) *JOHNNA LOFTIS, Primary Examiner*.

(3) *KATHARINA SCHUSTER, Applicant's Representative*.

(4) *NARENDRA NATH, Applicant*.

Date of Interview: *27 February 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1-24*.

Identification of prior art discussed: *Chaiken US 2009/0313127, Stephens US 2007/0239494, Gorelick 2002/0107882*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant and Applicant's representative explained differences between the cited prior art in the Non-final Office Action and Applicant's invention and discussed with the Examiners possible amendments to the claims including mapping programming variables based on the 'container' or 'name space' of the information rather than the content or text and generating deep-linking ads that have no predetermined relationship. The amended claims will be considered upon submission of the formal amendment and the Examiner will conduct an updated search of prior art. No decision on allowable subject matter was made.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/JOHNNA LOFTIS/ Primary Examiner, Art Unit 3683	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

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PTOL-413A (09-08)
Approved for use through 10/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/308,004 First Named Applicant: Narendra Nath

Examiner: Alissa D. Karmis Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina W. Schuster, Reg. No. 50000

(3) Inventor Narendra Nath (4)

Proposed Date of Interview: 02/27/2014 **Proposed Time:** 11:00 A.M. CST 12:00 P.M. EST AM/PM

Type of Interview Requested:

(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO

If yes, provide brief description:

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 102 Rejection	1-24	2009/0313127	☐	☐	☐
(2)		2007/0239494	☐	☐	☐
(3)		2002/0107882	☐	☐	☐
(4)		2008/0046313	☐	☐	☐
		2009/0144124			

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

Applicant would like to discuss elements not found in the cited prior art and would welcome any claim amendment suggestions from the Examiner that would forward prosecution and place the present application in a condition for allowance. Applicant respectfully requests the presence of a Primary Examiner or Supervisory Examiner.

An interview was conduction on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Katharina W. Schuster
Applicant/Applicant's Representative Signature

Katharina W. Schuster
Typed/Printed Name of Applicant or Representative

50,000
Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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FAX COVER SHEET

TO:	USPTO – Central Fax Unit Examiner: Alissa D. Karmis Art Unit: 3683	**FAX NO.:**	571-273-8300 571-270-8277
FROM:	Katharina W. Schuster (MM)	**DOCKET NO.**	WAYF1100-1
DATE:	February 24, 2014	**# OF PGS:**	2 (Including this form)
RE:	**Applicant Initiated Interview Request Form for: U.S. Patent Application No. 13/308,004**		

Please contact 512.366.7312 if there is a problem with this transmission.

COMMENTS:

CONFIDENTIALITY NOTICE

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(o) 512.637.9220 (f) 512.371.9088

PAGE 1/2 * RCVD AT 2/24/2014 4:40:48 PM [Eastern Standard Time] * SVR:W-PTOFAX-001/9 * DNIS:2738300 * CSID:5123719088 * DURATION (mm-ss):00-49

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PTOL-413A (09-08)
Approved for use through 10/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/308,004 First Named Applicant: Narendra Nath

Examiner: Alissa D. Karmis Art Unit: 3683 Status of Application: Pending

Tentative Participants:

(1) Examiner Alissa D. Karmis (2) Attorney Katharina W. Schuster, Reg. No. 50000

(3) Inventor Narendra Nath (4) _____

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(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) 102 Rejection	1-24	2009/0313127	☐	☐	☐
(2) _____	_____	2007/0239494	☐	☐	☐
(3) _____	_____	2002/0107882	☐	☐	☐
(4) _____	_____	2008/0046313	☐	☐	☐
		2009/0144124			

☐ Continuation Sheet Attached

Brief Description of Argument to be Presented:

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Katharina W. Schuster
Applicant/Applicant's Representative Signature

Katharina W. Schuster
Typed/Printed Name of Applicant or Representative

50,000
Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
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FAX COVER SHEET

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FROM:	Katharina W. Schuster (MM)	**DOCKET NO.**	WAYF1100-1
DATE:	February 24, 2014	**# OF PGS:**	2 (Including this form)
RE:	**Applicant Initiated Interview Request Form for: U.S. Patent Application No. 13/308,004**		

Please contact 512.366.7312 if there is a problem with this transmission.

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PAGE 1/2 * RCVD AT 2/24/2014 2:48:54 PM [Eastern Standard Time] * SVR:W-PTOFAX-001/0 * DNIS:2738300 * CSID:5123719088 * DURATION (mm-ss):00-50

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/308,004	11/30/2011	Narendra Nath	WAYF1100-1	9029

44654 7590 12/18/2013

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

EXAMINER	
KARMIS, ALISSA D	
ART UNIT	PAPER NUMBER
3683	
MAIL DATE	DELIVERY MODE
12/18/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/308,004	Applicant(s) NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *November 30, 2011*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-24* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-24* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *November 30, 2011* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some * c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/30/2011*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The following non-final Office action is in response to Applicant's submission filed on November 30, 2011.

Status of the Claims

3. Claims 1-24 have been reviewed and are pending.

Priority

4. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 103

5. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-6, 9, and 11-23** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Chaiken et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1 and further in view of Gorelick et al., U.S. Patent Application No. 2002/0107882 A1.

7. **Regarding claim 1**, Chaiken discloses a method comprising:

at a server computer, automatically generating an ad (selectively matching advertisements and displaying the advertisements to a user - Para. [0039], [0040]);

serving the ad on a first page of the first site or mobile application in response to a request, from a browser application running on a user device, the first page containing a first set of programming variables of the first site or mobile application (selecting advertisements that match contextual sections of product information on a webpage requested by a user – Para. [0022], [0026], [0043]).

Chaiken also does not explicitly disclose the ad is a deep-linked ad, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming variables of a second site or mobile application, the first set of programming variables being associated with the second set of programming variables and in response to user interaction with the deep-linked ad causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from-the user interaction. However, Stephens teaches a deep-linked ad (Para. [0056], [0057]), and like Chaiken teaches a first page containing a first set of programming variables of the first site or mobile application (webpage containing reservation characteristics and deep-link displayed on user computer when the user uses the computer's browser to make a reservation (i.e., request) on the service provider's website - Para. [0007], [0008], [0011], [0061]). Stephens also teaches the deep-linked ad containing a reference to a second page (deep-link takes user to intermediate page – Para. [0007], [0008], [0056], [0057], [0061]), the second page containing a second set of programming variables of a second site or

mobile application, the first set of programming variables being associated with the second set of programming variables (deep-link takes user to intermediate page containing pre-selected characteristics selected by the user and other associated characteristics such as choose a vehicle or choose a time – Para. [0007], [0008], [0056], [0057], [0058], [0061]). Stephens also teaches in response to user interaction with the deep-linked ad causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from-the user interaction (user clicks on deep-link which takes user to intermediate page containing pre-selected characteristics selected by the user – Para. [0007], [0008], [0056], [0057], [0061]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify Chaiken's incorporation of advertisements into a website to include the deep-linking concept as taught by Stephens in order to generate or increase revenue when a user selects an ad (Chaiken, Para. [0002], [0004]) and to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

The combination of Chaiken and Stephens does not explicitly disclose utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications and that the associating of the programming variables is in the universal variable map. However, Gorelick teaches automatically inserting relevant links such as advertisements into a webpage (Para. [0022], [0035]). Gorelick also teaches utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications and that the associating of the programming variables is in the universal variable map (using a database that maps contents of text (i.e., programming variables) in a webpage with general

terms as well as brand names (i.e., mapping universal variables) and identifies an appropriate link to insert in the webpage for linking to another webpage (Para. [0035], [0038]-[0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken and Stephens to include utilization of mapping universal variables and linking programming variables across websites as taught by Gorelick in order to provide a user with relevant links such as links to websites of relevant manufacturers or vendors of products of interest to the user and thereby increase advertising revenues (Gorelick, Para. [0022], [0023], [0026], [0027], [0049]).

8. **Regarding claim 2**, the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above. Chaiken further discloses comprising: programmatically receiving or gathering or inferring by content the programming variables across the multiple sites and applications (contents of webpage parsed, extracted, and crawled; features identified from content sections - Para. [0031], [0034], [0037], [0039], [0042], [0043]).

9. **Regarding claim 3,** the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above. The combination of Chaiken and Stephens does not explicitly disclose further comprising: associating each of the programming variables with a normalized programming variable in the universal variable map. However, Gorelick teaches associating each of the programming variables with a normalized programming variable in the universal variable map (using a database that maps contents of text (i.e., programming variables) in a webpage with general terms as well as brand names (i.e., mapping universal variables) and

identifies an appropriate link to insert in the webpage for linking to another webpage (Para. [0035], [0038]-[0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken and Stephens to include associating programming variables with normalized programming variables as taught by Gorelick in order to provide a user with relevant links such as links to websites of relevant manufacturers or vendors of products of interest to the user and thereby increase advertising revenues (Gorelick, Para. [0022], [0023], [0026], [0027], [0049]).

10. **Regarding claim 4,** the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above. The combination of Chaiken and Stephens does not explicitly disclose wherein the programming variables comprises a composite text string, further comprising: mapping data in the composite text string to a set of non- composite variables in the universal variable map. However, Gorelick teaches wherein the programming variables comprises a composite text string, further comprising: mapping data in the composite text string to a set of non- composite variables in the universal variable map (mapping character text strings - Para. [0035], [0038]-[0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken and Stephens to include mapping data in the composite text string as taught by Gorelick in order to provide a user with relevant links such as links to websites of relevant manufacturers or vendors of products of interest to the user and thereby increase advertising revenues (Gorelick, Para. [0022], [0023], [0026], [0027], [0049]).

11. **Regarding claim 5,** the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above. The combination of Chaiken and Stephens does not explicitly disclose further comprising: determining correspondence between- the programming variables and normalized programming variables in the universal variable map utilizing heuristics. However, Gorelick teaches determining correspondence between- the programming variables and normalized programming variables in the universal variable map utilizing heuristics (use of shortnames to reference a product reduces the amount of computations and computational time – Para. [0042], [0043]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken and Stephens to include utilizing heuristics as taught by Gorelick in order to provide a user with relevant links such as links to websites of relevant manufacturers or vendors of products of interest to the user and thereby increase advertising revenues (Gorelick, Para. [0022], [0023], [0026], [0027], [0049]).

12. **Regarding claim 6,** the combination of Chaiken/Stephens/Gorelick teaches the method of claim 5 as shown above. The combination of Chaiken and Stephens does not explicitly disclose further comprising: refining the correspondence between the programming variables and the normalized programming variables in the universal variable map. However, Gorelick teaches refining the correspondence between the programming variables and the normalized programming variables in the universal variable map (relevancy of selected links is improved by using secondary indicators – Para. [0045]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of

Chaiken and Stephens to include refining correspondence as taught by Gorelick in order to provide a user with relevant links such as links to websites of relevant manufacturers or vendors of products of interest to the user and thereby increase advertising revenues (Gorelick, Para. [0022], [0023], [0026], [0027], [0049]).

13. **Regarding claim 9,** the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above. Chaiken does not explicitly disclose wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry. However, Stephens teaches wherein the user interaction involves only a single click without data entry by the user (user selects deep-link to jump to another webpage; user can bypass at least one data entry task of the website – Para. [0056]. Stephens also teaches wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry (webpage includes a deep-link to another webpage for a promotional offer; alleviating users from submitting one or more reservation characteristics – Para. [0057]-[0062]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify Chaiken's serving of advertisements to include user interaction with the ad involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry as taught by Stephens in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

14. **Claims 11-16** are directed to the computer program product for performing the method in claims 1-6. Since the combination of Chaiken/Stephens/Gorelick teaches the method, the same art and rationale apply to claims 11-16.

15. **Claim 17-23** are directed to the system for performing the method in claims 1-6 and 9. Since the combination of Chaiken/Stephens/Gorelick teaches the method, the same art and rationale apply to claims 17-23.

16. **Claims 7 and 8** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Chaiken et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1, further in view of Gorelick et al., U.S. Patent Application No. 2002/0107882 A1, and further in view of Chen U.S. Patent Application No. 2008/0046313 A1.

17. **Regarding claim 7**, the combination of Chaiken/Stephens/Gorelick teaches the method of claim 6 as shown above and specifically Gorelick teaches refining the correspondence between programming and normalized programming variables in the universal variable map (relevancy of selected links is improved by using secondary indicators – Para. [0045]). The combination of Chaiken/Stephens/Gorelick fails to teach wherein the refining further comprises adjusting a weight assigned to at least one of the heuristics. However, Chen teaches adjusting a weight assigned to at least one of the heuristics (weighting could be adjusted for approaches in determining correspondence - Para. [0048]-[0057]). Therefore, it would have been obvious to a

person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken/Stephens/Gorelick to include adjusting a weight assigned to at least one of the heuristics as taught by Chen in order to determine which terms (i.e., programming variables) will be identified as topics for the target web page and to determine which advertisements are relevant to the target page and may be presented on the web browser (Chen, Para. [0053], [0057]).

18. **Regarding claim 8**, the combination of Chaiken/Stephens/Gorelick teaches the method of claim 6 as shown above and specifically Gorelick teaches refining the correspondence between programming and normalized programming variables in the universal variable map (relevancy of selected links is improved by using secondary indicators – Para. [0045]). The combination of Chaiken/Stephens/Gorelick fails to teach wherein the refining further comprises creating new heuristics and weights associated therewith. However, Chen teaches creating new heuristics and weights associated therewith (terms in these fields can be added to the topic list or be given higher weight; the weighting could be adjusted to give lower weight to terms that appear in a collection of low-quality terms – Para. [0048]-[0057]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken/Stephens/Gorelick to include creating new heuristics and weights associated therewith as taught by Chen in order to determine which terms (i.e., programming variables) will be identified as topics for the target web page and to determine which advertisements are relevant to the target page and may be presented on the web browser (Chen, Para. [0053], [0057]).

19. **Claims 10 and 24** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Chaiken et al., U.S. Patent Application No. 2009/0313127 A1 in view of Stephens et al., U.S. Patent Application No. 2007/0239494 A1, further in view of Gorelick et al., U.S. Patent Application No. 2002/0107882 A1 and further in view of Surendran et al., U.S. Patent Application No. 2009/0144124 A1.

20. **Regarding claim 10**, the combination of Chaiken/Stephens/Gorelick teaches the method of claim 1 as shown above but fails to teach wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click. However, Surendran teaches wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click (examples of interaction that may initiate presentation of the advertisement include clicking or hovering on the visual object – Para. [0035], [0041]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the combination of Chaiken's serving of advertisements and Stephens deep-linking ad feature to include displaying the second page of the second site or mobile application via the deep-linked ad without a single click as taught by Surendan in order to streamline a user's path through a website and bypass at least one data entry task (Stephens, Para. [0053], [0056]).

