

AO 120 (Rev. 08/10)

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been
 filed in the U.S. District Court WESTERN DISTRICT OF TEXAS on the following

☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:22-cv-00342	DATE FILED 3/31/2022	U.S. DISTRICT COURT WESTERN DISTRICT OF TEXAS
PLAINTIFF WEBROOT, INC. and OPEN TEXT, INC.		DEFENDANT FORCEPOINT LLC
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 8,726,389	5/13/2014	Webroot, Inc.
2 8,438,386	5/7/2013	Webroot, Inc.
3 10,599,844	3/24/2020	Webroot, Inc.
4 9,413,721	8/9/2016	Webroot, Inc.
5 10,025,928	7/17/2018	Webroot, Inc.

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

Large Entity Declaration

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number: 12/709504**Current Date** 21 June 2016**Filing Date:** 21 FEB 2010**Patent Number:** 8438386**Issue Date:** 7 MAY 2013

CHANGE OF ENTITY STATUS PURSUANT TO 37 C.F.R. §1.27 (g)(2)

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

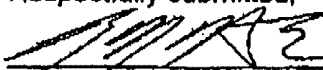
Sir:

This communication hereby notifies the United States Patent and Trademark Office
that small entity status is no longer applicable for the above-identified patent.

COMPANY or FIRM
NAME AND ADDRESS:

Webroot Inc.
385 Interlocken Crescent, Suite 800
Broomfield, CO 80021

Respectfully submitted,



Signature

Ryan Howe

Printed Name

General Counsel

Title

OR

Reg. # if US Attorney _____



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.
12/709,504	05/07/2013	8438386	6890-22	6836

22442 7590 04/17/2013
Sheridan Ross PC
1560 Broadway
Suite 1200
Denver, CO 80202

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 319 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):

Ron Hegli, San Diego, CA;
Hal Lonas, Carlsbad, CA;
Christopher K. Harris, San Diego, 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)

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.

22442 7590 01/10/2013
 Sheridan Ross PC
 1560 Broadway
 Suite 1200
 Denver, CO 80202

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.

Kathy Johnston	(Depositor's name)
/Kathy Johnston/	(Signature)
April 10, 2013	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/709,504	02/21/2010	Ron Hegli	6890-22	6836
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TITLE OF INVENTION: SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	04/10/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MOORTHY, ARAVIND K	2492	726-011000

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 Sheridan Ross P.C.

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)

Webroot Inc.

Broomfield, Colorado

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 credit any overpayment, to Deposit Account Number 191970 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /Brent R. Lindon/

Date April 10, 2013

Typed or printed name Brent R. Lindon

Registration No. 67,424

This collection of information 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.

Electronic Patent Application Fee Transmittal				
Application Number:		12709504		
Filing Date:		21-Feb-2010		
Title of Invention:		SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE		
First Named Inventor/Applicant Name:		Ron Hegli		
Filer:		Brent Robert Lindon/Kathy Johnston		
Attorney Docket Number:		6890-22		
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:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	2501	1	890	890
Publ. Fee- Early, Voluntary, or Normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1190

Electronic Acknowledgement Receipt

EFS ID:	15486816
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	22442
Filer:	Brent Robert Lindon/Kathy Johnston
Filer Authorized By:	Brent Robert Lindon
Attorney Docket Number:	6890-22
Receipt Date:	10-APR-2013
Filing Date:	21-FEB-2010
Time Stamp:	18:59:51
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 1190
RAM confirmation Number	5717
Deposit Account	191970
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	Issue Fee Payment (PTO-85B)	IssueFee.pdf	91512	no	1
			d2c065e0abee95385c8cc03f2ca4a5cc8c99090a		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	32058	no	2
			e18e8d218a3825ca9984f026a92aadb5da824f7		

Warnings:

Information:

Total Files Size (in bytes):			123570
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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

NOTICE OF ALLOWANCE AND FEE(S) DUE

22442 7590 01/10/2013
Sheridan Ross PC
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2492

DATE MAILED: 01/10/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/709,504

02/21/2010

Ron Hegli

6890-22

6836

TITLE OF INVENTION: SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	04/10/2013

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 SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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)

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.

22442 7590 01/10/2013
Sheridan Ross PC
1560 Broadway
Suite 1200
Denver, CO 80202

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.
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12/709,504	02/21/2010	Ron Hegli	6890-22	6836
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TITLE OF INVENTION: SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional	YES	\$885	\$300	\$0	\$1185	04/10/2013
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EXAMINER	ART UNIT	CLASS-SUBCLASS
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MOORTHY, ARAVIND K	2492	726-011000
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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, 1 _____
- (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. 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 credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information 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.

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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 NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/709,504	02/21/2010	Ron Hegli	6890-22	6836
22442	7590	01/10/2013	EXAMINER	
Sheridan Ross PC 1560 Broadway Suite 1200 Denver, CO 80202			MOORTHY, ARAVIND K	
			ART UNIT	PAPER NUMBER
			2492	

DATE MAILED: 01/10/2013

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

The Patent Term Adjustment to date is 244 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 244 day(s).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

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.

Notice of Allowability	Application No.	Applicant(s)	
	12/709,504	HEGLI ET AL.	
	Examiner	Art Unit	
	ARAVIND MOORTHY	2492	

-- 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 2 November 2012.
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 1-3 and 5-27. 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).
 - 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)

- | | |
|--|--|
| <ol style="list-style-type: none"> 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 _____ | <ol style="list-style-type: none"> 5. ☐ Examiner's Amendment/Comment 6. ☐ Examiner's Statement of Reasons for Allowance 7. ☐ Other _____ |
|--|--|

/Aravind K Moorthy/
Primary Examiner, Art Unit 2492

Notice of References Cited	Application/Control No. 12/709,504		Applicant(s)/Patent Under Reexamination HEGLI ET AL.	
	Examiner ARAVIND MOORTHY		Art Unit 2492	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2010/0184505 A1	07-2010	Bryson et al.	463/25
*	B	US-2009/0006569 A1	01-2009	Morss et al.	709/206
	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.

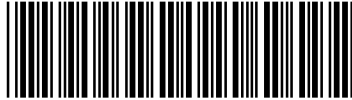
Search Notes 	Application/Control No. 12709504	Applicant(s)/Patent Under Reexamination HEGLI ET AL.
	Examiner ARAVIND MOORTHY	Art Unit 2492

SEARCHED			
Class	Subclass	Date	Examiner
726	11	4/5/2012	AM
726	4, 11, 12, 29	1/8/2013	AM
713	153, 165, 166	1/8/2013	AM
709	216, 217, 224, 225	1/8/2013	AM

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search: Palm and East- search strategy enclosed	4/5/2012	AM
East (US-PGPUB, USPAT, EPO, JPO, DERWENT)- See search history printout	4/5/2012	AM
Inventor name search: Palm and East- search strategy enclosed	1/8/2013	AM
East (US-PGPUB, USPAT, EPO, JPO, DERWENT)- See search history printout	1/8/2013	AM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
726	4, 11, 12, 29	1/8/2013	AM
713	153, 165, 166	1/8/2013	AM
709	216, 217, 224, 225	1/8/2013	AM

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<i>Index of Claims</i> 	Application/Control No. 12709504	Applicant(s)/Patent Under Reexamination HEGLI ET AL.
	Examiner ARAVIND MOORTHY	Art Unit 2492

✓	Rejected
=	Allowed

-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

☐ Claims renumbered in the same order as presented by applicant				☐ CPA		☐ T.D.		☐ R.1.47	
CLAIM		DATE							
Final	Original	04/05/2012	01/07/2013						
1	1	✓	=						
2	2	✓	=						
3	3	✓	=						
	4	✓	-						
4	5	✓	=						
7	6	✓	=						
8	7	✓	=						
9	8	✓	=						
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11	10	✓	=						
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25	26		=						
26	27		=						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L12	2	hegli near ron	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/08 12:50
L13	4	lonas near hal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/08 12:50
L14	335	harris near christopher	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/08 12:50
L15	2	L14 and reputation and index	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/08 12:50
L16	1	(internet resource threshold value reputation index country legitimacy factor).clm.	US-PGPUB	AND	ON	2013/01/08 12:51
L17	1	(internet resource reputation index web site vector country popularity).clm.	US-PGPUB	AND	ON	2013/01/08 12:52
L18	1	(internet resource reputation index vector country behavior).clm.	US-PGPUB	AND	ON	2013/01/08 12:53
L19	1	(collecting factor internet resource reputation vector country behavior age).clm.	US-PGPUB	AND	ON	2013/01/08 12:54
L20	1	(internet resource reputation vector training set entropy classifier).clm.	US-PGPUB	AND	ON	2013/01/08 12:54
L21	1	(collecting MED classifier reputation vector).clm.	US-PGPUB	AND	ON	2013/01/08 12:55
S1	267	726/11.cor.	USPAT	OR	OFF	2012/04/05 14:56
S2	1	"20100269168".pn.	US-PGPUB	OR	ON	2012/04/05 15:01
S3	2	hegli near ron	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:16
S4	4	lonas near hal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:16
S5	308	harris near christopher	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:17

S6	2	S5 and reputation and index	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:18
S7	894	(resource site) WITH (confidence reputation) WITH (index level value)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:26
S8	170	S7 and (proxy gateway)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:28
S9	146	S8 and @ad<="20090910"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:28
S10	33	S9 and crawler	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:35
S11	1	S2 and med	US-PGPUB	OR	ON	2012/04/05 16:12
S12	32	S10 and (train\$ updat\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 16:13
S13	1	"20080082662".pn.	US-PGPUB	OR	ON	2012/04/09 09:38
S14	1	S13 and proxy WITH (score reputation)	US-PGPUB	OR	ON	2012/04/09 09:39
S15	1	S13 and threshold	US-PGPUB	OR	ON	2012/04/09 09:39
S16	1	S13 and (den\$5 reject\$ block\$ prevent\$)	US-PGPUB	OR	ON	2012/04/09 09:40
S17	1	S13 and domain	US-PGPUB	OR	ON	2012/04/09 09:45
S18	1	S13 and (country location)	US-PGPUB	OR	ON	2012/04/09 09:46
S19	1	S13 and site	US-PGPUB	OR	ON	2012/04/09 09:50
S20	1	S13 and internet	US-PGPUB	OR	ON	2012/04/09 09:50
S21	1	S13 and browser	US-PGPUB	OR	ON	2012/04/09 09:53
S22	1	S13 and computer	US-PGPUB	OR	ON	2012/04/09 09:55
S23	1	S13 and request\$	US-PGPUB	OR	ON	2012/04/09 09:57
S24	1	S13 and request\$ with client	US-PGPUB	OR	ON	2012/04/09 09:57
S25	1	S13 and factor	US-PGPUB	OR	ON	2012/04/09 10:01
S26	1	"20100269168".pn.	US-PGPUB	OR	ON	2012/04/09 10:21
S27	1	S26 and vector	US-PGPUB	OR	ON	2012/04/09 10:21

S28	1	S13 and train\$	US-PGPUB	OR	ON	2012/04/09 10:24
S29	1660	location WITH (information data) WITH ((country with register\$) (country with service) (country with address))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/07 10:40
S30	102205	(reputation confidence legit\$ authoriz\$ verif\$ valid\$) WITH (age popularity address (number with host))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/07 10:42
S31	371	S29 and S30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/07 10:43
S32	289	S31 and @ad<="20090910"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2013/01/07 10:43

EAST Search History (I nterference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L2	189	726/12.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:48
L3	511	726/4.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:48
L4	154	726/29.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:48
L5	329	713/153.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:48
L6	238	713/165.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49
L7	138	713/166.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49
L8	155	709/216.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49
L9	1697	709/217.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49
L10	3589	709/224.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49
L11	982	709/225.cor.	USPAT; UPAD	OR	OFF	2013/01/08 12:49

1/ 8/ 2013 12:56:39 PM
C:\ Users\ amoorthy\ Documents\ EAST\ Workspaces\ 12709504.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: Ron Hegli	)	Group Art Unit: 2492
Application No.: 12/709,504	)	Examiner: MOORTHY, ARAVIND K
Filed: February 21, 2010	)	Confirmation No.: 6836
Atty. File No.: 6890-22	)	

For: SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE

AMENDMENT AND RESPONSE

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

Commissioner:

Applicant submits this Supplemental Amendment and Response supplemental to the Amendment and Response filed Oct. 10, 2012.

Appropriate fees were paid for the Amendment and Response filed Oct. 10, 2012, and although Applicant does not believe any additional fees are owed for the filing of this Supplemental Amendment and Responses, the Commissioner is authorized to credit any overpayment or charge any underpayment to Deposit Account No. 19-1970.

Please enter the following amendments and remarks:

Amendments to the Claims are shown in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 8 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from an Internet-enabled client application from a client-side device of a local area network, the Internet resource residing at a first server;

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;

determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network, the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location, wherein the location factor of the plurality of factors for the reputation vector comprises two or more of: country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises two or more of: age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises at least one of: plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency; and

transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource.

2. (Previously Presented) The method according to claim 1, wherein the reputation index for the Internet resource is at or above the threshold value and wherein the decision transmission is access to the Internet resource, the method further comprises transmitting the

request for the Internet resource over the Internet to the first server for the Internet resource and receiving the Internet resource at the local area network.

3. (Previously Presented) The method according to claim 1, wherein the reputation index for the Internet resource is below the threshold value, and wherein the decision transmission is a Web page from the local area network containing information that accessing the Internet resource is against an Internet policy established on the local area network.

4. (Canceled)

5. (Previously Presented) The method according to claim 1, wherein the Internet resource is one of a Web site, an email server and a voice communications server.

6. (Currently Amended) A system for controlling access to a Web site, the system comprising:

a network, the network comprising the Internet;

an Internet resource hosted at a first server and accessible over the Internet; and

a local area network, the local area network comprising:

a plurality of client-side devices, each of the ~~client-side~~client-side devices having a browser; and

a security appliance, the security appliance controlling access to the Internet by each of the plurality of client-side devices, the security appliance having a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location, wherein the location factor of the plurality of factors for the reputation vector comprises two or more of: country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises two or more of: age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of

factors for the reputation vector comprises at least one of: plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency;

wherein access to the Internet resource by any of the plurality of client-side devices is determined based on the reputation index exceeding a threshold value established for the local area network.

7. (Previously Presented) The system according to claim 6, wherein the client-side device is a personal computer or a PDA.

8. (Previously Presented) The system according to claim 6, further comprising a data collection site accessible over the Internet, the security site having a crawler for collecting a plurality of factors from a plurality of Internet resources.

9. (Previously Presented) The system according to claim 8, wherein the data collection site has a database containing reputation indices for a plurality of Internet resources.

10. (Currently Amended) A method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from a Web browser for a client-side device of a local area network, the Internet resource residing at a first server;

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;

accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising ~~at least one of~~ security history, legitimacy, behavior, associations and location, wherein the location factor of the plurality of factors for the reputation vector comprises two or more of: country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises two or more of: age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector

comprises at least one of: plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency;

determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network; and

transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource.

11. (Currently Amended) A method for building a reputation database for Internet resources, the method comprising:

collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource;

receiving the plurality of factors for the Internet resource at a data collection site;

constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location, wherein the location factor of the plurality of factors for the reputation vector comprises two or more of: country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises two or more of age of: a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises at least one of: plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency;

analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier;

storing the reputation index for the Internet resource at the data collection site;

and

transmitting the stored reputation index to a local area network upon request for managing access to the Internet resource.

12. (Previously Presented) The method according to claim 11, further comprising weighting each of the plurality of factors based on empirical knowledge of each of the plurality of factors.

13. (Previously Presented) The method according to claim 11, further comprising obtaining the plurality of factors for the Internet resource using a crawler.

14. (Previously Presented) The method according to claim 13, wherein obtaining the plurality of factors for the Internet resource comprises accessing the Internet service, analyzing a plurality of HTML documents for the Internet resource, and crawling a plurality of linked Internet resources of the plurality of HTML documents for Internet resource.

15. (Currently Amended) The method according to claim ~~11~~13, wherein analyzing the plurality of HTML documents comprises determining the script block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter.

16. (Previously Presented) A method for controlling access to an Internet resource, the method comprising:

collecting a first plurality of Internet resource reputation vectors;

partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets;

training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network;

testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier;

evaluating the tested maximum entropy discrimination classifier;

providing feedback to the evaluated maximum entropy discrimination classifier;

and

utilizing the maximum entropy discrimination classifier at a local area network for managing access to an Internet resource.

17. (Previously Presented) The method according to claim 16, wherein each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location, and the method further comprises weighting each of the plurality of dimensions.

18. (Currently Amended) A method for training a ~~MED-maximum entropy discrimination (MED)~~ classifier for controlling access to an Internet resource, the method comprising:

collecting a first plurality of reputation vectors for Internet resources;
partitioning the first plurality of reputation vectors for the Internet resources into one or more training sets;
training a MED classifier with the plurality of training sets, the maximum entropy discrimination classifier being trained for a specific local area network;
testing the trained MED classifier ~~against unknown~~ using a second plurality of Internet resources resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained MED classifier;
evaluating the ~~trained-tested~~ MED classifier; and
determining if the ~~trained-tested~~ MED classifier has been adequately trained.

19. (Previously Presented) The method according to claim 18, wherein the training set comprises good reputation Internet resources and bad reputation Internet resources.

20. (Previously Presented) The method according to claim 18, further comprising locating the trained MED classifier at a security appliance of the local area network.

21. (Previously Presented) The method according to claim 1, wherein the reputation index is received from a data collection site accessible by the security appliance over the Internet.

22. (Previously Presented) The method according to claim 1, wherein the reputation index is stored at a remote reputation generating site.

23. (Previously Presented) The method according to claim 10, further comprising transmitting the reputation index over the Internet to the local area network.

24. (Previously Presented) The method according to claim 11, wherein the stored reputation index is transmitted over the Internet to a local area network.

25. (Previously Presented) The method according to claim 16, wherein at least one of collecting, training, and testing is performed external to the local area network.

26. (Previously Presented) The method according to claim 18, wherein at least one of collecting, training, and testing is performed external to the local area network.

27. (New) The method according to claim 18, wherein each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location.

REMARKS

Applicant respectfully requests entry of this supplemental amendment and reconsideration of this application as amended.

Applicant would like to thank Examiner Moorthy for his time during the personal interview on October 23, 2012. Examiner Moorthy and Applicant's representative, Brent Lindon, discussed the current 102(b) rejection to clarify the issues at hand, discussed possible additions to the claims, and differences between the cited art, in particular Dandliker, and the present claims. During the interview, the Examiner agreed to reconsider the prior art rejection for claim 16. The changes discussed during the interview are some of the changes included in the current amendments. Again, Applicant appreciates the Examiner's attention and assistance.

Without concession as to the propriety of the outstanding rejection, Applicant has canceled claim 4 without intending abandon or dedicate to the public any patentable subject matter. Claim 27 has been added. Further, Applicant has amended the independent claims 1, 6, 10, and 11 to clarify the location factor of the plurality of factors for the reputation vector, the legitimacy factor of the plurality of factors for the reputation vector, and the behavior factor of the plurality of factors for the reputation vector. For example, amended claims 1, 6, 10, and 11 recite, among other things, wherein the location factor of the plurality of factors for the reputation vector comprises two or more of country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises two or more of age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises at least one of plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency.

Additionally, claim 18 was amended to further clarify the Maximum Entropy Discrimination (MED) classifier. Dandliker provides not such disclosure and at least does not teach, suggest, or disclose a MED classifier.

Accordingly, at least based on the above, the independent claims are patentably distinguishable from the cited reference.

The dependent claims are further distinguishable at least based on the above and the additional feature(s) recited therein.

With all rejections having been overcome, Applicant respectfully submits that this application is in condition for allowance. Withdrawal of the outstanding rejection and a prompt notice of allowance are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the telephone number listed below.

The Commissioner is hereby authorized to charge to deposit account number 19-1970 any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby Petitioned.

Respectfully submitted,
SHERIDAN ROSS P.C.

Date: November 2, 2012

By: /Brent R. Lindon/
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Electronic Acknowledgement Receipt

EFS ID:	14141285
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	22442
Filer:	Brent Robert Lindon/Leslie Roberts
Filer Authorized By:	Brent Robert Lindon
Attorney Docket Number:	6890-22
Receipt Date:	02-NOV-2012
Filing Date:	21-FEB-2010
Time Stamp:	18:13:50
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		AMEND_01_SUPP.pdf	93235 e1b99341fd87c3bab7f5551d9d5e5f6408543389	yes	10

Multipart Description/PDF files in .zip description			
Document Description	Start	End	
Supplemental Response or Supplemental Amendment	1	1	
Claims	2	8	
Applicant Arguments/Remarks Made in an Amendment	9	10	

Warnings:

Information:

Total Files Size (in bytes):	93235
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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.

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 12/709,504		Filing Date 02/21/2010		☐ To be Mailed	
APPLICATION AS FILED – PART I										
(Column 1)			(Column 2)			SMALL ENTITY ☒ OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=	OR	X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		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 \$250 (\$125 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			TOTAL				
APPLICATION AS AMENDED – PART II										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	11/02/2012	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 26	Minus	** 26	= 0	X \$31 =	0	OR	X \$ =	
	Independent (37 CFR 1.16(h))	* 6	Minus	*** 6	= 0	X \$125 =	0	OR	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
					TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE		
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)		
	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))									
					TOTAL ADD'L FEE		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.										

Legal Instrument Examiner:
/LASHAWN MARKS/

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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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/709,504	02/21/2010	Ron Hegli	6890-22	6836
22442	7590	10/25/2012	EXAMINER	
Sheridan Ross PC 1560 Broadway Suite 1200 Denver, CO 80202			MOORTHY, ARAVIND K	
			ART UNIT	PAPER NUMBER
			2492	
			MAIL DATE	DELIVERY MODE
			10/25/2012	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.

<i>Applicant-Initiated Interview Summary</i>	Application No. 12/709,504	Applicant(s) HEGLI ET AL.	
	Examiner ARAVIND MOORTHY	Art Unit 2492	

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

(1) ARAVIND MOORTHY. (3) ____.

