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PATENT AND TRADEMARK OFFICE

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ACKNOWLEDGEMENT OF LOSS OF ENTITLEMENT TO ENTITY STATUS DISCOUNT

APPLICATION #	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET #	REQUEST ID
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	151129

The entity status change request below filed through Patent Center on 01/18/2024 has been accepted.

Certifications

APPLICANT CHANGING TO REGULAR UNDISCOUNTED FEE STATUS

Signature

I certify, in accordance with 37 CFR 1.4(d)(4), that I am one of the signatories making the entity status change.

Signature	Name	Registration #
/Hunter Malboeuf/	Hunter Malboeuf	79730

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	05/15/2018	9973524	BST-004C1	2464

51414 7590 04/25/2018

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

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 0 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).

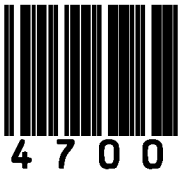
Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management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

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

Stephen Boyer, Cambridge, MA;
BitSight Technologies, Inc., Cambridge, MA;
Nagarjuna Venna, Waltham, MA;
Megumi Ando, Cambridge, MA;

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.

Office of Petitions: Routing Sheet



Application No. 14944484

This application is being forwarded to your office for further processing. A decision has been rendered on a petition filed in this application, as indicated below. For details of this decision, please see the document PET.OP.DEC filed on the same date as this document.

- [X] **GRANTED**
- [ ] **DISMISSED**
- [ ] **DENIED**

Office of Petitions: Decision Count Sheet

Mailing Month: 4

Application No.: 14944484

14944484

For US serial numbers: enter number only, no slashes or commas. Ex: 10123456
For PCT: enter "51+single digit of year of filing+last 5 numbers", Ex. for PCT/US05/12345, enter 51512345

Deciding Official: BRITTON PAULA

Count (1) - Palm Credit 14/944,484

Decision: GRANT

FINANCE WORK NEEDED
☐ Select Check Box for YES

GRANT

Decision Type: 510 - 37 CFR 1.137(b) FOR REVIVAL TO ACCEPT LATE

510

Notes:

Count (2)

Decision: n/a

FINANCE WORK NEEDED
☐ Select Check Box for YES

Decision Type: NONE

Notes:

Count (3)

Decision: n/a

FINANCE WORK NEEDED
☐ Select Check Box for YES

Decision Type: NONE

Notes:

Initials of Approving Official (if required)

If more than 3 decisions, attach 2nd count sheet & mark this box ☐

Printed on: 4/3/2018

Office of Petitions Internal Document - Ver. 5.0

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United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

51414 7590 04/12/2018

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER	
KANAAN, SIMON P	

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
04/12/2018	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTBOS@GOODWINPROCTER.COM
PSOUSA-ATWOOD@GOODWINPROCTER.COM
GLENN.WILLIAMS@GOODWINPROCTER.COM

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

In re Application of	:	
Boyer, et al.	:	
Application No. 14/944,484	:	DECISION ON PETITION
Filed: November 18, 2015	:	
Attorney Docket No. BST-004C1	:	

This is a decision on the petition pursuant to 37 CFR 1.137(a), filed December 12, 2017, to revive the above-identified application.

The petition is **GRANTED.**

The above-identified application became abandoned for failure to timely file the inventor's oath or declaration no later than the date on which the issue fee was paid, as required by the Notice Requiring Inventor's Oath or Declaration (PTO-2306). The application became abandoned by operation of law on December 5, 2017. The Office mailed a Notice of Abandonment on December 11, 2017.

The petition satisfies the requirements of 37 CFR 1.137(a) in that petitioner has supplied (1) the reply in the form of substitute statements for Stephen Boyer and Megumi Ando that are signed by the applicant of record; (2) the petition fee of $850; and (3) a statement of unintentional delay.

Telephone inquiries concerning this decision should be directed to Paula Britton at 571-272-1556. All other inquiries concerning the examination or status of the application is accessible in the PAIR system at http://portal.uspto.gov/.

The application is being forwarded to the Office of Data Management for processing into a patent.

/Irvin Dingle/
Irvin Dingle
Lead Paralegal Specialist
Office of Petitions

Docket No.: BST-004C1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen Boyer et al.

Application No.: 14/944,484 | Confirmation No.: 2464

Filed: November 18, 2015 | Art Unit: 2492

For: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM | Examiner: S. P. Kanaan

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

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 C.F.R. § 1.137(a)

The above-identified application became unintentionally abandoned for failure to file an oath or declaration in compliance with 37 C.F.R. § 1.63 or a substitute statement in compliance with 37 C.F.R. § 1.64 for each inventor by the date the issue fee was paid. In particular, in response to a Notice Requiring Inventor's Oath or Declaration issued on October 20, 2017, Applicant submitted substitute statements for inventors Megumi Ando and Stephen Boyer and a declaration for inventor Nagarjuna Venna, on December 4, 2017. Applicant also paid the issue fee on December 4, 2017.

On December 11, 2017, Applicant learned that the substitute statements were not accepted because they were signed by Nagarjuna Venna in his capacity as a joint inventor, not in his capacity as an officer of the Applicant, BitSight Technologies, Inc. This was an unintentional error by the Applicant that resulted in a Notice of Abandonment was issued on December 11, 2017.

Applicant hereby respectfully requests that the application be revived on the basis of unintentional delay pursuant to 37 C.F.R. § 1.137(a). In accordance with the requirements of 37 C.F.R. § 1.137(b), Applicant submits herewith:

1. Substitute statements for Megumi Ando and Stephen Boyer executed by the Applicant, BitSight Technologies, Inc., i.e., the reply required to the outstanding notice;

2. The petition fee set forth in 37 C.F.R. § 1.17(m);

3. A statement that the entire delay in filing the substitute statements (i.e., the required reply) from the due date for submitting the substitute statements until the filing of the instant grantable petition was unintentional.

Applicant submits that the instant application is not a design application and was not filed before June 8, 1995. Accordingly, the terminal disclaimer referenced by 37 C.F.R. § 1.137(b)(3) and 37 C.F.R. § 1.137(d) is not required.

Please charge our Credit Card in the amount of $850.00 covering the fees set forth in 37 C.F.R. § 1.17(m). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 07-1700, under Order No. BST-004C1.

Dated: December 12, 2017

Respectfully submitted,

Electronic signature: /Joel E. Lehrer/
Joel E. Lehrer
Registration No.: 56,401
GOODWIN PROCTER LLP
100 Northern Avenue
Boston, Massachusetts 02210
(617) 570-1000
Attorney for Applicant

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 04/30/2017. OMB 0651-0032
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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

This statement is directed to:

[ ] The attached application,

OR

[x] United States application or PCT international application number 14/944,484 filed on 11/18/2015.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Megumi Ando

Residence (except for a deceased or legally incapacitated inventor):

Cambridge	MA	United States of America
City	State	Country

Mailing Address (except for a deceased or legally incapacitated inventor):

21 Brookline Street #207

Cambridge	MA	02138	United States of America
City	State	Zip	Country

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Relationship to the inventor to whom this substitute statement applies:

[ ] Legal Representative (for deceased or legally incapacitated inventor only),

[x] Assignee,

[ ] Person to whom the inventor is under an obligation to assign,

[ ] Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

[ ] Joint Inventor.

PTO/SB/AIA/02 (07-13)
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SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased.
- [ ] Inventor is under legal incapacity.
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Nagarjuna Venna	Date (Optional):

Signature: N. V.

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: BitSight Technologies, Inc.

Title of Person Executing This Substitute Statement: Chief Product Officer, Founder

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

Waltham	MA	United States of America

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

324 Bishops Forest Drive

Waltham	MA	02452	United States of America
City	State	Zip	Country

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

This statement is directed to:

[ ] The attached application,

OR

[x] United States application or PCT international application number 14/944,484 filed on 11/18/2015.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Stephen Boyer

Residence (except for a deceased or legally incapacitated inventor):

City	State	Country
Cambridge	MA	United States of America

Mailing Address (except for a deceased or legally incapacitated inventor):

31 Covered Bridge Lane

City	State	Zip	Country
Cambridge	MA	02140	United States of America

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Relationship to the inventor to whom this substitute statement applies:

[ ] Legal Representative (for deceased or legally incapacitated inventor only),

[x] Assignee,

[ ] Person to whom the inventor is under an obligation to assign,

[ ] Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

[ ] Joint inventor.