21. **Claim 24** is directed to the system for performing the method in claim 10. Since the combination of Chaiken/Stephens/Gorelick teaches the method, the same art and rationale applies to claim 24.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Muilenburg et al., U.S. 2010/0082778 A1 Systems and methods for configuring a network of affiliated websites
- Sundaresan et al., U.S. 6,651,058 B1 System and method of automatic discovery of terms in a document that are relevant to a given target topic

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA KARMIS whose telephone number is (571)270-7277. The examiner can normally be reached on Monday - Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter H. Choi can be reached on 571-272-6971. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALISSA KARMIS/
Examiner, Art Unit 3683

/JOHNNA LOFTIS/
Primary Examiner, Art Unit 3683

Notice of References Cited	Application/Control No. 13/308,004	Applicant(s)/Patent Under Reexamination NATH ET AL.	
	Examiner ALISSA KARMIS	Art Unit 3683	Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2009/0313127	12-2009	Chaiken et al.	705/14.72
*	B	US-2007/0239494	10-2007	Stephens et al.	705/005
*	C	US-2002/0107882	08-2002	Gorelick et al.	707/500.1
*	D	US-2008/0046313	02-2008	Chen, Shuwei	705/14
*	E	US-2010/0082778	04-2010	Muilenburg et al.	709/220
*	F	US-6,651,058	11-2003	Sundaresan et al.	1/1
*	G	US-2009/0144124	06-2009	SURENDRAN et al.	705/10
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	Q					
	R					
	S					
	T					

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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q30/02	12/12/2013	AK
G06Q30/0257	12/12/2013	AK
G06Q30/0276	12/12/2013	AK
G06Q30/0277	12/12/2013	AK
G06Q30/00	12/12/2013	AK
G06F17/30864	12/12/2013	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	14.4	12/12/2013	AK

SEARCH NOTES		
Search Notes	Date	Examiner
STIC PLUS Search	12/4/2013	AK
Inventor name search	12/12/2013	AK
EAST keyword search	12/12/2013	AK
Google Scholar keyword search	12/12/2013	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/ALISSA KARMIS/ Examiner.Art Unit 3683	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S3	41	spidering with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 13:32
S4	12	("2010/0293221").URPN.	USPAT	ADJ	ON	2013/12/04 14:06
S5	77	(map$3 or link$3) with (attribute or variable) with multiple with site	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:10
S6	2115	705/14.4.ccls.	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S7	0	S5 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:12
S8	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S9	1	S6 and S8	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:14
S10	1387	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:17
S11	4	S10 and S6	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:18
S12	926	((map$3 or link$3) with (attribute or variable or content or field or context or term)) same (multiple near3 site)	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:19
S13	1979	((map$3 or link$3 or match$3) with (attribute or variable or content or field or context or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S14	8	S6 and S13	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:21
S15	2671	((map$3 or link$3 or match$3) with (attribute or element or variable or content or field or term)) same ((multiple or various or several or similar) near3 (site or website or web-site))	US-PGPUB; USPAT	ADJ	ON	2013/12/04 14:25
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S17	331	((map$3 or link$3 or match$3) with	US-	ADJ	ON	2013/12/04

		(attribute or element or variable or content or field or term)) near10 ((multiple or various or several or similar) near3 (site or website or web-site)) and ((ad or advertisement) with link or URL)	PGPUB; USPAT			14:28
S19	3	("7788245").URPN.	USPAT	ADJ	ON	2013/12/04 14:34
S21	1	("20120030551").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/04 16:31
S23	2	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page) and (populat$3 with (second or other or another))	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:18
S24	108	populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:22
S25	4	pre-populat$3 with (second or other or another) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:23
S27	14	(pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)) and (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 11:36
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S30	1	"5937392".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:46
S31	1	"5960409".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S32	1	"6029141".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:47
S33	1	"6058417".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:51
S34	1	"6330575".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S35	1	"6401075".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S36	1	"6601057".PN.	USPAT; USOCR	ADJ	ON	2013/12/05 11:52
S37	2	("6061660" | "6334111").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 12:37
S38	66	(ad or advertisement) with (relat$3 or relationship or common or similar) with first with (another or second) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 13:39
S39	5	("20030078832" | "20030229531" | "20040093327" | "20080046429" | "20080059258").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:02
S40	2708	(ad or advertisement) with (relat$3 or similar) with (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:13
S41	2599	(ad or advertisement) with (relat$3 or similar) with (webpage or website)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:13

S42	4066	(ad or advertisement) with (relat$3 or similar or associat$3) with (webpage or website)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 14:14
S44	0	("2009/0313127").URPN.	USPAT	ADJ	ON	2013/12/05 15:12
S45	676	(ad or advertisement) with (common or alternative) with (keyword or text)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S46	171	(ad or advertisement) with (common or alternative) with (keyword or text) with (match$3 or link$3)	US-PGPUB; USPAT	ADJ	ON	2013/12/05 15:55
S47	11	("2002/0107882").URPN.	USPAT	ADJ	ON	2013/12/05 16:17
S48	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	USPAT	ADJ	ON	2013/12/05 16:18
S50	1	("20070239494").PN.	US-PGPUB; USPAT	OR	OFF	2013/12/06 11:31
S51	56	("20020010639" | "20020087367" | "20020169643" | "20030040944" | "5715453" | "20020194037" | "20040030593" | "20050246275" | "20100106623" | "3665397" | "20020133430" | "20060190314" | "20020186144" | "20020087367" | "20020165735" | "20070239494" | "20020077871" | "20070094055" | "20070179819" | "20020010604" | "20020007327" | "20040148179" | "20010034723" | "20020065688" | "20030004761" | "20040006498" | "20040010338" | "5289369" | "6477503" | "20030158761" | "20020198758" | "20030046117" | "20040030593" | "20050216139" | "20050246275" | "6711548" | "20020165735" | "20070198311" | "20070239494" | "20020007327" | "20030061145" | "20040148179" | "20020069093" | "20020184041" | "20100106608" | "6519576" | "7124096" | "7769601" | "20040107144" | "7617136" | "20050216139" | "20020186144" | "20010056363" | "4965821" | "5253166" | "5389773" | "6360254" | "6539424" | "6757710" | "20030061145" | "20030195811" | "20030195811" | "20070198311" | "20030061146" | "20070027708" | "5066853" | "7050986" | "8108231").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 11:33
S54	11	("6092074" | "5630117" | "5708825" | "5745360" | "6651058" | "6581065" | "5634121" | "6546399" | "6122647" | "6654737" | "6658623").PN.	US-PGPUB; USPAT	ADJ	ON	2013/12/06 16:59
S55	6135	(universal or common or general) with (term or variable or text) with (map or database)	US-PGPUB; USPAT	ADJ	ON	2013/12/11 11:43
S58	190	("2005/0222989").URPN.	USPAT	ADJ	ON	2013/12/11 12:04
S59	19	((deep adj link$3) or deep-link$3) with (ad or advertisement) and hover$3	US-PGPUB;	ADJ	ON	2013/12/11 16:32

			USPAT			
S61	53	(select$3 or activat$3 or interact$3) near5 (ad or advertisement) near5 hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/11 16:40
S62	1278	spidering	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S63	126	(ad or advertisement) with link$3 with (one or first) with (second or other or another) with (site or website or web-site or webpage or web-page)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:43
S64	27	pre-populat$3 same (second or other or another) same (webpage or website or web-page or web-site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:49
S65	209	((map$3 or link$3) with (attribute or variable)) same (multiple with site)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:52
S66	3618	G06Q30/02.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S67	0	G06Q30/0257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 01:59
S68	0	G06Q30/0277.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S69	0	G06Q30/0276.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S70	0	G06Q30/0276.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:00
S71	1502	G06F17/24.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S72	0	G06F17/30864.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S73	0	G06F17/30864.CLPS.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S74	26673	G06Q30/00.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:01
S75	0	G06Q30/257.CLPP.	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:06
S76	33	((deep adj link$3) or deep-link$3) with (ad or advertisement)	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:09
S77	1574	G06Q30/02.CLPP. and ad	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:10
S78	0	G06Q30/02.CLPP. and (deep-link$3 adj (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:10
S79	0	G06Q30/02.CLPP. and (deep-link$3 near5 (ad	US-	ADJ	ON	2013/12/12

		or advertisement))	PGPUB; USPAT			02:11
S80	0	G06Q30/02.CLPP. and (deep-link$3 near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S81	723	G06Q30/02.CLPP. and (link near10 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S82	500	G06Q30/02.CLPP. and (link near3 (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S83	69	G06Q30/02.CLPP. and (link near3 (ad or advertisement)) and hover$3	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:11
S84	0	G06F17/30864.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:13
S85	0	G0630/00.CLPP. and ((crawl$3 or spider$3 or extract$3) with (ad or advertisement))	US-PGPUB; USPAT	ADJ	ON	2013/12/12 02:14

EAST Search History (Interference)

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12/12/2013 2:20:46 AM
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	Not Yet Assigned
				Filing or 371 (c) Date:	Herewith
				First Named Inventor	Narendra Nath
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	WAYF1100-1

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Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature	/Alissa Karmis/	Date Considered	12/16/2013

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.K./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	Not Yet Assigned
				Filing or 371 (c) Date:	Herewith
				First Named Inventor	Narendra Nath
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	WAYF1100-1

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	A23	2007/0244750 A1	10-18-2007	Grannan et al.	
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	A29	2008/0294524 A1	11-27-2008	Badros et al.	
	A30	2009/0012903 A1	01-08-2009	Subramanian et al.	
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	A42				
	A43				
	A44				

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature	/Alissa Karmis/	Date Considered	12/16/2013

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.K./

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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P.O. Box 1450
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BIB DATA SHEET

CONFIRMATION NO. 9029

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/308,004	11/30/2011 RULE	705	3683	WAYF1100-1

APPLICANTS

INVENTORS

Narendra Nath, Hillsborough, CA;
Mallikarjun Hiremani, Fremont, CA;

**** CONTINUING DATA ***************************

This appln claims benefit of 61/420,193 12/06/2010

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
12/13/2011

Foreign Priority claimed	☐ Yes ☑ No	☐ Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119(a-d) conditions met	☐ Yes ☑ No					
Verified and Acknowledged	/ALISSA D KARMIS/ Examiner's Signature	Initials	CA	9	24	3

ADDRESS

Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705
UNITED STATES

TITLE

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

FILING FEE RECEIVED		
650	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13308004	NATH ET AL.
	Examiner	Art Unit
	ALISSA KARMIS	3683

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	12/12/2013								
	1	✓								
	2	✓								
	3	✓								
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	24	✓								

PLUS Search Results for S/N 13308004, Searched Wed Dec 04 16:07:18 EST 2013

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

20060212350 61
20060116926 61
20080103895 61
20090012903 61
20100293063 61
8484080 59
20120066084 59
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5991740 56
7493553 56
8250456 56
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 13/308,004

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	95		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	310		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	125		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	24 minus 20 =	* 4	x 30 =	120	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*	x 125 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	650		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/308,004	11/30/2011	2447	650	WAYF1100-1	24	3

CONFIRMATION NO. 9029

44654
Sprinkle IP Law Group
1301 W. 25th Street
Suite 408
Austin, TX 78705

FILING RECEIPT

OC00000051455972

Date Mailed: 12/16/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Narendra Nath, Hillsborough, CA;
Mallikarjun Hiremani, Fremont, CA;

Power of Attorney: The patent practitioners associated with Customer Number 44654

Domestic Priority data as claimed by applicant

This appln claims benefit of 61/420,193 12/06/2010

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)

If Required, Foreign Filing License Granted: 12/13/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/308,004**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No
** **SMALL ENTITY** **

Title

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

Preliminary Class

709

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where

the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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PTO/SB/05 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	WAYF1100-1
First Inventor	Narendra Nath
Title	DEEP-LINKING SYSTEM, METHOD AND...
Express Mail Label No.	N/A

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. [✓] **Fee Transmittal Form** (e.g., PTO/SB/17)
   (Submit an original and a duplicate for fee processing)
2. [✓] **Applicant claims small entity status.** See 37 CFR 1.27.
3. [✓] **Specification** [*Total Pages* 55]
   Both the claims and abstract must start on a new page
   (For information on the preferred arrangement, see MPEP 608.01(a))
4. [✓] **Drawing(s)** (*35 U.S.C. 113*) [*Total Sheets* 9]
5. **Oath or Declaration** [*Total Sheets* 2]
   a. [✓] Newly executed (original or copy)
   b. [ ] A copy from a prior application (37 CFR 1.63(d))
   (for continuation/divisional with Box 18 completed)
   i. [ ] DELETION OF INVENTOR(S)
   Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. [ ] **Application Data Sheet.** See 37 CFR 1.76
7. [ ] **CD-ROM or CD-R** in duplicate, large table or Computer Program *(Appendix)*
   [ ] Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
   (if applicable, items a. – c. are required)
   a. [ ] Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. [ ] CD-ROM or CD-R (2 copies); or
      ii. [ ] Paper
   c. [ ] Statements verifying identity of above copies

ADDRESS TO: **Commissioner for Patents**
P.O. Box 1450
Alexandria VA 22313-1450

ACCOMPANYING APPLICATION PARTS

9. [ ] **Assignment Papers** (cover sheet & document(s))
   Name of Assignee
10. [ ] **37 CFR 3.73(b) Statement** *(when there is an assignee)* [✓] **Power of Attorney**
11. [ ] **English Translation Document** *(if applicable)*
12. [✓] **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
    [ ] Copies of citations attached
13. [ ] **Preliminary Amendment**
14. [ ] **Return Receipt Postcard** (MPEP 503)
    (*Should be specifically itemized)*
15. [ ] **Certified Copy of Priority Document(s)**
    (if foreign priority is claimed)
16. [✓] **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
17. [✓] Other: Cert. of Transmission

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:*

[ ] Continuation [ ] Divisional [ ] Continuation-in-part (CIP) of prior application No.: .....

Prior application information: *Examiner* _____ *Art Unit:* _____

19. CORRESPONDENCE ADDRESS

[✓] The address associated with Customer Number: 44654 ***OR*** [ ] Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	Katharina Schuster	Date	Nov. 30, 2011
Name (Print/Type)	Katharina W. Schuster	Registration No. (Attorney/Agent)	50,000

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box [+]

PTO/SB/01

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)		
	Attorney Docket No.	WAYF1100-1
	First Named Inventor	Narendra Nath
	COMPLETE IF KNOWN	
	Application Number	Unknown
	Filing Date	Herewith
[X] Declaration Submitted with Initial Filing [ ] Declaration Submitted after Initial Filing	*Group Art Unit*	Unknown
	Examiner Name	Unknown

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

(Title of Invention)

the specification of which was filed on (MM/DD/YYYY)	Herewith
as United States Application Number or PCT International Application Number	Unknown
and was amended on (MM/DD/YYYY) *(if applicable)*	

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me which is material to the patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

Application Number(s)	Filing Date (MM/DD/YYYY)	
61/420,193	12/06/2010	[ ] Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto

DECLARATION -- Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States Application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number *(if applicable)*

Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the registered practitioner(s) assigned to **Customer No. 44654** to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole/First Inventor:							
Given Name (first and middle [if any])			Family Name or Surname				
Narendra			Nath				
Inventor's Signature	Narendra Nath			Date	11/27/11		
Residence: City	Hillsborough	State	CA	Country	US	Citizenship	US
Residence Address	90 Rowan Tree Lane, Hillsborough, CA 94010						
Post Office Address	Same as above						

Name of Additional Inventor:							
Given Name (first and middle [if any])			Family Name or Surname				
Mallikarjun			Hiremani				
Inventor's Signature				Date	27th Nov 2011		
Residence: City	Fremont	State	CA	Country	US	Citizenship	IN
Residence Address	5006 Cappy Terrace, Fremont, CA 94555						
Post Office Address	Same as above						

Name of Additional Inventor:							
Given Name (first and middle [if any])			Family Name or Surname				
Inventor's Signature				Date			
Residence: City		State		Country		Citizenship	
Residence Address							
Post Office Address							

Direct all correspondence to Customer No. 44654							
Name	Katharina W. Schuster		Sprinkle IP Law Group				
Address	1301 W. 25th Street, Suite 408						
City	Austin			*State*	TX	*Zip*	78705
Country	U.S.A.	*Telephone*	512.637.9220	*Fax*	512.371.9088		

PTO/SB/35 (11-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)	First Named Inventor	**Narendra Nath**
	Title	**Deep-Linking System, Method and Computer Program Product for Online Advertisement and E-Commerce**
	Atty. Docket:	**WAYF1100-1**

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

NOV. 30, 2011
Date

Katharina Schuster
Name: Katharina W. Schuster
Reg. No.: 50,000

This request must be signed in compliance with 37 C.F.R. 1.33(b) and submitted with the application **upon filing.**

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

Burden Hour Statement: This collection of information is required by 37 C.F.R. 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 C.F.R. 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WHAT IS CLAIMED IS:

1. A method, comprising:

at a server computer, automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming variables of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming variables of a second site or mobile application, the first set of programming variables being associated with the second set of programming variables in the universal variable map; and

in response to user interaction with the deep-linked ad, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

2. The method according to claim 1, further comprising:

programmatically receiving or gathering or inferring by content the programming variables across the multiple sites and applications.

3. The method according to claim 1, further comprising:

associating each of the programming variables with a normalized programming variable in the universal variable map.

4. The method according to claim 1, wherein the programming variables comprises a composite text string, further comprising:

mapping data in the composite text string to a set of non-composite variables in the universal variable map.

5. The method according to claim 1, further comprising:

determining correspondence between the programming variables and normalized programming variables in the universal variable map utilizing heuristics.

6. The method according to claim 5, further comprising:

refining the correspondence between the programming variables and the normalized programming variables in the universal variable map.

7. The method according to claim 6, wherein the refining further comprises adjusting a weight assigned to at least one of the heuristics.

8. The method according to claim 6, wherein the refining further comprises creating new heuristics and weights associated therewith.

9. The method according to claim 1, wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry.

10. The method according to claim 1, wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click.

11. A computer program product comprising at least one non-transitory computer readable medium storing instructions translatable by a server computer to perform:

automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming variables of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming variables of a second site or mobile application, the first set of programming variables being associated with the second set of programming variables in the universal variable map; and

in response to user interaction with the deep-linked ad, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

12. The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

programmatically receiving or gathering or inferring by content the programming variables across the multiple sites and applications.