(2) Brent Lindon. (4) ____.

Date of Interview: 23 October 2012.

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: 1,4,16 and 18.

Identification of prior art discussed: Dandliker et al US 2008/0082662 A1.

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...)

The examiner discussed the possibility of moving dependent claim 4 into independent claim 1. The examiner will reconsider the prior art rejection for claim 16. If the examiner withdraws the prior art rejection for claim 16, the attorney will possibly resemble claim 18 to claim 16. The examiner will further update his search upon working on the case.

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

/Aravind K Moorthy/ Primary Examiner, Art Unit 2492	
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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.

OCT 22 2012

Doc Code: M865 or FAI.REQ.INTV

PTOL-413A (08-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 12/709,504 First Named Applicant: Hegli, Ron
 Examiner: Moorthy, Aravind K Art Unit: 2492 Status of Application: Non-Final Rejection

Tentative Participants:

(1) Brent R Lindon (2) _____
 (3) _____ (4) _____

Proposed Date of Interview: 10/23/2012 Proposed Time: 2:00 PM (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) <u>Rej.</u>	<u>1-20</u>	<u>Dandliker</u>	☐	☐	☐
(2) _____	_____	_____	☐	☐	☐
(3) _____	_____	_____	☐	☐	☐
(4) _____	_____	_____	☐	☐	☐

☐ Continuation Sheet Attached ☐ Proposed Amendment or Arguments Attached

Brief Description of Arguments to be Presented: Discussion of the differences between the currently pending claims and the cited reference, Dandliker.

Specifically, Dandliker doesn't teach, suggest, or disclose a plurality of factors comprise behavior, nor does Dandliker teach, suggest, or disclose transmitting a decision.

An interview was conducted on the above-identified application on _____

NOTE: This form should be completed and filed by applicant in advance of the interview (see MPEP § 713.01). If this form is signed by a registered practitioner not of record, the Office will accept this as an indication that he or she is authorized to conduct an interview on behalf of the principal (37 CFR 1.32(a)(3)) pursuant to 37 CFR 1.34. This is not a power of attorney to any above named practitioner. See the Instruction Sheet for this form, which is incorporated by reference. By signing this form, applicant or practitioner is certifying that he or she has read the Instruction Sheet. After the interview is conducted, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible. This application will not be delayed from issue because of applicant's failure to submit a written record of this interview.

/Brent R. Lindon/

Applicant/Applicant's Representative Signature

Brent R. Lindon

Typed/Printed Name of Applicant or Representative

67,424

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 24 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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PTOL-413A (08-10)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Instruction Sheet for:
APPLICANT INITIATED INTERVIEW REQUEST FORM
(Not to be Submitted to the USPTO)

1. If this form is signed by a registered practitioner not of record, the authority to submit the Applicant Initiated Interview Request Form is pursuant to limited authority to act in a representative capacity under 37 CFR 1.34 and further proof of authority to act in a representative capacity may be required. See 37 CFR 1.34.

The Office will accept the signed form as an indication that the registered practitioner not of record is authorized to conduct an interview on behalf of the principal in pursuant to 37 CFR 1.34.

For more information, see the "Conducting an Interview with a Registered Practitioner Acting in a Representative Capacity" notice which is available on the USPTO Web site at: <http://www.uspto.gov/patents/law/notices/2010.jsp>.

2. This is not a power of attorney to any named practitioner. Accordingly, any registered practitioner not of record named on the form does not have authority to sign a request to change the correspondence address, a request for express abandonment, a disclaimer, a power of attorney, or other document requiring the signature of the applicant, assignee of the entire interest or an attorney of record. If appropriate, a separate power of attorney to the named practitioner should be executed and filed in the US Patent and Trademark Office.
3. Any interview concerning an unpublished application under 35 U.S.C. § 122(b) with a registered practitioner not of record, pursuant to 37 CFR 1.34, will be conducted based on the information and files supplied by the practitioner in view of the confidentiality requirements of 35 U.S.C. § 122(a).

Page 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.

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**SHERIDAN
ROSS** attorneys at
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Date: 10/21/2012

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SR Reference No.: 6890-22

Your Reference No.: Application No. 12/709,504

Message:

We greatly appreciate your cooperation in agreeing to schedule a personal interview for Tuesday, October 23, 2012, at 2:00 p.m. EST.

PLEASE CONFIRM RECEIPT

If you do not receive all the pages, please call (303) 863-9700

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: Ron Hegli	)	Group Art Unit: 2492
Application No.: 12/709,504	)	Examiner: MOORTHY, ARAVIND K
Filed: February 21, 2010	)	Confirmation No.: 6836
Atty. File No.: 6890-22	)	

For: SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE

AMENDMENT AND RESPONSE

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

Madam:

Applicant submits this Amendment and Response to address the Office Action having a mailing date of April 12, 2012. A Petition for three months Extension of Time along with the requisite fees has been filed concurrently herewith. Additionally, payment in the amount for \$372.00 for six additional dependent claims has been made concurrently herewith. Although the proper petitions for extension of time are believed to have been filed herewith, any further petitions for extension of time deemed necessary are hereby Petitioned.

Please credit any overpayment or charge any underpayment to Deposit Account No. 19-1970.

Please amend the above-identified patent application as follows:

Amendments to the Claims are shown in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 8 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for controlling access to an Internet resource, the method comprising:
 - transmitting a request for an Internet resource from an Internet-enabled client application from a client-side device of a local area network, the Internet resource residing at a first server;
 - receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;
 - determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network, the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location; and
 - transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource.
2. (Currently Amended) The method according to claim 1, wherein the reputation index for the Internet resource is at or above the threshold value and wherein the decision transmission is access to the Internet resource, the method further comprises transmitting the request for the Internet resource over the Internet to the first server for the Internet resource and receiving the Internet resource at the local area network.
3. (Currently Amended) The method according to claim 1, wherein the reputation index for the Internet resource is below the threshold value, and wherein the decision

transmission is a Web page from the local area network containing information that accessing the Internet resource is against an Internet policy established on the local area network.

4. (Currently Amended) The method according to claim 1, wherein the location factor of the plurality of factors for the reputation vector comprises country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises a plurality of run-time behaviors, ~~JavaScript-script~~ block count, picture count, immediate redirect and response latency.

5. (Currently Amended) The method according to claim 1, wherein the Internet resource is one of a Web site, an email server and a voice communications server.

6. (Currently Amended) A system for controlling access to a Web site, the system comprising:

a network, the network comprising the Internet;

an Internet resource hosted at a first server and accessible over the Internet; and

a local area network, the local area network comprising:

a plurality of client-side devices, each of the ~~client-side~~ client-side devices having a browser; and

a security appliance, the security appliance controlling access to the Internet by each of the plurality of client-side devices, the security appliance having a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location;

wherein access to the Internet resource by any of the plurality of client-side devices is determined based on the reputation index exceeding a threshold value established for the local area network.

7. (Currently Amended) The system according to claim 6, wherein the client-side device is a personal computer or a PDA.

8. (Currently Amended) The system according to claim 6, further comprising a data collection site accessible over the Internet, the security site having a crawler for collecting a plurality of factors from a plurality of Internet resources.

9. (Currently Amended) The system according to claim 8, wherein the data collection site has a database containing reputation indices for a plurality of Internet resources.

10. (Original) A method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from a Web browser for a client-side device of a local area network, the Internet resource residing at a first server;

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;

accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising at least one of security history, legitimacy, behavior, associations and location;

determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network; and

transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource.

11. (Original) A method for building a reputation database for Internet resources, the method comprising:

collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource;

receiving the plurality of factors for the Internet resource at a data collection site;

constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location;

analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier;

storing the reputation index for the Internet resource at the data collection site;

and

transmitting the stored reputation index to a local area network upon request for managing access to the Internet resource.

12. (Currently Amended) The method according to claim 11, further comprising weighting each of the plurality of factors based on empirical knowledge of each of the plurality of factors.

13. (Currently Amended) The method according to claim 11, further comprising obtaining the plurality of factors for the Internet resource using a crawler.

14. (Currently Amended) The method according to claim 13, wherein obtaining the plurality of factors for the Internet resource comprises accessing the Internet service, analyzing a plurality of HTML documents for the Internet resource, and crawling a plurality of linked Internet resources of the plurality of HTML documents for Internet resource.

15. (Currently Amended) The method according to claim 11, wherein analyzing the plurality of HTML documents comprises determining the ~~JavaScript-script~~ block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter.

16. (Currently Amended) A method for controlling access to an Internet resource, the method comprising:

collecting a first plurality of Internet resource reputation vectors;

partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets;

training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network;

testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier;

evaluating the tested maximum entropy discrimination classifier;

providing feedback to the evaluated maximum entropy discrimination classifier;

and

utilizing the ~~reputation index~~maximum entropy discrimination classifier at a local area network for managing access to an Internet resource.

17. (Currently Amended) The method according to claim 16, wherein each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location, and the method further comprises weighting each of the plurality of dimensions.

18. (Currently Amended) A method for training a ~~MED~~maximum entropy discrimination (MED) classifier for controlling access to an Internet resource, the method comprising:

collecting a plurality of reputation vectors for Internet resources;

partitioning the plurality of reputation vectors into training sets;

training a MED classifier with the training sets;

testing the trained MED classifier against unknown Internet resources;

evaluating the trained MED classifier; and

determining if the trained MED classifier has been adequately trained.

19. (Currently Amended) The method according to claim 18, ~~were wherein~~ the training set comprises good reputation Internet resources and bad reputation Internet resources.

20. (Currently Amended) The method according to claim 18, further comprising locating the trained MED classifier at a security appliance of the local area network.

21. (New) The method according to claim 1, wherein the reputation index is received from a data collection site accessible by the security appliance over the Internet.

22. (New) The method according to claim 1, wherein the reputation index is stored at a remote reputation generating site.

23. (New) The method according to claim 10, further comprising transmitting the reputation index over the Internet to the local area network.

24. (New) The method according to claim 11, wherein the stored reputation index is transmitted over the Internet to a local area network.

25. (New) The method according to claim 16, wherein at least one of collecting, training, and testing is performed external to the local area network.

26. (New) The method according to claim 18, wherein at least one of collecting, training, and testing is performed external to the local area network.

REMARKS

Applicant submits this Response to address the Office Action dated April 12, 2012. Claims 2-9, 11, and 13-20 have been amended without intending to abandon or to dedicate to the public any patentable subject matter. Claims 21-24 have been added. Accordingly, claims 1-24 are currently pending. As set forth herein, reconsideration and withdrawal of the rejections of the claims are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2008/0082662 to Dandliker et al. (“Dandliker”). In order for a rejection under 35 U.S.C. § 102 to be proper, each and every claim element must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Dandliker, however, fails to teach, suggest, or describe several features in claims 1-20. Accordingly, Applicant respectfully submits that the rejections under 35 U.S.C. § 102 should be reconsidered and withdrawn.

Regarding claim 1, paragraphs [0131], [0057], and [0055] of Dandliker are relied upon to teach determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network, the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location; and transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource. *See e.g., Office Action*, page 3. However, paragraphs [0131], [0057], and [0055] of Dandliker state:

[0131] In an embodiment, database 624 comprises a verdict cache that stores results of previous scan operations of the verdict engines 630, 632, 634 on network resources. As an operational example, assume that content processing logic 626 receives a request from web reputation logic 622 to scan a particular URL. The content processing logic 626 searches the verdict cache in database 624 for the URL. If the URL is not found in the cache, then the URL is scanned using one or more of the verdict engines 630, 632, 634. If the scans yield a reputation score that is below a configured threshold, then the reputation score and the verdict engine results are stored in a new record in the verdict cache in association with the URL. Typically, a low reputation score will cause messaging gateway 608 to refuse access to the network resource. Further, the next time that any of

the clients 612 request the same resource, the lookup operation in the verdict cache will yield a cache hit, precluding the need to re-scan the resource.

[0057] A URL reputation service 150 is coupled to Internet 110 and comprises URL score analysis logic 152, query response logic 154, URL reputation database 130, and URL-reputation score table 122. URL reputation service 150 can receive information from a plurality of URL reputation data sources 160, which may be co-located with the URL reputation service, or located in Internet 110 or on LAN 108. In general, URL reputation service 150 functions to receive, aggregate, and prune data feeds from reputation data sources 160 and messaging apparatus 116; to maintain the URL reputation database 130 with prefix score information including calculating scores for URL prefixes and pruning entries; and updating proxies at instances of messaging apparatus 116 with prefix scores. Prefixes and their use are described further herein.

[0055] URL reputation score-action mapping 124 comprises stored data that associates URL reputation scores with responsive actions. The meaning of URL reputation scores and responsive actions is described further in other sections herein. In general, mapping 124 provides messaging apparatus 116 with information that enables the messaging apparatus to determine what actions to allow or block when a user requests access to a particular URL.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is it disclosed wherein a plurality of factors for the Internet resource comprises behavior. Further, nowhere in the above cited portion is it disclosed transmitting a decision transmission to the Internet-enabled client application of the client-side device. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 4, paragraphs [0073], and [0111-0112] of Dandliker are relied upon to teach wherein the location factor of the plurality of factors for the reputation vector comprises country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises a plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency. *See e.g., Office Action*, page 4. However, paragraphs [0073], [0111], and [0112] of Dandliker state:

[0073] In step 202, information about one or more network resource identifiers is received from reputation data sources. For example, URL reputation service 150 receives

information about a particular URL from one or more URL reputation data sources 160. The received information may come from any of a plurality of sources. Examples include information indicating how long the domain in a URL has been registered, what country the website is hosted in, whether the domain is owned by a Fortune 500 company, whether the Web server is using a dynamic IP address, etc.

[0111] Another use scenario for the approaches herein can dramatically improve resistance of user system 102 to spyware. Typical spyware solutions contain relatively static blacklists and spyware signatures. When new spyware is deployed at a website, with typical solutions the spyware objects must be deconstructed and signatures must be prepared, a process that can take days, during which user system 102 is not protected against attack.

[0112] With the present approach, URL reputation service 150 continually evaluates URLs for the presence of spyware and places a record in URL reputation database 130 with an updated URL reputation value as soon as a URL is determined to deliver or have an association with spyware. When user system 102 attempts to access a URL with a recently updated, low URL reputation score value, access can be blocked. Thus, the reaction time gap between deployment of spyware and creating an effective defense for user system 102 is reduced significantly.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is it disclosed that the legitimacy factor of the plurality of factors for the reputation vector comprises popularity rank and top-level domain. Further, nowhere in the above cited portion is it disclosed that the behavior factor of the plurality of factors for the reputation vector comprises a plurality of run-time behaviors, script block count, picture count, immediate redirect and response latency. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 6, paragraphs [0134-0135] of Dandliker are relied upon to teach the security appliance having a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location. *See e.g., Office Action*, page 5. However, paragraphs [0134]-[0135] of Dandliker state:

[0134] In an embodiment, a messaging gateway 608 that implements verdict engines as shown herein periodically returns verdict data to the URL reputation service 150 (FIG. 1). The verdicts, both positive and negative, can be used as an input into scoring and the

database or corpus. For example, assume that a messaging gateway 608 returns 100 URLs, and 10 of these URLs were determined to have spyware on them by the anti-spyware engines in the messaging gateway. In response, the URLs can be added to the corpus as spyware. They can be used to create a blacklist rule into reputation scoring to negatively influence the score of any URL that has been reported as "bad". Similarly, the remaining 90 URLs that did not have spyware can be added to the corpus as non-spyware and can positively influence the score of any URL that has been reported as "good".

[0135] In an embodiment, a subset of the URLs processed in the manner herein is sent to the URL reputation service 150. For example, the most popular URLs or domains are on the list. The messaging gateway can return volume statistics on URLs that it processes, so that reputation data covering the highest percentage of queries will be created. For example, assume that a messaging gateway with data returned from all sources indicates that the highest number of requested URLs is www.google.com, at 2% of all requested pages. The second highest is www.yahoo.com at 1% of all requested pages. When the system publishes a new URL list, both www.google.com and www.yahoo.com will be on this list because they will cover the most amount of traffic.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is it disclosed that a plurality of factors for the Internet resource comprise legitimacy, behavior, and associations. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 10, paragraphs [0057] and [0055] of Dandliker are relied upon to teach accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising at least one of security history, legitimacy, behavior, associations and location; and transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource. *See e.g., Office Action*, page 6. However, paragraphs [0057] and [0055] of Dandliker state:

[0057] A URL reputation service 150 is coupled to Internet 110 and comprises URL score analysis logic 152, query response logic 154, URL reputation database 130, and URL-reputation score table 122. URL reputation service 150 can receive information from a plurality of URL reputation data sources 160, which may be co-located with the URL reputation service, or located in Internet 110 or on LAN 108. In general, URL reputation service 150 functions to receive, aggregate, and prune data feeds from reputation data sources 160 and messaging apparatus 116; to maintain the URL reputation database 130 with prefix score information including calculating scores for URL prefixes and pruning entries; and updating proxies at instances of messaging apparatus 116 with prefix scores. Prefixes and their use are described further herein.

[0055] URL reputation score-action mapping 124 comprises stored data that associates URL reputation scores with responsive actions. The meaning of URL reputation scores and responsive actions is described further in other sections herein. In general, mapping 124 provides messaging apparatus 116 with information that enables the messaging apparatus to determine what actions to allow or block when a user requests access to a particular URL.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is it disclosed that the reputation index is based on a reputation vector for the Internet resource comprising at least one of security history, legitimacy, behavior, associations and location. Further, the above cited portion does not disclose transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource. That is, nowhere in the above cited portion is it described that the decision transmission is transmitted to the Web browser of the client-side device. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 11, paragraph [0090] of Dandliker is relied upon to teach constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location. *See e.g., Office Action*, page 7. However, paragraph [0090] of Dandliker states:

[0090] Values received from data sources may be assigned an initial feed score that is then modified to produce a combined reputation final score value for a network resource identifier. The initial feed score for a data source may vary according to a perceived reputation of the source. For example, feed scores for domains and/or IP addresses in whitelists and blacklists may be assigned based on the perceived reputation of the list author and the perceived accuracy of the list itself. For example, domains from a TRUSTe whitelist could be assigned feed scores of +6 because of the ability to compile an accurate list. Domains from the MVPS blacklist could be assigned feed scores of -6 for the same reason. Domains from the SURBL blacklist could be assigned feed scores of -3 based on a lower belief in SURBL's ability to blacklist spyware URLs than in the MVPS list's ability, as SURBL is more focused on e-mail related URLs rather than spyware-related URLs.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere does the above cited portion

disclose that a plurality of factors for the Internet resource comprises security history, legitimacy, behavior, associations and location. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 15, paragraphs [0111-0112] of Dandliker are relied upon to teach wherein analyzing the plurality of HTML documents comprises determining the script block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter. *See e.g., Office Action*, page 8. However, paragraphs [0111] and [0112] of Dandliker state:

[0111] Another use scenario for the approaches herein can dramatically improve resistance of user system 102 to spyware. Typical spyware solutions contain relatively static blacklists and spyware signatures. When new spyware is deployed at a website, with typical solutions the spyware objects must be deconstructed and signatures must be prepared, a process that can take days, during which user system 102 is not protected against attack.

[0112] With the present approach, URL reputation service 150 continually evaluates URLs for the presence of spyware and places a record in URL reputation database 130 with an updated URL reputation value as soon as a URL is determined to deliver or have an association with spyware. When user system 102 attempts to access a URL with a recently updated, low URL reputation score value, access can be blocked. Thus, the reaction time gap between deployment of spyware and creating an effective defense for user system 102 is reduced significantly.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is it disclosed wherein analyzing the plurality of HTML documents comprises determining the script block count and the picture count of each of the HTML documents. Further, there is no mention of browser hijacking and file downloads. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 16, paragraphs [0034], [0037-0039], [0040], and [0041] of Dandliker are relied upon to teach training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network; testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier; evaluating the tested

maximum entropy discrimination classifier; providing feedback to the evaluated maximum entropy discrimination classifier; and utilizing the maximum entropy discrimination classifier at a local area network for managing access to an Internet resource. *See e.g., Office Action*, page 8 and page 9. However, paragraphs [0034], [0037-0039], [0040], [00410] and [0059-0060] of Dandliker state:

[0034] Thus, embodiments provide effective mechanisms for addressing threats carried in URLs and other network resource identifiers. Embodiments address a problem that is quite different from the problem of spam carried in e-mail. For example, whereas the vast majority of e-mail is bad, the vast majority of URLs are good. Unlike e-mail, in which false negatives (spam marked as ham) are preferred to false positives (ham marked as spam), URL false positives (safe URLs that are blocked/warned) are preferred to URL false negatives (bad URLs that are allowed). Further, whereas a large spam corpus can be used to train a Bayesian anti-spam system, a much smaller corpus of spyware URLs exists. Anti-spam methods scan e-mail message bodies for spam. Analogously, anti-spyware (ASW) engines scan HTTP responses for spyware.

[0037] According to an embodiment, real-time analysis is performed on a database of network resource identifiers to detect network resource identifiers of pages or resources that contain or are associated with some form of malware. In this description, the term "network resource identifier" means a URL, uniform resource identifier (URI), or other identifier of a website, domain, application, data or other resource that is available on a network. A "resource" broadly refers to any information, service, application or system that is available using network data communications, and includes a Web site, a Web page, an HTML form, a CGI-BIN script, an online database, etc.

[0038] The approaches herein use reputation information to control requests to obtain network resources using HTTP and other web protocols. In an embodiment, a Web Reputation Score is a numeric value providing a variable rating of the likelihood that a particular network resource identifier presents a security risk for visitors, such as spyware, viruses, phishing, and potentially spam.

[0039] Reputation information may be derived from whitelists, blacklists, blocklists, and other sources and can be used to control user network access in a variety of ways. For example, information on destinations or recipients of outbound email can be used to determine whether access a domain of a network resource, such as a URL, should be allowed. For example, if a user elects to send email to a particular domain, then that domain may be scored with a higher reputation than in the absence of such outbound mail information. The source data for reputation scores may be transformed, in one embodiment, into a reputation score ranging, for example, from -10 to +10.