PTO/SB/AIA02 (07-13)
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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased.
- [ ] Inventor is under legal incapacity.
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Nagarjuna Venna	Date (Optional):

Signature: 

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: BitSight Technologies, Inc.

Title of Person Executing This Substitute Statement: Chief Product Officer, Founder

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

Waltham	MA	United States of America

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

324 Bishops Forest Drive

Waltham	MA	02452	United States of America
City	State	Zip	Country

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Electronic Patent Application Fee Transmittal

Application Number:	14944484
Filing Date:	18-Nov-2015
Title of Invention:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	Joel E. Lehrer/Susan Cannon
Attorney Docket Number:	BST-004C1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
PET. REVIVE ABANDON APP, DELAY PYMT-RESP	2453	1	850	850
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**850**

Electronic Acknowledgement Receipt

EFS ID:	31202946
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	51414
Filer:	Joel E. Lehrer/Susan Cannon
Filer Authorized By:	Joel E. Lehrer
Attorney Docket Number:	BST-004C1
Receipt Date:	12-DEC-2017
Filing Date:	18-NOV-2015
Time Stamp:	17:06:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$850
RAM confirmation Number	121317INTEFSW17074900
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition for review by the Office of Petitions	BST_004C1_Pet_to_Revive.pdf	27442 9f1bb4da296b10bf9f6440a937de6f3e29c74ee1	no	2
Warnings:					
Information:					
2	Oath or Declaration filed	BST-004C1_SUB_STATEMENTS XX_121217.pdf	1927390 85d47c7d8f3401ef1f1037c77a9497c871c755d2	no	4
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30499 7b161462edd740a320a944c1abee0da534699388	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1985331		

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

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United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

7590 12/11/2017

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER	
KANAAN, SIMON P	
ART UNIT	PAPER NUMBER
2492	
NOTIFICATION DATE	DELIVERY MODE
12/11/2017	ELECTRONIC

Notice of Abandonment

This application is abandoned in view of:

1. ☐ The applicant's failure to timely file a proper reply to the Office letter mailed on _____.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission date _____), which is after the expiration of the period for reply (including a total extension of ____ month(s)) which expired on _____.
   (b) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission date _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____.
   The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☑ No corrected drawing have been received.
4. ☑ Applicant's failure to timely file the inventor's oath or declaration no later than the date on which the issue fee was paid as required by the Notice Requiring Inventor's Oath or Declaration (PTO-2306).
   (a) ☐ An inventor's oath or declaration was received on _____ (with a Certificate of Mailing or Transmission date _____), which is after the date on which the issue fee was paid.
   (b) ☑ While an oath or declaration (or substitute statement) for one or more inventors was received, an oath or declaration (or substitute statement) for at least one other inventor has not been received.
   (c) ☐ No inventor's oath or declaration has been received.
5. ☐ Drawings received on _____ were disapproved by examiner. See examiner's response dated _____.
6. ☐ Corrected drawings were received on _____ , which is after the expiration of the one-month period for reply set in examiner's response dated _____.
7. ☐ No corrected drawings have been received in reply to one-month period set in examiner's response dated _____.
8. ☑ The reason(s) below: Substitute statements signed by someone other than applicant.

Petitions to revive under 37 CFR 1.137(a) or request to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

/A.L. for/

(571)-272-4200 or 1(888)-786-0101
Patent Publication Branch
Office of Data Management

PART B–FEE(S) TRANSMITTAL

Complete and send this form, together with the applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22314-1450
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)

GOODWIN PROCTER LLP
100 Northern Avenue
Boston, Massachusetts 02210

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

Certificate of Mailing or Transmission

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

(Depositor's Name)
(S-signature)
(Date)

APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

TITLE OF INVENTION: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

APPLN: TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480.00			$480.00	01/22/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
S. P. Kanaan	2492	

1. Change of correspondence address or indication of "Fee Address" (37CFR 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 attorney or agent. If no name is listed, no name will be printed

1. Goodwin Procter LLP
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.

1a. NAME OF ASSIGNEE: BitSight Technologies, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Cambridge, Massachusetts

Please check the appropriate assignee 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 Fees(s): **(Please first reapply and previously paid fee shown above)**

☐ A check is enclosed

☒ Payment be credit card. Form PTO-2038 is attached

☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 07-1700 (enclose an extra copy of this form)

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

☐ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

☐ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be notification of loss of entitlement to small or micro entity status, as applicable.

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

Authorized Signature	/Joel E. Lehrer/	Date	December 4, 2017
Typed or printed name	Joel E. Lehrer	Registration No.	56,401

Electronic Patent Application Fee Transmittal

Application Number:	14944484
Filing Date:	18-Nov-2015
Title of Invention:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	Joel E. Lehrer/Susan Cannon
Attorney Docket Number:	BST-004C1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

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

Electronic Acknowledgement Receipt

EFS ID:	31119657
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	51414
Filer:	Joel E. Lehrer/Susan Cannon
Filer Authorized By:	Joel E. Lehrer
Attorney Docket Number:	BST-004C1
Receipt Date:	04-DEC-2017
Filing Date:	18-NOV-2015
Time Stamp:	16:11:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$480
RAM confirmation Number	120517INTEFSW16120600
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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)	_Issue_Fee.pdf	32702 37b95d7655ce3f1d26cf9f5d8cb1d741ea657ffa	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30264 01069216669e3921b8243216c29253b5fc478039	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	62966		

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.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 14/944,484 filed on 11/18/2015.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Stephen Boyer

Residence (except for a deceased or legally incapacitated inventor):

Waltham	MA	United States of America
City	State	Country

Mailing Address (except for a deceased or legally incapacitated inventor):

31 Covered Bridge Lane

Wayland	MA	01778	United States of America
City	State	Zip	Country

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Relationship to the inventor to whom this substitute statement applies:

☐ Legal Representative (for deceased or legally incapacitated inventor only),

☐ Assignee,

☐ Person to whom the inventor is under an obligation to assign,

☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

☒ Joint Inventor.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Nagarjuna Venna	Date (Optional):

Signature: N.V.

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name:

Title of Person Executing
This Substitute Statement:

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

Waltham	MA	United States of America

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

324 Bishops Forest Drive

Waltham	MA	02452	United States of America
City	State	Zip	Country

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

As the below named inventor, I hereby declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ United States application or PCT international application number 14/944,484 filed on 11/18/2015 .

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Nagarjuna Venna Date (Optional) : _____

Signature: Naga. V.

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 14/944,484 filed on 11/18/2015.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Megumi Ando

Residence (except for a deceased or legally incapacitated inventor):

Cambridge	MA	United States of America
City	State	Country

Mailing Address (except for a deceased or legally incapacitated inventor):

21 Brookline Street.#207

Cambridge	MA		United States of America
City	State	Zip	Country

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Relationship to the inventor to whom this substitute statement applies:

☐ Legal Representative (for deceased or legally incapacitated inventor only),

☐ Assignee,

☐ Person to whom the inventor is under an obligation to assign,

☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

☒ Joint Inventor.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Nagarjuna Venna	Date (Optional):

Signature: N. V.