13. The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

associating each of the programming variables with a normalized programming variable in the universal variable map.

14. The computer program product according to claim 11, wherein the programming variables comprise a composite text string and wherein the instructions are further translatable by the server computer to perform:

mapping data in the composite text string to a set of non-composite variables in the universal variable map.

15. The computer program product according to claim 11, wherein the instructions are further translatable by the server computer to perform:

determining correspondence between the programming variables and normalized programming variables in the universal variable map utilizing heuristics.

16. The computer program product according to claim 15, wherein the instructions are further translatable by the server computer to perform:

adjusting the correspondence between the programming variables and the normalized programming variables in the universal variable map.

17. A system, comprising:

at least one processor; and

at least one non-transitory computer readable medium storing instructions translatable by the at least one processor to perform:

automatically generating a deep-linked ad utilizing a universal variable map, the universal variable map linking programming variables across multiple sites and applications;

serving the deep-linked ad on a first page of the first site or mobile application in response to a request from a browser application running on a user device, the first page containing a first set of programming variables of the first site or mobile application, the deep-linked ad containing a reference to a second page, the second page containing a second set of programming variables of a second site or mobile application, the first programming variable being associated with the second set of programming variables in the universal variable map; and

in response to user interaction with the deep-linked ad, causing the browser application to display the second page of the second site or mobile application, the second page containing one or more fields being pre-populated with values extracted or inferred from the user interaction.

18. The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

programmatically receiving or gathering or inferring by content the programming variables across the multiple sites and applications.

19. The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

associating each of the programming variables with a normalized programming variable in the universal variable map.

20. The system of claim 17, wherein the programming variables comprise a composite text string and wherein the instructions are further translatable by the at least one processor to perform:

mapping data in the composite text string to a set of non-composite variables in the universal variable map.

21. The system of claim 17, wherein the instructions are further translatable by the at least one processor to perform:

determining correspondence between the programming variables and normalized programming variables in the universal variable map utilizing heuristics.

22. The system of claim 21, wherein the instructions are further translatable by the at least one processor to perform:

adjusting the correspondence between the programming variables and normalized programming variables in the universal variable map.

23. The system of claim 17, wherein the user interaction involves only a single click without data entry by the user and wherein the browser application is caused to display one or more deep-linked ads from the second site or mobile application without any user data entry.

24. The system of claim 17, wherein the user interaction involves no clicks and wherein the browser application is caused to display the second page of the second site or mobile application via the deep-linked ad without a single click.

DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

ABSTRACT OF THE DISCLOSURE

[0111] Embodiments disclosed herein can leverage dynamic data, fields and implied information from arbitrary web sites, mobile apps and other forms of online media to create a universal variable map and automatically generate deep-linked ads utilizing the universal variable map, linking any arbitrary web site, mobile app, network, Internet TV channel, and other forms of online media to any other such arbitrary web site, mobile app, network, Internet TV channel, and other forms of online media. The automatically generated deep-linked ads can be inserted into any ad server and served out from there in real-time. A deep-linked ad thus presented to a user can take the user from a starting page on one site or application where the ad is displayed directly to a resulting page such as a checkout page on another site or mobile application, with pertinent information already pre-populated, and action already initiated for the user.

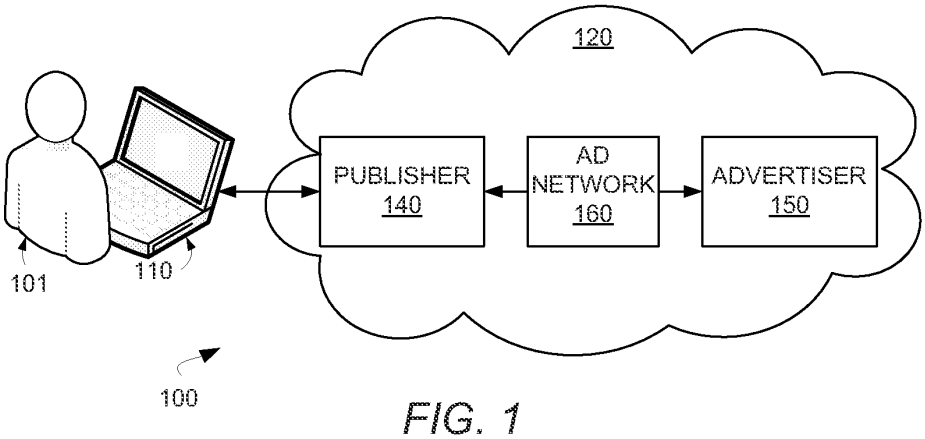

120
PUBLISHER
140
AD
NETWORK
160
ADVERTISER
150
101
110
100

FIG. 1

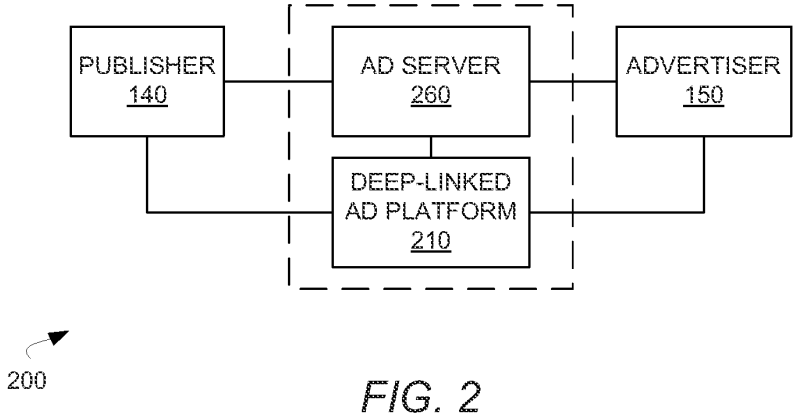

PUBLISHER
140
AD SERVER
260
ADVERTISER
150
DEEP-LINKED
AD PLATFORM
210
200

FIG. 2

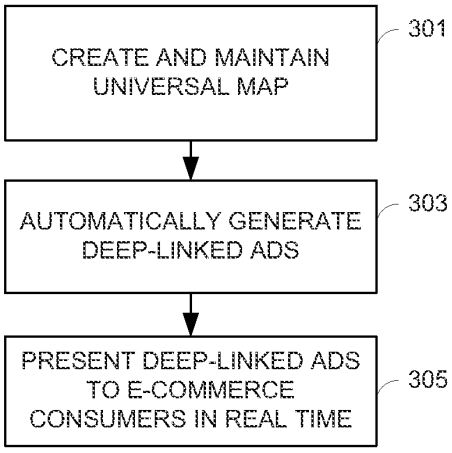


FIG. 3

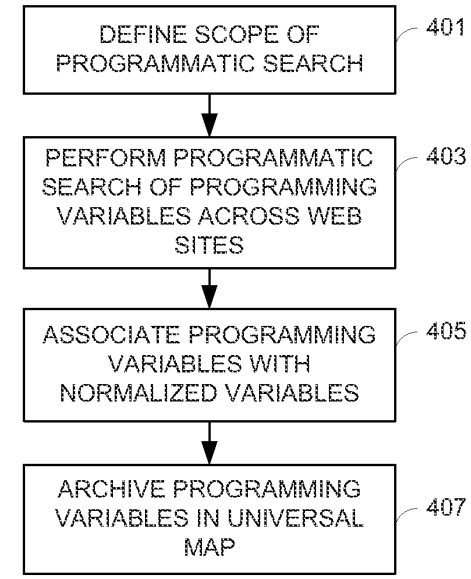


FIG. 4

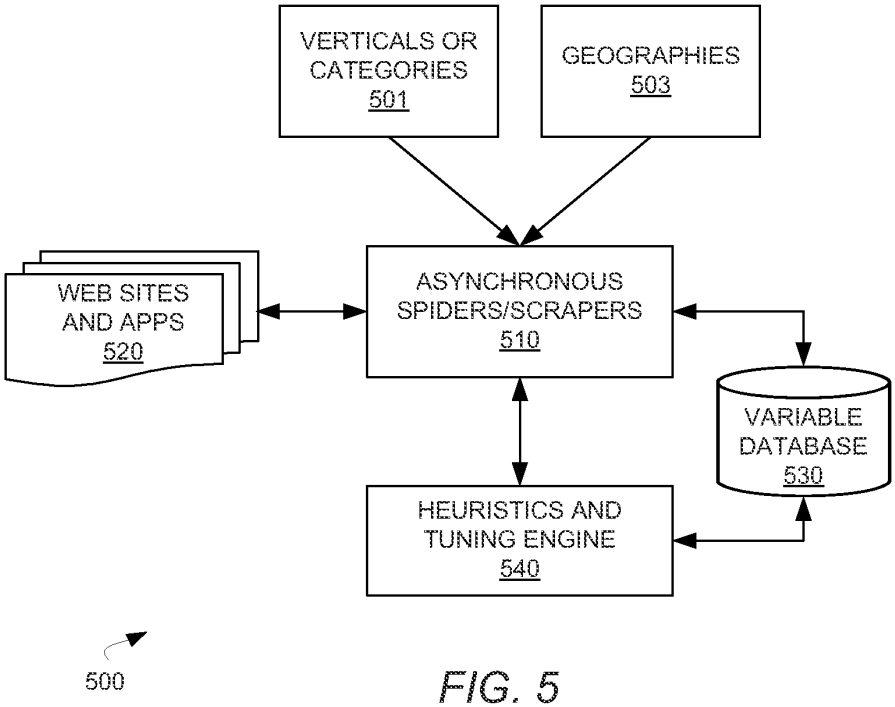


FIG. 5

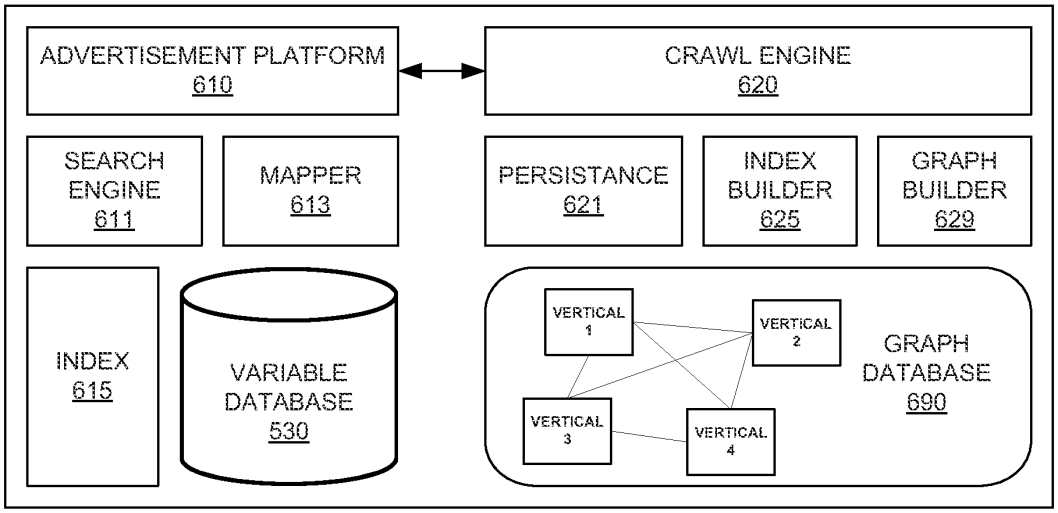

ADVERTISEMENT PLATFORM
610
CRAWL ENGINE
620
SEARCH ENGINE
611
MAPPER
613
PERSISTANCE
621
INDEX BUILDER
625
GRAPH BUILDER
629
INDEX
615
VARIABLE DATABASE
530
VERTICAL 1
VERTICAL 2
VERTICAL 3
VERTICAL 4
GRAPH DATABASE
690
600

FIG. 6

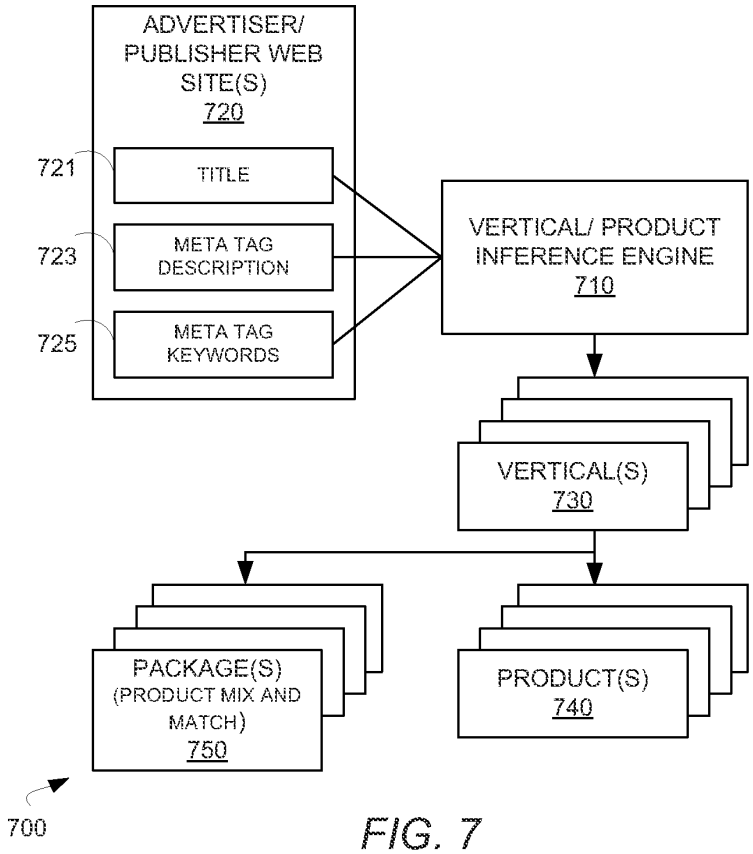

ADVERTISER/ PUBLISHER WEB SITE(S)
720
721
TITLE
723
META TAG DESCRIPTION
725
META TAG KEYWORDS
VERTICAL/ PRODUCT INFERENCE ENGINE
710
VERTICAL(S)
730
PACKAGE(S)
(PRODUCT MIX AND MATCH)
750
PRODUCT(S)
740
700

FIG. 7

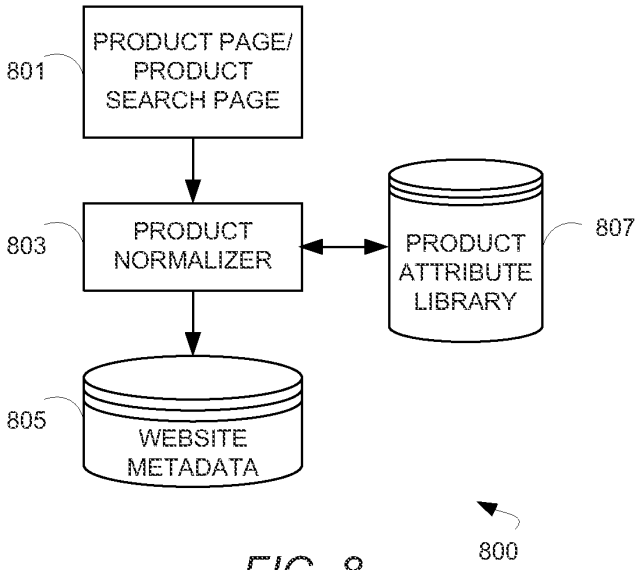


FIG. 8

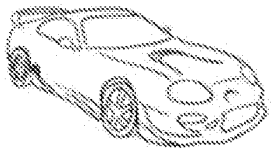
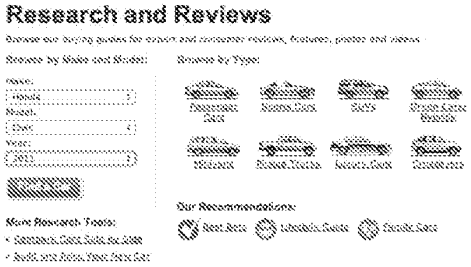
PRODUCT 901	FORM 903
	
PRODUCT ATTRIBUTES 911 Vertical - Automotive Make -- CarManufacturer Model -- SuperSport Year - 2011	FORM SOURCE CODE AND DATA 913 <form name="crpWidget" id="crpWidget" method="get" onsubmit="goToResearch()"> <label for="makeid">Make:</label> <select name="makeid" id="makeid" onchange="popModels();"></select> <label for="modelid">Model:</label> <select name="modelid" id="modelid" onchange="popYears();"></select> <label for="year">Year:</label> <select name="year" id="year"></select> <!-- button --> Find a Car </form>