[0040] Web Reputation Scoring forms one component of preventive web security solutions as described herein. Web Reputation Scoring may be implemented in a stand-alone network security appliance, software solution, or network-accessible service.

[0041] In this document, Web Reputation Filtering refers to the technology that allows users to apply a Web Reputation Score to a URL, domain, IP address, or other web server identifier to protect against known and potential network security threats.

[0059] Query response logic 154 comprises one or more computer programs or other software elements that perform certain functions described herein relating to receiving a request to provide a URL reputation score value for a particular URL, and responding with the score value. URL reputation database 130 is a data repository that comprises at least the URL-reputation score table 122, which stores URLs or portions thereof in association with reputation score values. In an embodiment, a URL or a portion of a URL is a key field in table 122. Thus, given a particular URL, database 130 can retrieve a corresponding reputation score value and return that score value in response to a request. Queries and responses may be received and sent on a logical connection 170 between URL processing logic 122, or between other logic in messaging apparatus 116, and URL reputation service 150. Logical connection 170 physically may comprise a flow of packets through LAN 108 and Internet 110.

[0060] In this context, a proxy is an intermediary program which acts as both a server and a client for the purpose of making requests on behalf of other clients. Requests are serviced internally or by passing them, with possible translation, on to other servers. A proxy may interpret and, if necessary, rewrite a request message before forwarding it. Proxies are often used as client-side portals through network firewalls and as helper applications for handling requests via protocols not implemented by the user agent.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network disclosed. That is, nowhere in Dandliker is a maximum entropy discrimination classifier disclosed or that the maximum entropy discrimination classifier is trained for a specific local area network.

Further, Dandliker does not disclose testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier. Dandliker discloses that a reputation may be derived from various sources and further discloses applying a general Web Reputation Score, but nowhere does Dandliker disclose or teach that an maximum entropy discrimination classifier is tested using a second plurality of internet resource reputation vectors.

The cited portions of Dandliker also do not disclose or teach evaluating the tested maximum entropy discrimination classifier, providing feedback to the evaluated maximum entropy discrimination classifier, or utilizing the maximum entropy discrimination classifier at a local area network for managing access to an Internet resource. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 17, paragraphs [0088] –[0090] of Dandliker is relied upon to teach that each of the first plurality of reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location. *See e.g., Office Action*, page 9. However, paragraphs [0088] –[0090] of Dandliker states:

[0088] Thus, no particular minimum size of data sources is contemplated. Better results can be expected with embodiments that use a large volume of data, coming from diverse data sources, with breadth and high quality. In an embodiment, URL reputation data sources 160 comprise a database that receives data from ISPs, large enterprises, and other sources. One or more Web crawler programs can be used to locate newly created or modified URLs. The URL reputation data sources 160 can comprise third party blacklists, whitelists or other sources that reliably identify URLs that are associated with viruses, spam, spyware, phishing, and pharming.

[0089] In step 204, the reputation data sources are processed to determine the overall probability that the one or more network resource identifiers are associated with malware of any kind. For example, URL score analysis logic 152 processes a particular URL, information received at step 202, and the parameters identified above to result in creating an overall probability value, which is temporarily stored.

[0090] Values received from data sources may be assigned an initial feed score that is then modified to produce a combined reputation final score value for a network resource identifier. The initial feed score for a data source may vary according to a perceived reputation of the source. For example, feed scores for domains and/or IP addresses in whitelists and blacklists may be assigned based on the perceived reputation of the list author and the perceived accuracy of the list itself. For example, domains from a TRUSTe whitelist could be assigned feed scores of +6 because of the ability to compile an accurate list. Domains from the MVPS blacklist could be assigned feed scores of -6 for the same reason. Domains from the SURBL blacklist could be assigned feed scores of -3 based on a lower belief in SURBL's ability to blacklist spyware URLs than in the MVPS list's ability, as SURBL is more focused on e-mail related URLs rather than spyware-related URLs.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere does the above cited portion

disclose the reputation vector comprising a plurality of factors for the Internet resource comprising legitimacy, behavior, and location. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Regarding claim 18, paragraphs [0040] and [0041] of Dandliker are relied upon to teach evaluating the trained MED classifier; and determining if the trained MED classifier has been adequately trained. *See e.g., Office Action*, page 9. However, paragraphs [0040] and [0041] of Dandliker state:

[0040] Web Reputation Scoring forms one component of preventive web security solutions as described herein. Web Reputation Scoring may be implemented in a stand-alone network security appliance, software solution, or network-accessible service.

[0041] In this document, Web Reputation Filtering refers to the technology that allows users to apply a Web Reputation Score to a URL, domain, IP address, or other web server identifier to protect against known and potential network security threats.

Despite the assertions by the Office, Applicant is unsure as to how the above portion of Dandliker teaches the claimed features. For example, nowhere in the above cited portion is evaluating the trained MED classifier and determining if the trained MED classifier has been adequately trained disclosed. These features are simply not disclosed by Dandliker. With the reference failing to disclose each and every claimed feature, the reference cannot anticipate the claim.

Claims 2-3, 5, 7-9, 12-14, and 19-24 are allowable for at least being dependent on an allowable base claim and the additional feature(s) recited therein.

Conclusion

With all rejections having been overcome, Applicant respectfully submits that this application is in condition for allowance. A prompt notice of allowance is respectfully solicited.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is encouraged to contact Applicants undersigned representative at the telephone number listed below.

The Commissioner is hereby authorized to charge to deposit account number 19-1970 any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any

overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby Petitioned.

Respectfully submitted,
SHERIDAN ROSS P.C.

Date: 10/11/2012

By: /Brent R. Lindon/
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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.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 6890-22
Application Number 12/709,504	Filed 2010-02-21
For SYSTEM AND METHOD FOR DEVELOPING A RISK PROFILE FOR AN INTERNET SERVICE	
Art Unit 2492	Examiner MOORTHY, ARAVIND K.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	<u>Fee</u>	<u>Small Entity Fee</u>	
☐ One month (37 CFR 1.17(a)(1))	\$150	\$75	\$ _____
☐ Two months (37 CFR 1.17(a)(2))	\$560	\$280	\$ _____
☒ Three months (37 CFR 1.17(a)(3))	\$1270	\$635	\$ <u>1270.00</u>
☐ Four months (37 CFR 1.17(a)(4))	\$1980	\$990	\$ _____
☐ Five months (37 CFR 1.17(a)(5))	\$2690	\$1345	\$ _____

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 191970.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the ☐ applicant/inventor.

☐ 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 67,424

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

/Brent R. Lindon/	2012-10-11
Signature	Date
Brent R. Lindon	(303) 863-9700
Typed or printed name	Telephone Number

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 1.136(a). 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 6 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 Patent Application Fee Transmittal

Application Number:	12709504			
Filing Date:	21-Feb-2010			
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service			
First Named Inventor/Applicant Name:	Ron Hegli			
Filer:	Brent Robert Lindon/Leslie Roberts			
Attorney Docket Number:	6890-22			
Filed as Large 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	1202	6	62	372
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	1253	1	1290	1290
Miscellaneous:				
Total in USD (\$)				1662

Electronic Acknowledgement Receipt

EFS ID:	13965669
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	22442
Filer:	Brent Robert Lindon/Leslie Roberts
Filer Authorized By:	Brent Robert Lindon
Attorney Docket Number:	6890-22
Receipt Date:	11-OCT-2012
Filing Date:	21-FEB-2010
Time Stamp:	17:17:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 1662
RAM confirmation Number	4593
Deposit Account	191970
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		AMEND_01.pdf	139817	yes	18
			1b0320257cae5a6fc6a9e09cffb2a3f8f7b91263		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	7	
	Applicant Arguments/Remarks Made in an Amendment		8	18	
Warnings:					
Information:					
2	Extension of Time	EXTENSION_OF_TIME.pdf	286670	no	2
			675a4e41a59f11dec76fc3311c80b4e5b8f18cc4		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	32092	no	2
			1794fb981532c5bcaf3b69e1f72636cf060da575		
Warnings:					
Information:					
Total Files Size (in bytes):			458579		

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.

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 12/709,504		Filing Date 02/21/2010		☐ To be Mailed	
APPLICATION AS FILED – PART I										
(Column 1)			(Column 2)			SMALL ENTITY ☒ OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=	OR	X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		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 \$250 (\$125 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))										
			TOTAL			TOTAL				
* If the difference in column 1 is less than zero, enter "0" in column 2.										
APPLICATION AS AMENDED – PART II										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	10/11/2012	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 26	Minus	** 20	= 6	X \$31 =	186	OR	X \$	=
	Independent (37 CFR 1.16(h))	* 6	Minus	*** 6	= 0	X \$125 =	0	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	186	OR	TOTAL ADD'L FEE	
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	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 number found in the appropriate box in column 1.										

Legal Instrument Examiner:
/VIOLA ROGERS/

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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/709,504	02/21/2010	Ron Hegli	BC-001

22442
Sheridan Ross PC
1560 Broadway
Suite 1200
Denver, CO 80202

CONFIRMATION NO. 6836
POA ACCEPTANCE LETTER



Date Mailed: 10/10/2012

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/01/2012.

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.

/snguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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
12/709,504	02/21/2010	Ron Hegli	BC-001

53014
Clause Eight Intell. Prop. Service
P.O Box 131270
Carlsbad, CA 92013

CONFIRMATION NO. 6836
POWER OF ATTORNEY NOTICE



Date Mailed: 10/10/2012

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/01/2012.

- 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).

/snguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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.

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:



Practitioners associated with Customer Number:

22442

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 assignments 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:



The address associated with Customer Number:

22442

OR

☐	Firm or Individual Name			
	Address			
	City	State	Zip	
	Country			
	Telephone	Email		

Assignee Name and Address: BRIGHTCLOUD INCORPORATED
4810 EASTGATE MALL
SAN DIEGO, CALIFORNIA 92121

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		Date	1 OCT 2012
Name	David Huberman, Esq.	Telephone	720-842-3627
Title	General Counsel		

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 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: 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:	13880317
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	53014
Filer:	Jason Vick/Joanne Vos
Filer Authorized By:	Jason Vick
Attorney Docket Number:	BC-001
Receipt Date:	01-OCT-2012
Filing Date:	21-FEB-2010
Time Stamp:	15:02:21
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		Statement_Under_373c_w_PO A.pdf	96926 14adb494ff01496238ca14965cc46a9f4bc9396a4	yes	3

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Assignee showing of ownership per 37 CFR 3.73.	1	2
	Power of Attorney	3	3
Warnings:			
Information:			
Total Files Size (in bytes):		96926	
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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.			

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.

STATEMENT UNDER 37 CFR 3.73(c)Applicant/Patent Owner: BRIGHTCLOUD INCORPORATEDApplication No./Patent No.: 12/709,504 Filed/Issue Date: February 21, 2010Titled: System And Method For Developing A Risk Profile For An Internet ServiceBRIGHTCLOUD INCORPORATED, a 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 (choose one of options 1, 2, 3 or 4 below):

1. ☒ The assignee of the entire right, title, and interest.
2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):
- ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- ☐ 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. ☐ 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 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. ☐ 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 option 1, 2 or 3 above (not option 4) is evidenced by either (choose one of options A or B below):

- 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 023966, Frame 0384, or for which a copy thereof is attached.
- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:
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.
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.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(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.

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.

STATEMENT UNDER 37 CFR 3.73(c)

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.

4. 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.

5. 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.

6. 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.☐ Additional documents in the chain of title are listed on a supplemental sheet(s).☒ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the 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 of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment 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.

/Jason H. Vick/

Signature

Jason H. Vick

Printed or Typed Name

October 1, 2012

Date

45,285

Title or Registration Number



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.
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12/709,504

02/21/2010

Ron Hegli

BC-001

6836

53014 7590 04/12/2012

Clause Eight Intell. Prop. Service

P.O Box 131270

Carlsbad, CA 92013

EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2492

MAIL DATE

DELIVERY MODE

04/12/2012

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. 12/709,504	Applicant(s) HEGLI ET AL.	
	Examiner ARAVIND MOORTHY	Art Unit 2492	

-- 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 26 October 2010.
- 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) 1-20 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) 1-20 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 21 February 2010 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).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
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) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) ☐ Other: ____. |

DETAILED ACTION

1. This is in response to the communications filed on 26 October 2010.
2. Claims 1-20 are pending in the application.
3. Claims 1-20 have been rejected.

Information Disclosure Statement

4. The examiner has considered the information disclosure statement (IDS) filed on 26 October 2010.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dandliker et al US 2008/0082662 A1 (hereinafter Dandliker).

As to claim 1, Dandliker discloses a method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from an Internet-enabled client application from a client-side device of a local area network [0046], the Internet resource residing at a first server (i.e. Web server) [0049];

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet (i.e.

HTTP proxy can send and receive HTTP requests and responses on behalf of user system) [0052];

determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network [0131], the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location (i.e. URL reputation score table) [0057]; and

transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource (i.e. block access to URL) [0055].

As to claim 2, Dandliker discloses that the reputation index for the Internet resource is at or above the threshold value and wherein the decision transmission is access to the Internet resource [0131], the method further comprises transmitting the request for the Internet resource over the Internet to the first server for the Internet resource and receiving the Internet resource at the local area network (i.e. Web server) [0049].

As to claim 3, Dandliker discloses that the reputation index for the Internet resource is below the threshold value, and wherein the decision transmission is a Web page from the local area network containing information that accessing the Internet resource is against an Internet policy established on the local area network [0105-0106].

As to claim 4, Dandliker discloses that the location factor of the plurality of factors for the reputation vector comprises country of domain registration (i.e. country) [0073], country of service hosting and country of an internet protocol address block [0073], wherein the legitimacy factor of the plurality of factors for the reputation vector comprises age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency [0111-0112].

As to claim 5, Dandliker discloses that the Internet resource is one of a Web site, an email server and a voice communications server (i.e. web site) [0042].

As to claim 6, Dandliker discloses a system for controlling access to a Web site, the system comprising:

a network, the network comprising the Internet [0047];

an Internet resource hosted at a first server and accessible over the Internet (i.e. Web server) [0049]; and

a local area network [0051], the local area network comprising

a plurality of client-side devices, each of the client side devices having a browser [0052],

a security appliance, the security appliance controlling access to the Internet by each of the plurality of client-side devices (i.e. HTTP proxy can send

and receive HTTP requests and responses on behalf of user system) [0052], the security appliance having a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location [0134-0135];

wherein access to the Internet resource by any of the plurality of client-side devices is determined on the reputation index exceeding a threshold value established for the local area network (i.e. URL reputation score table) [0057].

As to claim 7, Dandliker discloses that the client-side device is a personal computer or a PDA (i.e. computer system) [0172].

As to claim 8, Dandliker discloses a data collection site accessible over the Internet, the security site having a crawler for collecting a plurality of factors from a plurality of Internet resources [0081].

As to claim 9, Dandliker discloses that the data collection site has a database containing reputation indices for a plurality of Internet resources (i.e. URL reputation score table) [0057].

As to claim 10, Dandliker discloses a method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from a Web browser for a client-side device of a local area network [0030], the Internet resource residing at a first server (i.e. Web server) [0049];

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet (i.e. HTTP proxy can send and receive HTTP requests and responses on behalf of user system) [0052];

accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising at least one of security history, legitimacy, behavior, associations and location (i.e. URL reputation score table) [0057];

determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network [0094-0096]; and

transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource (i.e. block access to URL) [0055].

As to claim 11, Dandliker discloses a method for building a reputation database for Internet resources, the method comprising:

collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource [0088];

receiving the plurality of factors for the Internet resource at a data collection site [0089];

constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location [0090];

analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier [0095];

storing the reputation index for the Internet resource at the data collection site [0096]; and

transmitting the stored reputation index to a local area network upon request for managing access to the Internet resource [0098].

As to claim 12, Dandliker discloses weighting each of the plurality of factors based on empirical knowledge of each of the plurality of factors. [0081]

As to claim 13, Dandliker discloses obtaining the plurality of factors for the Internet resource using a crawler [0081].

As to claim 14, Dandliker discloses that obtaining the plurality of factors for the Internet resource comprises accessing the Internet service, analyzing a plurality of HTML documents for the Internet resource, and crawling a plurality of linked Internet resources of the plurality of HTML documents for Internet resource [0088].

As to claim 15, Dandliker discloses that analyzing the plurality of HTML documents comprises determining the JavaScript block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter [0111-0112].

As to claim 16, Dandliker discloses a method for controlling access to an Internet resource, the method comprising:

collecting a first plurality of Internet resource reputation vectors [0090];

partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets [0091];

training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network [0034];

testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier [0037-0039];

evaluating the tested maximum entropy discrimination classifier [0040];

providing feedback to the evaluated maximum entropy discrimination classifier [0041]; and

utilizing the reputation index at a local area network for managing access to an Internet resource [0059-0060].

As to claim 17, Dandliker discloses that each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location, and the method further comprises weighting each of the plurality of dimensions [0088-0090].

As to claim 18, Dandliker discloses a method for training a MED classifier for controlling access to an Internet resource, the method comprising:

collecting a plurality of reputation vectors for Internet resources [0090];

partitioning the plurality of reputation vectors into training sets [0091];

training a MED classifier with the training sets [0034];

testing the trained MED classifier against unknown Internet resources [0037-0039];

evaluating the trained MED classifier [0040]; and

determining if the trained MED classifier has been adequately trained [0041].

As to claim 19, Dandliker discloses that the training set comprises good reputation Internet resources and bad reputation Internet resources [0091].

As to claim 20, Dandliker discloses locating the trained MED classifier at a security appliance of the local area network (i.e. HTTP proxy) [0052].

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARAVIND MOORTHY whose telephone number is (571)272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. 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.

/Aravind K Moorthy/
Primary Examiner, Art Unit 2492

Application/Control Number: 12/709,504
Art Unit: 2492

Page 11

Notice of References Cited	Application/Control No. 12/709,504	Applicant(s)/Patent Under Reexamination HEGLI ET AL.	
	Examiner ARAVIND MOORTHY	Art Unit 2492	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2008/0082662 A1	04-2008	Dandliker et al.	709/225
	B	US-			
	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					
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	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.

<i>Index of Claims</i> 	Application/Control No. 12709504	Applicant(s)/Patent Under Reexamination HEGLI ET AL.
	Examiner ARAVIND MOORTHY	Art Unit 2492

✓	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	04/05/2012							
	1	✓							
	2	✓							
	3	✓							
	4	✓							
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	6	✓							
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	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							



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BIB DATA SHEET

CONFIRMATION NO. 6836

SERIAL NUMBER 12/709,504	FILING or 371(c) DATE 02/21/2010 RULE	CLASS 726	GROUP ART UNIT 2492	ATTORNEY DOCKET NO. BC-001	
APPLICANTS Ron Hegli, San Diego, CA; Hal Lonas, Carlsbad, CA; Christopher K. Harris, San Diego, CA; ** CONTINUING DATA ***** This appln claims benefit of 61/171,264 04/21/2009 and claims benefit of 61/241,389 09/10/2009 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 02/26/2010					
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☒ Yes ☐ No Verified and /ARAVIND K MOORTHY/ Acknowledged Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY CA	SHEETS DRAWINGS 11	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 6
ADDRESS Clause Eight Intell. Prop. Service P.O Box 131270 Carlsbad, CA 92013 UNITED STATES					
TITLE System And Method For Developing A Risk Profile For An Internet Service					
FILING FEE RECEIVED 792	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		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		12709504
	Filing Date		2010-02-21
	First Named Inventor	Ron Hegli	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	BC-001	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/A.M./	1	6606659		2003-08-12	Hegli et al.	
/A.M./	2	6973488		2005-12-06	Yavatkar et al.	
/A.M./	3	7287279		2007-10-23	Bertman et al.	
/A.M./	4	7383299		2008-06-03	Hailpern et al.	
/A.M./	5	7406466		2008-07-29	Roy et al.	
/A.M./	6	7467206		2008-12-16	Moore et al.	
/A.M./	7	7493403		2009-02-17	Shull et al.	
/A.M./	8	7483982		2009-01-27	Hegli et al.	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	12709504
Filing Date	2010-02-21
First Named Inventor	Ron Hegli
Art Unit	
Examiner Name	
Attorney Docket Number	BC-001

/A.M./	9	7591016		2009-09-15	Home	
/A.M./	10	7721333		2010-05-18	Home	

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/A.M./	1	20040122926		2004-06-24	Moore et al.	
/A.M./	2	20050204050		2005-09-15	Turley et al.	
/A.M./	3	20060253578		2006-11-09	Dixon et al.	
/A.M./	4	20060143703		2006-06-29	Hopen et al.	
/A.M./	5	20070078675		2007-04-05	Kaplan	
/A.M./	6	20070130350		2007-06-07	Alperovitch et al.	
/A.M./	7	20080015925		2008-01-17	Sundaresan	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

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First Named Inventor	Ron Hegli
Art Unit	
Examiner Name	
Attorney Docket Number	BC-001

/A.M./	8	20080052758		2008-02-28	Byrnes	
/A.M./	9	20080082662		2008-04-03	Dandliker et al.	
/A.M./	10	20080097936		2008-04-24	Schmidtler et al.	
/A.M./	11	20090064337		2009-03-05	Chien	
/A.M./	12	20090063248		2009-03-05	Chong et al.	
/A.M./	13	20090178125		2009-07-09	Barber et al.	