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name:

Title of Person Executing
This Substitute Statement:

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

Waltham	MA	United States of America

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

324 Bishops Forest Drive

Waltham	MA	02452	United States of America
City	State	Zip	Country

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Electronic Acknowledgement Receipt

EFS ID:	31122703
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	51414
Filer:	Joel E. Lehrer/Susan Cannon
Filer Authorized By:	Joel E. Lehrer
Attorney Docket Number:	BST-004C1
Receipt Date:	04-DEC-2017
Filing Date:	18-NOV-2015
Time Stamp:	18:09:18
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Oath or Declaration filed	BST-004C1_SubstituteOathBoyer.pdf	70531 314afc63fe955bb3a0d7f584d08296e76e2ddf3e	no	2

Warnings:

Information:					
2	Oath or Declaration filed	BST-004C1_signed_Declaration_Venna.PDF	53502 5997b2b9a44d5993c442f7a9b6d14f6814c6992d	no	1
Warnings:					
Information:					
3	Oath or Declaration filed	BST-004C1_Substiute_Stmt_And.pdf	71759 6bb2eb7a0a538aa576b3eb3092a8a9c6f30b4ec3	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	195792	

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

51414 7590 10/20/2017

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER
KANAAN, SIMON P

ART UNIT	PAPER NUMBER
2492	

DATE MAILED: 10/20/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

TITLE OF INVENTION: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	01/22/2018

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

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

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

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)

51414 7590 10/20/2017
GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

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

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

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

TITLE OF INVENTION: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	01/22/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
KANAAN, SIMON P	2492	726-025000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

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

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

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

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

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

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

❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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

❑ Applicant certifying micro entity status. See 37 CFR 1.29

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

❑ Applicant asserting small entity status. See 37 CFR 1.27

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

❑ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

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

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Black Kite Ex. 1002, Page 31 of 424

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

51414 7590 10/20/2017

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER	
KANAAN, SIMON P	

ART UNIT	PAPER NUMBER
2492	

DATE MAILED: 10/20/2017

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

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

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

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

Notice Requiring Inventor's Oath or Declaration	Application No. 14/944,484	Applicant(s) Stephen Boyer	
	Examiner KANAAN, SIMON P	Art Unit 2492	

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

An oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) MUST be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Stephen Boyer**, **Nagarjuna Venna**, and **Megumi Ando**.
  Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

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

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

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

Privacy Act Statement

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

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

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

Notice of Allowability	Application No. 14/944,484	Applicant(s) BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	AIA (First Inventor to File) Status No

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

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

1. ☒ This communication is responsive to *7/13/2017*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-9 and 11-21*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

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

   * Certified copies not received: _____.

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

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

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

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date *9/29/2017* .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/OLEG KORSAK/ Primary Examiner, Art Unit 2492	/SIMON KANAAN/ Examiner, Art Unit 2492

Examiner's Comments

1. Acknowledgement to the amendment on 7/13/2017 have been entered. The amendment has been entered and reviewed. No new matter has been introduced.

2. Applicants Amendments/Arguments towards previously filed 35 U.S.C. 103 has been considered and are persuasive in view of examiner's amendment below; therefore the previously filed 35 U.S.C. 103 has been withdrawn.

3. Claims 1-9, and 11-21 are allowed

EXAMINER'S AMENDMENT

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

Authorization for this examiner's amendment was given in a telephone interview with Joel Lehrer (Reg No 56401) on 9/29/2017.

The application has been amended as follows:

1. (Currently amended) A computer implemented method comprising:

~~at least partly by computer,~~ on one or more computers, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities

comprises determining IP information by annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses,

automatically ~~by a computer that~~ use[[s]]ing sensors on the Internet to collect[[ing]] externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities and associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name,

automatically ~~by a computer,~~ deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise ~~at least one of~~ (i) a number of technical assets that have been reported to be malicious and (ii) a duration of detected malicious activity associated with the technical assets,

automatically ~~by a computer,~~ generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business.

19. (Currently Amended) A computer implemented method comprising:

~~at least partly by computer,~~ on one or more computers operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,

the maintaining of the entity map comprising (a) automatically using sensors on the Internet to collect externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities, (b) associating the observable cyber-security characterizations with a respective entity based at least in part on the

derived server name, (c) submitting names of the entities to regional Internet registries using various spellings of the names, (d) using domain names associated with the entities, (e) probing IP addresses around published IP addresses, (f) using a name server lookup to verify IP addresses associated with domain names, (g) using information received from Internet Service Providers, (h) annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses, and ([[h]] i) applying heuristics,

automatically ~~by a computer,~~ deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise ~~at least one of~~ (a) a number of technical assets that have been reported to be malicious and (b) a duration of detected malicious activity associated with the technical assets,

automatically ~~by a computer,~~ generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface the cyber-security ratings of the entities.

21. (Currently Amended) A system comprising:

one or more computers programmed to facilitate operations comprising:

maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses,

collecting, using sensors on the Internet, externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities and associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name,

deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise ~~at least one of~~ (i) a number of technical assets that have been reported to be malicious and (ii) a duration of detected malicious activity associated with the technical assets,

generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business.

Allowance

5. The following is an examiner's statement of reasons for allowance: The primary reasons for allowance of the claims are applicant's arguments and the inclusion of the limitation, inter alia, "on one or more computers, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses, automatically by a computer

that using sensors on the Internet to collect externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities and associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name, … deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise … a number of technical assets that have been reported to be malicious and … a duration of detected malicious activity associated with the technical assets, … generating a cyber-security rating for each of the entities using the entity map and the derived observations, and through a communication network, exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business." that is in all claims which is not found in the prior art references previously relied upon or any new references found.

The closest art of record Chris Newton (US Pre-Grant 2004/0250122 A1) teaches “A network security system takes an active approach to network security. This is accomplished by providing intelligence about other networks. A master network intelligence database is established that uses a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database. A customer network security system is then able to secure the customer network in dependence upon information received from the master network intelligence. Security information includes at least one of hostility level on the Internet, collected from numerous sites; security event history; spam levels; hosted services; public wireless; organization type; organization associations; peer ISPs; bandwidth connection to the Internet; active security measures; number of users on the network; age of the network; inappropriate content served; industry; geographic placement; open proxy servers; and contact information.” But does not teach the allowable subject matter indicated above.

Another art of record Shull et al. (US Pre-Grant 2006/0212925 A1) teaches “Embodiments of the present invention provide methods, systems, and software for implementing trust policies. Such policies may be implemented in a variety of ways, including at one or more border devices, client computers, etc. In accordance with various embodiments, a communication between a client computer (and/or application) and an online entity may be monitored and/or otherwise detected. The online entity may be identified, and/or one or more trust scores associated with the online entity may be obtained. Based on the trust scores, as well, perhaps as the nature of the communication, an action (such as allowing the communication, blocking the communication, quarantining the communication, warning a user, administrator, etc.) may be taken. In some cases, a trust policy may be consulted to determine what action should be taken with respect to a given communication.” But does not teach the allowable subject matter indicated above.

Carpenter et al. (US Pre-Grant 2007/0282730) teaches “Systems and methods are described for gathering investment information of peers and/or other trusted sources and making the investment information and analysis available on a real-time basis. These systems and methods provide investment information and advisory services for individual members generated through peer research, real-time portfolio and trading sharing. Individual member account data is consolidated from a variety of data sources, and members are allowed to share the aggregate data set for the purposes of providing real-time information, insights, and investment recommendations to peers based upon individual performance, real-time trading activity, and summary member data.” But does not teach the allowable subject matter indicated above.

Wanser et. al (US Pre-Grant 2012/0215892 A1)) teaches “A highly advantageous domain name system and method are disclosed for receiving and replying to queries for information associated with at least one Internet connected domain in which replies to queries are based at least in part on the identity of the querying entity.” But does not teach the allowable subject matter indicated above.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KANAAN whose telephone number is (571)270-3906. The examiner can normally be reached on Mon-Thurs 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached at the following telephone number: (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.

/SIMON KANAAN/
Examiner, Art Unit 2492

/OLEG KORSAK/
Primary Examiner, Art Unit 2492

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	14/944,484	BOYER ET AL.	
	Examiner	Art Unit	
	SIMON KANAAN	2492	

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

(1) *SIMON KANAAN*. (3)_____.

(2) *Joel Lehrer (Reg No 56401)*. (4)_____.

Date of Interview: *29 September 2017*.

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

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

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

Claim(s) discussed: *1-9 and 11-21*.

Identification of prior art discussed: *Chris Newton (US Pre-Grant 2004/0250122 A1) Shull et al. (US Pre-Grant 2006/0212925 A1, Carpenter et al. (US Pre-Grant 2007/0282730) and Wanser et. al (US Pre-Grant 2012/0215892 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...)

Examiner and applicant's representative discussed amending the claims to place them in better condition for allowance..