FIG. 9

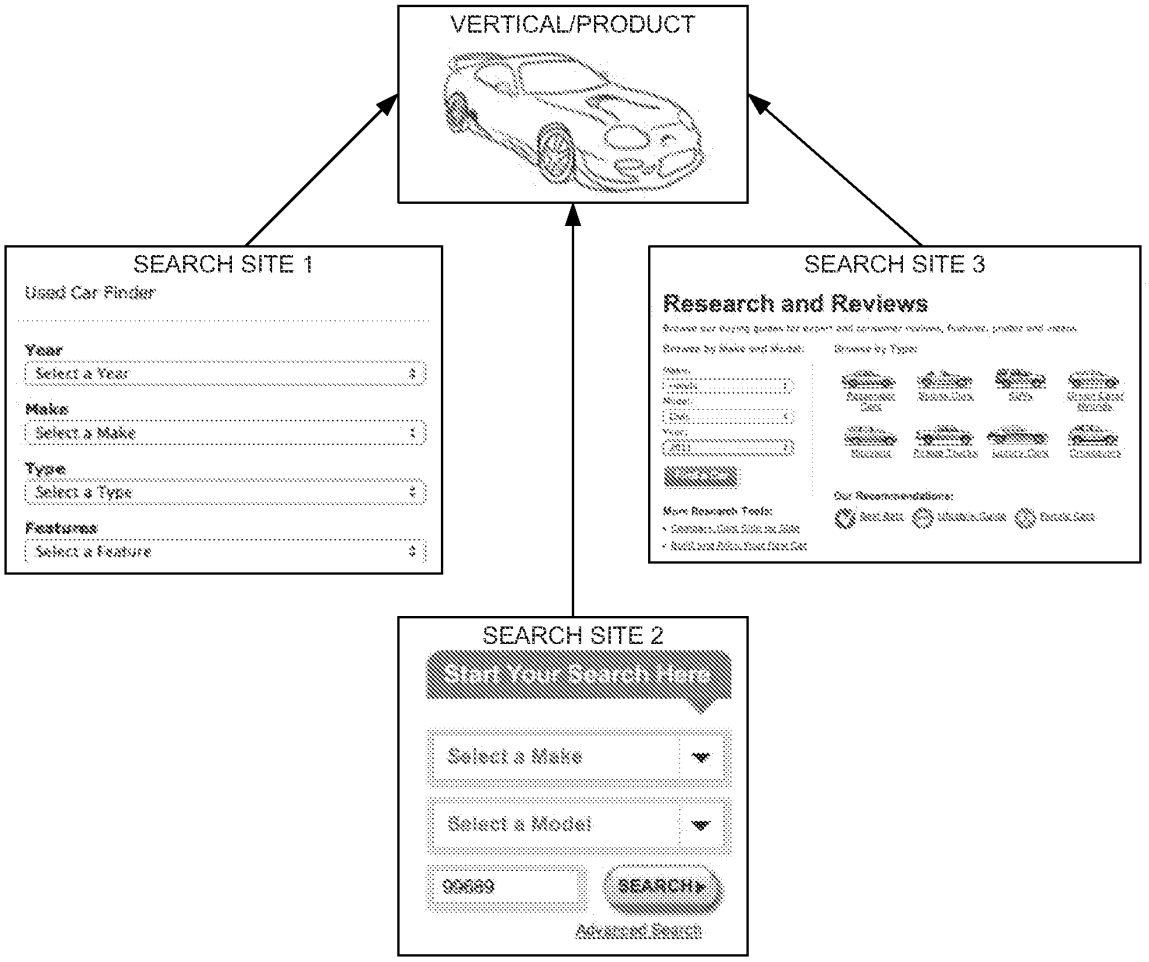

VERTICAL/PRODUCT
SEARCH SITE 1
Used Car Finder
Year
Select a Year
Make
Select a Make
Type
Select a Type
Features
Select a Feature
SEARCH SITE 3
Research and Reviews
SEARCH SITE 2
Start Your Search Here
Select a Make
Select a Model
SEARCH
Advanced Search

FIG. 10

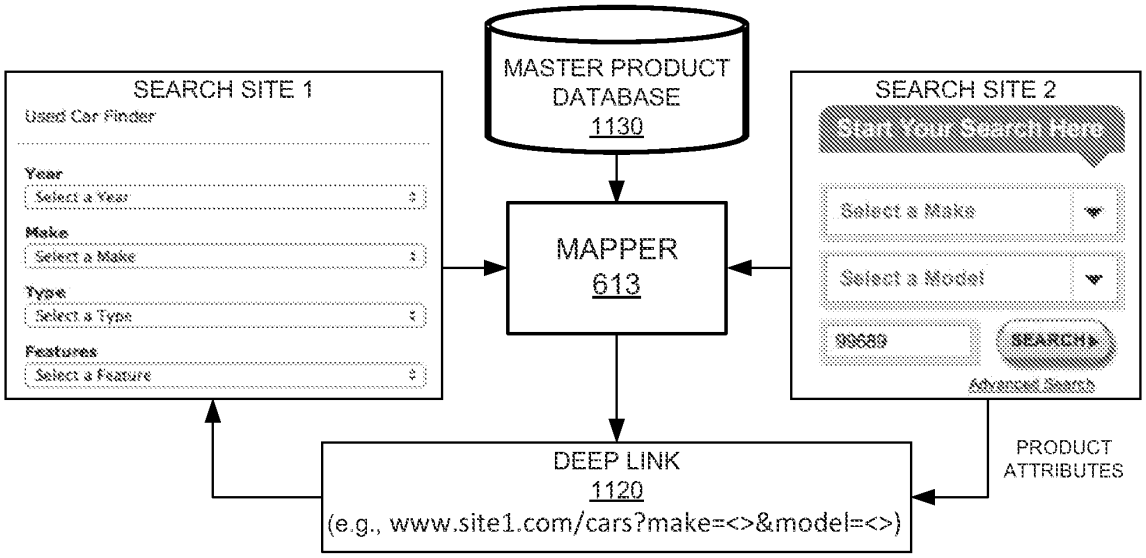


FIG. 11A

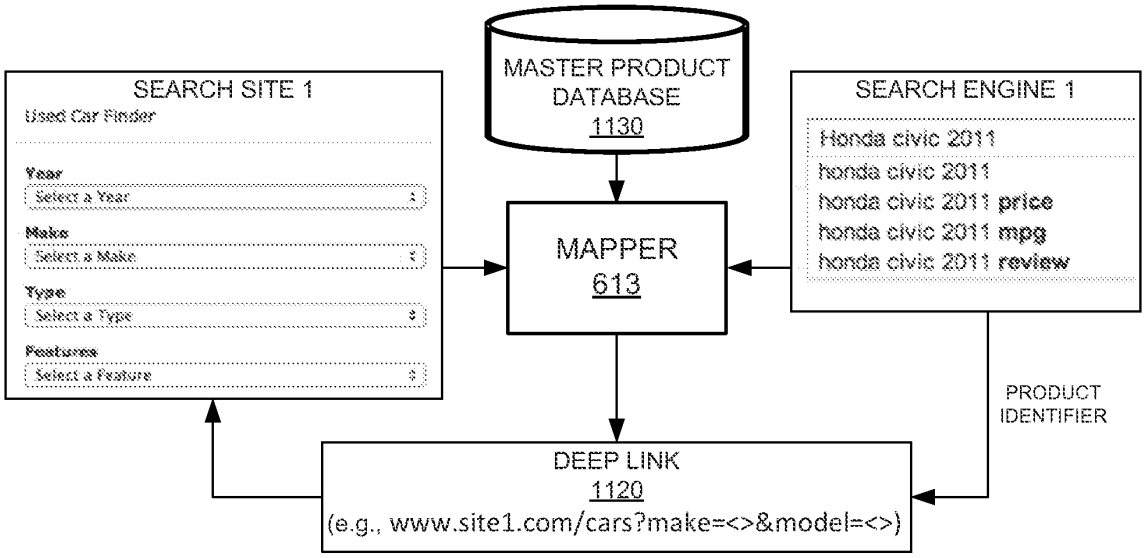


FIG. 11B

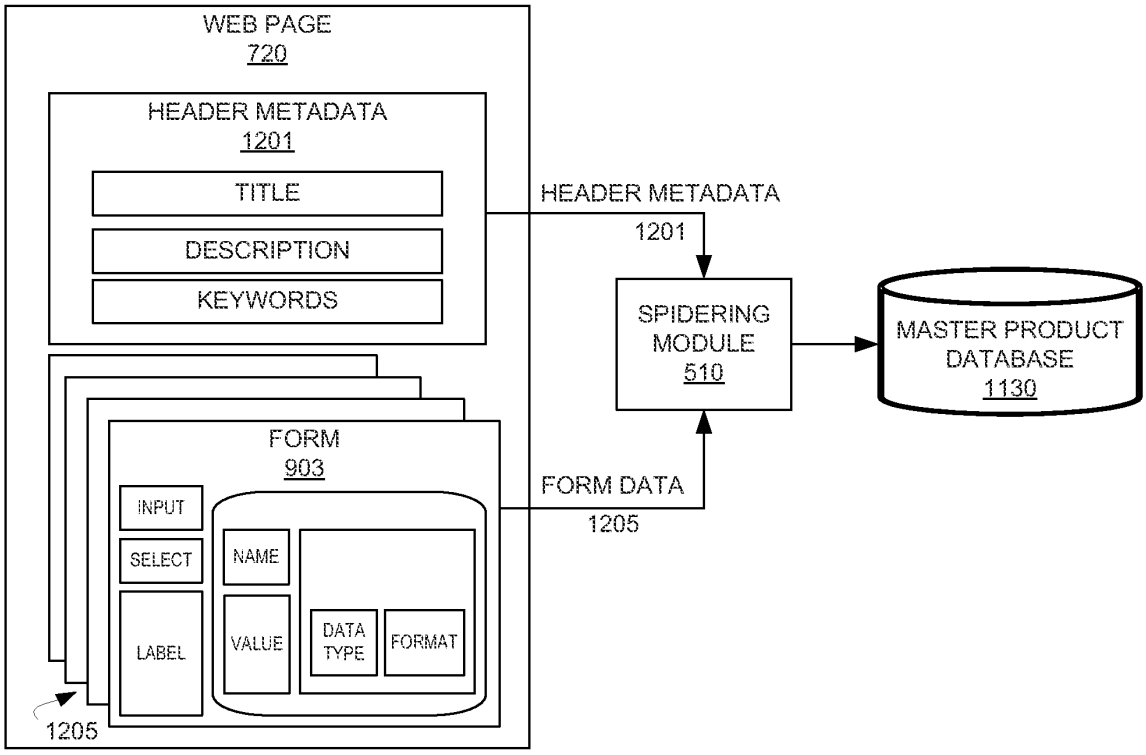

WEB PAGE
720
HEADER METADATA
1201
TITLE
DESCRIPTION
KEYWORDS
FORM
903
INPUT
SELECT
LABEL
NAME
VALUE
DATA TYPE
FORMAT
1205
HEADER METADATA
1201
FORM DATA
1205
SPIDERING MODULE
510
MASTER PRODUCT DATABASE
1130

FIG. 12

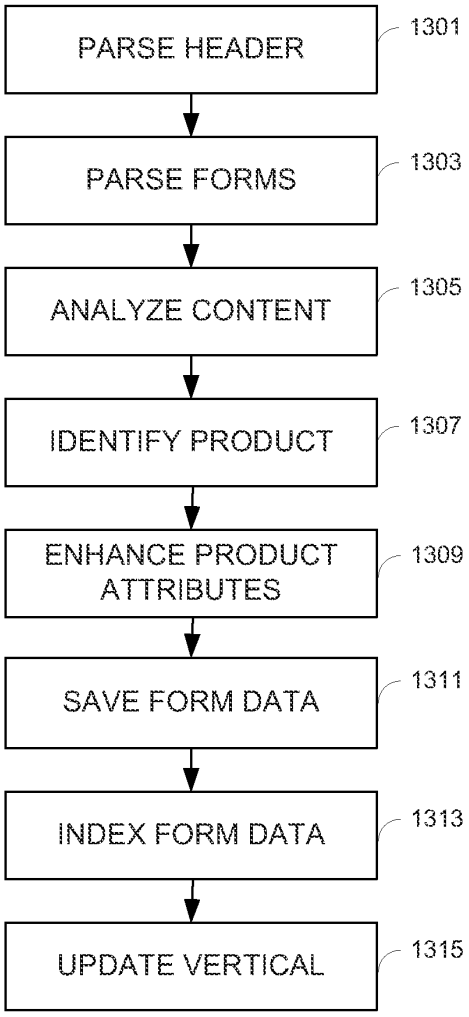

PARSE HEADER
1301
PARSE FORMS
1303
ANALYZE CONTENT
1305
IDENTIFY PRODUCT
1307
ENHANCE PRODUCT ATTRIBUTES
1309
SAVE FORM DATA
1311
INDEX FORM DATA
1313
UPDATE VERTICAL
1315
1300

FIG. 13

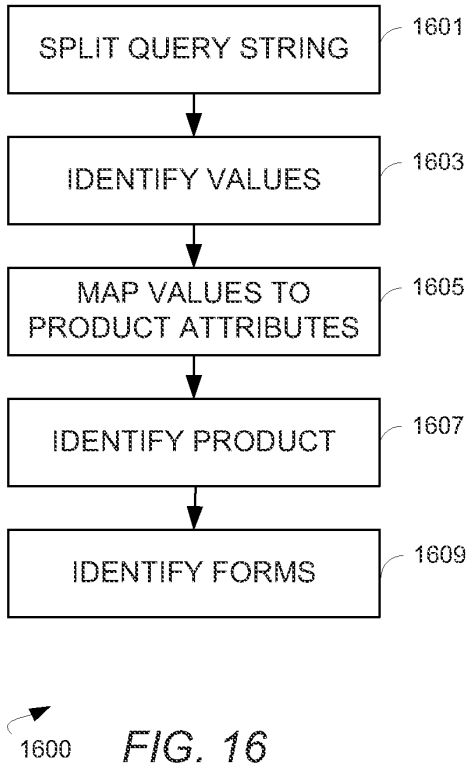

SPLIT QUERY STRING
1601
IDENTIFY VALUES
1603
MAP VALUES TO PRODUCT ATTRIBUTES
1605
IDENTIFY PRODUCT
1607
IDENTIFY FORMS
1609
1600

FIG. 16

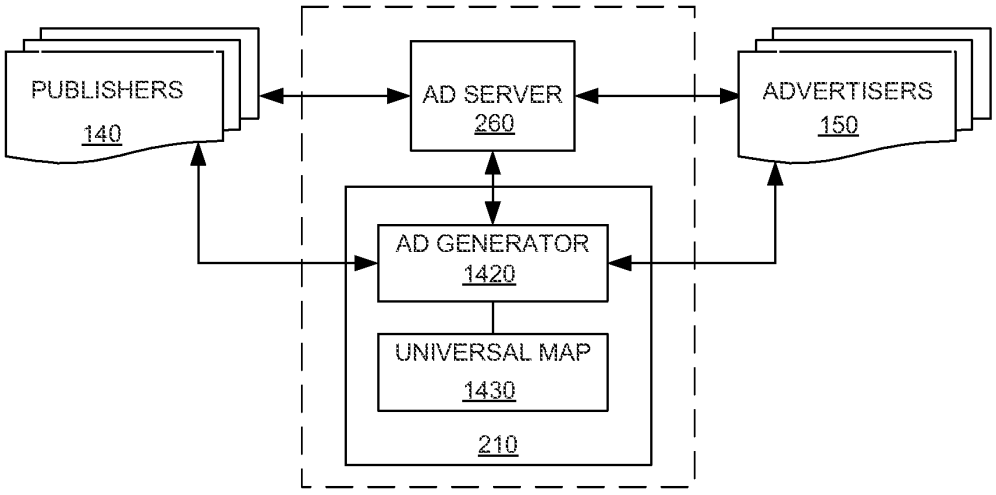

PUBLISHERS
140
AD SERVER
260
ADVERTISERS
150
AD GENERATOR
1420
UNIVERSAL MAP
1430
210
1400

FIG. 14

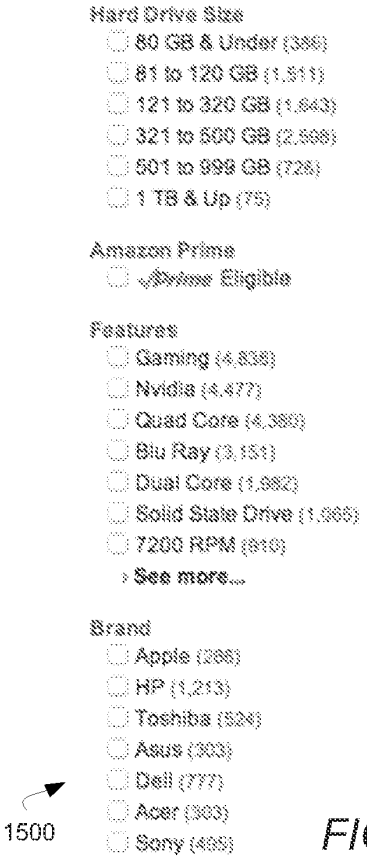

Hard Drive Size
80 GB & Under (386)
81 to 120 GB (1,811)
121 to 320 GB (1,643)
321 to 500 GB (2,598)
501 to 999 GB (726)
1 TB & Up (75)
Amazon Prime
Prime Eligible
Features
Gaming (4,838)
Nvidia (4,477)
Quad Core (4,380)
Blu Ray (3,151)
Dual Core (1,982)
Solid State Drive (1,965)
7200 RPM (910)
See more...
Brand
Apple (386)
HP (1,213)
Toshiba (524)
Asus (303)
Dell (777)
Acer (360)
Sony (489)
1500

FIG. 15

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Atty. Docket No. (Opt.) **WAYF1100-1**

Applicant **Narendra Nath**	
Application Number **Not Yet Assigned**	Filing or 371 (c) Date: **Herewith**
For **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**	
Group Art Unit **Not Yet Assigned**	Examiner **Not Yet Assigned**
Confirmation Number: **Not Yet Assigned**	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certification of Transmission Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being transmitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 via the U.S. Patent and Trademark Office Electronic Filing System (EFS-Web) on November 30 2011.