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Art Unit		
Examiner Name		
Attorney Docket Number	BC-001	

/A.M./	1	PCT International Search Report for PCT Application Number PCT/US2010/025702, Mailed 17 September 2010	☐
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EXAMINER SIGNATURE

Examiner Signature	/Aravind Moorthy/	Date Considered	04/05/2012
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20080082662".pn.	US-PGPUB	OR	ON	2012/04/09 09:38
L2	1	1 and proxy WITH (score reputation)	US-PGPUB	OR	ON	2012/04/09 09:39
L3	1	1 and threshold	US-PGPUB	OR	ON	2012/04/09 09:39
L4	1	1 and (den\$5 reject\$ block\$ prevent\$)	US-PGPUB	OR	ON	2012/04/09 09:40
L5	1	1 and domain	US-PGPUB	OR	ON	2012/04/09 09:45
L6	1	1 and (country location)	US-PGPUB	OR	ON	2012/04/09 09:46
L7	1	1 and site	US-PGPUB	OR	ON	2012/04/09 09:50
L8	1	1 and internet	US-PGPUB	OR	ON	2012/04/09 09:50
L9	1	1 and browser	US-PGPUB	OR	ON	2012/04/09 09:53
L10	1	1 and computer	US-PGPUB	OR	ON	2012/04/09 09:55
L11	1	1 and request\$	US-PGPUB	OR	ON	2012/04/09 09:57
L12	1	1 and request\$ with client	US-PGPUB	OR	ON	2012/04/09 09:57
L13	1	1 and factor	US-PGPUB	OR	ON	2012/04/09 10:01
L14	1	"20100269168".pn.	US-PGPUB	OR	ON	2012/04/09 10:21
L15	1	14 and vector	US-PGPUB	OR	ON	2012/04/09 10:21
L16	1	1 and train\$	US-PGPUB	OR	ON	2012/04/09 10:24
S1	267	726/11.cor.	USPAT	OR	OFF	2012/04/05 14:56
S2	1	"20100269168".pn.	US-PGPUB	OR	ON	2012/04/05 15:01
S3	2	hegli near ron	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:16
S4	4	lonas near hal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:16
S5	308	harris near christopher	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:17

S6	2	S5 and reputation and index	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:18
S7	894	(resource site) WITH (confidence reputation) WITH (index level value)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:26
S8	170	S7 and (proxy gateway)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:28
S9	146	S8 and @ad<= "20090910"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:28
S10	33	S9 and crawler	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 15:35
S11	1	S2 and med	US-PGPUB	OR	ON	2012/04/05 16:12
S12	32	S10 and (train\$ updat\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2012/04/05 16:13

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Search Notes 	Application/Control No. 12709504	Applicant(s)/Patent Under Reexamination HEGLI ET AL.
	Examiner ARAVIND MOORTHY	Art Unit 2492

SEARCHED			
Class	Subclass	Date	Examiner
726	11	4/5/2012	AM

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search: Palm and East- search strategy enclosed	4/5/2012	AM
East (US-PGPUB, USPAT, EPO, JPO, DERWENT)- See search history printout	4/5/2012	AM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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	Examiner Name		
	Attorney Docket Number	BC-001	

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6606659		2003-08-12	Hegli et al.	
	2	6973488		2005-12-06	Yavatkar et al.	
	3	7287279		2007-10-23	Bertman et al.	
	4	7383299		2008-06-03	Hailpern et al.	
	5	7406466		2008-07-29	Roy et al.	
	6	7467206		2008-12-16	Moore et al.	
	7	7493403		2009-02-17	Shull et al.	
	8	7483982		2009-01-27	Hegli et al.	

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Examiner Name		
Attorney Docket Number	BC-001	

	9	7591016		2009-09-15	Horne	
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	1	20040122926		2004-06-24	Moore et al.	
	2	20050204050		2005-09-15	Turley et al.	
	3	20060253578		2006-11-09	Dixon et al.	
	4	20060143703		2006-06-29	Hopen et al.	
	5	20070078675		2007-04-05	Kaplan	
	6	20070130350		2007-06-07	Alperovitch et al.	
	7	20080015925		2008-01-17	Sundaresan	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	12709504
Filing Date	2010-02-21
First Named Inventor	Ron Hegli
Art Unit	
Examiner Name	
Attorney Docket Number	BC-001

8	20080052758		2008-02-28	Byrnes	
9	20080082662		2008-04-03	Dandliker et al.	
10	20080097936		2008-04-24	Schmidtler et al.	
11	20090064337		2009-03-05	Chien	
12	20090063248		2009-03-05	Chong et al.	
13	20090178125		2009-07-09	Barber et al.	

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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							☐

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		12709504
	Filing Date		2010-02-21
	First Named Inventor	Ron Hegli	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	BC-001	

	1	PCT International Search Report for PCT Application Number PCT/US2010/025702, Mailed 17 September 2010	☐
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If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	12709504
Filing Date	2010-02-21
First Named Inventor	Ron Hegli
Art Unit	
Examiner Name	
Attorney Docket Number	BC-001

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Michael Catania/	Date (YYYY-MM-DD)	2010-10-26
Name/Print	Michael Catania	Registration Number	36474

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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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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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BC-001PCT	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2010/025702	International filing date (day/month/year) 27 JANUARY 2010 (27.01.2010)	(Earliest) Priority Date (day/month/year) 21 APRIL 2009 (21.04.2009)	
Applicant BRIGHTCLOUD INCORPORATED et al			

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed

☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box No. II)

3. ☐ Unity of invention is lacking (See Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/025702**A. CLASSIFICATION OF SUBJECT MATTER***G06F 21/20(2006.01); G06F 15/16(2006.01); G06F 17/20(2006.01); G06F 9/06(2006.01)*

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC : G06F

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: web, security, reputation, score

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008-0082662 A1 (RICHARD DANGLIKER et al.) 03 April 2008 See abstract, paragraphs [0119], [0123], [0131], claims 1, 7, figures 1, 6.	1,5-10
A	US 2006-0253578 A1 (CHRISTOPHER DIXON et al.) 09 November 2006 See abstract, paragraph [0140], figure 4.	1-20
A	US 2007-0130350 A1 (DMITRI ALPEROVITCH et al.) 07 June 2007 See abstract, paragraphs [0053]-[0057], [0074]-[0077], figures 4, 9.	1-20
A	US 2009-0064337 A1 (SHIH-WEI CHIEN) 05 March 2009 See abstract, paragraphs [0022]-[0026], figures 3, 4.	1-20
A	US 2004-0122926 A1 (GEORGE MOORE et al.) 24 June 2004 See abstract, paragraphs [0030]-[0039], [0062]-[0065], figures 1-3, 6	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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

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

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17 SEPTEMBER 2010 (17.09.2010)

Date of mailing of the international search report

17 SEPTEMBER 2010 (17.09.2010)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-
gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KIM, Dong Sung

Telephone No. 0424818519



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/025702

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0082662 A1	03.04.2008	EP 2033108 A2 WO 2007-136665 A2	11.03.2009 29.11.2007
US 2006-0253578 A1	09.11.2006	US 2008-0109473 A1 US 2008-0114709 A1	08.05.2008 15.05.2008
US 2007-0130350 A1	07.06.2007	AU 2003-230606 A1 AU 2003-230606 B2 AU 2005-304883 A1 AU 2006-315184 A1 AU 2008-207924 A1 CA 2478299 A1 CA 2586709 A1 CA 2628189 A1 CA 2654796 A1 CN 101401466 A CN 101443736 A EP 1486316 A2 EP 1820101 A2 EP 1982540 A2 EP 2036246 A2 EP 2115642 A1 JP 2005-520230 A JP 2008-519532 A JP 2009-516269 A US 2003-0172166 A1 US 2003-0172167 A1 US 2003-0172291 A1 US 2003-0172292 A1 US 2003-0172294 A1 US 2003-0172301 A1 US 2003-0172302 A1 US 2006-0015563 A1 US 2006-0015942 A1 US 2006-0021055 A1 US 2006-0174341 A1 US 2006-0248156 A1 US 2006-0251068 A1 US 2006-0253447 A1 US 2006-0265747 A1 US 2006-0267802 A1 US 2007-0027392 A1 US 2007-0130351 A1 US 2007-0195753 A1 US 2007-0195779 A1 US 2007-0300286 A1 US 2008-0175226 A1 US 2008-0178259 A1 US 2008-0184366 A1	22.09.2003 30.04.2009 18.05.2006 24.05.2007 31.07.2008 18.09.2003 18.05.2006 24.05.2007 21.12.2007 01.04.2009 27.05.2009 22.12.2004 22.08.2007 22.10.2008 18.03.2009 11.11.2009 07.07.2005 05.06.2008 16.04.2009 11.09.2003 11.09.2003 11.09.2003 11.09.2003 11.09.2003 11.09.2003 11.09.2003 19.01.2006 19.01.2006 26.01.2006 03.08.2006 02.11.2006 09.11.2006 09.11.2006 23.11.2006 30.11.2006 01.02.2007 07.06.2007 23.08.2007 23.08.2007 27.12.2007 24.07.2008 24.07.2008 31.07.2008

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/025702

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 6941467 B2	06.09.2005
		US 7089590 B2	08.08.2006
		US 7096498 B2	22.08.2006
		US 7124438 B2	17.10.2006
		US 7213260 B2	01.05.2007
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		US 7519994 B2	14.04.2009
		US 7693947 B2	06.04.2010
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		US 7779156 B2	17.08.2010
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		WO 03-077071 A2	18.09.2003
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		WO 2007-059428 A2	24.05.2007
		WO 2007-146690 A2	21.12.2007
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		WO 2007-146701 A2	21.12.2007
		WO 2008-091980 A1	31.07.2008
US 2009-0064337 A1	05.03.2009	CN 101382979 A	11.03.2009
		EP 2037384 A1	18.03.2009
		JP 2009-064443 A	26.03.2009
		KR 10-2009-0025146 A	10.03.2009
US 2004-0122926 A1	24.06.2004	AU 2003-295966 A1	29.07.2004
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		CN 1745376 A	08.03.2006
		EP 1576492 A1	21.09.2005
		EP 1576492 A4	12.12.2007
		JP 2006-511884 A	06.04.2006
		JP 2006-511884 T	06.04.2006
		KR 10-2005-0094413A	27.09.2005
		TW 1321283A	01.03.2010
		US 7467206 B2	16.12.2008
		WO 2004-061703 A1	22.07.2004

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

MICHAEL CATANIA

Clause Eight IPS P.O.Box 131270 CARISBAD
CALIFORNIA 92013

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **17 SEPTEMBER 2010 (17.09.2010)**

Applicant's or agent's file reference

BC-001PCT

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US2010/025702

International filing date (day/month/year)

27 JANUARY 2010 (27.01.2010)

Priority date(day/month/year)

21 APRIL 2009 (21.04.2009)

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

G06F 21/20(2006.01)i, G06F 15/16(2006.01)i, G06F 17/20(2006.01)i, G06F 9/06(2006.01)i

Applicant

BRIGHTCLOUD INCORPORATED et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR
Korean Intellectual Property Office
Government Complex-Daejeon, 139
Seonsa-ro, Seo-gu, Daejeon 302
-701, Republic of Korea
Facsimile No. 82-42-472-7140



Date of completion of this opinion

17 SEPTEMBER 2010 (17.09.2010)

Authorized officer

KIM, Dong Sung

Telephone No 0424818519



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2010/025702

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of:
 - a. a sequence listing filed or furnished
 - ☐ on paper
 - ☐ in electronic form
 - b. time of filing or furnishing
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2010/025702

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	2-4, 11-20	YES
	Claims	1, 5-10	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following document:

D1: US 2008-0082662 A1 (RICHARD DANDLIKER et al.) 03 April 2008

1) Novelty and Inventive Step

(1) Independent Claims 1 and 10

D1, which is considered to be the closest prior art to the subject matter of claim 1, discloses a method for controlling access to an internet resource (see abstract), comprising the steps of:

transmitting a request for an internet resource from an internet-enabled client application from a client-side device of a local area network, the internet resource residing at a first server;

receiving the request for the internet resource at a security appliance of the local area network prior to transmission of the request over the internet (see [0119], 608, 612, 614, 606 in figure 6);

determining if a reputation index for the internet resource is at or above a threshold value established for the local area network (see [0123]); and

transmitting a decision transmission to the internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the internet resource (see [0131]).

D1 does not disclose the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location, as described in claim 1. However, it is merely a matter of design option to a person skilled in the art when considering the disclosure of D1 (see abstract, claims 1, 7 in D1). Therefore, claim 1 lacks an inventive step under PCT Article 33(3).

The features of method claim 10 essentially correspond to those of method claim 1. The same reasoning as in claim 1 applies to claim 10. Therefore, claim 10 lacks an inventive step under PCT Article 33(3).

(2) Dependent Claims 2-5

The additional features of dependent claims 2-4 are not disclosed in D1, nor are they obvious to a person skilled in the art. Accordingly, claims 2-4 are novel and involve an inventive step under PCT Article 33(2) and (3).

The additional feature of dependent claim 5 is disclosed in D1 (614 in figure 6). Therefore, claim 5 lacks an inventive step under PCT Article 33(3).

Continued on Supplemental Box

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box V

(3) Independent Claim 6

The features of apparatus claim 6 concerning a system essentially correspond to those of method claim 1. The same reasoning as in claim 1 applies to claim 6. Therefore, claim 6 lacks an inventive step under PCT Article 33(3).

(4) Dependent Claims 7-9

The additional feature of dependent claim 7 is disclosed in D1 (102 in fig.1, 612 in fig.6). The additional features of dependent claims 8-9 are disclosed in D1 (130 in fig.1, 624 in fig.6). Therefore, claims 7-9 lack an inventive step under PCT Article 33(3).

(5) Independent Claim 11 and Dependent Claims 12-15

D1 does not teach or fairly suggest the steps of claim 11, "collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource; and constructing a reputation vector for the Internet resource at the data collection site". And these features are not obvious to a person skilled in the art. Therefore, claim 11 and claims 12-15 dependent on claim 11 meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

(6) Independent Claim 16 and Dependent Claim 17

D1 does not teach or fairly suggest the steps of claim 16, "collecting a first plurality of Internet resource reputation vectors; partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets; training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network; testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors". And these features are not obvious to a person skilled in the art. Therefore, claim 16 and claim 17 dependent on claim 16 meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

(7) Independent Claim 18 and Dependent Claims 19-20

The features of method claim 18 essentially correspond to those of method claim 16. The same reasoning as in claim 16 applies to claim 18. Therefore, claim 18 and claims 19-20 dependent on claim 18 meet the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

2) Industrial Applicability

Claims 1-20 have industrial applicability and meet the requirement of PCT Article 33(4).

Electronic Acknowledgement Receipt

EFS ID:	8708816
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	53014
Filer:	Michael Catania
Filer Authorized By:	
Attorney Docket Number:	BC-001
Receipt Date:	26-OCT-2010
Filing Date:	21-FEB-2010
Time Stamp:	22:38:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	updated_IDS.pdf	612733 544cf4f8886688a64d7846c6aec3ca0d2b0a d629	no	6

Warnings:

Information:

2	NPL Documents	BC001PCTsearchreport.pdf	10941483 7ae7d4a66bcb2487f460bc59e02effcb9870f60e	no	8
Warnings:					
Information:					
Total Files Size (in bytes):			11554216		
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. <u>New Applications Under 35 U.S.C. 111</u> 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. <u>National Stage of an International Application under 35 U.S.C. 371</u> 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. <u>New International Application Filed with the USPTO as a Receiving Office</u> 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
12/709,504	02/21/2010	Ron Hegli	BC-001

CONFIRMATION NO. 6836

PUBLICATION NOTICE



OC000000044117497

53014
Clause Eight Intell. Prop. Service
P.O. Box 131270
Carlsbad, CA 92013

Title:System And Method For Developing A Risk Profile For An Internet Service

Publication No.US-2010-0269168-A1

Publication Date:10/21/2010

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <http://pair.uspto.gov/>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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UNITED STATES DEPARTMENT OF COMMERCE
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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
12/709,504	02/21/2010	Ron Hegli	BC-001

53014
Clause Eight Intell. Prop. Service
P.O Box 131270
Carlsbad, CA 92013

CONFIRMATION NO. 6836
POA ACCEPTANCE LETTER



Date Mailed: 03/02/2010

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/21/2010.

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.

/mnguyen/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/709,504	02/21/2010		792	BC-001	20	6

CONFIRMATION NO. 6836

53014

Clause Eight Intell. Prop. Service
P.O. Box 131270
Carlsbad, CA 92013

FILING RECEIPT



OC000000040347694

Date Mailed: 03/02/2010

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)

Ron Hegli, San Diego, CA;
Hal Lonas, Carlsbad, CA;
Christopher K. Harris, San Diego, CA;

Assignment For Published Patent Application

BRIGHTCLOUD INC., San Diego, CA

Power of Attorney: The patent practitioners associated with Customer Number 53014

Domestic Priority data as claimed by applicant

This appln claims benefit of 61/171,264 04/21/2009
and claims benefit of 61/241,389 09/10/2009

Foreign Applications

If Required, Foreign Filing License Granted: 02/26/2010

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/709,504**

Projected Publication Date: 10/21/2010

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

System And Method For Developing A Risk Profile For An Internet Service

Preliminary Class**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****GRANTED**

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

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

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).

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Hegli <i>et al.</i>	)	Docket No.:	BC-001
		)		
Serial No.:	12/709504	)	Art Unit:	
		)		
Filing Date:	02/21/2010	)	Examiner:	
		)		
Title:	System And Method For	)	Due Date:	
	Developing A Risk Profile	)		
	For An Internet Resource	)	Confirmation No.:	6836
		)		

Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 222350-1450

INTERNATIONAL FILING NOTICE
UNDER 35 U.S.C. §122(b)(2)B(iii)

Applicants hereby provide notice to the Director that PCT Application Number PCT/US10/25702 was filed on February 27, 2010 for an application directed to an invention disclosed in U.S. Application Number 12/709504. Applicants have rescinded a previously filed Request for Non-Publication of U.S. Application Number 12/709504. This Notice is provided within 45 days after the date of filing of PCT Application Number PCT/US10/25702.

Respectfully submitted,

/MICHAEL CATANIA/

February 27, 2010

Michael Catania
Attorney for Applicants
Registration Number 36,474
Clause Eight Intellectual Property Services, LLP
P.O. Box 131270
Carlsbad, California 92013
Telephone: 760-579-3702
Fax: 760-230-6846
e-mail: mcatania@clauseeight.com

Electronic Acknowledgement Receipt

EFS ID:	7104241
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	53014
Filer:	Michael Catania
Filer Authorized By:	
Attorney Docket Number:	BC-001
Receipt Date:	27-FEB-2010
Filing Date:	21-FEB-2010
Time Stamp:	17:51:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	BC00137USC122statement.pdf	1222632 8e65954dbb1a08cb4f331b43f0d80af036e2031d	no	1

Warnings:

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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.

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RESCISSION OF PREVIOUS NONPUBLICATION REQUEST (35 U.S.C. 122(b)(2)(B)(ii)) AND, IF APPLICABLE, NOTICE OF FOREIGN FILING (35 U.S.C. 122(b)(2)(B)(iii))	Application Number	12/709504
	Filing Date	02/21/2010
	First Named Inventor	Ron Hegli
	Title	System And Method For Developing ...
	Atty Docket Number	BC-001
	Art Unit	
	Examiner	

Send completed form to:
Mail Stop PG Pub
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450
 FAX: (571) 273-8300

A request that the above-identified application not be published under 35 U.S.C. 122(b) (nonpublication request) was included with the above-identified application on filing pursuant to 35 U.S.C. 122(b)(2)(B)(i).
 I hereby **rescind** the previous nonpublication request.

If a notice of foreign or international filing is or will be required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c), I hereby provide such notice. This notice is being provided no later than forty-five (45) days after the date of such foreign or international filing.

If a notice of subsequent foreign or international filing required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c) was not filed within forty-five (45) days after the date of filing of the foreign or international application, the application is ABANDONED, and a petition to revive under 37 CFR 1.137(b) is required. See 37 CFR 1.137(f).

/Michael Catania/

02/26/2010

Signature

Date

Michael Catania

36474

Typed or printed name

Registration Number, if applicable

760-579-3702

Telephone Number

This request must be signed in compliance with 37 CFR 1.33(b).

If information or assistance is needed in completing this form, please contact the Pre-Grant Publication Division at (703)605-4283 or by e-mail at PGPub@USPTO.gov.

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop PG Pub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature /Michael Catania/

Name (Print/Type) Michael Catania

Date

02/26/2010

This collection of information is required by 37 CFR 1.213(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 6 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 PG Pub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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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:	7103655
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	53014
Filer:	Michael Catania
Filer Authorized By:	
Attorney Docket Number:	BC-001
Receipt Date:	26-FEB-2010
Filing Date:	21-FEB-2010
Time Stamp:	21:09:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Rescind Nonpublication Request for Pre Grant Pub	sb0036.pdf	259856 44571e6753f763dc05a9e8e99ecb0e41eae0695f	no	2

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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.

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**POWER OF ATTORNEY
OR
REVOCATION OF POWER OF ATTORNEY
WITH A NEW POWER OF ATTORNEY
AND
CHANGE OF CORRESPONDENCE ADDRESS**

Application Number	
Filing Date	
First Named Inventor	Ron Hegli
Title	System And Method For Generating ...
Art Unit	
Examiner Name	
Attorney Docket Number	BC-001

I hereby revoke all previous powers of attorney given in the above-identified application

- ☐ A Power of Attorney is submitted herewith.
- OR**
- ☒ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.
- 53014
- OR**
- ☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified application to:

- ☒ The address associated with the above-mentioned Customer Number.
- OR**
- ☐ The address associated with Customer Number:

☐ Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

I am the:

- ☒ Applicant/Inventor
- OR**
- ☐ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) (Form PTO/SB/96) submitted herewith or filed on _____

SIGNATURE of Applicant or Assignee of Record

Signature	<i>Ron Hegli</i>	Date	5/20/09
Name	Ron Hegli	Telephone	
Title and Company			

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 3 forms are submitted

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

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**POWER OF ATTORNEY
OR
REVOCATION OF POWER OF ATTORNEY
WITH A NEW POWER OF ATTORNEY
AND
CHANGE OF CORRESPONDENCE ADDRESS**

Application Number	
Filing Date	
First Named Inventor	Ron Hagli
Title	System And Method For Generating
Art Unit	
Examiner Name	
Attorney Docket Number	BC-091

I hereby revoke all previous powers of attorney given in the above-identified application.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

53014

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number.

OR

☐ The address associated with Customer Number:

OR

☐ Firm or Individual Name

Address

City

State

Zip

Country

Telephone

Email

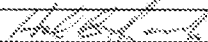
I am the:

☒ Applicant/Inventor.