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of 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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	2492

CPC- SEARCHED		
Symbol	Date	Examiner
H04L 63/1433	9/28/2017	SK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor and Assignee Search + text (PALM)	3/6/2016	SK
USPC: (EAST: 726/1,2,22,25+text)	6/22/2016	SK
CPC (EAST: H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00 + text)	9/28/2017	SK
Intereference search + text (EAST)	9/29/2017	SK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
H04L 63	1433+text	9/29/2017	SK

/SIMON KANAAN/ Examiner.Art Unit 2492	

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	**Art Unit**
	SIMON KANAAN	2492

CPC							
Symbol						**Type**	**Version**
H04L		63	/	1433		F	2013-01-01
G06Q		10	/	0639		I	2013-01-01
H04L		43	/	062		I	2013-01-01
H04L		43	/	0876		I	2013-01-01
H04L		61	/	2007		I	2013-01-01
H04L		67	/	20		I	2013-01-01
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CPC Combination Sets								
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

/SIMON KANAAN/ Examiner.Art Unit 2492	09/29/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/OLEG KORSAK/ Primary Examiner.Art Unit 2492	10/02/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	**Art Unit**
	SIMON KANAAN	2492

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
		H	0	4	L	29 / 06 (2006.01.01)						
CROSS REFERENCE(S)												
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

/SIMON KANAAN/ Examiner.Art Unit 2492	09/29/2017	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/OLEG KORSAK/ Primary Examiner.Art Unit 2492	10/02/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	**Art Unit**
	SIMON KANAAN	2492

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

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	16	17												
2	2	17	18												
3	3	19	19												
4	4	18	20												
5	5	20	21												
6	6														
7	7														
8	8														
9	9														
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/SIMON KANAAN/ Examiner.Art Unit 2492 (Assistant Examiner)	09/29/2017 (Date)	**Total Claims Allowed:** 20	
/OLEG KORSAK/ Primary Examiner.Art Unit 2492 (Primary Examiner)	10/02/2017 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L2	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L3	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L4	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L5	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L6	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L7	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L8	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L9	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L10	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L11	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L12	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L13	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L14	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L15	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L16	0	malwareurl	US-PGPUB;	ADJ	ON	2017/09/29 11:06

			USPAT			
L17	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L18	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L19	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L20	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L21	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L22	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L23	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L24	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L25	87	L24 not L23	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L26	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L27	0	L24 and L26	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L28	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L26	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L29	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L26	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L30	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L26	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06

L31	0	L26 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L32	0	L26 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L33	0	L26 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L34	0	L26 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L35	0	L26 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L36	7	L26 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L37	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L38	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L39	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L40	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L41	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L42	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L43	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L44	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L45	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L46	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L47	1	abor networks	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:06
L48	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L49	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L50	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L51	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L52	582	L51 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L53	220	L52 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L54	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L55	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L56	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L57	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L58	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L59	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L60	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L61	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L62	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L63	10	L62 not L61	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L64	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L65	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L66	3	"13240572"	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:06
L67	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L68	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L69	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L70	129	L68 and L69	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L71	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L72	62	L71 and L69	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L73	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L74	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L75	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L76	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L77	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L78	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L79	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L80	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L81	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L82	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L83	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L84	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L85	0	(external$5 or third party) with (security)	US-	ADJ	ON	2017/09/29

		with (commercial near data) with reputation	PGPUB; USPAT			11:06
L86	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L87	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L88	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L89	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L90	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L91	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L92	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L93	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L94	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L95	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L96	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L97	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L98	87	L97 not L96	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L99	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L100	0	L97 and L99	US-PGPUB;	ADJ	ON	2017/09/29 11:06

			USPAT			
L101	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L102	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L103	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L104	0	L99 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L105	0	L99 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L106	0	L99 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L107	0	L99 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L108	0	L99 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L109	7	L99 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L110	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L111	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L112	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L113	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L114	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L115	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06

L116	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L117	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L118	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L119	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L120	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L121	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L122	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L123	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L124	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L125	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L126	582	L125 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L127	220	L126 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L128	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L129	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L130	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L131	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L132	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L133	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L134	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06

L135	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L136	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L137	10	L136 not L135	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L138	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L139	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L140	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L141	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L142	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L143	129	L141 and L142	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L144	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L145	62	L144 and L142	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L146	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L147	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L148	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L149	25	L148 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L150	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L151	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR	US-PGPUB;	ADJ	ON	2017/09/29 11:06

		H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	USPAT			
L152	603	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L153	164	L152 and L151	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L154	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L155	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/09/29 11:06
L156	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L157	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L158	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L159	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L160	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L161	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L162	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L163	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L164	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L165	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L166	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L167	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L168	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L169	0	network with vulnerability with detection	US-	ADJ	ON	2017/09/29

		with compliance with assesment	PGPUB; USPAT			11:06
L170	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L171	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L170	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L172	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L173	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L174	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L175	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L176	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L177	2	L175 and L176	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L178	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L179	2	L175 and L177	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L180	8	L175 and L178	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L181	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06

L182	19	L176 and L181	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L183	92	L178 and L181	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L184	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L185	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L186	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L187	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L188	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L189	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L190	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L191	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L192	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L193	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L194	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L195	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L196	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L197	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L198	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L199	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L200	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06

L201	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L202	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L203	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L204	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L205	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L206	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L207	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L208	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L209	87	L208 not L207	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L210	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L211	0	L208 and L210	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L212	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L213	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L214	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L215	0	L210 and user behavior	US-PGPUB;	ADJ	ON	2017/09/29 11:06

			USPAT			
L216	0	L210 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L217	0	L210 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L218	0	L210 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L219	0	L210 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L220	7	L210 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:06
L221	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L222	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L223	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L224	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L225	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L226	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:06
L227	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L228	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L229	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L230	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L231	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L232	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L233	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L234	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L235	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L236	582	L235 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L237	220	L236 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L238	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L239	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L240	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L241	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L242	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L243	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L244	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L245	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L246	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L247	10	L246 not L245	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L248	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L249	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L250	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L251	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L252	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L253	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L254	129	L252 and L253	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L255	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L256	62	L255 and L253	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L257	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L258	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L259	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L260	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L261	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L262	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L263	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L264	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L265	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L266	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L267	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L268	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L269	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L270	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L271	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L272	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L273	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L274	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L275	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L276	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L277	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L278	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L279	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L280	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L281	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L282	87	L281 not L280	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L283	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L284	0	L281 and L283	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L285	0	(insustry reports or internet monitoring	US-	ADJ	ON	2017/09/29

		web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	PGPUB; USPAT			11:07
L286	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L287	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L288	0	L283 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L289	0	L283 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L290	0	L283 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L291	0	L283 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L292	0	L283 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L293	7	L283 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L294	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L295	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4) and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L296	27	((external$5 or third party) with audit$4) and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L297	309	((external$5 or third party) with audit$4) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L298	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L299	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L300	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB;	ADJ	ON	2017/09/29 11:07

		and rat$3 and commercial	USPAT			
L301	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L302	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L303	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L304	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L305	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L306	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L307	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L308	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L309	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L310	582	L309 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L311	220	L310 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L312	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L313	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L314	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L315	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L316	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L317	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L318	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L319	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB;	ADJ	ON	2017/09/29 11:07

			USPAT			
L320	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L321	10	L320 not L319	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L322	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L323	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L324	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L325	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L326	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L327	129	L325 and L326	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L328	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L329	62	L328 and L326	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L330	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L331	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L332	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L333	25	L332 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L334	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L335	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

		H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)				
L336	603	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L337	164	L336 and L335	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L338	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L339	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/09/29 11:07
L340	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L341	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L342	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L343	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L344	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L345	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L346	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L347	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L348	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L349	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L350	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L351	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L352	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L353	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L354	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L355	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L354	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L356	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L357	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L358	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L359	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L360	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L361	2	L359 and L360	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L362	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L363	2	L359 and L361	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L364	8	L359 and L362	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L365	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L366	19	L360 and L365	US-PGPUB;	ADJ	ON	2017/09/29 11:07

			USPAT			
L367	92	L362 and L365	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L368	2	"14944484"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L369	9	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L370	0	L369 and dig tool	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L371	0	L356 and (dig tool)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L372	0	L356 and (dig with tool)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L373	1	L356 and (dig)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L374	2	(dig) with published IP address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L375	2	(dig) with published near3 address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L376	402	(dig) with address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L377	14	(dig) with address with domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L393	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L394	2	L393 and dig	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L395	2	"20150074579"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L397	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L398	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L399	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L400	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L401	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L402	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L403	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L404	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L405	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L406	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L407	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L408	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L409	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L410	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L411	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L412	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L413	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L414	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L415	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L416	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L417	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L418	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L419	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L420	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L421	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L422	87	L421 not L420	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L423	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L424	0	L421 and L423	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L425	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L426	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L427	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L428	0	L423 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L429	0	L423 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L430	0	L423 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L431	0	L423 and public with features	US-PGPUB; USPAT; USOCR; EPO;	ADJ	ON	2017/09/29 11:07