Betty Caldwell
Betty Caldwell

Dear Sir,

Applicant respectfully requests, pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, that the information listed on the attached SB08A/B form(s) be considered and cited in the examination of the above-identified application. A copy of U.S. Patent(s) and U.S. Patent Application Publication(s) listed on the attached SB08A form is not being submitted with this Information Disclosure Statement pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) by the U.S. Patent and Trademark Office. Where applicable, a copy of foreign patent document(s) as well as information listed on the attached SB08B form is enclosed for the convenience of the Examiner.

☒ This Information Disclosure Statement is being submitted within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d).

☐ This Information Disclosure Statement is being submitted within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application;

☐ This Information Disclosure Statement is being submitted before the mailing of a First Office Action on the merits; or

☐ This Information Disclosure Statement is being submitted before the mailing of a First Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

☐ This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(b) and before the mailing date of any of a Final Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

- ☐ The statement specified in 37 C.F.R. § 1.97(e); or
- ☐ The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of $180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

☐ This Information Disclosure Statement is being submitted after the period specified in 37 C.F.R. § 1.97(c) and on or before payment of the issue fee and is accompanied by:

- ☐ The statement specified in 37 C.F.R. § 1.97(e); and
- ☐ The fee set forth in 37 C.F.R. § 1.17(p). Applicant hereby authorizes the Commissioner to deduct the amount of $180 from Deposit Account No. 50-3183 of Sprinkle IP Law Group for the filing fee of this Information Disclosure Statement.

Applicant respectfully submits that the claims of Applicant's above-referenced patent application are patentably distinguishable from the listed information. Furthermore, pursuant to 37 C.F.R. §§ 1.97(g) and (h), no representation is made that a search has been made or that this information is material to patentability of the present application.

Applicant does not believe any fees are due and owing at this time. If Applicant is in error, the Director is hereby authorized to deduct any and all appropriate fees from Deposit Account 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

Sprinkle IP Law Group
Attorneys for Applicant

Katharina W. Schuster
Reg. No. 50,000

Dated: Nov. 30, 2011

1301 W. 25th Street, Suite 408
Austin, Texas 78705
Tel. (512) 637-9220
Fax. (512) 317-9088

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number	Not Yet Assigned
Filing or 371 (c) Date:	Herewith
First Named Inventor	Narendra Nath
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	WAYF1100-1

Sheet 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	A1	6,868,389 B1	03-15-2005	Wilkins et al.	
	A2	7,080,073 B1	07-18-2006	Jiang et al.	
	A3	7,395,259 B2	07-01-2008	Bailey et al.	
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	A6	7,756,741 B2	07-13-2010	Ranka et al.	
	A7	7,818,208 B1	10-19-2010	Veach	
	A8	2003/0187667 A1	10-02-2003	Azimi	
	A9	2005/0125285 A1	06-09-2005	McQueeney et al.	
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	A11	2005/0187818 A1	08-25-2005	Zito et al.	
	A12	2005/0197894 A1	09-08-2005	Fairbanks et al.	
	A13	2005/0240475 A1	10-27-2005	Margiloff et al.	
	A14	2006/0069616 A1	03-30-2006	Bau	
	A15	2006/0277102 A1	12-07-2006	Agliozzo	
	A16	2007/0022096 A1	01-25-2007	Hertz	
	A17	2007/0067215 A1	03-22-2007	Agarwal et al.	
	A18	2007/0088609 A1	04-19-2007	Reller et al.	
	A19	2007/0226206 A1	09-27-2007	Pavlovski et al.	
	A20	2007/0233565 A1	10-04-2007	Herzog et al.	
	A21	2007/0239527 A1	10-11-2007	Nazer et al.	
	A22	2007/0239542 A1	10-11-2007	Shapiro	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature		Date Considered	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	Not Yet Assigned
				Filing or 371 (c) Date:	Herewith
				First Named Inventor	Narendra Nath
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	WAYF1100-1

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document Number Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	A23	2007/0244750 A1	10-18-2007	Grannan et al.	
	A24	2008/0086356 A1	04-10-2008	Glassman et al.	
	A25	2008/0103897 A1	05-01-2008	Flake et al.	
	A26	2008/0140508 A1	06-12-2008	Anand et al.	
	A27	2008/0201188 A1	08-21-2008	Heyman et al.	
	A28	2008/0255915 A1	10-16-2008	Collins et al.	
	A29	2008/0294524 A1	11-27-2008	Badros et al.	
	A30	2009/0012903 A1	01-08-2009	Subramanian et al.	
	A31	2009/0077022 A1	03-19-2009	Cuthbert	
	A32	2009/0119169 A1	05-07-2009	Chandratillake et al.	
	A33	2009/0119173 A1	05-07-2009	Parsons et al.	
	A34	2009/0240586 A1	09-24-2009	Ramer et al.	
	A35	2010/0082439 A9	04-01-2010	Patel et al.	
	A36	2010/0094758 A1	04-15-2010	Chamberlain et al.	
	A37	2010/0121706 A1	05-13-2010	Arena et al.	
	A38	2010/0145762 A1	06-10-2010	Coladonato et al.	
	A39	2010/0228623 A1	09-09-2010	Devaraj et al.	
	A40	2010/0241511 A1	09-23-2010	Cunningham et al.	
	A41	2010/0293063 A1	11-18-2010	Atherton et al.	
	A42				
	A43				
	A44				

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code *(if known)*	Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear

Examiner Signature		Date Considered	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	
CERTIFICATE OF TRANSMISSION VIA EFS-WEB SYSTEM	Atty Docket No. WAYF1100-1

In the Application of: **Narendra Nath**
Date Filed: **Herewith**
Title: **DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I hereby certify that the attached Utility Patent Application Transmittal Form (1 page), executed Declaration and Power of Attorney (2 pages), Utility Patent Application (55 pages), Formal Drawings (9 sheets), Information Disclosure Statement (5 pages), and Request for Non-Publication (1 page) are being deposited electronically using the United States Patent and Trademark Office EFS-Web System on November 30, 2011.

Respectfully submitted,

SPRINKLE IP LAW GROUP

Betty Caldwell

Betty Caldwell

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	WAYF1100-1_Patent_Application_Transmittal.pdf	72449 75b5532035f51edc72bd747423574a96da240d63	no	1
Warnings:					
Information:					
2	Oath or Declaration filed	WAYF1100-1_Declaration.pdf	2813795 776782c606b25ebc721db8304edede9b9be9b357	no	2
Warnings:					
Information:					
3	Nonpublication request from applicant.	WAYF1100-1_Nonpublication_Request.pdf	61820 96597805afb53057dafc1ec0cece9e60f7076739	no	1
Warnings:					
Information:					
4		WAYF1100-1_Specification_Claims.pdf	102594 b46b553c21127e2f4ab8dab6067dd5ac7fd31ea3	yes	55

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	47
Claims	48	54
Abstract	55	55

Warnings:					
Information:					
5	Drawings-only black and white line drawings	WAYF1100-1_Drawings.pdf	255188 190d2037ff6b963dcdc4ffe816b6a55505ef73dd	no	9
Warnings:					
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6		WAYF1100-1_IDS.pdf	194373 bb8f5e3448eaf8c231e1a69248d457b2b1c21f32	yes	5

Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	3

	Information Disclosure Statement (IDS) Form (SB08)		4	5	
Warnings:					
Information:					
7	Miscellaneous Incoming Letter	WAYF1100-1_Certificate_Transmission.pdf	27758 a31ab5e8417332fefcabe75fc945afec16886937	no	1
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	36800 6d7283efb585fd34180678484d7a4c372e48c67f	no	2
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DEEP-LINKING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR ONLINE ADVERTISEMENT AND E-COMMERCE

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This is a conversion of and claims a benefit of priority from U.S. Provisional Application No. 61/420,193, filed December 6, 2010, entitled "SYSTEM, METHOD, DATABASE AND SOFTWARE PROGRAM FOR AUTOMATING THE SPIDERING, ARCHIVING AND PROGRAMMATIC USE OF DYNAMIC DATA FROM ARBITRARY WEB SITES, MOBILE APPS AND OTHER FORMS OF ONLINE MEDIA," which is fully incorporated herein by reference for all purposes.

TECHNICAL FIELD

[0002] This disclosure relates generally to the field of online advertising and E-commerce. More particularly, embodiments disclosed herein relate to deep-linked advertising and E-commerce. Even more particularly, embodiments disclosed herein relate to a deep-linking system, method, database, and computer program product for online ads and E-commerce widgets, the online ads and widgets being automatically generated utilizing dynamic data from arbitrary web sites, mobile apps and other forms of online media and being able to automatically transfer their dynamic data to other arbitrary web sites, mobile apps and other forms of online media, thereby pre-populating fields on the receiving online media, or enabling ad clicks to land directly on a results page or checkout page rather than a home page, substantially increasing conversion rates and performance. Note that the

definition of this dynamic data includes data explicitly typed in by the user, as well as data that may be implicitly inferred from the page that the user is on, and the page location s/he clicks on or hovers over. Note further that dynamic data may be obtained at the initiative of the advertising system via a "pull" model, or at the initiative of the sites and applications being linked to via a "push" model.

BACKGROUND OF THE RELATED ART

[0003] The advertising industry is seeing substantial developments and transformations around the world. In particular, a greater percentage of overall worldwide marketing spending is shifting from traditional offline media such as print, television, billboards and venues to online media such as the Internet, mobile apps, Internet access networks, Internet television, etc. This is happening for two primary reasons - firstly, a greater percentage of consumer "eyeballs" are shifting from offline to online media. Secondly, the online media affords much greater ability to measure and manage advertising programs and placements, such that advertisers are able to get greater return on investment, and engage in more performance-based marketing practices. Digital advertising, as the various forms of online or interactive advertising are commonly described, is thus becoming an increasing percentage of the overall advertising market. With this trend, the requirement to provide better and better targeting, relevance and harmony with content continues to get stronger in order to provide greater value to end-users, better return-on-investment for advertisers, and better site loyalty and monetization for publishers.

[0004] Within Digital Advertising, the two largest categories currently are Display Advertising and Search Advertising. Display advertising refers to any type of banner ads, audio ads, video ads, animation ads, etc. where the ad unit (a piece or an item of advertising) is presented on the publisher media based on some filtering conditions specified by the advertiser or the publisher. These filtering conditions might include current information, such as the location of the user, the date and time of the ad serving, as well as historical information, such as the sites the user has been on prior to coming to this publisher's media, the user's past click and purchase behavior on this and other media, etc. Advertisers and publishers are finding that the better the targeting of an ad, the better its performance for all parties.

[0005] Search advertising refers to a major innovation brought about by Google™, Bing™ and other "horizontal" search engines. These horizontal search engines came up with new and better ways to sort and categorize the entire Internet by keywords, or groups of words typed in by users to find information they were interested in. The search engines were so effective for users that they quickly became the dominant entry points for users looking to get on the Internet. Google and other search sites then introduced a major innovation in the world of advertising, and that was to use the keywords typed in by users searching for information to select the ads to present. Subsequently, they also added the ability to serve up ads filtered out by the static content of any web site, not just Google or Bing itself. Furthermore, they changed ad formats from predominantly banner based to predominantly text based, as a further message to users about relevance and

contextualization, rather than intrusiveness of display. By enhancing the contextualization and presentation of ads, the search engines were able to greatly shift advertising spend from offline and display ads to search ads.

[0006] Advances in information technology, and business requirements for continually better performance continue to bring changes and challenges to online advertising. Consequently, there is always room for improvement and innovation.

SUMMARY OF THE DISCLOSURE

[0007] A recent advancement in Digital Advertising has been "deep-linked" or "parameter-based" advertising. This form of advertising today applies to search and E-commerce sites where the user is searching for a product or service, like a travel site, and types in search parameters, such as where s/he is traveling from, where to, travel dates, how many people in the party, class of travel, etc. These search parameters are then passed along with each ad click to the appropriate advertiser. The advertiser then uses the parameters passed along to: (a) hyper-target the placement of ads and customize the copy of ads presented on targeted web pages, and (b) automatically activate searches from their home page, thereby landing the web user "deep" into their booking process rather than on their home page as is customary with other forms of ad clicks.

[0008] Targeting and customizing the ad copy dynamically results in much greater click-through rates, and landing the ad click deep in the booking process results in much greater conversion rates. As a result, deep-linked ads have much higher overall

return-on-investment for advertisers, translating to much higher monetization rates for publishers.

[0009] To make deep-linked ads work, dynamic data from the publisher's site or app needs to be input into the appropriate locations on the advertiser's site or app, enabling it to "fast-forward" the user click deep into its conversion funnel. In one embodiment of this invention, to make these ads work fields or variables on the publisher site or mobile app need to be mapped and integrated with corresponding fields or variables on the advertiser site or mobile apps, and the ad click sent to the appropriate dynamic page URL as opposed to the home page URL. So far in the industry, these deep-linked ad connections have been manually created by developing programmatic integrations between variables and fields on the publisher web site and the advertiser web site, created by manual code. This is so because each web site uses its own field descriptors and variable names, and the only way to create deep-linked ads has been to manually obtain the names of the respective variables from both publishers and advertisers and then integrate them to each other through manual programming.

[0010] This manual programming is a time and resource intensive activity that multiplies as the size of the network grows, limiting the size, scale and market adoption for deep-linked ads. Furthermore, this manual model requires prior knowledge of ads to be placed on a given publisher's site or app in order for the deep-linked integrations to be pre-built. However, this then precludes many of the traditional efficiencies in the Display and Search ad markets, such as an open real-time bidding model for ad inventory, flexibility of

placing ads and pulling them down on demand, dynamic targeting, etc. There is hence an acute need for an automated way to generate deep-linked ads, as that will spur rapid and much wider adoption of these kinds of ads by increasing numbers of participating web sites and by bringing new market efficiencies to both publishers and advertisers and thereby produce greater economic gains for a larger cross-section of publisher and advertiser sites. These benefits accrue whether the automated ad generation system is operated by human beings at the network acting upon requests made by publishers or advertisers, as well as by self-help systems that can be directly used by human operators at publishers and advertisers.

[0011] Embodiments disclosed herein provide various solutions for automating the spidering or otherwise data gathering, archiving, inferring, linking and programmatic use of dynamic data and the programming containers or variables for this dynamic data from arbitrary web sites (also referred to herein as "sites"), mobile apps and other forms of online media to other arbitrary web sites, mobile apps and other forms of online media. Note that this dynamic data may comprise data explicitly typed in by the user, as well as data implicitly inferred from the page that the user is on, and/or the page location s/he clicks on or hovers over. More specifically, some embodiments disclosed herein may enable the automated generation of deep-linked ads between any arbitrary web site, mobile app, private Internet network, Internet TV channel, and other forms of online media and any other such arbitrary web site, mobile app, private Internet network, Internet TV channel, and other forms of online media. Some embodiments

may additionally enable the automatically generated deep-linked ads to be inserted into any ad server, such that the deep-linked ads can be served out from there in real-time. Some embodiments may also enable deep-linked ads to be created in real-time by fetching non deep-linked Display or Search ads from real-time ad exchanges or other sources, appending deep-linking codes into the fetched ads, and then placing the deep-linked versions of these ads back out onto real-time ad exchanges or other ad servers. Some embodiments may enable the deep-linked ads to land the user directly onto the results or checkout page of the advertising site or application, other embodiments may enable the pre-population of dynamic data into the forms of the advertising site or application but not activating the actual search action, in the event that all fields cannot be pre-populated because of incomplete dynamic data being passed from the publishing site. Deep-linked ads in this embodiment reduce data entry required of users by pre-populating what is already available from the publishing site, thereby increasing conversion rates.