OR

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

☐ Statement under 37 CFR 3.73(b) (Form PTO/SB/96) submitted herewith or filed on _____.
SIGNATURE of Applicant or Assignee of Record

Signature		Date	20 MAR 2009
Name	Hal Lonas	Telephone	
Title and Company			

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 3 forms are submitted.

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

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POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS	Application Number	
	Filing Date	
	First Named Inventor	Ron Hegli
	Title	System And Method For Generating ...
	Art Unit	
	Examiner Name	
	Attorney Docket Number	8C-001

I hereby revoke all previous powers of attorney given in the above-identified application.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

53014

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number.

OR

☐ The address associated with Customer Number:

OR

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Address

City

State

Zip

Country

Telephone

Email

I am the:

☒ Applicant/Inventor.

OR

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) (Form PTO/SB/96) submitted herewith or filed on _____

SIGNATURE of Applicant or Assignee of Record

Signature

Date

Name

Christopher K. Harris

Telephone

Title and Company

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 2 forms are submitted.

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**NONPUBLICATION REQUEST
UNDER
35 U.S.C. 122(b)(2)(B)(i)**

First Named Inventor

Ron Hegli

Title

System And Method For Developing ...

Attorney Docket Number

BC-001

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 international 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).

/Michael Catania/

02/21/2010

Signature

Date

Michael Catania

36474

Typed or printed name

Registration Number, if applicable

760-579-3702

Telephone Number

This request must be signed in compliance with 37 CFR 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)).**

This collection of information is required by 37 CFR 1.213(a). 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 6 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 (1-800-786-9199) and select option 2.

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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 Patent Application Fee Transmittal

Application Number:				
Filing Date:				
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service			
First Named Inventor/Applicant Name:	Ron Hegli			
Filer:	Michael Catania			
Attorney Docket Number:	BC-001			
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	82	82
Utility Search Fee	2111	1	270	270
Utility Examination Fee	2311	1	110	110
Pages:				
Claims:				
Independent claims in excess of 3	2201	3	110	330
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				792

Electronic Acknowledgement Receipt

EFS ID:	7053530
Application Number:	12709504
International Application Number:	
Confirmation Number:	6836
Title of Invention:	System And Method For Developing A Risk Profile For An Internet Service
First Named Inventor/Applicant Name:	Ron Hegli
Customer Number:	53014
Filer:	Michael Catania
Filer Authorized By:	
Attorney Docket Number:	BC-001
Receipt Date:	21-FEB-2010
Filing Date:	
Time Stamp:	21:56:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$792
RAM confirmation Number	7747
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Abstract	BC001abstract.pdf	453667	no	1
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Information:					
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3	Oath or Declaration filed	BC001finaldec.pdf	1623819	no	4
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4	Drawings-only black and white line drawings	BC001P2finaldrawings.pdf	5215394	no	11
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5	Specification	BC001specification.pdf	1806794	no	35
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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.

ABSTRACT OF THE DISCLOSURE

A method and system for controlling access to an Internet resource is disclosed herein. When a request for an Internet resource, such as a Web site, is transmitted by an end-user of a LAN, a security appliance for the LAN analyzes a reputation index for the Internet resource before transmitting the request over the Internet. The reputation index is based on a reputation vector which includes a plurality of factors for the Internet resource such as country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, popularity rank, internet protocol address, number of hosts, to-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. If the reputation index for the Internet resource is at or above a threshold value established for the LAN, then access to the Internet resource is permitted. If the reputation index for the Internet resource is below a threshold value established for the LAN, then access to the Internet resource is denied.

CLAIMS

We claim as our invention:

1. A method for controlling access to an Internet resource, the method comprising:

transmitting a request for an Internet resource from an Internet-enabled client application from a client-side device of a local area network, the Internet resource residing at a first server;

receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;

determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network, the reputation index generated from a reputation vector for the Internet resource, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location; and

transmitting a decision transmission to the Internet-enabled client application of the client-side device, the decision transmission allowing or denying access to the Internet resource.
2. The method according to claim 1 wherein the reputation index for the Internet resource is at or above the threshold value and wherein the decision transmission is access to the Internet resource, the method further comprises transmitting the request for the Internet resource over the Internet to the first server for the Internet resource and receiving the Internet resource at the local area network.

3. The method according to claim 1 wherein the reputation index for the Internet resource is below the threshold value, and wherein the decision transmission is a Web page from the local area network containing information that accessing the Internet resource is against an Internet policy established on the local area network.
4. The method according to claim 1 wherein the location factor of the plurality of factors for the reputation vector comprises country of domain registration, country of service hosting and country of an internet protocol address block, wherein the legitimacy factor of the plurality of factors for the reputation vector comprises age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, and wherein the behavior factor of the plurality of factors for the reputation vector comprises a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency.
5. The method according to claim 1 wherein the Internet resource is one of a Web site, an email server and a voice communications server.

6. A system for controlling access to a Web site, the system comprising:
- a network, the network comprising the Internet;
 - an Internet resource hosted at a first server and accessible over the Internet; and
 - a local area network, the local area network comprising
 - a plurality of client-side devices, each of the client side devices having a browser,
 - a security appliance, the security appliance controlling access to the Internet by each of the plurality of client-side devices, the security appliance having a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location;
 - wherein access to the Internet resource by any of the plurality of client-side devices is determined on the reputation index exceeding a threshold value established for the local area network.
7. The system according to claim 6 wherein the client-side device is a personal computer or a PDA.

8. The system according to claim 6 further comprising a data collection site accessible over the Internet, the security site having a crawler for collecting a plurality of factors from a plurality of Internet resources.
9. The system according to claim 8 wherein the data collection site has a database containing reputation indices for a plurality of Internet resources.
10. A method for controlling access to an Internet resource, the method comprising:
 - transmitting a request for an Internet resource from a Web browser for a client-side device of a local area network, the Internet resource residing at a first server;
 - receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet;
 - accessing a reputation index for the Internet resource, the reputation index based on a reputation vector for the Internet resource comprising at least one of security history, legitimacy, behavior, associations and location;
 - determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network; and
 - transmitting a decision transmission to the Web browser of the client-side device, the decision transmission allowing or denying access to the Internet resource.

11. A method for building a reputation database for Internet resources, the method comprising:

collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource;

receiving the plurality of factors for the Internet resource at a data collection site;

constructing a reputation vector for the Internet resource at the data collection site, the reputation vector comprising a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location;

analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier;

storing the reputation index for the Internet resource at the data collection site; and

transmitting the stored reputation index to a local area network upon request for managing access to the Internet resource.

12. The method according to claim 11 further comprising weighting each of the plurality of factors based on empirical knowledge of each of the plurality of factors.

13. The method according to claim 11 further comprising obtaining the plurality of factors for the Internet resource using a crawler.

14. The method according to claim 13 wherein obtaining the plurality of factors for the Internet resource comprises accessing the Internet service, analyzing a plurality of HTML documents for the Internet resource, and crawling a plurality of linked Internet resources of the plurality of HTML documents for Internet resource.

15. The method according to claim 11 analyzing the plurality of HTML documents comprises determining the JavaScript block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter.

16. A method for controlling access to an Internet resource, the method comprising:

- collecting a first plurality of Internet resource reputation vectors;
- partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets;
- training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network;
- testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors, the second plurality of Internet resource reputation vectors unknown to the trained maximum entropy discrimination classifier;
- evaluating the tested maximum entropy discrimination classifier;
- providing feedback to the evaluated maximum entropy discrimination classifier; and

utilizing the reputation index at a local area network for managing access to an Internet resource.

17. The method according to claim 16 wherein each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location, and the method further comprises weighting each of the plurality of dimensions.

18. A method for training a MED classifier for controlling access to an Internet resource, the method comprising:

- collecting a plurality of reputation vectors for Internet resources;
- partitioning the plurality of reputation vectors into training sets;
- training a MED classifier with the training sets;
- testing the trained MED classifier against unknown Internet resources;
- evaluating the trained MED classifier; and
- determining if the trained MED classifier has been adequately trained.

19. The method according to claim 18 where the training set comprises good reputation Internet resources and bad reputation Internet resources.

20. The method according to claim 18 further comprising locating the trained MED classifier at a security appliance of the local area network.

Declaration For United States Patent Application

As an inventor listed below, I hereby declare that:

My residence, post office address and citizenship are as set forth below.

I believe that 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 an United States Patent is sought on the invention entitled *System And Method For Developing A Risk Profile For An Internet Resource*, the specification of which is attached hereto.

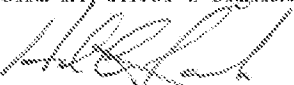
I hereby state that I have reviewed and understand the contents of the above identified specification including the claims.

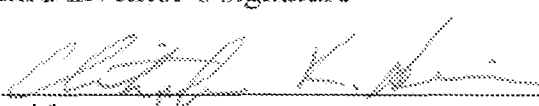
I hereby claim the benefit under 35 U.S.C. Section 119(e) of: U.S. Provisional Patent Application Number 61/241389, filed on September 10, 2009, and U.S. Provisional Patent Application Number 61/171264, filed on April 21, 2009.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

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 USC 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor Ron Hegli	
First inventor's signature 	Date 4/2/09
Residence 12855 Chaparral Ridge Road, San Diego, CA 92130	
Citizenship US	
Post Office Address Same as above	

Full name of second inventor Hal Lonas	
Second inventor's signature 	Date 4/2/2009
Residence 908 Orchid Way, Carlsbad, California 92011	
Citizenship US	
Post Office Address Same as above	

Full name of third inventor Christopher K. Harris	3/25/2009
Third inventor's signature 	Date
Residence 7465 Healis Place, San Diego, California 92129	
Citizenship US	
Post Office Address Same as above	

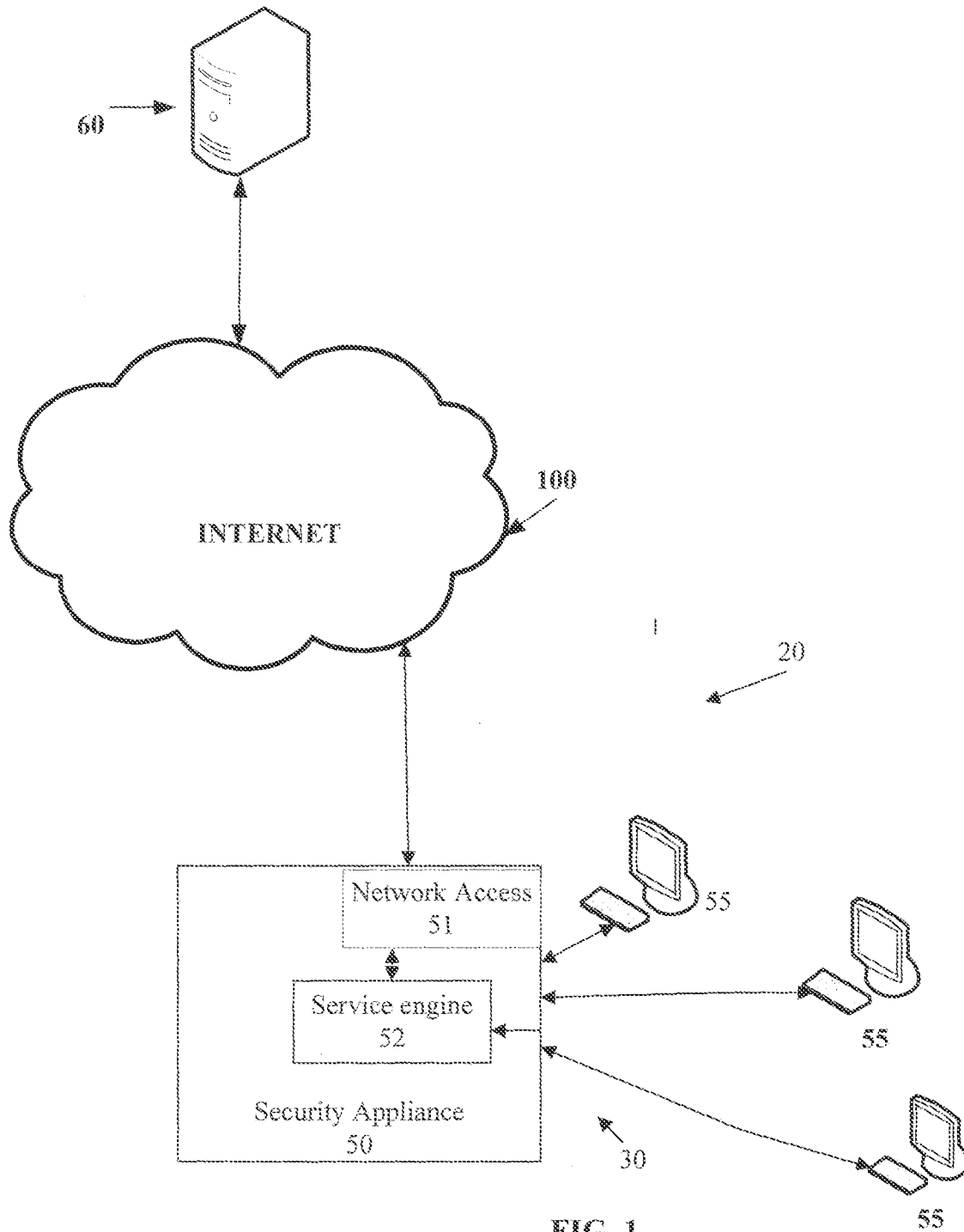


FIG. 1

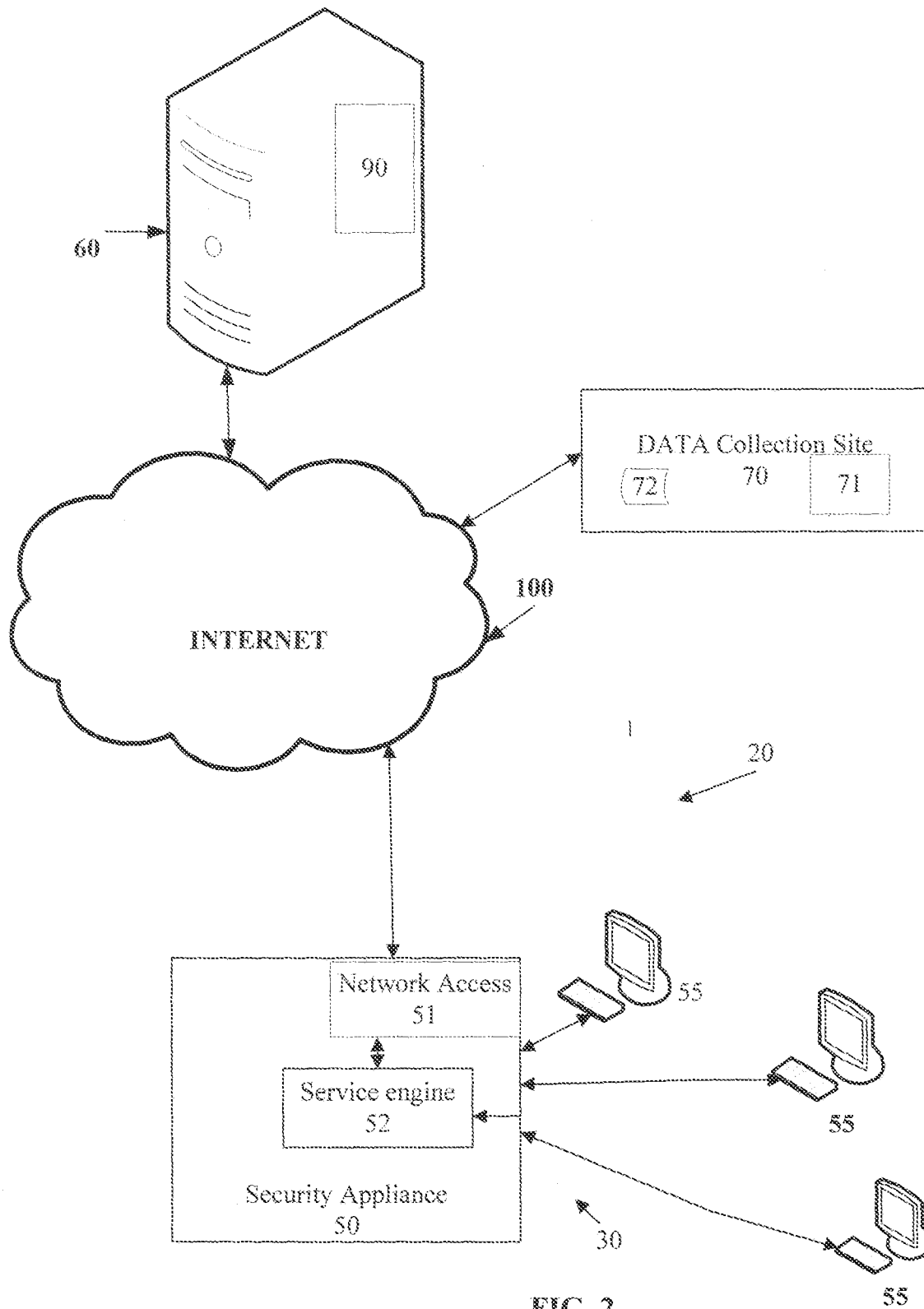


FIG. 2

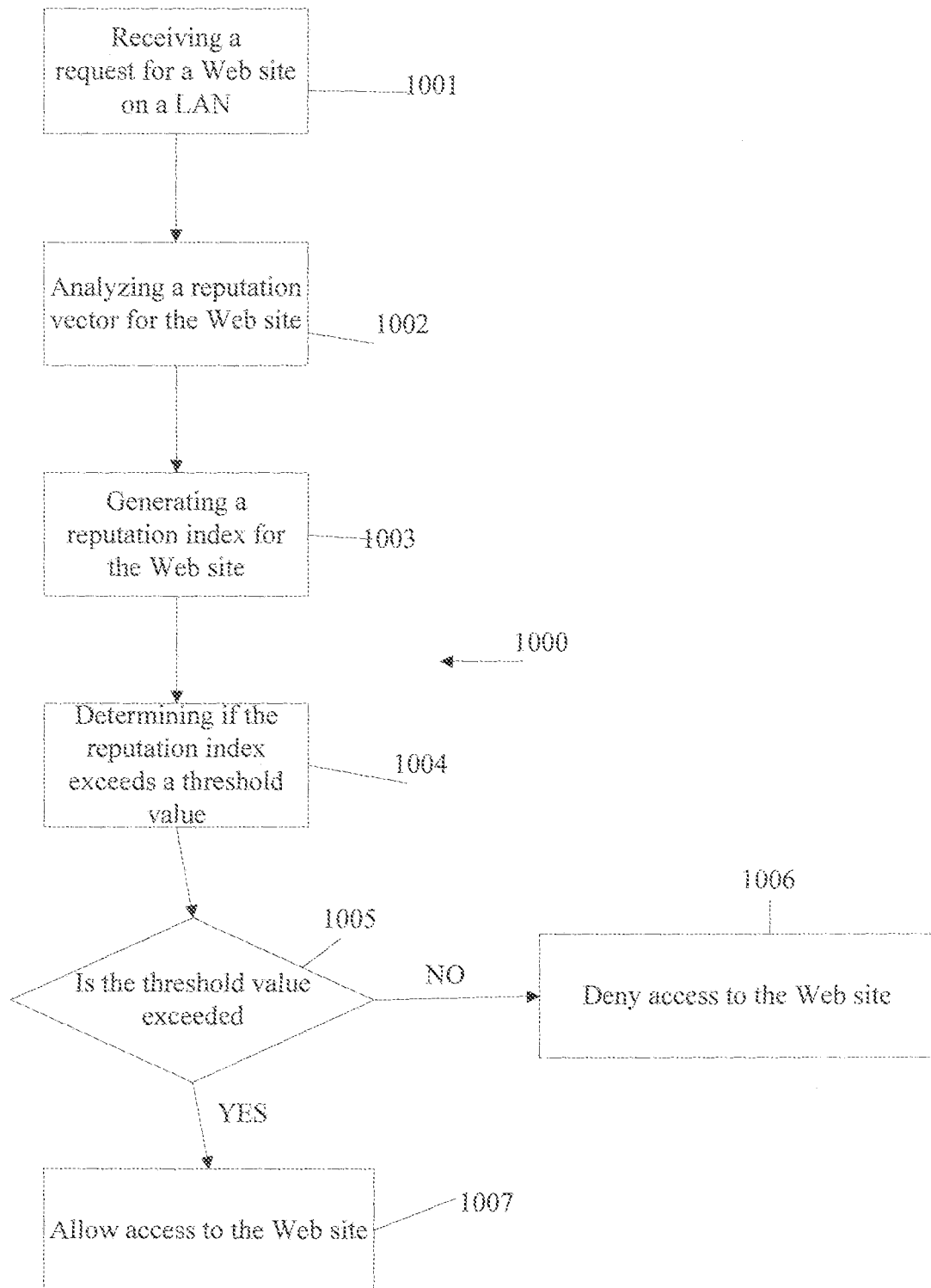
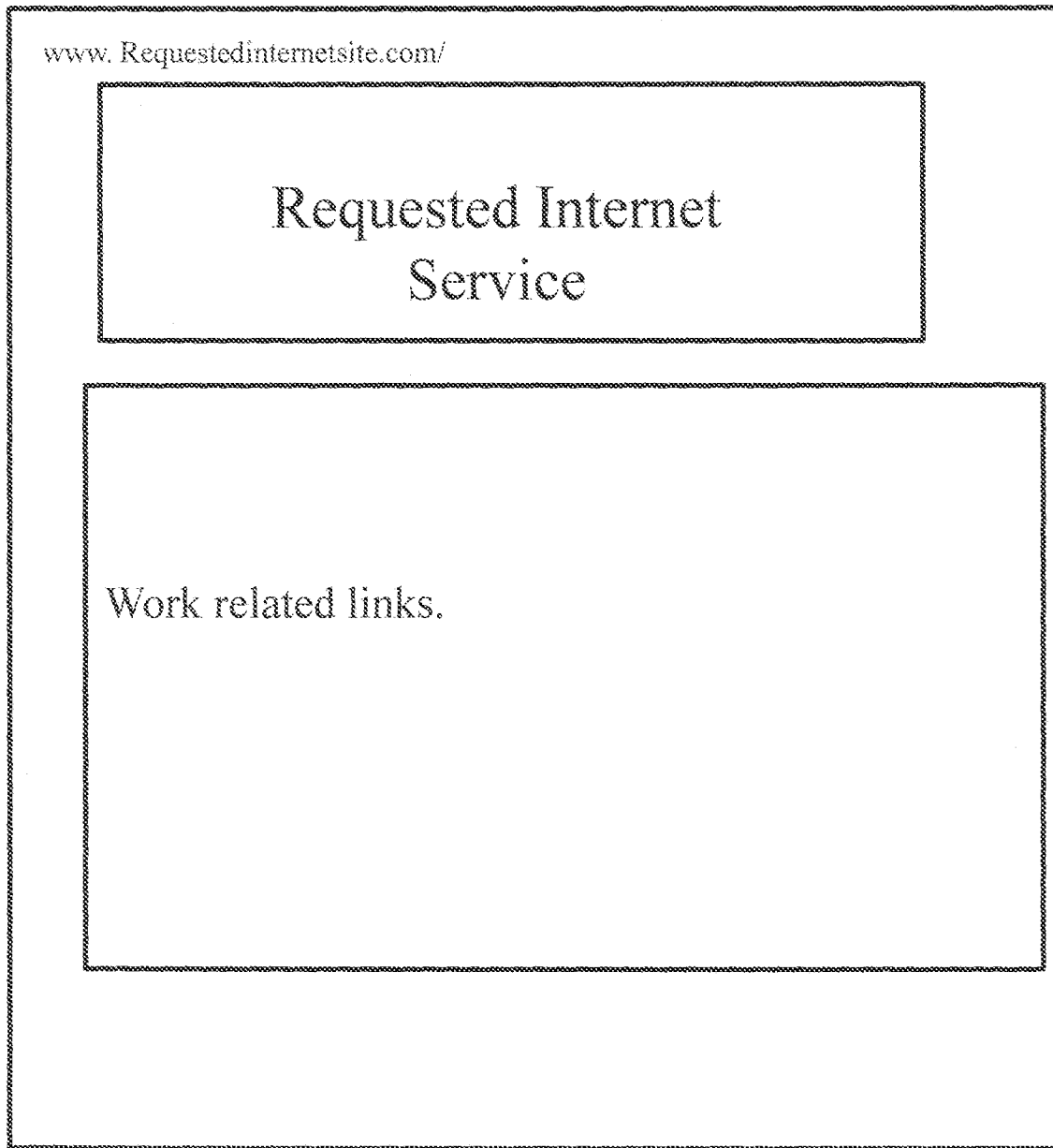


FIG. 3



400

An arrow originates from the reference numeral '400' and points diagonally upwards and to the right, terminating at the top-left corner of the main rectangular frame of the diagram.