			DERWENT			
L432	0	L423 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L433	7	L423 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L434	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L435	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L436	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L437	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L438	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L439	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L440	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L441	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L442	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L443	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L444	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L445	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L446	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L447	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L448	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L449	582	L448 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L450	220	L449 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L451	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L452	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L453	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L454	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L455	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L456	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L457	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L458	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L459	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L460	10	L459 not L458	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L461	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L462	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L463	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L464	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L465	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L466	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L467	129	L465 and L466	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L468	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L469	62	L468 and L466	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L470	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L471	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L472	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L473	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L474	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L475	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L476	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L477	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L478	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L479	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L480	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L481	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L482	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L483	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L484	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L485	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L486	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07

L487	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L488	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L489	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L490	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L491	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L492	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L493	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L494	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L495	87	L494 not L493	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L496	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L497	0	L494 and L496	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L498	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L499	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L500	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L501	0	L496 and user behavior	US-PGPUB;	ADJ	ON	2017/09/29 11:07

			USPAT			
L502	0	L496 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L503	0	L496 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:07
L504	0	L496 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L505	0	L496 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L506	7	L496 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:07
L507	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L508	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L509	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L510	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L511	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L512	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L513	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L514	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L515	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L516	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L517	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08

L518	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L519	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L520	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L521	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L522	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L523	582	L522 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L524	220	L523 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L525	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L526	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L527	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L528	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L529	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L530	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L531	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L532	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L533	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L534	10	L533 not L532	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L535	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L536	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08

L537	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L538	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L539	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L540	129	L538 and L539	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L541	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L542	62	L541 and L539	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L543	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L544	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L545	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L546	25	L545 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L547	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L548	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L549	603	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L550	164	L549 and L548	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L551	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L552	0	"11237642"	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT; USOCR			
L553	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L554	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L555	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L556	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L557	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L558	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L559	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L560	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L561	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L562	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L563	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L564	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L565	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L566	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L567	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L568	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08

		networks or user behavior) and L567				
L569	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L570	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L571	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L572	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L573	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L574	2	L572 and L573	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L575	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L576	2	L572 and L574	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L577	8	L572 and L575	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L578	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L579	19	L573 and L578	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L580	92	L575 and L578	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L581	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L582	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L583	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT			
L584	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L585	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L586	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L587	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L588	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L589	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L590	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L591	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L592	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L593	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L594	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L595	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L596	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L597	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L598	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L599	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L600	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L601	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L602	3	arbor networks and renesys	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT			
L603	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L604	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L605	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L606	87	L605 not L604	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L607	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L608	0	L605 and L607	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L609	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L610	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L611	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L612	0	L607 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L613	0	L607 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L614	0	L607 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L615	0	L607 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L616	0	L607 and externally	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT; USOCR; EPO; DERWENT			11:08
L617	7	L607 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L618	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L619	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L620	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L621	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L622	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L623	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L624	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L625	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L626	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L627	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L628	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L629	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L630	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L631	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L632	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L633	582	L632 and third party	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT			
L634	220	L633 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L635	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L636	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L637	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L638	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L639	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L640	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L641	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L642	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L643	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L644	10	L643 not L642	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L645	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L646	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L647	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L648	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L649	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L650	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L651	129	L649 and L650	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L652	849	(organization or company) same reputation same (score or rating)	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT			
L653	62	L652 and L650	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L654	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L655	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L656	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L657	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L658	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L659	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L660	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L661	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L662	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L663	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L664	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L665	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L666	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L667	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L668	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L669	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L670	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L671	0	malwareurl$5	US-PGPUB;	ADJ	ON	2017/09/29 11:08

			USPAT			
L672	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L673	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L674	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L675	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L676	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L677	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L678	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L679	87	L678 not L677	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L680	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L681	0	L678 and L680	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L682	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L683	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L684	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L685	0	L680 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08

L686	0	L680 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L687	0	L680 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L688	0	L680 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L689	0	L680 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L690	7	L680 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L691	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L692	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L693	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L694	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L695	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L696	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L697	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L698	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L699	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L700	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L701	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L702	1	abor networks	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:08
L703	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L704	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L705	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L706	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L707	582	L706 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L708	220	L707 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L709	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L710	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L711	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L712	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L713	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L714	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L715	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L716	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L717	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L718	10	L717 not L716	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L719	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L720	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L721	5701	(organization or company or entity) same	US-	ADJ	ON	2017/09/29

		reputation	PGPUB; USPAT			11:08
L722	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L723	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L724	129	L722 and L723	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L725	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L726	62	L725 and L723	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L727	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L728	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L729	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L730	25	L729 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L731	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L732	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L733	603	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L734	164	L733 and L732	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L735	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L736	0	"11237642"	US-PGPUB; USPAT;	ADJ	ON	2017/09/29 11:08

			USOCR			
L737	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L738	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L739	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L740	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L741	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L742	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L743	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L744	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L745	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L746	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L747	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L748	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L749	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L750	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L751	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:08
L752	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L751	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08

L753	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L754	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L755	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L756	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L757	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L758	2	L756 and L757	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L759	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L760	2	L756 and L758	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L761	8	L756 and L759	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L762	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L763	19	L757 and L762	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L764	92	L759 and L762	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L765	2	"14944484"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L766	9	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:08
L767	0	L766 and dig tool	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:08
L768	0	L753 and (dig tool)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L769	0	L753 and (dig with tool)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L770	1	L753 and (dig)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L771	2	(dig) with published IP address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L772	2	(dig) with published near3 address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L773	402	(dig) with address	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L774	14	(dig) with address with domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L775	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L776	2	L775 and dig	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L777	2	"20150074579"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L778	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L779	2	L778 and (portal)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L780	4	(portal) with (security rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L799	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L800	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L801	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L802	0	network vulnerability detection compliance assesment	US-PGPUB;	ADJ	ON	2017/09/29 11:09

			USPAT			
L803	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L804	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L805	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L806	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L807	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L808	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L809	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L810	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L811	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L812	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L813	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L814	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L815	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L816	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L817	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L818	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L819	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L820	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L821	82	reputation and domain and (insustry reports or internet monitoring web site or	US-PGPUB;	ADJ	ON	2017/09/29 11:09

		news article or court record) and (renesys or propriety data or arbor networks or user behavior)	USPAT			
L822	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L823	87	L822 not L821	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L824	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L825	0	L822 and L824	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L826	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L824	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L827	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L824	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L828	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L824	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L829	0	L824 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L830	0	L824 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L831	0	L824 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L832	0	L824 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L833	0	L824 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L834	7	L824 and external	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT; USOCR; EPO; DERWENT			11:09
L835	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L836	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L837	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L838	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L839	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L840	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L841	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L842	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L843	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L844	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L845	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L846	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L847	28	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L848	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L849	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L850	582	L849 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L851	220	L850 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L852	264	network reputation	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:09
L853	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L854	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L855	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L856	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L857	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L858	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L859	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L860	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L861	10	L860 not L859	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L862	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L863	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L864	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L865	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L866	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L867	20112	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L868	129	L866 and L867	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L869	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L870	62	L869 and L867	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L871	3	"13240572"	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:09
L872	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L873	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L874	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L875	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L876	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L877	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L878	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L879	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L880	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L881	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L882	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L883	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L884	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L885	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L886	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L887	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L888	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L889	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L890	2	www$malwareurl$com	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:09
L891	196	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L892	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L893	7407	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L894	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L895	169	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L896	87	L895 not L894	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L897	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L898	0	L895 and L897	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L899	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L897	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L900	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L897	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L901	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L897	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L902	0	L897 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L903	0	L897 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L904	0	L897 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09