[0012] In some embodiments, a method of automated generation of deep-linked ads may comprise some or all of the following:

[0013] - Create a list of all the verticals and all the geographies in which an ad company wishes to operate.

[0014] - Generate lists of web sites belonging in the above verticals and geographies by doing a search on Google, Bing and other search and directory resources.

[0015] - Run asynchronous spiders over the Internet, or otherwise gather information pushed directly from sites and web pages, to verify the verticals and product categories to which sites

and web pages belong and capture and continually update the names of all the site categories and variables or field identifiers or containers of user input data on all sites and apps reached based on the lists.

[0016] - Normalize all the variables and identifiers to a meta-schema constructed for each vertical and type of site or app, whereby all variables and identifiers are mapped to their standard normalized names.

[0017] - Create mini-integrations or handshakes between each gathered variable and the corresponding normalized variable by employing a series of mapping heuristics that can be fine-tuned over time. In one embodiment, this is realized via a universal variable map. For efficiency purposes, many or all mini-integrations can also be performed directly between publisher and advertiser of ad, rather than each to the normalized variables as an interim step. The mini-integrations can be created at any stage - during the time the variables are first gathered, when an ad placement is created, just as an ad is about to get served in real-time, or any other time in the process.

[0018] - Spidering or otherwise gathering the dynamic landing page URL to which to send the ad click, as opposed to a static home page or other landing page URL.

[0019] - Run processes to continually validate, update and fine-tune the data gathering, spidering and variable mapping process. These processes may be adaptive and/or involve human oversight.

[0020] - Either as an asynchronous batch process, or as a synchronous process when requested by a publisher or advertiser wanting to

place deep-linked ads, generate a deep link ad with the appropriate integrations between publisher variables and advertiser variables already built in.

[0021] - Determine the positioning of each deep-linked ad placement relative to other deep-linked or non-deep-linked ad placements based on the bid prices of the various ads, click-through rates of the various ads, CPM rates of the various ads, eCPM rates of the various ads, any combination of the above, or any other bid or performance characteristics.

[0022] In one embodiment, the user input field on a publisher site might comprise a composite field, such as a multi-keyword text string. In this embodiment, the composite text string can be parsed into its component values that can then be passed into the corresponding normalized variables through a real-time parsing module. These normalized variables can then be linked to explicit variables on the advertising site, thereby passing all requisite dynamic data from a composite multi-keyword text field on the publisher site into the right multiple fields in the right locations on the advertiser site.

[0023] In another embodiment, the user might not fill out any field on the publisher site if this is a browse-based site. In this situation, the user's click on any page, or a hover over a location on a page, can be used to define what item or link or attribute the user clicked on or hovered over, and on which page of the publisher site, using that information to set the inferred values into the corresponding normalized variables in the universal variable map in real-time. These normalized variables can then be linked to explicit variables on the advertising site, thereby passing all requisite dynamic data

from the page location clicked on or hovered over into the right locations on the advertiser site.

[0024] In some embodiments, through the universal variable map, forms and fields from one site can be associated with one or more relevant forms and fields from one or more different sites, even if the sites themselves may be in different verticals. Leveraging this unique and comprehensive universal variable map, embodiments can take a web site visitor from an initial stop (e.g., a home page of a first web site) directly and in real-time through a specific deep-link ad to a landing spot on another site (e.g., a checkout page of a second web site), or to a home page on another site with as much data pre-populated as available based on the user's input in the context of the particular E-commerce transaction.

[0025] In one embodiment, deep-linked ads can be daisy-chained, whereby upon receiving an ad click from a publisher site, the advertiser site can in turn become the next publisher site, sending a deep-linked ad click to its own advertiser site, with the sequence proliferating indefinitely. There is hence an indefinite number of cascading deep-linked ads that can be set up, each ad having the ability to leverage all of the user input - explicitly typed in, or implicitly inferred from the user's clicks or hovers - up to that point.

[0026] Some embodiments disclosed herein may provide a computer program product having at least one non-transitory computer readable medium storing instructions translatable by at least one processor to implement the direct deep-linking methodology disclosed herein, including the automated generation of deep-linked ads. Some embodiments disclosed herein may provide a system comprising at least one processor and at least one non-

transitory computer readable medium storing instructions translatable by the at least one processor to implement the deep-linking methodology disclosed herein, including the automated generation of deep-linked ads.

[0027] With embodiments disclosed herein, publisher sites, apps and media can leverage deep-linked ads with the same ease as Display ads and Search ads, dramatically enhancing their revenue and monetization. At the same time, advertisers can place deep-linked ads on a full range of online media, dramatically enhancing their conversion rates and return on investment.

[0028] These, and other, aspects of the disclosure will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following description, while indicating various embodiments of the disclosure and numerous specific details thereof, is given by way of illustration and not of limitation. Many substitutions, modifications, additions and/or rearrangements may be made within the scope of the disclosure without departing from the spirit thereof, and the disclosure includes all such substitutions, modifications, additions and/or rearrangements.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029] The drawings accompanying and forming part of this specification are included to depict certain aspects of the disclosure. It should be noted that the features illustrated in the drawings are not necessarily drawn to scale. A more complete understanding of the disclosure and the advantages thereof may be acquired by referring to the following description, taken in conjunction with the accompanying drawings in which like reference numbers indicate like features and wherein:

[0030] FIGURE 1 depicts a diagrammatic representation of an example network architecture in which embodiments disclosed herein may be implemented;

[0031] FIGURE 2 depicts a diagrammatic representation of an example system architecture according to some embodiments disclosed herein;

[0032] FIGURE 3 depicts a flow diagram representing an example embodiment of a method of creating a universal variable map for deep-linking;

[0033] FIGURE 4 depicts a diagrammatic representation of an example process flow and modules implementing an embodiment of a method disclosed herein;

[0034] FIGURE 5 depicts a diagrammatic representation of an example embodiment utilizing keyword density of meta tags for selection of an appropriate schema in the automated generation of deep-linked ads, and using a set of smart heuristics to match variables on one site or mobile app to those on another site or mobile app;

[0035] FIGURE 6 depicts a diagrammatic representation of an example embodiment for processing product information gleaned from web sites to map to the universal schema and map all related relationships;

[0036] FIGURE 7 depicts a diagrammatic representation of an example system architecture for decomposing a site into its component product and package offerings according to some embodiments disclosed herein;

[0037] FIGURE 8 depicts a diagrammatic representation of modules for searching a vertical or product and mapping variables, the modules accessing website schemas and product schemas;

[0038] FIGURE 9 depicts a diagrammatic representation of an example correspondence between a physical product, its product search form, its pertinent search variables, and the actual source code illustrating an example implementation;

[0039] FIGURE 10 depicts a diagrammatic representation of example linkages between a physical product, and the search fields on three different sites designed to search for that physical product, illustrating the logic behind the variable mapping exercise;

[0040] FIGURE 11A depicts a diagrammatic representation of example linkages built in an automated fashion between two sites, where both sites have multiple search fields, and an illustration of an example generation of automated code for a deep-linking ad between the two sites;

[0041] FIGURE 11B depicts a diagrammatic representation of example linkages built in an automated fashion between two sites, where one site has multiple search fields and the other site has a composite text field, and an illustration of an example

generation of automated code for a deep-linking ad between the two sites;

[0042] FIGURE 12 depicts a diagrammatic representation of an example architecture for decomposing a web site or an app into its components, and eliciting, organizing and mapping its variables in the universal variable database;

[0043] FIGURE 13 depicts a diagrammatic representation of an example flow diagram for identifying, parsing, detecting, organizing and archiving site and applications and their product attributes or variables in the universal variable database;

[0044] FIGURE 14 depicts a diagrammatic representation of an example architecture for serving deep-linked ads via associations between an ad server, ad generator and universal variable map;

[0045] FIGURE 15 depicts a diagrammatic representation of a web page/site that does not require any typed-in user input to operate, but rather is operated by clicking on or hovering over menu selections; and

[0046] FIGURE 16 depicts a diagrammatic representation of an example flow diagram for decomposing a composite text string into its component values and mapping the values onto multiple product attributes or variables.

DETAILED DESCRIPTION

[0047] The disclosure and various features and advantageous details thereof are explained more fully with reference to the exemplary, and therefore non-limiting, embodiments illustrated in the accompanying drawings and detailed in the following description. It should be understood, however, that the

detailed description and the specific examples, while indicating the preferred embodiments, are given by way of illustration only and not by way of limitation. Descriptions of known programming techniques, computer software, hardware, operating platforms and protocols may be omitted so as not to unnecessarily obscure the disclosure in detail. Various substitutions, modifications, additions and/or rearrangements within the spirit and/or scope of the underlying inventive concept will become apparent to those skilled in the art from this disclosure.

[0048] FIGURE 1 depicts a diagrammatic representation of a high-level network architecture 100 in which embodiments disclosed herein may be implemented. In the example of FIGURE 1, user 101 at user device 110 may direct a browser application running on device 110 to a particular Internet Protocol (IP) address of publisher site 140 on Internet 120. Depending upon user input, publisher site 140 may present a product or service search page containing various links to user 101. This product or service search page may contain one or more links to advertiser 150. Publisher 140 and Advertiser 150 may be clients of ad network 160. If user 101 views or clicks on an ad published by publisher 140, advertiser 150 may pay publisher for that view or click.

[0049] FIGURE 2 depicts a diagrammatic representation of example system architecture 200 according to some embodiments disclosed herein. In the above example, ad network 160 may include ad server 260. Ads for advertiser 150 may be prepared and/or served by ad server 260 to publisher 140. In one embodiment, platform or system 210 (also referred to herein as an Ad system) may reside on or alongside Ad server 260 and

operate to automatically generate deep-linked ads for advertiser 150 and published by publisher 140 on web sites. In one embodiment, Ad system 210 may be implemented on a single server computer or on a cluster/farm of servers, which may include any combination of separate server computers and may provide automatically generated deep-link ads to ad server 260. An example of a suitable server computer may include a central processing unit (CPU), read-only memory (ROM), random access memory (RAM), hard drive (HD) or non-volatile memory, and input/output (I/O) device(s). An I/O device may be a keyboard, monitor, printer, electronic pointing device (e.g., mouse, trackball, etc.), or the like.

[0050] Embodiments may include a computer program product implementing a deep-linking method for online ads, the deep-linked ads being automatically generated on Ad system 210. As one skilled in the art can appreciate, a computer program product implementing the method disclosed herein may comprise one or more non-transitory computer readable storage media storing computer instructions translatable by one or more processors in Ad system 210. Examples of computer readable media may include, but are not limited to, volatile and non-volatile computer memories and storage devices such as ROM, RAM, HD, direct access storage device arrays, magnetic tapes, floppy diskettes, optical storage devices, etc.

[0051] FIGURE 3 depicts a flow diagram representing an example embodiment of a deep-linking method disclosed herein. In this example, method 300 may comprise creating and maintaining a universal map of variables and identifiers from sites (step 301), automatically generating deep-linked ads from the variables and identifiers and other data in the universal

variable map (step 303), and presenting deep-linked ads to consumers in real time (step 305). These steps will be further described below.

[0052] FIGURE 4 depicts a flow diagram representing an example embodiment of a method for creating and maintaining a universal variable map. In this example, method 400 may comprise defining a scope of a programmatic search (step 401). For example, an operator of Ad system 210 may define verticals and categories of sites to be searched on the Internet. This list can be a typed-in list, flat file list, excel file list, or any form of entry suitable for input to one or more modules for data gathering or spidering or scraping. An example of list entries for verticals can be Travel, Real Estate, Cars, Jobs, etc. An example of list entries for geographies can be zip code, phone area code, geo-coordinates, or names like California, Texas, China, India, South America, etc.

[0053] In some embodiments, sites might submit or "push" their variable data, or actual product or services data along with associated data schemas from their private databases to the ad system. In these embodiments, the ad system can map explicit variables to other linked sites via the universal variable map, or can infer variable names from data and schemas provided by participating sites, and map them to other linked sites via the universal variable map, thereby providing deep-linking benefits even if one of the linked sites submits its data to the ad system directly, rather than via spidering over the Internet.

[0054] In some embodiments, method 400 may further comprise performing a programmatic search for the verticals and geographies defined in the list via various horizontal search

engines (step 403). Each site on the list may then receive from the site, or be crawled to see if a vertical or horizontal search box (form) is found. If no search box is found, then all the site's page headers or site map may be extracted and saved in Ad system 210. The page headers or site map may be used to identify values for normalized variables should a user click on or hover over an identified location on the appropriate pages. If search boxes can be found, as illustrated in FIGURE 5, one or more asynchronous spiders/scrapers or data gathering interfaces 510 may be utilized to interact with a plurality of web sites and applications 520 to obtain the desired information about lists of qualifying web sites, and the variables or identifiers on them. Example search engines may include Google, Bing, and any other horizontal search engines desired. In some embodiments, spiders/scrapers or data gathering interfaces 510 may comprise software modules programmed to utilize a suite of heuristics to begin identifying sites and fields around verticals 501 and geographies 503 defined in the list(s). For instance, if a vertical name specified is Travel, a spidering module may search for "Travel sites," "Travel apps," "Traveling sites," "Traveling apps," "Travel web sites," "Travel Web Sites," and any combination or variation of the above it decides to use. As an example, the spidering module may look up the first 100, 200, 1000, or however many web sites it wants to do the keyword searches for.

[0055] In some embodiments, spidering module or data gathering module 510 may then scan all the search engine optimization (SEO) tags specified on each of web sites and applications 520 to categorize what kind of site it is. As an example, SEO tags

may specify a site as a Travel agency site, a Travel meta-search site, a Travel comparison site, a Travel content and blog site, etc.

[0056] In some embodiments, spidering module or data gathering module 510 may look up the Form section of each relevant web page, parse out the names of all the variables or input field identifiers (step 405), and archive them in a database which can be considered a universal variable map to all relevant forms and fields across the web sites crawled by the spidering module or data gathering module thus far (step 407). If the Form found by spidering module or data gathering module 510 consists of a single text string field, the spidering module or data gathering module may tag the field as such in the universal variable map, thereby triggering a real-time parser to be executed to parse out the text string, decompose it into values for each of the specified variable fields for the appropriate Vertical schema, and set the right values into the right variables based on the vertical and product category the form belongs to. For example, if the text string typed in by a user into a text string field is "Flights from San Francisco to London", the real-time parser may decompose the text string to mean that Vertical = Travel/Flights, Origin = San Francisco, Destination = London and set the appropriate variables accordingly as the ad is being served. In contrast, if the form found by spidering module or data gathering module 510 includes multiple fields, the spidering module or data gathering module collects the names of variables and identifiers used for input fields on web sites. In other words, in the context of embodiments disclosed herein, spidering or crawling web sites, or direct data gathering from

data provided by web sites, is utilized to crawl and parse names of programming variables as opposed to static content on pages. These names are essentially the place holders for dynamic data that a user types in on a site, or clicks on or hovers over on a site, and can be passed between publisher and advertiser web sites.

[0057] For instance, following the above example, the spidering module can go to a Travel web site, crawl the page, parse the Form section of the page and determine, for example, that the "from" field for a flight is called "Orig" and the "to" field is called "Dest", that the date fields are called "DepDate" and "ArrDate", that the time fields are called "DepTime" and "ArrTime", etc. The names of all such variables are then archived in a universal variable map, one example of which is implemented as variable database 530 shown in FIGURE 5. Variable database 530 can be suitably configured for storing normalized programming variables and data associated therewith.

[0058] A non-limiting example of one embodiment of a universal variable map is illustrated below in Table 1.

Web Sites	xxx.com	yyy.net	zzz.org	...	Normalized Variables
Variable 1	Orig	Depart_City	From	...	from
Variable 2	Dest	Arrival_City	To	...	to
Variable 3	...	...	...	...	...
...	...	...	...	...	...

[0059] In addition to spidering or data gathering the names of variables as identified above, the spidering module or data gathering module can also note the landing page URL of the

dynamic results page by looking at the "Action" meta-tag of the form being scanned. This URL is then used to land the ad click deep into the results or checkout page, rather than on a static home page or other landing page.