FIG. 4

www.brightcloudclient.com/internetaccesspolicy

Internet Access Policy

The reputation index for this Internet service is below the threshold for the local area network and therefore access is denied.

500

FIG. 5

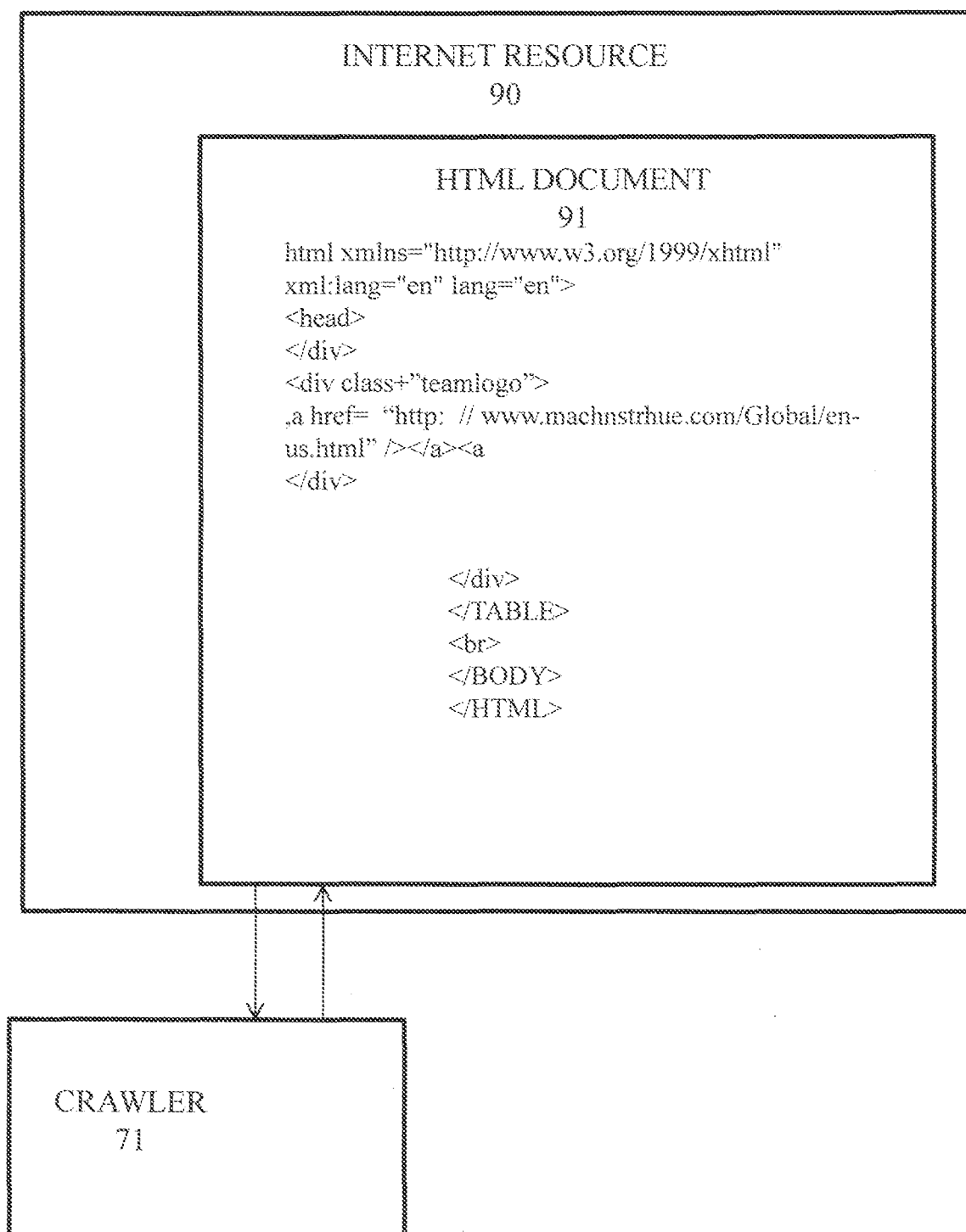


FIG. 6

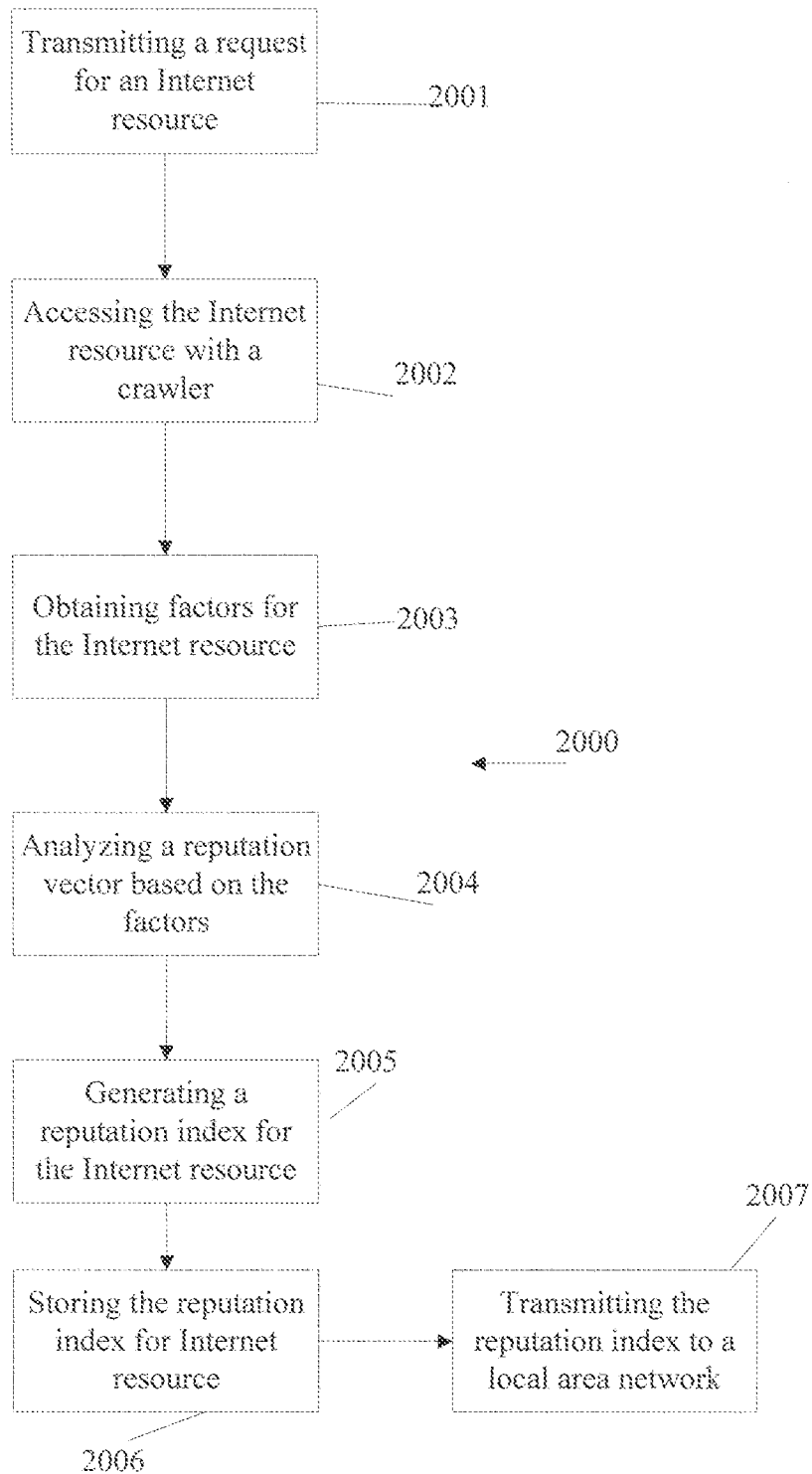


FIG. 7

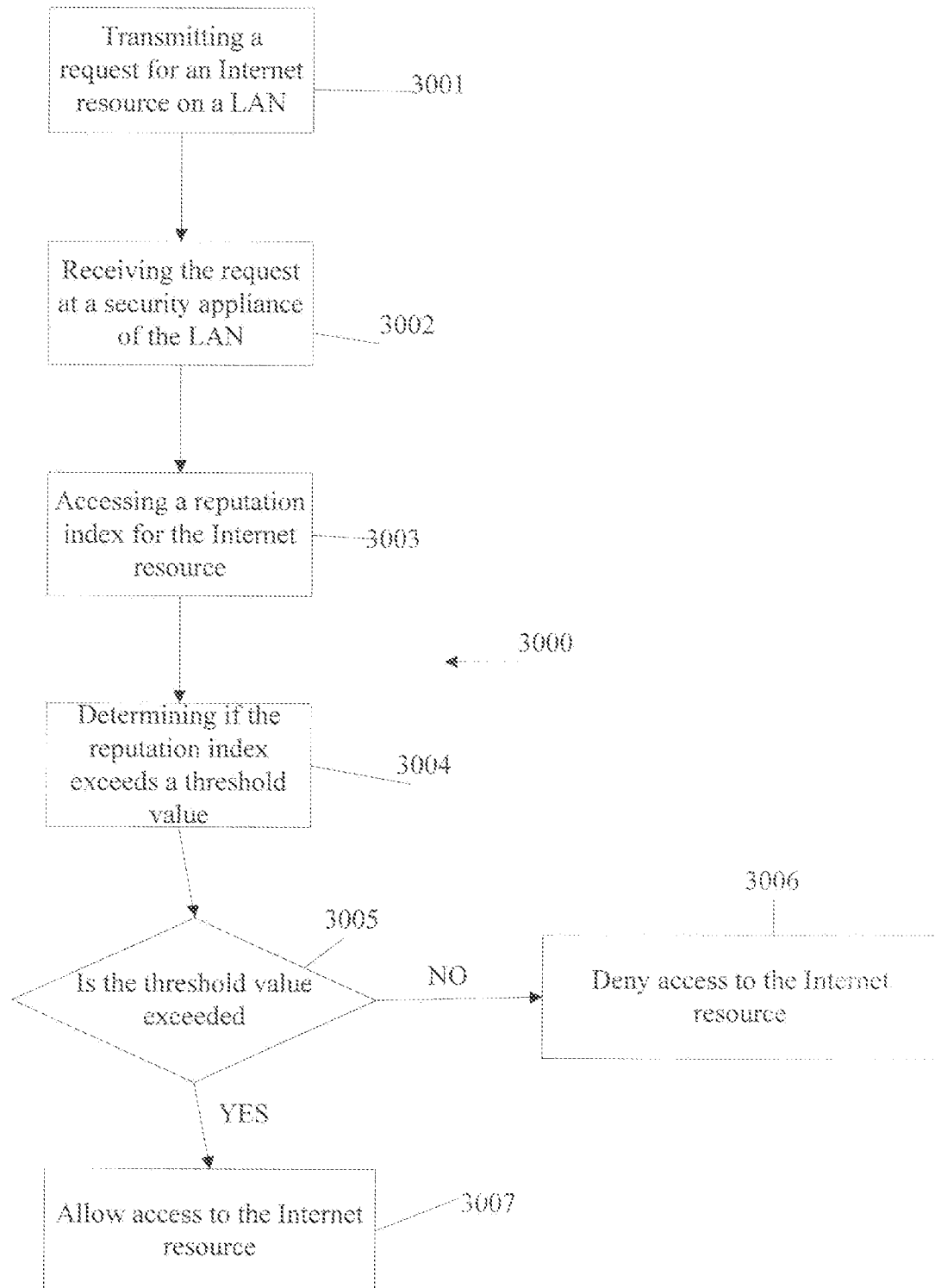


FIG. 8

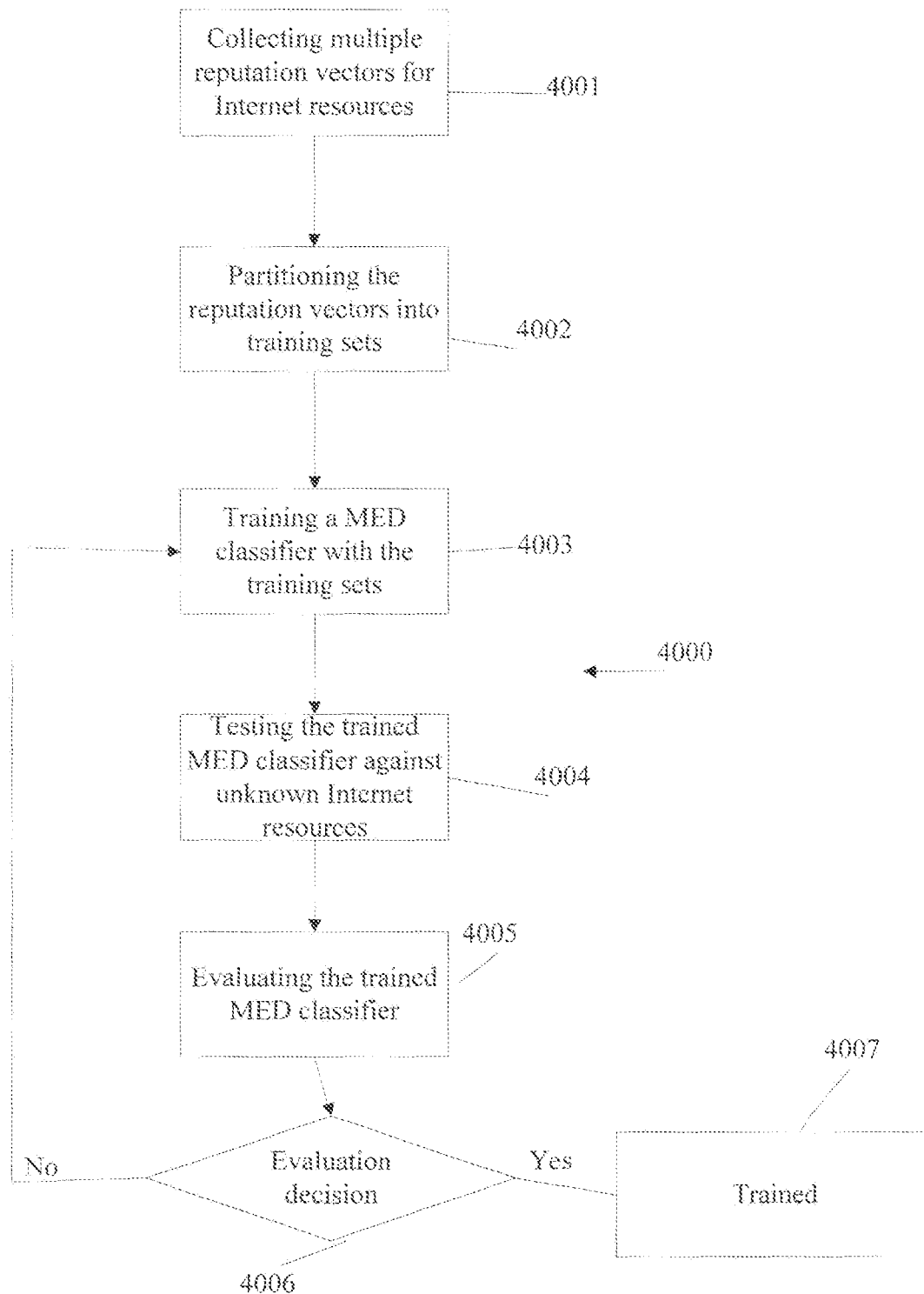


FIG. 9

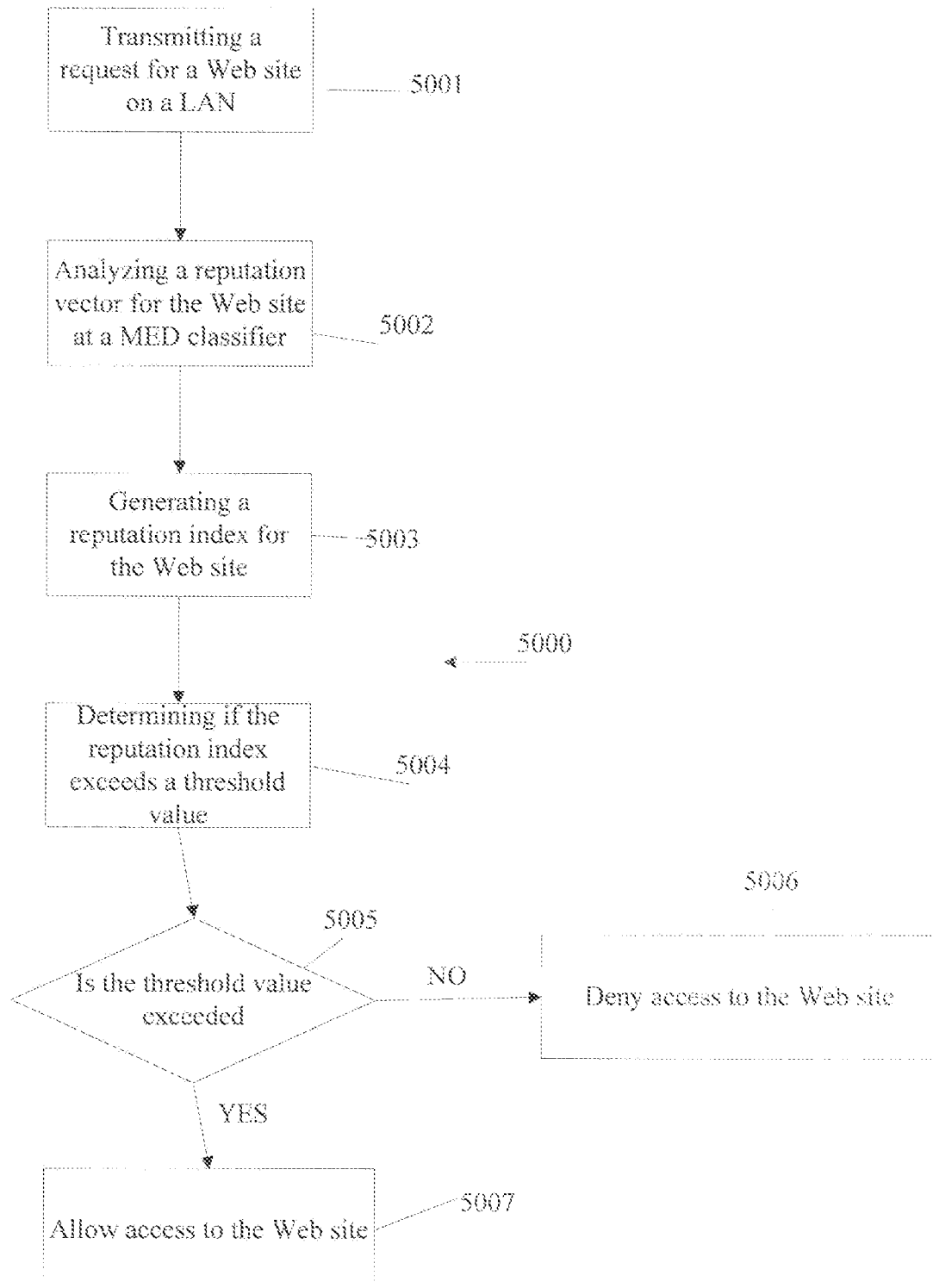


FIG. 10

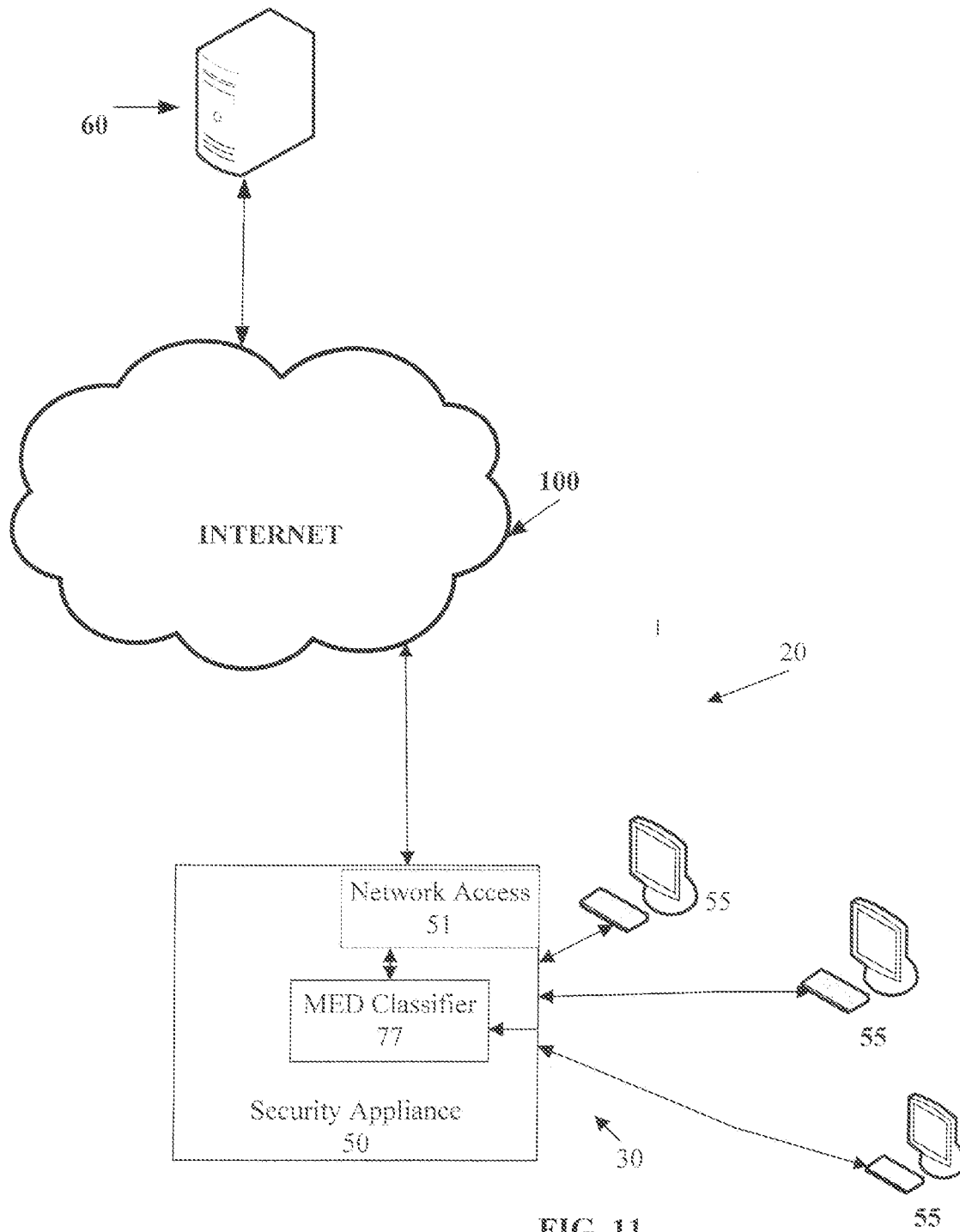


FIG. 11

TITLE OF THE INVENTION

System And Method For Developing A Risk Profile For An Internet Resource

(Docket Number BC-001)

CROSS REFERENCE TO RELATED APPLICATION

The present application claims priority to U.S. Provisional Patent Application Number 61/241389, filed on September 10, 2009 and U.S. Provisional Patent Application Number 61/171264, filed on April 21, 2009, both of which are hereby incorporated by reference in their entireties.

STATEMENT REGARDING FEDERALLY SPONSORED

RESEARCH OR DEVELOPMENT

Not Applicable

BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The present invention is related to assessing risk profiles of Internet resources. More specifically, the present invention is related to a system and method for developing a risk profile for an Internet resource by generating a reputation index, based on attributes of the resource collectively referred to as the reputation vector of the resource.

Description of the Related Art

- [0002] Management of internet access, particularly to Web sites, has been accomplished in the past using “Content Filtering”, where Web sites are organized into categories and requests for Web content are matched against per-category policies and either allowed or blocked. This type of management focuses on the subject matter of a Web site, and provides visibility into, for example, how employees spend their time, and their company’s network bandwidth usage, during the course of the day. These solutions also allow companies to enforce established internet usage policy (IUP) by blocking Web sites whose subject matter violates their IUP.
- [0003] Security solutions, such as anti-virus products, examine file or Web page content to discover known patterns or signatures that represent security threats to users, computers, or corporate networks. These focus not on the subject matter of a site, but look for viruses and other ‘malware’ that are currently infecting the site. However, current solutions to management of Internet resources fail to measure the security risk associated with accessing an Internet resource in a more predictive way, before infections are isolated and signatures are identified and distributed.
- [0004] A possible analogy to the reputation of an Internet resource is the credit score of an individual. A Web user would want to be informed of the reputation of a Web site before visiting it, just as a lender would want to know the reputation, the financial reputation at least, of a borrower of the lender’s money.

[0005] A credit score is based on a variety of fairly tightly related factors, such as existing debt, available credit lines, on-time payments, existing credit balances, etc.

[0006] In the United States, a credit score is a number based on a statistical analysis of a person's credit files that represents the creditworthiness of that person, which is the likelihood that the person will pay their bills. A credit score is primarily based on credit information, typically from one of the three major credit agencies.

[0007] There are different methods of calculating credit scores. The best known one, FICO, is a credit score developed by the Fair Isaac Corporation. FICO is used by many mortgage lenders that use a risk-based system to determine the possibility that the borrower may default on financial obligations to the mortgage lender.

[0008] FICO® scores are provided to lenders by the three major credit reporting agencies: Equifax, Experian and TransUnion. When lenders order your credit report, they can also buy a FICO® score that is based on the information in the report. That FICO® score is calculated by a mathematical equation that evaluates many types of information from the borrower's credit report at that agency. In order for a FICO® score to be calculated on the borrower's credit report, the report must contain sufficient information—and sufficient recent information—on which to base a score. Generally, that means the borrower must have at least one account that has been open for six months or longer, and at least one account that has been reported to the credit reporting agency within the last six months.

[0009] FICO scores provide a reliable guide to future risk based solely on credit report data. FICO® scores have a 300–850® score range. The higher the score, the lower the risk. But no score says whether a specific individual will be a “good” or “bad” customer. And while many lenders use FICO® scores to help them make lending decisions, each lender has its own strategy to determine if a potential borrower is a good customer. Although FICO won't reveal exactly how it determines a credit score, it considers the following factors: payment history (35%); outstanding debt (30%); length of credit history (15%); types of credit (10%); and new credit (10%).

[00010] Returning to Internet resources, attackers have been using the Internet to attack the computers and other devices of users of the Internet. Attackers continue to take advantage of flaws in traditional security measures and bypass reputation-based systems to increase attack effectiveness.

[00011] In 2008, massive attacks were conducted that compromised hundreds of thousands of legitimate Web sites with good reputations worldwide with data-stealing malicious code. The attacks included sites from MSNBC, ZDNet, Wired, the United Nations, a large UK government site, and more. In the attacks, when a user's browser opened one of the thousands of compromised sites, a carefully crafted iframe HTML tag redirected users to a malicious site rife with exploits. As a result, malicious code, designed to steal confidential information, was launched on vulnerable machines. In addition to Web exploits, email spammers are also taking advantage of the reputation of popular email services like Yahoo! and Gmail to bypass anti-spam systems.

[00012] Also, spammers use sophisticated tools and bots to break the “CAPTCHA -” systems that were developed to keep email and other services safe from spammers and other malicious activity. MICROSOFT Live Mail, GOOGLE’s popular Gmail service and Yahoo! mail services were all compromised by this breakthrough method. Subsequently, spammers have been able to sign up for the free email accounts on a mass basis and send out spam from email accounts with good reputations. With a free signup process, access to a wide portfolio of services and domains that are unlikely to be blacklisted given their reputation, spammers have been able to launch attacks on millions of users worldwide while maintaining anonymity.

[00013] Thus, prior art solutions have focused on security when accessing known infected sites in the Internet from a network such as a local area network or a wide area network.

[00014] Hegli *et al.*, U.S. Patent Number 7483982 for *Filtering Techniques For Managing Access To Internet Sites Or Other Software Applications* discloses a system and method for controlling an end user’s access to the Internet by blocking certain categorized sites or limiting access based on bandwidth usage.

[00015] Hegli *et al.*, U.S. Patent Number 6606659 for a *System And Method For Controlling Access To Internet Sites* discloses a system and method for controlling an end user’s access to the Internet by blocking certain categorized sites or limiting the number of times the end user can access an Internet site.

- [00016] Yavatkar *et al.*, U.S. Patent Number 6973488 for *Providing Policy Information To A Remote Device* discloses a method for distributing high level policy information to remote network devices using a low-level configuration.
- [00017] Turley *et al.*, U.S. Patent Publication Number 2005/0204050 for a *Method And System For Controlling Network Access* discloses a system and method for controlling access to a specific site by using a gateway that assigns incoming traffic to specific sections of the site.
- [00018] Shull *et al.*, U.S. Patent Number 7493403 for *Domain Name Validation* discloses accessing domain name registries to determine the ownership of a domain and monitoring the domain and registry.
- [00019] Roy *et al.*, U.S. Patent Number 7406466 for a *Reputation Based Search* discloses using a search engine to present search results associated with measures of reputation to overcome the problem of META tags skewing the search results.
- [00020] Hailpern *et al.*, U.S. Patent Number 7383299 for a *System And Method For Providing Service For Searching Web Site Addresses* discloses
- [00021] Moore *et al.*, U.S. Patent Number 7467206, for a *Reputation System For Web Services* discloses a system and method for selecting a Web service from a search engine list which is ranked based on reputation information for each Web service.
- [00022] Definitions for various terms are set forth below.
- [00023] FTP or File Transfer Protocol is a protocol for moving files over the Internet from one computer to another.

- [00024] HyperText Markup Language (HTML) is a method of mixing text and other content with layout and appearance commands in a text file, so that a browser can generate a displayed image from the file.
- [00025] Hypertext Transfer Protocol (HTTP) is a set of conventions for controlling the transfer of information via the Internet from a Web server computer to a client computer, and also from a client computer to a Web server.
- [00026] Internet is the worldwide, decentralized totality of server computers and data-transmission paths which can supply information to a connected and browser-equipped client computer, and can receive and forward information entered from the client computer.
- [00027] JavaScript is an object-based programming language. JavaScript is an interpreted language, not a compiled language. JavaScript is generally designed for writing software routines that operate within a client computer on the Internet. Generally, the software routines are downloaded to the client computer at the beginning of the interactive session, if they are not already cached on the client computer. JavaScript is discussed in greater detail below.
- [00028] Parser is a component of a compiler that analyzes a sequence of tokens to determine its grammatical structure with respect to a given formal grammar. Parsing transforms input text into a data structure, usually a tree, which is suitable for later processing and which captures the implied hierarchy of the input. XML Parsers ensure that an XML document follows the rules of XML markup syntax correctly.
- [00029] URL or Uniform Resource Locator is a address on the World Wide Web.

[00030] Web-Browser is a complex software program, resident in a client computer, that is capable of loading and displaying text and images and exhibiting behaviors as encoded in HTML (HyperText Markup Language) from the Internet, and also from the client computer's memory. Major browsers include MICROSOFT INTERNET EXPLORER, NETSCAPE, APPLE SAFARI, MOZILLA FIREFOX, and OPERA.

[00031] Web-Server is a computer able to simultaneously manage many Internet information-exchange processes at the same time. Normally, server computers are more powerful than client computers, and are administratively and/or geographically centralized. An interactive-form information-collection process generally is controlled from a server computer, to which the sponsor of the process has access. Servers usually contain one or more processors (CPUs), memories, storage devices and network interface cards. Servers typically store the HTML documents and/or execute code that generates Web-pages that are sent to clients upon request. An interactive-form information-collection process generally is controlled from a server computer, to which the sponsor of the process has access.

[00032] World Wide Web Consortium (W3C) is an unofficial standards body which creates and oversees the development of web technologies and the application of those technologies.

[00033] XHTML (Extensible Hypertext Markup Language) is a language for describing the content of hypertext documents intended to be viewed or read in a browser.

[00034] XML (Extensible Markup Language) is a W3C standard for text document markup, and it is not a language but a set of rules for creating other markup languages.

[00035] The prior art fails to provide solutions to the problems with accessing the Internet.

BRIEF SUMMARY OF THE INVENTION

[00036] The present invention provides a predictive approach based on a statistical model built on a broad sampling of Internet resources with varying degrees of risk. The present invention focuses on the reputation of a Web site, or any Internet-based service or resource. The reputation incorporates many factors that are relevant to the overall safety of visiting a site. The reputation assesses the over-time track record of the site and the provider that operates the web site, the current characteristics of the pages and related files composing the site, and reputations of sites linked to the site and of referrers to the site. The overall assessment is expressed as a score, not unlike a FICO score, that predicts the potential risk of visiting the site which can be used to protect users from inadvertently visiting or utilizing higher-risk sites or services within the Internet.