L905	0	L897 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L906	0	L897 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L907	7	L897 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L908	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L909	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L910	27	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L911	309	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L912	587	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L913	551	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L914	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L915	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L916	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L917	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L918	7	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L919	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L920	68	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L921	28	(network near3 assessment) with public	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:09
L922	62	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L923	1617	site secure	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L924	582	L923 and third party	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L925	220	L924 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L926	264	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L927	247	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L928	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L929	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L930	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L931	630	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L932	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L933	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L934	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L935	10	L934 not L933	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L936	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L937	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L938	5701	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L939	1429	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L940	20112	726/1,2,22,25.ccls.	US-	ADJ	ON	2017/09/29

			PGPUB; USPAT			11:09
L941	129	L939 and L940	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L942	849	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L943	62	L942 and L940	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L944	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L945	20	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L946	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L947	25	L946 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L948	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L949	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L950	603	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L951	164	L950 and L949	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L952	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L953	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/09/29 11:09
L954	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L955	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or	US-PGPUB;	ADJ	ON	2017/09/29 11:09

		RSYNC or CURL)	USPAT			
L956	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L957	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L958	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L959	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L960	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L961	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L962	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L963	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L964	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L965	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L966	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L967	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L968	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/09/29 11:09
L969	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L968	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L970	392	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L971	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09

		H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)				
L972	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L973	145	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L974	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L975	2	L973 and L974	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L976	339	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L977	2	L973 and L975	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L978	8	L973 and L976	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L979	53965	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L980	19	L974 and L979	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L981	92	L976 and L979	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L982	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L983	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L984	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L985	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L986	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09

L987	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L988	8	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L989	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L990	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L991	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L992	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L993	153	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L994	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L995	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L996	30	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L997	14	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L998	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09
L999	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/09/29 11:09

EAST Search History (Interference)

< This search history is empty>

9/29/2017 12:28:50 PM
C:\Users\skanaan\Documents\EAST\Workspaces\14944484.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	**Art Unit**
	SIMON KANAAN	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	03/06/2016	06/22/2016	01/06/2017	09/28/2017					
1	1	✓	✓	✓	=					
2	2	✓	✓	✓	=					
3	3	✓	✓	✓	=					
4	4	✓	✓	✓	=					
5	5	✓	✓	✓	=					
6	6	✓	✓	✓	=					
7	7	✓	✓	✓	=					
8	8	✓	✓	✓	=					
9	9	✓	✓	✓	=					
-	10	✓	✓	✓	-					
10	11	✓	✓	✓	=					
11	12	✓	✓	✓	=					
12	13	✓	✓	✓	=					
13	14	✓	✓	✓	=					
14	15	✓	✓	✓	=					
15	16	✓	✓	✓	=					
16	17	✓	✓	✓	=					
17	18	✓	✓	✓	=					
19	19		✓	✓	=					
18	20				=					
20	21				=					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen Boyer et al.

Application No.: 14/944,484 | Confirmation No.: 2464

Filed: November 18, 2015 | Art Unit: 2492

For: Information Technology Security Assessment System | Examiner: Kanaan, Simon P.

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

AMENDMENT AND RESPONSE

This paper is being submitted in response to the non-final Office Action mailed from the U.S. Patent and Trademark Office on January 17, 2017, for the above-identified patent application. Applicant submits herewith a Petition for a three-month extension of time.

Please charge our credit card in the amount of $700.00 for the Petition. No additional fees are believed necessary for filing this paper; however, the Commissioner is hereby authorized to charge any shortfall in fees to deposit account No. 07-1700, Order No. BST-004C1.

Please make the following amendments, without prejudice, and consider the following remarks.

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

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE CLAIMS

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

Claim Listing

1. (Currently amended) A computer implemented method comprising:

at least partly by computer, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a domain ~~common entity~~ name with ~~server~~ naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses,

automatically by a computer that uses sensors on the Internet, collecting externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities and associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name,

automatically by a computer, deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise at least one of (i) a number of technical assets that have been reported to be malicious and (ii) a duration of detected malicious activity associated with the technical assets,

automatically by a computer, generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business.

2. (Original) The method of claim 1 in which the technical assets comprise an IP space.

3. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises querying a regional Internet registry.

4. (Previously Presented) The method of claim 3 in which maintaining an entity map comprises submitting a name of one of the entities to the regional Internet registry.

5. (Previously Presented) The method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.

6. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using a domain name associated with the entity.

7. (Previously Presented) The method of claim 6 in which maintaining an entity map comprises using a dig tool on the domain name to determine a published IP address.

8. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises probing IP addresses around a published IP address.

9. (Original) The method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address.

10. (Cancelled)

11. (Currently Amended) The method of claim [[6]] 1 in which maintaining an entity map comprises using a name server lookup ~~nslookup~~ to verify the derived server name ~~an IP address associated with the domain name~~.

12. (Currently Amended) The method of claim 2 comprising using the IP space for collecting the cyber-security characterizations.

13. (Currently Amended) The method of claim 1 in which the technical assets that are associated with cyber-security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.

14. (Original) The method of claim 1 in which the technical assets comprise ranges of IP addresses.

15. (Original) The method of claim 1 in which the technical assets comprise servers.

16. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using information received from Internet Service Providers.

17. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using heuristics.

18. (Original) The method of claim 17 comprising persistently updating the heuristics.

19. (Currently Amended) A computer implemented method comprising:

at least partly by a computer operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,

the maintaining of the entity map comprising [[,]] (a) automatically using sensors on the Internet to collect externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities, (b) associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name, ([[a]] c) submitting names of the entities to regional Internet registries using various spellings of the names, ([[b]] d) using domain names associated with the entities, ([[c]] e) ~~adapting the domain names using server naming conventions, (d)~~ probing IP addresses around published IP addresses, ([[e]] f) using a name server lookup ~~nslookup~~ to verify IP addresses associated with domain names, ([[f]] g) using information received from Internet Service Providers, ([[g]] h) annotating a domain ~~common entity~~ name with ~~server~~ naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses, and ([[h]] i) applying heuristics,

automatically by a computer, deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise at least one of (a) a number of technical assets that have been reported to be malicious and (b) a duration of detected malicious activity associated with the technical assets,

automatically by a computer, generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface the cyber-security ratings ~~scores~~ of the entities.

20. (New) The method of claim 1, wherein annotating comprises prepending to the domain name at least one of "mail," "smtp," and "ftp."

21. (New) A system comprising:

one or more computers programmed to facilitate operations comprising:

maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses,

collecting, using sensors on the Internet, externally observable cyber-security characterizations of the technical assets that have been mapped to each of the entities and associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name,

deriving observations about the technical assets from the collected cyber-security characterizations, wherein the derived observations comprise at least one of (i) a number of technical assets that have been reported to be malicious and (ii) a duration of detected malicious activity associated with the technical assets,

generating a cyber-security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business.

REMARKS

Applicant hereby amends claims 1, 11–13, and 19, cancels claim 10, and adds new claims 20 and 21. Upon entry of this Amendment and Response, there will be a total of 20 claims pending, with 3 independent claims (claims 1, 19, and 21). The amendments to the claims have been made without prejudice and to further clarify the invention. Support for the amendments can be found in the application as filed, for example, on page 13, lines 17–21, and page 13, line 32 to page 14, line 6. No new matter has been added.

Reconsideration is respectfully requested in view of the following remarks.

Interview Summary

Applicant wishes to thank Examiner Kanaan for his courtesy in granting the telephonic interview that took place on June 27, 2017, with Applicant's representatives, Joel E. Lehrer and Jeffrey R. Rummler. Applicant submits that this Response serves as the Applicant's Statement of the Substance of the Interview in accordance with 37 C.F.R. § 1.133(b). During the interview, proposed amendments to the claims and the rejections under 35 U.S.C. § 103 were discussed. The remarks regarding patentability of the claims, set forth herein, are consistent with those discussed during the interview.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1–19

Claims 1–19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Publication No. 2004/0250122 to Newton ("Newton") in view of U.S. Publication No. 2006/0212925 to Shull et al. ("Shull") and U.S. Publication No. 2007/0282730 to Carpenter et al. ("Carpenter") and further in view of U.S. Publication No. 2012/0215892 to Wanser et. al ("Wanser"). Applicant respectfully traverses the rejection as applied to the claims, as amended, though dependent claim 10 is cancelled, thereby rendering the rejection of that claim moot.