[0060] In some cases, a page may be coded up in Ajax code. In one embodiment, the method may further comprise running a programmatic query on the page coded in Ajax, receiving a dummy response page, and performing the parsing and scanning on the response page to obtain all the variable names. One embodiment of the spidering module or data gathering module described above may be further configured to perform these steps. As illustrated by this embodiment, the spidering module or data gathering module disclosed herein can gather and parse variable names from all kinds of pages available.

[0061] Some web sites may not have any form, search box, variable and/or parameter associated with them. Such web sites may contain index or browse-based navigation. Examples of such web sites may include Sears.com or BestBuy.com. In some embodiments, the spidering module or data gathering module 510 may be programmed to spider these web sites. More specifically, the spidering module or data gathering module may spider the site maps of these sites, or the page headers and navigation field tags and thereby have the intelligence to detect whatever implicit parameters are relevant from the location of a user click or user hovering exercise, such as location of the user, time and date of parsing, item clicked on, category clicked on, etc. For instance, if the user is on the Laptop page of the Amazon.com site, the page header and navigation field tags indicate that this is a Laptop purchase page. This defines the vertical (Electronics) and product

(Laptop) of the site. Furthermore, the page has several attribute selections (Brand, Budget, Screen Size, etc.) and values on the navigation of the page. Each attribute represents a variable in the universal variable map, and each selection the possible values for that variable. Each time the user clicks on a navigation option, or hovers over it, the appropriate variable can be set with the appropriate value in the ad click.

[0062] FIGURE 6 depicts a functional diagram showing example system components implementing an embodiment disclosed herein. In this example, Ad system 600 may implement one embodiment of Ad system 210 and may comprise advertisement platform 610 and spidering engine or data gathering module 510 or crawl engine 620.

[0063] In one embodiment, crawl engine 620 may use search engine 611 to find sites that belong to the vertical being spidered, and build a graph database 690 of verticals and sub-verticals to an arbitrary level of granularity using graph builder 629. This graph database may be used to track associations between forms and fields on one site or app and another site of app, whether in the same vertical or in different verticals. When sites and applications are linked in graph database 690 in the same vertical, they enable powerful comparison and complementary product merchandising functions, when sites and applications are linked from different verticals they enable powerful cross-marketing functions.

[0064] Once a site or app is categorized into the appropriate vertical, sub-vertical and product category using graph database 690, crawl engine 620 may spider all the variables in the site or app, and save them in universal variable map or

variable database 530, with an index 615 using the index builder 625. The universal variable map may then be completed (step 301) by mapping the variables saved and indexed in variable database 530 to their normalized versions using a set of adaptive heuristics executed by the heuristics engine 540 or mapper 613. Advertisement platform 610 may be configured for the automatic generation of deep-linked ads (step 303) and the presentation of the deep-linked ads (step 305) by accessing variable mapping information and URL landing information in variable database 530.

[0065] FIGURE 7 depicts a diagrammatic representation of an example embodiment utilizing keyword density of meta tags for selection of an appropriate vertical schema in the automated generation of deep-linked ads. All sites are categorized by verticals or geographies specified to the Ad system. As illustrated in FIGURE 7, each vertical may comprise one or more sub-verticals, products 740 and/or one or more packages 750. Crawler or data gathering module 510 or Vertical/product inference engine 710 may be configured to cross-reference or otherwise associate a given site 720 with an appropriate vertical 730 by checking its meta tags 721, 723, 725. As an example, the meta tags for the site kayak.com may be as follows:

<title>Cheap Flights, Hotels, Airline Tickets, Cheap Tickets, Cheap Travel Deals - KAYAK - Compare Hundreds of Travel Sites At Once</title> <meta name="description" content="Find and book cheap flights, hotels, vacations and rental cars with Kayak.com. Hotel, flight and travel deals. Search hundreds of travel sites at once."> <meta name="keywords" content="cheap airline tickets,airline tickets,airfare deals,cheap

airfares,airfare,plane ticket prices,major airlines,discount airlines,online travel agencies,discount car rental,domestic airline tickets,international airline tickets,air travel,travel search,travel search engine,kayak"/>

[0066] In this example, it is clear that the keyword densities for Travel and Flights (Tickets) are the highest, identifying this is a Travel/Flights page and form.

[0067] Data flow 700 illustrates that, in some embodiments, meta tag(s) from web site(s) may be utilized by engine 710 in determining which web site belongs to which vertical or product category. An example variable schema for a Travel vertical/cluster of sites may be as follows:

[0068] Product Type
Flights | Hotel | Cars | Cruise | Vacation | Activities | Flights+Hotels | Flights+Cars | Hotels+Cars | Flights+Hotels+Cars

If Product Type = Flights

Itinerary Type	Round Trip | One Way | Multiple Destinations
From	Text
To	Text
DepartingDate	Date
DepartingTime	Time
ArrivingDate	Date
ArrivingTime	Time
Flex Dates	Yes | No
# Adults	Number
# Kids	Number
# Seniors	Number
Nonstop	Yes | No

[0069] Additional example sites and their meta tags are provided below. Following the above example schema, notice that travel sites and non-travel sites have different descriptors. Embodiments of an engine can therefore readily determine what web site is in-cluster and what web site is out-of cluster for the vertical Travel.

[0070] KAYAK.COM

<title>Cheap Flights, Hotels, Airline Tickets, Cheap Tickets, Cheap Travel Deals - KAYAK - Compare Hundreds of Travel Sites At Once</title> <meta name="description" content="Find and book cheap flights, hotels, vacations and rental cars with Kayak.com. Hotel, flight and travel deals. Search hundreds of travel sites at once."> <meta name="keywords" content="cheap airline tickets,airline tickets,airfare deals,cheap airfares,airfare,plane ticket prices,major airlines,discount airlines,online travel agencies,discount car rental,domestic airline tickets,international airline tickets,air travel,travel search,travel search engine,kayak"/>

[0071] BARNES and NOBLE

<title>Barnes & Noble - Books, Textbooks, eBooks, Toys, Games & More</title> <meta name="description" content="New! Lower Prices on Millions of Books, DVDs, Music, Toys & Games and More. Shop for eBooks, NOOK, and textbooks. FREE Shipping on $25 orders!"/> <meta name="keywords" content="Holly Rose Tote Bag,Barefoot Contessa Cookbook,Ina Garten"/> <meta name="date" content="12/2/2010"/> <link rel="canonical" href="http://www.barnesandnoble.com/"/>

[0072] TRIPMAMA

<title> Travel Deals, Compare Cheap Flights, Compare Cheap Airfares, Airline Tickets -TripMama </title> <meta name="resource-type" content="document"/> <meta http-equiv="pragma" content="no-cache"/> <meta id="MetaDescription" name="DESCRIPTION" content="Search and compare cheap flights and airline tickets on TripMama. Compare cheap airfares to popular destinations using three or more travel web sites"/> <meta id="MetaKeywords" name="KEYWORDS" content="compare airfare, compare cheap flights, travel deals, compare flights, cheap airfares"/>

[0073] ORBITZ

<title>Orbitz Travel: Airline Tickets, Cheap Hotels, Car Rentals, Vacations & Cruises</title> <meta name="description" content="Book cheap airline tickets, hotel reservations, car rentals, vacations and travel deals on Orbitz. Get our cheapest airfare and hotel deals or a cash refund with Orbitz Price Assurance."/> <meta name="keywords" content="cheap airline tickets, cheap plane tickets, airline tickets, plane tickets, cheap tickets, cheap airfare, cheap hotels, cheap vacations, hotel reservations, car rentals, travel deals, flight deals, hotel deals, air travel, air tickets, air fares, airfare, travel"/>

[0074] KOHLS

<title>Kohl's</title> <meta name="description" content="Expect Great Things when you shop Kohl's for apparel, shoes, accessories, home products and more! Find top brands at great prices at Kohl?s today!"/> <meta name="keywords" content="kohles, khols, khol, khol's, kholes, kohls', koles, kolhs, kohl stores, kohl store, kohl com, kohl department,

kohl dept store, kohl department store, kohl department stores, khols department stores, khols stores, khols store, khol's store, khol store,"/>

[0075] Again, these meta tags can be used to determine to which vertical or category each web site belongs. In this way, once a site's category is defined, the variable mapping exercise can be simplified to match which variables or identifiers match up to which normalized variable, rather than a completely open-ended exercise of trying to map arbitrary strings of variable names to each other.

[0076] FIGURE 8 depicts a diagrammatic representation of an example embodiment of flow 800 for processing product information gleaned from web sites and mapping variables and fields for each of the products into normalized variables in the universal variable map. Flow 800 may utilize modules for searching a vertical or product and mapping variables, the modules accessing website schemas and product schemas. In this example, product page 801 embodies site 720 being spidered or obtained data for. Product normalizer 803 embodies crawl engine 620, persistence module 621, index builder 625 and graph builder 629. Product attribute library 807 embodies graph database 690. Website metadata 805 embodies variable database 530. Flow 800 will be further described below with reference to FIGURES 9 and 10.

[0077] FIGURE 9 exemplifies the relationship between a product 901 and a form 903 found by spidering module or data gathering module 510 on a site's product page or product search page (step 403 or step 801). Spidering module or data gathering module 510 may parse or scan form source code 913 to extract or otherwise obtain form data, including names of programming

variables and identifiers associated with product attributes 911 such as "makeid", "modelid", and "year". Extracted product attributes 911 may then be normalized (step 405 or step 803) and persisted in universal variable map or variable database 530 or product attribute library 807 referring to website metadata data repository 805 or variable database 530. As illustrated in FIGURE 10, the data gathering, normalizing, and persisting may be performed across a plurality of websites and apps on the Internet, including search sites and E-commerce sites, for each vertical or product of interest to the Ad system.

[0078] As described above, spidering module or data gathering module 510 may obtain and store these and other scanned names of programming variables and identifiers into a Normalized Variable Data database 530. This database may be considered a universal variable map of all classes and instances of products and services that can be searched and transacted on the Internet. Information stored on this universal variable map is archived for future reference. As an example, this database may store information such as the name of the generic variable for departure city in the above Travel example being "Orig," the name of this piece of information on arbitrary web site A being "SourceCity," and the name of this piece of information on arbitrary web site B being "StartLocation," for instance.

[0079] By creating this universal schema, if web site A wants to advertise a deep-linked ad for web site B, the Ad system would already know what the respective variable names were called, and could programmatically create an ad with accurate mappings without any human intervention. In one embodiment, this

mapping function is performed by mapper 613. FIGURES 11A and 11B depict example implementations of mapper 613.

[0080] In the example of FIGURE 11A, Search Site 2 wants to provide a deep-linked ad for Search Site 1. Mapper 613 may access universal variable map or variable database 530 or product attribute library 807 or master product database 1130 (which implements one embodiment of a universal variable map), cross reference programming variables used by Search Site 2 with those used by Search Site 1, and automatically create a deep-linked ad (deep link 1120 in this example). Deep link 1120 may then be placed on Search Site 2. When a user selects (either explicitly or implicitly) deep link 1120 on Search Site 2, the user's browser is automatically directed to a network address indicated by deep link 1120 ("www.site1.com/cars?make=<>&model=<>" in this example). A form at the network address on Search Site 1 may be pre-populated with product attributes, along with any user input provided at Search Site 2. FIGURE 11B shows an example in which a product identifier is passed along with deep link 1120 to Search Site 1.

[0081] In FIGURES 11A and 11B, both Search Site 1 and Search Site 2 belong to the same vertical. As FIGURE 12 illustrates, information on a product and product attributes may be obtained by spidering module 510 from different sections of a web page. As an example, spidering module 510 may parse header metadata 1201, identify a vertical or product (utilizing a metadata keyword density method described above in one embodiment), and index the result. In one embodiment, data collected from header metadata 1201 may be stored in website metadata 805. Spidering module 510 may also parse

form(s) 903 and form data 1205 associated therewith, identify a product associated with form(s) 903, obtain product attributes from form data 1205, and index the result. In one embodiment, data collected from form(s) 903 and form data 1205 may be stored in product attribute library 807. In one embodiment, vertical data and product data may be enhanced and stored in master product database 1130.

[0082] Spidering module 510 can be implemented in various ways. FIGURE 13 depicts a flow diagram illustrating an example embodiment of method 1300 for spidering across web sites. In this example, spidering module 510 may operate to parse a header section of a web page (step 1301), parse any forms on the page (step 1303), analyze content of the form(s) (step 1305), identify any product in the content of the form(s) (step 1307), enhance product attributes that can be identified (step 1309), persist the form data at the back end (step 1311), index the form data (step 1313), and update vertical data accordingly (step 1315).

[0083] By mapping all spidered variable names to a normalized set of variable names by vertical, embodiments disclosed herein can ensure that the Ad platform and database can scale by the order of magnitude of the number of sites and variables, as opposed to the square function of the number of sits and variables.

[0084] Referring to FIGURE 5, in some embodiments, a Heuristics and Tuning Engine 540 can decide which variables on a site correspond to which normalized variable in the Normalized Database. In some embodiments, Heuristics and Tuning Engine or module 540 may comprise a series of heuristics.

[0085] In some embodiments, these heuristics may be developed by a combination of programmatic logic and human operators that progressively refines what the spider module infers about forms and schemas and variables. Non-limiting examples of heuristics (rules) may include:

- Categorization. The first key heuristic, already discussed above, is to determine the Vertical and Product that a particular form pertains to, by searching for it on well-known search sites like Google and Bing, and by cross-checking its title meta-tags. Once a site's Vertical and Product category are known, the ad system can look up the schema in the Normalized Variable Database, and determine the finite set of variables that are of relevance to this form. This automatically constrains the set of variable choices to a finite list rather than a completely open-ended mapping process.

- Sequence of fields. The second heuristic is the typical sequencing of fields on a form in a given Vertical. For instance, on a Travel form, the "From" or departure field typically precedes a "To" or arrival field. In this way, the spidering module can expect the first text fields to refer to the "From" field, and the second, the "To" field. Not by way of limitation, and purely for purposes of illustration, for Travel forms this heuristic can be assigned an initial weight of 40%.

- Data types of fields. A second heuristic for determining mappings of variable fields is the data type of the field. For instance, a departure date might be specified to require a date data type, which enables the identification of the variable. Note that heuristics can be combined -

for instance, there are only two fields in a Travel form that have a date field associated with them, the Departure Date and the Arrival Date, and the former precedes the latter. Not by way of limitation, and purely for purposes of illustration, for Travel forms this Data Type heuristic can be assigned an initial weight of 10%.

- Partial word matches of text and variable names. This heuristic refers to the functionality to look up names of variables, and see if there is a partial word match from common variations of the field and variable name. For instance, when finding a departure field variable, partial matches can be done with the following common variations: "Fr", "Frm", "From", "Org", "Orig", "Origin", "Origination", "DCity", "DepCity", "DepartureCity", "Src", "Source", "SrcCity", "SourceCity". If there is a match the variable can be identified as matching the departure field. Not by way of limitation, and purely for purposes of illustration, for Travel forms this heuristic can be assigned an initial weight of 20%.

- Field type - text, radio button, select. This heuristic helps to determine to which mapped variable a certain field maps. For instance, a Travel form can have radio buttons for a Round-trip itinerary, a One-way itinerary, or a Multiple destination itinerary. By knowing these fields to have radio buttons in the normalized schema, the ad system can conclude that these variables map to these entry fields. Similarly, a check box field can be concluded to be the "search nearby airports" field, or the "show non-stops only" field as the two check box fields on the form. Not by way of limitation, and purely for purposes of illustration,

for Travel forms this heuristic can be assigned an initial weight of 15%.

- Parsing comments for fields. This heuristic entails looking at the comments entries for Form code, and doing partial keyword matches with the comments string. For instance, when finding a departure field variable, partial matches can be done with the comments text strings and the following common variations: "Fr", "Frm", "From", "Org", "Orig", "Origin", "Origination", "DCity", "DepCity", "DepartureCity", "Src", "Source", "SrcCity", "SourceCity". Not by way of limitation, and purely for purposes of illustration, for Travel forms this heuristic can be assigned an initial weight of 5%.

- Association patterns. This heuristic refers to creating associations between fields commonly found together on a form, and using that to map variables to one another. For instance, the check box "select nearby airports" is typically presented in association with a departure airport or an arrival airport. Not by way of limitation, and purely for purposes of illustration, for Travel forms this heuristic can be assigned an initial weight of 5%.