[00037] There are many components of reputation available within the Internet. Much like other scoring mechanisms, such as credit scoring, the factors to be

considered must be decided upon, and the weight that each factor will have in the overall “score” must be determined.

[00038] The present invention provides a system and method for defining a reputation of an Internet service such as a Web site.

[00039] A basic element of reputation is how long a domain has been registered to a particular company/entity. In addition, a domain which frequently changes hands is also interesting in a negative way relative to reputation.

[00040] Preferred steps of the invention are: evaluation of the important features to be included in the collection of reputation-relevant features referred to as the reputation vector; collection of the reputation vectors for a large sample of Internet resource; training of a classifier based on training sets of known high and low reputation services/sites; testing of a model against a wide variety of random samples; run-time evaluation of requests for the Internet resource using the developed classifier and responding to reputation index information requests from clients which enforce network security policy.

[00041] The present invention preferably protects users against threats which are typically are not related to the subject matter of the service, or site. The present invention preferably protects users and networks from zero-day threats which have not been characterized or included in anti-virus signature files. The present invention preferably allows network managers to protect users and infrastructure without having to restrict access to particular categories of content. The present invention preferably allows higher security which is independent of cultural or moral biases related to many categories of content.

[00042] One aspect of the present invention is a method for controlling access to a Web site. The method includes transmitting a request for a Web site from a browser on a client-side device of a local area network. The Web site resides at a first server. The method also includes receiving the request for the Web site at a security appliance of the local area network prior to transmission of the request over the Internet. The method also includes analyzing a reputation vector for the Web site at the security appliance. The reputation vector includes a plurality of factors for the Web site comprising at least one or more of country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. The method also includes generating a reputation index for the Web site based on the analysis of the plurality of factors. The method also includes determining if the reputation index for the Web site is above a threshold value established for the local area network. The method also includes transmitting a decision transmission to the browser of the client-side device.

[00043] If the reputation index for the Web site is above the threshold value, the method further includes transmitting the request for the Web-site over the Internet to a server for the Web site and receiving a Web page for the Web site at the local area network. In this situation, the decision transmission is the Web page for the Web site. If the reputation index for the Web site is at or below the threshold value, the decision transmission is a Web page from the local area network

[00044] The method can further include obtaining the plurality of factors for the Web site. Obtaining the plurality of factors for the Web site comprises accessing the Web site, analyzing a plurality of HTML documents for the Web site by crawling the Web site. Accessing the Web site comprises rendering a page for the Web site. Analyzing the plurality of HTML documents comprises determining the JavaScript block count and the picture count of each of the HTML documents.

[00045] Another aspect of the present invention is a system for controlling access to a Web site. The system includes a network, a Web site and a local area network. The network is the Internet. The Web site is hosted at a first server and accessible over the Internet. The local area network includes a plurality of client-side devices and a security appliance. Each of the client side devices has a browser. The security appliance controls access to the Internet by each of the plurality of client-side devices. The security appliance has a service engine for analyzing a reputation vector for the Web site and generating a reputation index for the Web site from the reputation vector. The reputation vector is based on a plurality of factors for the Web site. The plurality of factors comprises at least one or more of country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, popularity rank, internet protocol address, number of hosts, top-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. Access to the Web site by any of the plurality of client-side

devices is determined on the reputation index exceeding a threshold value established for the local area network.

[00046] Another aspect of the present invention is a method for controlling access to an Internet resource utilizing a reputation generating site. The method includes transmitting a request for an Internet resource from a browser for a client-side device of a local area network. The Internet resource resides at a first server. The method also includes receiving the request for the Internet resource at reputation generating site prior to transmission of the request over the Internet to the first server. The method also includes analyzing a reputation vector for the Internet resource at the reputation generating site. The reputation vector includes a plurality of dimensions for the Internet resource comprising at least two of country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, popularity rank, internet protocol address, number of hosts, to-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. The method also includes generating a reputation index for the Internet resource based on the analysis of the plurality of factors. The method also includes determining if the reputation index for the Internet resource is above a threshold value established for the local area network. The method also includes transmitting a decision transmission to the browser of the client-side device.

[00047] Another aspect of the present invention is a method for controlling access to an Internet resource. The method includes transmitting a request for an Internet resource from an Internet-enabled client application from a client-side device of a

local area network. The Internet resource resides at a first server. The method also includes receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet. The method also includes determining if a reputation index for the Internet resource is at or above a threshold value established for the local area network. The reputation index is generated from a reputation vector for the Internet resource. The reputation vector comprises a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location. The reputation index preferably resides in a database file at the security appliance, which is immediately accessible by the security appliance for determining whether or not to allow access to the Internet resource. Alternatively, the reputation index is generated in real-time at a data collection site accessible by the security appliance over the Internet, and the reputation index is forwarded to the security appliance from the data collection site upon request. The method also includes transmitting a decision transmission to the Internet-enabled client application of the client-side device. The decision transmission allows or denies access to the Internet resource.

[00048] Yet another aspect of the present invention is a method for controlling access to an Internet resource. The method includes transmitting a request for an Internet resource from a Web browser for a client-side device of a local area network. The Internet resource resides at a first server. The method also includes receiving the request for the Internet resource at a security appliance of the local area network prior to transmission of the request over the Internet. The method

also includes constructing a reputation vector for the Internet resource at the security appliance. The reputation vector comprises a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location. The method also includes analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier. The method also includes determining if the reputation index for the Internet resource is at or above a threshold value established for the local area network. The method also includes transmitting a decision transmission to the Web browser of the client-side device. The decision transmission allows or denies access to the Internet resource.

[00049] Yet another aspect of the present invention is a method for building a reputation database for Internet resources. The method includes collecting a plurality of factors for an Internet resource site to populate a reputation vector for the Internet resource to perform reputation analysis of the Internet resource. The method also includes receiving the plurality of factors for the Internet resource at a data collection site. The method also includes constructing a reputation vector for the Internet resource at the data collection site. The reputation vector comprises a plurality of factors for the Internet resource comprising security history, legitimacy, behavior, associations and location. The method also includes analyzing the reputation vector to generate a reputation index for the Internet resource based on the analysis of the plurality of factors and the reputation classifier. The method also includes storing the reputation index for the Internet resource at the data collection site. The method also includes transmitting the

stored reputation index to a local area network upon request for managing access to the Internet resource.

[00050] The method further includes weighting each of the plurality of factors based on empirical knowledge of each of the plurality of factors. The method further includes obtaining the plurality of factors for the Internet resource using a crawler. Obtaining the plurality of factors for the Internet resource preferably comprises accessing the Internet service, analyzing a plurality of HTML documents for the Internet resource, and crawling a plurality of linked Internet resources of the plurality of HTML documents for Internet resource. Analyzing the plurality of HTML documents preferably comprises determining the JavaScript block count and the picture count of each of the HTML documents, browser hijacking, file downloads and a subject matter.

[00051] Yet another aspect of the present invention is a method for controlling access to an Internet resource. The method includes collecting a first plurality of Internet resource reputation vectors. The method also includes partitioning the first plurality of Internet resource reputation vectors into a plurality of training sets. The method also includes training a maximum entropy discrimination classifier with the plurality of training sets, the maximum entropy discrimination classifier trained for a specific local area network. The method also includes testing the trained maximum entropy discrimination classifier using a second plurality of Internet resource reputation vectors. Each of the second plurality of Internet resource reputation vectors is unknown to the trained maximum entropy discrimination classifier. The method also includes evaluating the tested

maximum entropy discrimination classifier. The method also includes providing feedback to the evaluated maximum entropy discrimination classifier. The method also includes utilizing the reputation index at a local area network for managing access to an Internet resource.

[00052] Preferably, each of the first plurality of Internet resource reputation vectors comprises a plurality of dimensions for the Internet resource comprising security history, legitimacy, behavior, associations and location, and the method further comprises weighting each of the plurality of dimensions.

[00053] Yet another aspect of the present invention is a method for training a MED classifier for controlling access to an Internet resource. The method includes collecting a plurality of reputation vectors for Internet resources. The method also includes partitioning the plurality of reputation vectors into training sets. The method also includes training a MED classifier with the training sets. The method also includes testing the trained MED classifier against unknown Internet resources. The method also includes evaluating the trained MED classifier. The method also includes determining if the trained MED classifier has been adequately trained.