Briefly, Newton appears to describe a network intelligence database that gathers information about individual networks using network information agents (e.g., spam levels, hosted services, active security measures, etc.). *See* Newton at paras. [0015], [0016], [0022], and [0031]. The network intelligence agents provide the gathered information to a network intelligence database, which may be accessed via a customer network security system. *Id.* The

network security system may then be used to secure a network based on the stored data. *Id.* A Policy Enforcer (PE) then translates conceptual rules that describe which networks may communicate with the customer's network into generic rules for application across the customer's devices. *See Id.* at paras. [0053] and [0055].

Newton does not, however, teach "an entity map that maps technical assets to respective companies or other entities" based on "determining IP information by annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses," and then "associating the observable cyber-security characterizations with a respective entity based at least in part on the derived server name," as recited in amended independent claims 1 and 19. Such a technique addresses a specific problem when trying to attribute observed events that may not be immediately attributable to an entity to the proper entities based on a derived server name.

As stated on page 5 of the Office action, "Newton does not teach automatically by a computer generating a security rating for each of the entities using the entity map and the derived observations, through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business and wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses." For this, the Examiner relies on Shull, Carpenter, and Wanser.

Briefly, Shull appears to describe methods, systems, and software for monitoring communications between a client computer and an online entity, and associating trust scores to the online entity. *See* Shull at para. [0010]. The system may block communication between an online entity and a client computer or may display a warning depending on the online entity's trust score(s). *See Id.* at para. [0012]. Multiple trust scores may be provided for an online entity evaluating the online entity's trustworthiness in a category of behavior. *Id.*

Carpenter appears to describe systems and methods for gathering investment information from peers and trusted sources and providing real-time portfolio trading and sharing. *See* Carpenter at para. [0022]. The investment data sharing system (IDSS) uses members' data to automate and formalize shared investment advice. *See Id.* at para. [0024].

Wanser appears to describe a "domain name system and method . . . for receiving and replying to queries for information . . . ." Wanser at Abstract. "A sub-domain is a naming convention whereby a more local field is added to the left of the local part." *Id.* at para. [0054]. "Thus, as a naming convention, 'morelocal.example.com' is a sub-domain of 'example.com'." *Id.*

As an initial matter, Applicant submits that this rejection is improper at least because Carpenter is non-analogous art. *See Innovention Toys, LLC, v. MGA Entertainment, Inc.* (Fed. Cir. 2011) (explaining that a rejection under 35 U.S.C. § 103 cannot be based on non-analogous art). Carpenter is non-analogous art at least because (i) it is not from the same field of endeavor as the claimed invention (e.g., investment securities vs. cyber-security) and (ii) it is not reasonably pertinent to the particular problem faced by the inventors of the instant application (e.g., assessing an investment security vs. assessing cyber-security). Given that Carpenter relates to ratings for investment securities, the cited references fail to disclose, teach, or suggest "exposing to users in a user interface of a portal, information about the cyber-security ratings of the entities that is useful to decisions about entities with which to do business," as recited in proposed amended independent claim 1.

Further, Shull, Carpenter, and Wanser, either alone or in combination, fail to disclose, teach, or suggest "mapping technical assets to respective companies or other entities" by "annotating a domain name with naming conventions for at least one of a mail server, an SMTP server, and an FTP server, thereby deriving a likely server name having assigned IP addresses," as recited in amended independent claims 1 and 19. While Wanser appears to describe domain name naming conventions in general, Wanser is silent regarding the claimed requirement of using naming conventions for at least one of a mail server, an SMTP server, and an FTP server to derive a likely server name, which may then be used to attribute cyber-security events to a particular entity, as recited in amended claims 1 and 19.

Because claims 2–9 and 11–18 depend from independent claim 1 and, therefore, include all the limitations thereof, Applicant respectfully submits that claims 2–9 and 11–18 are allowable as well, for at least the same reasons. Withdrawal of the grounds for rejection is respectfully requested.

New Claims 20 and 21

New independent claim 21 is allowable for at least the reasons described above for amended independent claim 1. New dependent claim 20 depends from independent claim 1 and is allowable as well, for at least the same reasons.

CONCLUSION

By responding in the foregoing remarks only to particular positions taken by the Examiner, Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist. Finally, Applicant's decision to amend or cancel any claim should not be understood as implying that Applicant agrees with any positions taken by the Examiner with respect to that claim or other claims.

Applicant respectfully submits that, in light of the foregoing remarks, claims 1–9 and 11–21 are in condition for allowance, and requests that the application proceed to issue. If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues and to work with the Examiner toward placing the application in condition for allowance.

Respectfully submitted,

Dated: July 13, 2017
Reg. No. 61,290

Electronic signature: /Jeffrey R. Rummler/
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PTO/AIA/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) BST-004C1
Application Number 14/944,484-Conf. #2464	Filed November 18, 2015
For INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM	
Art Unit 2492	Examiner S. P. Kanaan

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):

	Fee	Small Entity Fee	Micro Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐ Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☒ Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 700.00
☐ Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐ Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☒ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

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

☒ Payment by credit card.

☐ 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 07-1700 .

☒ Payment made via EFS-Web.

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.

☒ attorney or agent of record. Registration number 61,290 .

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

/Jeffrey R. Rummler/ — Signature
July 13, 2017 — Date

Jeffrey R. Rummler — Typed or printed name
(617) 570-1000 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ * Total of 1 forms are submitted.

Electronic Patent Application Fee Transmittal

Application Number:	14944484
Filing Date:	18-Nov-2015
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	Jeffrey Richard Rummler/Caren Chaneco
Attorney Docket Number:	BST-004C1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

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

Electronic Acknowledgement Receipt

EFS ID:	29769386
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	51414
Filer:	Jeffrey Richard Rummler/Caren Chaneco
Filer Authorized By:	Jeffrey Richard Rummler
Attorney Docket Number:	BST-004C1
Receipt Date:	13-JUL-2017
Filing Date:	18-NOV-2015
Time Stamp:	15:06:16
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$700
RAM confirmation Number	071417INTEFSW15064500
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		BST-004C1_RSP.pdf	114326 1d4a8331de1b8178901b774dc013c502d5cf41fe	yes	9
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	9	
Warnings:					
Information:					
2	Extension of Time	BST-004C1_EOT.pdf	77816 1e5750854d9075a2b9ded16e11f9f49cd54c6400	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30297 f2c2bb17374f873ab1fa7c6fbd70edb1b11b64b8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	222439		

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/944,484	Filing Date 11/18/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

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

APPLICATION AS AMENDED – PART II

AMENDMENT **07/13/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

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

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

LIE
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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.

U.S. SERIAL NO. 14/944,484
(Attorney Docket No. BST-004C1)

INTERVIEW AGENDA

Applicant's representatives, Joel Lehrer (Reg. No. 56,401) and Anne Vilsoet, will call Examiner Kanaan at (571) 270-3906 on January 31, 2017, at 2:00 PM EDT.

Discuss Rejections Under 35 U.S.C. § 103 in View of Proposed Claim Amendments

- The Office action rejects independent claim 1 over U.S. Publication No. 2004/0250122 by Newton ("Newton") in view of U.S. Publication No. 2006/0212925 by Shull et al. ("Shull") and U.S. Publication No. 2007/0282730 by Carpenter et al. ("Carpenter").
    - Newton appears to describe a network intelligence database that gathers information about individual networks using network information agents (e.g., spam levels, hosted services, active security measures, etc.). See Newton at [0015], [0016], [0022], and [0031]. The network intelligence agents provide the gathered information to a network intelligence database, which may be accessed via a customer network security system. The network security system may then be used to secure a network based on the stored data. Ibid. A Policy Enforcer (PE) then translates conceptual rules that describe which networks may communicate with the customer's network into generic rules for application across the customer's devices. See id. at [0053] and [0055].
    - Shull appears to describe methods, systems, and software for monitoring communications between a client computer and an online entity, and associating trust scores to the online entity. See, Shull at para. [0010]. The system may block communication between an online entity and a client computer or may display a warning depending on the online entity's trust score(s). See id. at para. [0012]. Multiple trust scores may be provided for an online entity evaluating the online entity's trustworthiness in a category of behavior. Ibid.
    - Carpenter appears to describe systems and methods for gathering investment information from peers and trusted sources and providing real-time portfolio trading and sharing. See Carpenter at para. [0022]. The investment data sharing system (IDSS) uses members' data to automate and formalize shared investment advice. See id. at para. [0024].
    - As shown in the proposed amendments to claim 1, listed below, Applicant proposes to amend claim 1 to recite "mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses."
    - None of Newton, Shull, or Carpenter teaches "mapping technical assets to respective companies or other entities" by "determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses," as recited in amended independent claim 1. Shull specifically does not teach annotating a common entity name with server name conventions. Further, Carpenter is silent on the use of IP addresses in the methods or systems used to collect data.