- Proximity patterns. This heuristic refers to what form fields are typically presented close to what other form fields. For instance, in an Auto buying site, the "Make" field is typically presented next to the "Model" field. Not by way of limitation, and purely for purposes of illustration, for Travel forms this heuristic can be assigned an initial weight of 5%.

[0086] In some embodiments, the Heuristics and Tuning Engine may review results of the past spidering and categorization efforts and refine its logic, or add new heuristics, through a combination of programmatic adjustments and human operator adjustments. For example, for each vertical, a set of heuristics can be weighted (between 0% and 100%) to fine tune results such that a deep-linked ad can take a user directly, or substantially directly to a deeper page than the Home page of the advertiser. This optimization process can be based on, for example, a regression analysis and varying the weights via the analysis. This provides for a way for human operators to provide some of the schema rules, and for programming code to apply and enhance that schema logic for progressively more and more precise collection and mapping of variable names. For instance, in the above Travel form heuristics weights, the ad system can start with the above initial weights, make conclusions on the mappings of the appropriate variables, and conduct an action on the search box of the site, such as initiating a search with the variables as inferred by the initial heuristic weights. It can then examine the results of the action, and determine if the search proceeded as intended. If the search concluded successfully, no weighting adjustments are required, and if the search did not conclude successfully, then the system can adjust the heuristic weights and try the action again. In addition to the automated system-based adjustments of heuristic weights, from time to time human operators may spot trends in variable names, and create new heuristics to enable accurate mapping of variable names. Once such heuristics are created, and weight assigned, the system can again begin to run simulation tests with the new heuristics, and adjust weights adaptively.

[0087] In the spidering and mapping process, should a site be found with a form or field that is not already in the normalized universal variable database, then an embodiment of the invention is to add the new form or field to the universal variable map, thereby adapting and expanding the universal variable map to include all forms and fields and clicks and hovers found on the Internet.

[0088] FIGURE 14 depicts a diagrammatic representation of example system architecture 1400 according to some embodiments disclosed herein. In some embodiments, whenever a publisher (e.g., publisher 140) requests the insertion of a particular advertiser's (e.g., advertiser 150) deep-linked ad into its online media, or an advertiser requests placing its deep-linked ad on a publisher's media, an Ad Generator module 1420 may look up a pre-defined variable map, or create one from the stored variables (e.g., universal variable map 1430) in real-time, obtain other specified attributes of a deep-linked ad, such as target URL and creative specified, and insert a fully composed deep-linked ad into the designated ad server (e.g., ad server 260).

[0089] As illustrated in FIGURE 14, if publisher web site 140 wants to place a deep-linked ad from advertiser web site 150, a request can be made to Ad system 210. Ad Generator module 1420 in Ad system 210 may look up the URL for advertiser web sites 150, look up the respective variable names in universal variable map 1430 (which, in one embodiment, implements Normalized Variable Data database 530), and automatically generate the deep-linked ad code that enables parameter-passing. In one embodiment, Ad Generator module 1420 may insert this code in ad server 260 in the appropriate location.

These deep-linked ads can then be served live - either on web sites, or newsletters, or mobile apps that have ad serving capability. Once the deep-linked ads have been inserted into ad servers, they can be served up in real-time.

[0090] An embodiment of the invention includes the possibility that the ad is requested by the publisher web site 140 and the ad is served by the advertiser web site 150 not directly by publisher and advertiser clients, but via any form of agency or network or exchange or other third-party intermediary with access to publisher impressions or advertisers ads.

[0091] To an end user (e.g., a web site visitor), a deep-linked ad automatically generated via an embodiment disclosed herein may appear like a typical ad, a banner, an icon, an animated ad, a text ad, a check box, or anything of interest on a web site. For example, in FIGURE 15, a portion of site 1500 is shown. In this example, "Hard Drive Size" and "Brand" represent variables for the vertical Electronics, sub-vertical Computers and product category Hard Drives, while "80 GB and Under" and "81 to 120 GB" represent possible values of the variable "Hard Drive Size". The user may click on the "80 GB and Under" selection, which would set the variable for "Hard Drive Size" on the publisher site, and through the mapping mechanism described above, on the advertiser site, to the value of "80 GB and Under". Similarly, the user may hover over "80 GB and Under" selection which may trigger the direct deep-linking, causing the user's browser to fetch and display a deep-linked page on the advertiser site. In one embodiment, a product may be identified from product attributes and/or parent elements of the selection being clicked or hovered over. The user's

browser is therefore caused to fetch and display a deep-linked page for the product.

[0092] Hovering is one of many possible ways to obtain input data. As discussed above, embodiments disclosed herein provide a method for automatically spidering names of data input fields or variables on web pages. These data input fields or variables may be part of a form provided by a site. A user action may explicitly or implicitly set a variable or variables. Variations of linking data variables and fields may include a source form, a destination form, a single source to many destination form, many sources to one destination form, cascading forms (e.g., a first form links to a second form which links to a third form, etc.), and so on.

[0093] Explicitly, a user may be required to fill out a form at a certain site. For example, a travel site may require a user to fill out departure and arrival information for a vertical search, while a search engine may require the user to provide a text string which can be parsed out and linked to a vertical search site such as a particular travel site or to another search engine that can accept the parsed input.

[0094] FIGURE 16 depicts a flow diagram illustrating one embodiment of example method 1600 for deep-linking. In this example, a user provided query string is parsed and split into words and phrases (step 1601). For example, a text string "flight rates from London to Amsterdam March 13" may be divided into "flight", "rates, "from", "London", "to", "Amsterdam", and "March 13". Words and/or phrases that may have value are identified (step 1603). In this example, "flight", "from London", "to Amsterdam", and "March 13" are determined to have value and are mapped to product attributes (step 1605). For

example, "flight" is mapped to "air travel", "from London" is mapped to "departure city", "to Amsterdam" is mapped to "arrival city", and "March 13" is mapped to "departure date". In this case, "air travel", "departure city", "arrival city", and "departure date" are normalized product attributes (programming variables) in a universal variable map. Using these product attributes, a product can be identified (step 1607), which is "flight ticket for air travel" in this example. Using the product identifier, forms associated with this product can be identified (step 1609). Example forms may include "Expedia air search form, Orbitz air search form, American Airlines search form, Kayak air search form, etc. Although each site has its own programming variables, each of which is appropriately populated with values from the user's search query (i.e., the departure city, the arrival city, the departure date, etc.) utilizing the normalized product attributes in the universal variable map.

[0095] The above-described process can occur in real time such that, immediately after the user types in the text search query and causes the browser to submit a request for a result on the search query, the user's input can be parsed, decomposed into the pertinent values for the appropriate variables, linked to the corresponding variables on the advertiser's site, and land the ad click deep into the advertiser's site. In this way, the user's browser "fast forwards" from a horizontal search page to a deep vertical form page where the user can purchase a flight ticket to travel by air from London to Amsterdam on March 13.

[0096] In some cases, a user may not be required to type in information, but may be required to click or otherwise select

an icon representing a target of interest (e.g., a product or service offered by or through the web site). In some cases, as discussed above, a user may simply hover over an ad and value(s) to certain variable(s) may be set accordingly. At run time, these values can be used to customize an ad copy, set other linked and mapped variables. Although a user clicking or hovering over site text or image is not an explicit data-entry action on the part of the user, contextual information provided by their implicit action can still be recognized and utilized by embodiments disclosed herein to customize and automatically generate deep-linked ads that can take the user directly to a checkout page with pre-populated values extracted from the user interaction. For instance, say a user is on the Amazon (www.amazon.com) web site. The user then selects the laptops section, and is on a page showing laptop selections by brand, product type, price range, etc. In this implementation, the ad system can scan and read in the tags on this page on the Amazon web site. Now when the user clicks on a selection on the Amazon laptops page, the appropriate variables can be set - for instance, Vertical can be set to Electronics, the Product to Laptops, and the brand to Dell, price to Under $2000, etc. Then on the results page for those selections, deep-linked ads can be presented with the appropriate variable values set.

[0097] In another embodiment, the user might only hover over the Dell laptop selection on the Amazon site, and the ad system can detect the product or attribute hovered over, and present deep-linked ads with all known variables set.

[0098] In embodiments disclosed herein, deep-linked ads between any two arbitrary web sites or mobile apps and other deployment

scenarios can be created. Those skilled in the art will appreciate that embodiments disclosed herein can be adapted for various ad types, including, but are not limited to, text, graphics, animations, videos, audios, etc. For example, in one embodiment, a deep-linked handshake can be inserted into a video showing a product or service. In this case, no user action is involved. Rather, the linkage insertion is based on ad selection which is based on content being displayed or played to the user. For instance, the user may be watching a movie with an actor using an iPhone 4G. The movie may embed data tagging synchronized with the video, whereby certain product identifications can be made available to the ad system. Knowledge of the product in use can then be used to set the appropriate variables, such as Vertical can be set to Electronics, Product can be set to Smart Phones, Model can be set to iPhone 4G, etc. A deep-linked ad presented at this point can be precisely targeted to an iPhone 4G available for purchase in the geographic vicinity, and clicking on the ad might take the user directly to the iPhone 4G checkout page on the advertising site.

[0099] Some embodiments disclosed herein provide a method for creating cascades or chains of such deep-linked ads such that an arbitrary number of ad linkages can be set up, whereby an advertiser receiving a click can turn around and become a publisher for the next deep-linked ad click sent to another advertiser on that site. Embodiments disclosed herein thus automate a new generation of ads on the Internet and mobile devices that have not been possible before without extensive human intervention and programming.

[0100] Although the invention has been described with respect to specific embodiments thereof, these embodiments are merely illustrative, and not restrictive of the invention. The description herein of illustrated embodiments of the invention, including the description in the Abstract and Summary, is not intended to be exhaustive or to limit the invention to the precise forms disclosed herein (and in particular, the inclusion of any particular embodiment, feature or function within the Abstract or Summary is not intended to limit the scope of the invention to such embodiment, feature or function). Rather, the description is intended to describe illustrative embodiments, features and functions in order to provide a person of ordinary skill in the art context to understand the invention without limiting the invention to any particularly described embodiment, feature or function, including any such embodiment feature or function described in the Abstract or Summary. While specific embodiments of, and examples for, the invention are described herein for illustrative purposes only, various equivalent modifications are possible within the spirit and scope of the invention, as those skilled in the relevant art will recognize and appreciate. As indicated, these modifications may be made to the invention in light of the foregoing description of illustrated embodiments of the invention and are to be included within the spirit and scope of the invention. Thus, while the invention has been described herein with reference to particular embodiments thereof, a latitude of modification, various changes and substitutions are intended in the foregoing disclosures, and it will be appreciated that in some instances some features of embodiments of the invention will be employed without a corresponding use of other features

without departing from the scope and spirit of the invention as set forth. Therefore, many modifications may be made to adapt a particular situation or material to the essential scope and spirit of the invention.

[0101] Reference throughout this specification to "one embodiment", "an embodiment", or "a specific embodiment" or similar terminology means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment and may not necessarily be present in all embodiments. Thus, respective appearances of the phrases "in one embodiment", "in an embodiment", or "in a specific embodiment" or similar terminology in various places throughout this specification are not necessarily referring to the same embodiment. Furthermore, the particular features, structures, or characteristics of any particular embodiment may be combined in any suitable manner with one or more other embodiments. It is to be understood that other variations and modifications of the embodiments described and illustrated herein are possible in light of the teachings herein and are to be considered as part of the spirit and scope of the invention.

[0102] In the description herein, numerous specific details are provided, such as examples of components and/or methods, to provide a thorough understanding of embodiments of the invention. One skilled in the relevant art will recognize, however, that an embodiment may be able to be practiced without one or more of the specific details, or with other apparatus, systems, assemblies, methods, components, materials, parts, and/or the like. In other instances, well-known structures, components, systems, materials, or

operations are not specifically shown or described in detail to avoid obscuring aspects of embodiments of the invention. While the invention may be illustrated by using a particular embodiment, this is not and does not limit the invention to any particular embodiment and a person of ordinary skill in the art will recognize that additional embodiments are readily understandable and are a part of this invention.

[0103] Any suitable programming language can be used to implement the routines, methods or programs of embodiments of the invention described herein, including C, C++, Java, assembly language, etc. Different programming techniques can be employed such as procedural or object oriented. Any particular routine can execute on a single computer processing device or multiple computer processing devices, a single computer processor or multiple computer processors. Data may be stored in a single storage medium or distributed through multiple storage mediums, and may reside in a single database or multiple databases (or other data storage techniques). Although the steps, operations, or computations may be presented in a specific order, this order may be changed in different embodiments. In some embodiments, to the extent multiple steps are shown as sequential in this specification, some combination of such steps in alternative embodiments may be performed at the same time. The sequence of operations described herein can be interrupted, suspended, or otherwise controlled by another process, such as an operating system, kernel, etc. The routines can operate in an operating system environment or as stand-alone routines. Functions, routines, methods, steps and operations described herein can be

performed in hardware, software, firmware or any combination thereof.

[0104] Embodiments described herein can be implemented in the form of control logic in software or hardware or a combination of both. The control logic may be stored in an information storage medium, such as a computer-readable medium, as a plurality of instructions adapted to direct an information processing device to perform a set of steps disclosed in the various embodiments. Based on the disclosure and teachings provided herein, a person of ordinary skill in the art will appreciate other ways and/or methods to implement the invention.

[0105] It is also within the spirit and scope of the invention to implement in software programming or code an of the steps, operations, methods, routines or portions thereof described herein, where such software programming or code can be stored in a computer-readable medium and can be operated on by a processor to permit a computer to perform any of the steps, operations, methods, routines or portions thereof described herein. The invention may be implemented by using software programming or code in one or more general purpose digital computers, by using application specific integrated circuits, programmable logic devices, field programmable gate arrays, or the like. Optical, chemical, biological, quantum or nanoengineered systems, components and mechanisms may be used. In general, the functions of the invention can be achieved by any means as is known in the art. For example, distributed, or networked systems, components and circuits can be used. In another example, communication or transfer (or otherwise

moving from one place to another) of data may be wired, wireless, or by any other means.

[0106] A "computer-readable medium" may be any medium that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, system or device. The computer readable medium can be, by way of example only but not by limitation, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, system, device, propagation medium, or computer memory. Such computer-readable medium shall generally be machine readable and include software programming or code that can be human readable (e.g., source code) or machine readable (e.g., object code). Examples of non-transitory computer-readable media can include random access memories, read-only memories, hard drives, data cartridges, magnetic tapes, floppy diskettes, flash memory drives, optical data storage devices, compact-disc read-only memories, and other appropriate computer memories and data storage devices. In an illustrative embodiment, some or all of the software components may reside on a single server computer or on any combination of separate server computers. As one skilled in the art can appreciate, a computer program product implementing an embodiment disclosed herein may comprise one or more non-transitory computer readable media storing computer instructions translatable by one or more processors in a computing environment.

[0107] A "processor" includes any, hardware system, mechanism or component that processes data, signals or other information. A processor can include a system with a general-purpose central processing unit, multiple processing units, dedicated

circuitry for achieving functionality, or other systems. Processing need not be limited to a geographic location, or have temporal limitations. For example, a processor can perform its functions in "real-time," "offline," in a "batch mode," etc. Portions of processing can be performed at different times and at different locations, by different (or the same) processing systems.

[0108] It will also be appreciated that one or more of the elements depicted in the drawings/figures can also be implemented in a more separated or integrated manner, or even removed or rendered as inoperable in certain cases, as is useful in accordance with a particular application. Additionally, any signal arrows in the drawings/Figures should be considered only as exemplary, and not limiting, unless otherwise specifically noted.

[0109] As used herein, the terms "comprises," "comprising," "includes," "including," "has," "having," or any other variation thereof, are intended to cover a non-exclusive inclusion. For example, a process, product, article, or apparatus that comprises a list of elements is not necessarily limited only those elements but may include other elements not expressly listed or inherent to such process, process, article, or apparatus.

[0110] Furthermore, the term "or" as used herein is generally intended to mean "and/or" unless otherwise indicated. For example, a condition A or B is satisfied by any one of the following: A is true (or present) and B is false (or not present), A is false (or not present) and B is true (or present), and both A and B are true (or present). As used herein, including the claims that follow, a term preceded by

"a" or "an" (and "the" when antecedent basis is "a" or "an") includes both singular and plural of such term, unless clearly indicated within the claim otherwise (i.e., that the reference "a" or "an" clearly indicates only the singular or only the plural). Also, as used in the description herein and throughout the claims that follow, the meaning of "in" includes "in" and "on" unless the context clearly dictates otherwise. The scope of the present disclosure should be determined by the following claims and their legal equivalents.

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Application Number: 13308004 Document Date: 11/30/2011

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