[00054] Having briefly described the present invention, the above and further objects, features and advantages thereof will be recognized by those skilled in the pertinent art from the following detailed description of the invention when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

- [00055] FIG. 1 is a block diagram of a system for controlling access to a Web site.
- [00056] FIG. 2 is a block diagram of a system for controlling access to a Web site.
- [00057] FIG. 3 is a flow chart of a method for controlling access to a Web site.
- [00058] FIG. 4 is a Web page for a requested Web site.
- [00059] FIG. 5 is a page for a local area network informing a requestor of the denial of access to a Web site.
- [00060] FIG. 6 is a block diagram of an Internet resource having a HTML document that is accessed by a crawler.
- [00061] FIG. 7 is a flow chart of a method for generating a reputation index.
- [00062] FIG. 8 is a flow chart of a method for controlling access to an Internet resource.
- [00063] FIG. 9 is a flow chart of a method for utilizing a MED classifier for controlling access to an Internet resource.
- [00064] FIG. 10 is flow chart of a method for controlling access to an Internet resource utilizing a MED classifier.
- [00065] FIG. 11 is a block diagram of a system for utilizing a MED classifier for controlling access to an Internet resource.

DETAILED DESCRIPTION OF THE INVENTION

- [00066] Reputation is a qualitative assessment of the safety of a website, expressed as a quantitative value that can be used in managing internet usage. Internet resources, such as Web sites, are safe, or of high reputation, if the Internet

resource preferably has: a reputable ownership and registration; a consistent history; had consistent content during that history; associated with other high reputation sites; from a geographically safe region; the Internet service provider (“ISP”) is well-known and reputable; not been known to be a source of malware infection; and worked cooperatively with the end-user and the end-user’s Web browser application.

[00067] While security threats are transitory since they come up suddenly and are mitigated as quickly as possible, reputation is built up over a period of time and is a more enduring quality. Reputation can be lost, or become ‘bad’, over a period of time with repeated security events, bad associations, and bad behavior. For that reason, the occurrence of a single security breach (the site gets hacked and is a danger to visitors) does not dramatically lower the reputation of a site. Repeated occurrences over time, however, will destroy the reputation of the site.

[00068] Competitive reputation products include social considerations in their definitions, such that a highly reputable site, a site “held in high regard”, preferably has these characteristics: established record of Web presence; not a source of network security risk; no introduction of malware; no popup ads; no persistent ad infection; is not pornographic or obscene; and has no illegal content.

[00069] The reputation of an Internet resource is preferably determined by security, legitimacy, behavior, geographic location, associations and additional factors. Legitimacy is determined by the top-level domain, the investment in the Internet resource (virtual hosting with non-affiliated sites, multiple hosting and SSL security), the traffic volume, the category age and the popularity rank.

Legitimacy is also preferably determined by any or all of the following: the consistency between the registering and hosting city region or country; and city, region or country associated with the IP address. Behaviors include the use of popup ads, browser hijacking and the use of auto-redirecting. Associations include the number of sites linking into the site, the reputations of the linked in sites and the reputations of the linked-to sites. The geographic location includes the hosting country, the registration country, the region and the city. The geographic location also preferably includes the consistency between the registering and hosting country and the country associated with the IP address.

[00070] In a most preferred embodiment discussed below, machine learning technologies are utilized for controlling access to an Internet resource. A variation on support vector machine techniques called Maximum Entropy Discrimination (“MED”) is a preferred machine learning technology. MED allows a computer to be trained to recognize the relative reputation of an Internet resource based on the features of the Internet resource. The set of features which characterize the reputation of the Internet resource is its reputation vector. Once trained, the computer uses the reputation vector for a requested Internet service to evaluate its reputation index, a score which can be used with empirically developed threshold values to block access where the reputation index is deemed to be too low to be safe.

[00071] A predictive security assessment for an Internet resource is provided based on known facts about the Internet resource, which is more secure than relying only on knowledge of previously experienced security attacks.

[00072] The system preferably provides classification of each Internet resource at run-time given a Uniform Resource Identifier (URI) and the reputation vector of the Internet resource. The system returns a score, or index, expressing the results on a relative scale for use by requesting clients, typically a security product which integrates the reputation assessment as a service.

[00073] The reputation vector preferably comprises a combination of some or all of the following: country of domain registration; country of service hosting; country of IP Address block; age of domain registration; time known to the assessor site; subject matter; classification age (time since last re-categorization); rank (popularity); IP Address; virtual hosting; number of hosts; top-level domain (.com, .biz, .ru, etc); security history; run-time behaviors; popup ads; downloadable executables; virus-infected executables; JavaScript block count; picture count; immediate redirect; and response latency. These features are collected and evaluated for all model training samples and at run-time on a per-user-request basis. Those skilled in the pertinent art will recognize that other factors may be utilized which are relevant to the security as determined by an assessor.

[00074] As shown in FIG.1, a system for controlling access to an Internet service is generally designated 20. The system 20 preferably comprises a local area network 30, the Internet 100 and an Internet service located at a remote server 60. The Internet resource is preferably a Web site. A local area network 30 preferably comprises a security appliance 50 and a plurality of client-side devices 55. The plurality of client-side devices preferably comprises desktop computers,

laptop computers, personal digital assistants, smartphones and the like. Each of the client-side devices 55 preferably has a Web-browser for accessing the Internet from the client side device 55. The security appliance 50 preferably comprises a network access 51 for permitting access to the Internet from the local area network 30, and a service engine 52 for determining if a requested Internet resource has a reputation index that meets a threshold established for the local area network 30.

[00075] A method 1000 for controlling access to a Web site is shown in FIG. 3. At block 1001, a request for a Web site is transmitted from a browser for a client-side device of a local area network which is received at a security appliance of the local area network prior to transmission of the request over the Internet. At block 1002, a reputation index for the Web site is obtained at the security appliance. The reputation index is calculated from a reputation vector which preferably includes a plurality of factors for the Web site comprising country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, popularity rank, internet protocol address, number of hosts, to-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. At block 1004, a determination is made if the reputation index for the Web site is above a threshold value established for the local area network. At decision 1005, if the reputation index is not above the threshold, then at block 1006 access to the Web site is denied and a transmission of the denial is sent to the client-side device, preferably as a page 500 as shown in FIG. 5. If at decision 1005 the reputation

index for the Web site is above the threshold, then the access to the Web site by the client-side device is permitted by the security appliance, and preferably, as shown in FIG. 4, a Web page 400 is provided to the client-side device.

[00076] An alternative embodiment of the system 20 is illustrated in FIG. 2. The system 20 preferably comprises a local area network 30, the Internet 100, an Internet service located at a remote server 60 and a reputation generating site 70 preferably having a crawler 71 and a database 72. The Internet service is preferably a Web site. A local area network 30 preferably comprises a security appliance 50 and a plurality of client-side devices 55. Each of the client-side devices 55 preferably has a Web-browser for accessing the Internet from the client side device 55. The security appliance 50 preferably comprises a network access 51 for permitting access to the Internet from the local area network 30, and a service engine 52 for determining if a requested Internet service has a reputation index that meets a threshold establish for the local area network 30. The reputation generating site 70 provides reputation indices to service engine 52 of the security appliance 50. The reputation generating site 70 preferably utilizes the crawler 71 and other means to access Internet resources such as the Internet resource located at Web server 60. The other means preferably includes publicly available data feeds, purchased databases, proprietary database, zone files from WHOIS database.

[00077] A flow chart for a method 2000 for generating a reputation index is shown in FIG. 7. At block 2001, a HTTP request is transmitted from a reputation generating site 70 for an Internet resource. From the HTTP request, a crawler 71

of the reputation generating site accesses the Internet resource. In accessing the Internet resource, as shown in FIG. 6, the crawler 71 preferably accesses at least one HTML document 91 of a plurality of HTML documents of the Internet resource 90. At block 2003, from the HTML documents and links within the HTML documents, the crawler 71 obtains information concerning the Internet resource 90. The reputation vector for the Internet resource 90 is based on some of this information obtained by the crawler 71. At block 2004, the reputation vector for the Internet resource is analyzed at the reputation generating site 70. At block 2005, a reputation index for the Internet resource 90 is generated at the data collection site. At block 2006, the reputation index for the Internet resource 90 is stored in a database 72 of the reputation generating site 70. The reputation for the Internet resource is available to the security appliance as updates or individual requests. At block 2007, the reputation index for the Internet resource 90 is transmitted to a LAN 30 for storage in a service engine 52 of a security appliance 50.

[00078] A flow chart for a method 3000 for controlling access to an Internet resource is shown in FIG. 8. At block 3001, a request for an Internet resource is transmitted from an Internet-enabled client application for a client-side device 55 of a LAN 30. At block 3002, the request is received at a security appliance 50 of the LAN 30 prior to transmission of the request over the Internet 100. At block 3003, a reputation index for the Internet resource is accessed from a database of a service engine 52 of the security appliance 50. The reputation index is based on a reputation vector which includes a plurality of factors for the Internet resource

comprising at least two or more of country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, security history, popularity rank, internet protocol address, number of hosts, to-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. At block 3004, a determination is made if the reputation index for the Internet resource is at or above a threshold value established for the LAN 30. At decision 3005, if the reputation index is below the threshold value, then at block 3006 access to the Internet resource is denied and a transmission of the denial is sent to the client-side device 55. If at decision 3005 the reputation index for the Web site is at or above the threshold value, then the access to the Internet resource by the client-side device 55 is permitted by the security appliance 50.

[00079] Table One provides a list of the attributes for the reputation vector and a description of each of the attributes.

TABLE ONE

Attribute	Description
Country	2-letter code, 3-letter code or full name of country based on IP block
Top-level Domain	.com, .biz, .org, .gov, etc.
Domain Age	Number of months in existence on zone lists, or no less than the classification age
Database Age	Months since Authority was entered into database
Classification Age	Months that the Authority has held its current classification
Hosts	Number of IP's associated with the Authority
Virtually Hosted	T/F if the other authorities share associated IP's
Popups	T/F if the page opens new browser windows on its own
Hijack	T/F does the default page alter the browser configuration
JavaScript	Count of <SCRIPT> blocks in default pages
Executables	T/F does the authorities download executables to client
Pictures	Count of pictures on default page
Latency	Number of milliseconds to return default page
Rank	Numerical ranking, used as T if <2,000,000, F otherwise in modeling
Infected	T/F were infected download files found by AV tools during site analysis
Security Trend	Number of malware infections in past 12 months
Total Security Count	Total number of malware infections known
Redirect	Authority redirects to another Authority
IP Address	Analysis of IP address for known threat sources, reserved IP ranges, and legacy IP address assignments
ISP	Internet service provider
City	
Region	

[00080] Table Two is an example of a “good” Internet resource.

TABLE TWO

Attribute	Value
Authority	USmoney. gov
Country	USA
Top Level Domain	Gov
Domain Age	18
Hosts	2
Virtual Hosts	0
Rank	1
Infected	0
Security Events	0
Recent Events	0
PublicCoIP	0
GovernmentIP	1
Hijack	0
JavaScript	0
Executables	0
Pictures	0
Latency	0
Redirect	0

[00081] Table Three is an example of a “bad” Internet resource.

TABLE THREE

Attribute	Value
Authority	www. c.reditcan.cn
Country	CN
Top Level Domain	CN
Domain Age	3
Hosts	1
Virtual Hosts	1
Rank	0
Infected	0
Security Events	1
Recent Events	1
PublicCoIP	0
GovernmentIP	0
Hijack	0
JavaScript	13
Executables	1
Pictures	14
Latency	826
Redirect	0

[00082] Depending on the threshold value established by the administrator of the LAN, the Internet resource of www. c.reditcan .cn with an reputation index value of 51, is not available for access by a user based on its reputation index, and the Internet resource of www. USmoney .GOV is available for access by a user based on its reputation index 95. Thus, even if the Internet resource of www. c.reditcan .cn is not a known source of malware or viruses, the present invention would prevent an end user client from accessing the Internet resource since its reputation index is deemed unsafe.

[00083] Another embodiment uses a MED algorithm to build a statistical model on a Web page based on good and bad Internet samples. This embodiment uses a unique optimization algorithm for training, as well as two other optimization steps for calibrating the outputs to be probabilities, in a process that tolerates some input errors while still yielding reliable outputs. Training process feedback loops guide the implementer to improve the model data through splitting data into sets for holdout, training, and testing guided by two criteria: most violating examples, and least understood examples. The implementer using the criteria iteratively improves the quality of the training set which also reduces classifier errors and is exponentially faster than having the implementer manually verify or check the example assignments to categories in random or haphazard order. The examples are randomly reassigned before every training iteration to improve generalization. Sparse matrix math during the classification process improves processing speeds to enable a modest computer to classify millions of URLs per day. The implementation allows for a multiple of dimensions, each representing a fact about the Internet resource, to be included in the reputation model, while classification speed of any particular Internet resource is independent of the number of total dimensions in its reputation vector.

[00084] This embodiment is preferred since classifying a large percentage of existing Web sites into reputation risk assessments quickly and efficiently requires an automated process because the number of humans required is too large to be practical or economical. Further, defining automated classification rules by hand is very hard and requires writing many thousands of extremely specific as

well as vague rules. All of these rules will interact with each other in an exponential number of ways, making human-based rule construction a daunting effort as well. The machine learning approach of this embodiment solves the problem by having humans define “training sets” or examples of each topic for the classifier, which then “trains” by optimizing the weights each factor should have in order to reduce classification error the most.

[00085] In addition to providing a good implementation of the learning algorithm, this embodiment efficiently utilizes the human efforts in identifying examples of good and bad reputations.

[00086] This embodiment preferably applies an effective learning formulation based on the principles and theory of MED with an efficient optimization algorithm based on the principles of Platt’s sequential minimization optimization (“SMO”), in conjunction with an overall optimization of tunable parameters and calibrated confidence scores, to solve the learning problem given proper examples of Web sites of good and bad reputation.

[00087] The process then involves having humans examine a list of “most violating” examples, the examples which were marked as being good reputations but received extremely low confidence scores from the classifier (and vice-versa), as well as “least understood” examples, the examples which receive a confidence score close to the prior probability of the reputation.

[00088] By spending human time examining these two classes of examples, the classifier benefits from having egregiously misclassified examples being put into the proper reputation (good or bad) as well as providing the classifier with the

largest amount of new information as quickly as possible. This combination improves the classifier's real-world effectiveness very quickly with minimal human effort. Thus, this embodiment efficiently combines human and automated work to solve the problem of automated reputation classification of Internet resources.

[00089] In one method, an evaluation of multiple factors (such as discussed above) is included in determining a reputation vector for an Internet resource. This process is done for multiple Internet resources. Next, reputation vectors for a large sample of Internet resources are collected at a data collection site. Next, a MED classifier is trained using the collection of reputation vectors based on training sets of known high reputation Internet resources and low reputation Internet resources. Next, a MED-based model for classification is tested against a wide variety of random samples of Internet resources. Next, a security appliance is deployed at a LAN. Next, a run-time evaluation of Internet resource requests is performed in using the developed MED classifier for responding to reputation index information requests from clients based on a LAN security policy. The MED-based model for classification is preferably utilized at run-time to calculate a reputation index. In this manner, this embodiment provides a predictive security assessment based on known facts about an Internet resource, which is more secure than relying only on knowledge of previously experienced security attacks. This embodiment provides a LAN real-time updates, real-time classification of non-cached URLs and a real-time feedback loop.

[00090] A flow chart of a method 4000 for utilizing a MED classifier for controlling access to an Internet resource is shown in FIG. 9. At block 4001, multiple reputation vectors for a large sample of Internet resources are collected preferably at a reputation generating site. The reputation vectors for the Internet resources are previously generated as discussed above. At block 4002, the reputation vectors are partitioned into multiple training sets. The training sets comprise at least two training sets divided into high reputation Internet resources and low reputation Internet resources. At block 4003, a MED classifier is trained using the training sets of high reputation Internet resources and low reputation Internet resources to create a trained MED classifier. At block 4004, the trained MED classifier is tested against a wide variety of Internet resources which are not grouped into training sets and the reputation index is unknown to the trained MED classifier. At block 4005, the tested MED classifier is evaluated to determine the accuracy of the tested MED classifier and to determine the most violating examples of either a wrongly categorized high reputation Internet resource or low reputation Internet resource, and the least understood Internet resources. At decision block 4006, an evaluation of the testing is performed. If the testing was performed correctly, then at block 4007 the MED classifier is considered trained and ready for operations. If the testing was inadequate feedback is provided to the MED classifier concerning the wrongly categorized high reputation Internet resources or low reputation Internet resources, and the least understood Internet resources. The process is continued at block 4003 again until the MED classifier is properly trained.

[00091] In another embodiment, a reputation index is returned immediately from a stored set of reputation indexes calculated prior to the user's request. As shown in FIG. 10, a method for controlling access to an Internet resource utilizing a MED classifier is generally designated 5000. At block 5001, a request for an Internet resource is transmitted from an Internet-enabled client application for a client-side device 55 of a LAN 30. At block 5002, a reputation vector for the Internet resource is analyzed preferably at a MED classifier or at a security appliance for the LAN. At block 5003, a reputation index for the Internet resource is accessed/generated from a database of a service engine 52 of the security appliance 50. The reputation index is preferably based on a reputation vector which includes a plurality of factors for the Internet resource comprising at least two or more of country of domain registration, country of service hosting, country of an internet protocol address block, age of a domain registration, security history, popularity rank, internet protocol address, number of hosts, to-level domain, a plurality of run-time behaviors, JavaScript block count, picture count, immediate redirect and response latency. At block 5004, a determination is made if the reputation index for the Internet resource is at or above a threshold value established for the LAN 30. At decision 5005, if the reputation index is below the threshold value, then at block 5006 access to the Internet resource is denied and a transmission of the denial is sent to the client-side device 55. If at decision 5005 the reputation index for the Web site is at or above the threshold value, then the access to the Internet resource by the client-side device 55 is permitted by the security appliance 50. In such an embodiment, a pre-calculated

reputation index residing on the LAN or quickly available to the security appliance of the LAN provides for a much faster response (if not immediate response) as to the accessibility of the Internet resource.

[00092] FIG. 11 illustrates a system 20 for controlling access to an Internet resource utilizing a MED classifier site 77. The system 20 preferably comprises a local area network 30, the Internet 100, a MED classifier site 77, and an Internet service located at a remote server 60. The Internet resource is preferably a Web site. A local area network 30 preferably comprises a security appliance 50 and a plurality of client-side devices 55. Each of the client-side devices 55 preferably has a Web-browser for accessing the Internet from the client side device 55. The security appliance 50 preferably comprises a network access 51 for permitting access to the Internet from the local area network 30, based on data from the MED classifier site 77, which determines if a requested Internet resource has a reputation index that meets a threshold establish for the local area network 30.

[00093] Table Four provides an example of some dimensions and the sorted model weights of the MED classifier.

TABLE FOUR

Identification	Dimension	Sorted Model weights
1966272070	Domain age	3.785360
2307717	gov	1.969750
1906396306	paris	0.647784
1477426223	Hijack	-19.887100

[00094] From the foregoing it is believed that those skilled in the pertinent art will recognize the meritorious advancement of this invention and will readily understand that while the present invention has been described in association with a preferred embodiment thereof, and other embodiments illustrated in the accompanying drawings, numerous changes modification and substitutions of equivalents may be made therein without departing from the spirit and scope of this invention which is intended to be unlimited by the foregoing except as may appear in the following appended claim. Therefore, the embodiments of the invention in which an exclusive property or privilege is claimed are defined in the following appended claims.

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	BC-001
		Application Number	
Title of Invention	System And Method For Developing A Risk Profile For An Internet Service		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

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☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

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Applicant 1					Remove
Applicant Authority		☒ Inventor		☐ Legal Representative under 35 U.S.C. 117	☐ Party of Interest under 35 U.S.C. 118
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Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service					
City	San Diego	State/Province	CA	Country of Residence i	US
Citizenship under 37 CFR 1.41(b) i		US			
Mailing Address of Applicant:					
Address 1		12855 Chaparral Ridge Road			
Address 2					
City	San Diego	State/Province	CA		
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Applicant 2					Remove
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Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service					
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Mailing Address of Applicant:					
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number		BC-001	
		Application Number			
Title of Invention		System And Method For Developing A Risk Profile For An Internet Service			
Citizenship under 37 CFR 1.41(b) i		US			
Mailing Address of Applicant:					
Address 1		7465 Healis Place			
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City	San Diego		State/Province	CA	
Postal Code	92129		Country ⁱ	US	
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Email Address	mcatania@clauseight.com	Add Email	Remove Email

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Title of the Invention	System And Method For Developing A Risk Profile For An Internet Service		
Attorney Docket Number	BC-001	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	11	Suggested Figure for Publication (if any)	1

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☒ Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and 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 international agreement, that requires publication at eighteen months after filing.

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	BC-001
		Application Number	
Title of Invention	System And Method For Developing A Risk Profile For An Internet Service		
Customer Number	53014		

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This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	non provisional of	61/171264	2009-04-21
Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	non provisional of	61/241389	2009-09-10

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Assignee 1 Remove			
If the Assignee is an Organization check here. ☒			
Organization Name	Brightcloud Inc.		
Mailing Address Information:			
Address 1	4810 Eastgate Mall		
Address 2			
City	San Diego	State/Province	CA
Country ⁱ	US	Postal Code	92121
Phone Number		Fax Number	
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	BC-001
		Application Number	
Title of Invention	System And Method For Developing A Risk Profile For An Internet Service		

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.					
Signature	/Michael Catania/			Date (YYYY-MM-DD)	2010-02-21
First Name	Michael	Last Name	Catania	Registration Number	36474

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Date: 02/21/10

Approved for use through 7/31/2006. OMB 0651-0032

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 12/709,504	
APPLICATION AS FILED – PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	82	N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	270	N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	110	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	20	minus 20 =		x\$26		x\$52	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	6	minus 3 =		x\$110	330	x\$220	
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR						
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				195		390	
				TOTAL	792	TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED – PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)	OTHER THAN SMALL ENTITY
	Total (37 CFR 1.16(i))	Minus	**	=	X =		X =
	Independent (37 CFR 1.16(h))	Minus	***	=	X =		X =
	Application Size Fee (37 CFR 1.16(s))				N/A		N/A
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))				TOTAL ADD'T FEE		TOTAL ADD'T FEE
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)	OTHER THAN SMALL ENTITY
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	Independent (37 CFR 1.16(h))	Minus	***	=	X =		X =
	Application Size Fee (37 CFR 1.16(s))				N/A		N/A
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))				TOTAL ADD'T FEE		TOTAL ADD'T FEE
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