Proposed Amendments to Claim 1

1. (Currently amended) A computer implemented method comprising

at least partly by computer, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses,

automatically by a computer that uses sensors on the Internet collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities,

automatically by a computer, deriving observations about the technical assets from the collected security characterizations,

automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business.

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Date	Total Pages	Attorney Number	Client/matter Number
January 30, 2017	3	25386	128842-255025

To	Company	Fax Number	Telephone
Examiner Kanaan	USPTO	571-273-8300	

From	Fax Number	Telephone
Anne Vilsoet *on behalf of*: Joel Lehrer	617-523-1231	617-570-1000

Message:

Re: Application Serial No. 14/944,484

Dear Examiner Kanaan:

Please see the attached

Thank you for your assistance.

Best,

Sent by Anne Vilsoet ***on behalf of***:
Joel Lehrer
Reg. No. 56,401
Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
T: 617-570-1000
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-004C1	2464

51414 7590 01/17/2017

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER
KANAAN, SIMON P

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
01/17/2017	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTBOS@GOODWINPROCTER.COM
PSOUSA-ATWOOD@GOODWINPROCTER.COM
GLENN.WILLIAMS@GOODWINPROCTER.COM

Office Action Summary	Application No. 14/944,484	Applicant(s) BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	AIA (First Inventor to File) Status No

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

Period for Reply

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

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

Status

1)☒ Responsive to communication(s) filed on *10/5/2016*.

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

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

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

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

Disposition of Claims*

5)☒ Claim(s) *1-19* 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) *1-19* is/are rejected.

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

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

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

Application Papers

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

11)☒ The drawing(s) filed on *11/18/2015* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

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

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

Priority under 35 U.S.C. § 119

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

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

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

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

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

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

Attachment(s)

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

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *12/2/2016*.

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

4) ☐ Other: _____.

DETAILED ACTION

Office Action Summary

1. Instant office action is in response to RCE filed 10/5/2016. Claims 1-19 remain pending in the instant application. Amendments files 10/5/2016 have been entered. Claims 1 and 19 have been amended accordingly. Claims 1-19 are rejected under 35 USC § 103.

Applicant's arguments/amendments directed towards the Double Patenting rejection are persuasive therefore the rejection has been withdrawn.

Applicant's arguments/amendments directed towards the 35 USC § 101 rejection are persuasive therefore the rejection has been withdrawn.

2. Applicant's arguments filed 10/5/2016 have been considered but are moot based on new grounds of rejection necessitated by applicant's amendments as applicants amendments changed the scope of the invention and required further search and consideration.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/5/2016 has been entered.

Priority

4. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of 35 U.S.C. 112(a) or the first paragraph of pre-AIA 35 U.S.C. 112, except for the best mode requirement. See Transco Products, Inc. v. Performance Contracting, Inc., 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994)

5. The disclosure of the prior-filed application, Application No. 61/386,156, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application.

Notice of Pre-AIA or AIA Status

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

7. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 1-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chris Newton (US Pre-Grant Publication No: 2004/0250122 A1) hereinafter referred to as Newton in view of in view of Shull et al. (US Pre-Grant Publication No: 2006/0212925 A1) hereinafter referred to as Shull and Carpenter et al. (US Pre-Grant Publication No: 2007/0282730) hereinafter referred to as Carpenter and further in view of Wanser et. al (US Pre-Grant Publication No: 2012/0215892 A1) hereinafter referred to as Wanser.

As per **claim 1**, Newton teaches **a computer implemented method comprising at least partly by computer, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated,** *(Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company which is an asset mapping to entity)*

automatically by a computer that uses sensors on the Internet collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, *(Newton, [0044]-[0048] and [0029], teaches*

information gathered externally from multiple sources including proxy information and data mining internet which is public information. And [0040], teaches device agents gathering information i.e. automatically)

automatically by a computer, deriving observations about the technical assets from the collected security characterizations, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)*

but Newton does not teach **automatically by a computer generating a security rating for each of the entities using the entity map and the derived observations, through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business and wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses**

However, Shull teaches **automatically by a computer generating a security rating for each of the entities using the entity map and the derived observations, through a communication network,** *(Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score*

which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)

And Carpenter teaches **exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business** *(Carpenter, [0080], teaches "The IDSS of an embodiment is configured to display the ratings 602 to members via a portal and [0133], teaches "The system of an embodiment comprises a portal coupled to the processor. The portal of an embodiment is configured to allow each investor restricted access to shared data of the plurality of investors. The shared data of an embodiment includes one or more of the investment data, the real-time trade data, the rank, the security ratings, the recommendations, the performance measures, the evaluation, and the comparison")*

And Wanser teaches **wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses.** *(Wanser, [0027] and [0054])*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not and to display the ratings in a portal accessible to consumers so a consumer is aware of who they are interacting with; And to modify the method of newton which gathers information about sources and computed a score with the method of Wanser which provides additional detail about a source because it helps compute a more robust/accurate score.

As per **claim 2**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise an IP space.** *(Newton, [0022], teaches "Active security measures, firewalls, IDSs" and [0016] teaches "Hosted services (web servers, email servers)")*

As per **claim 3**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises querying a regional Internet registry.** *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface")*

As per **claim 4**, Newton in view of Shull and Carpenter teaches **the method of claim 3 in which maintaining an entity map comprises submitting a name of one of the entities to the regional Internet registry.** *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 5**, Newton in view of Shull and Carpenter teaches **the method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.** *(Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))*

As per **claim 6**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using a domain name associated with the entity.** *(Newton, [0029], teaches "Address, contact information." also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 7**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises using a dig tool on the domain name to determine a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 8**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises probing IP addresses around a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 9**, Newton in view of Shull and Carpenter teaches **the method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 10**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises adapting the domain name with server naming conventions. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 11**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises using nslookup to verify an IP address associated with the domain name. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 12**, Newton in view of Shull and Carpenter teaches **the method of claim 2 comprising using the IP space for collecting the security characterizations.** *(Newton, [0025], teaches "inappropriate content served (hate sites, porn, pirated software)")*

As per **claim 13**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.** *(Newton, [0019] teaches "organization associations: owned by, partnered with whom")*

As per **claim 14**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise ranges of IP addresses.** *(Newton, [0021], teaches "Bandwidth connection to the Internet")*

As per **claim 15**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise servers.** *(Newton, [0016], teaches "Hosted services (web servers, email servers)")*

As per **claim 16**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using information received from Internet Service Providers.** *(Newton, [0047], teaches "Search Engine Agent, for example a Google.TM. Agent")*

As per **claim 17**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using heuristics.** *(Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

As per **claim 18**, Newton in view of Shull and Carpenter teaches **the method of claim 17 comprising persistently updating the heuristics**. (*Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

As per **claim 19**, Newton teaches **a computer implemented method comprising at least partly by a computer operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,** *(Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company which is an asset mapping to entity)*

the maintaining of the entity map comprising, automatically using sensors on the Internet to collect externally observable security characterizations of the technical assets that have been mapped to each of the entities, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information. And [0040], teaches device agents gathering information i.e. automatically)* **(a) submitting names of the entities to regional Internet registries using various spellings of the names,** *(Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))*

(d) probing IP addresses around published IP addresses, *(Newton, [0020], teaches peer ISPSs)*

(f) using information received from Internet Service Providers, and (g) applying heuristics, *(Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

automatically by a computer, deriving observations about the technical assets from the collected security characterizations, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)*

but Newton does not teach **(b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions, (e) using nslookup to verify IP addresses associated with domain names, automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations, and through a communication network, exposing to users in a user interface the security scores of the entities and (g) annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses.**

However, Shull teaches **(b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions,** *(Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address*

(and/or network block)") **(e) using nslookup to verify IP addresses associated with domain names, (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")* **automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations,** *(Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)*

And Carpenter teaches **through a communication network, exposing to users in a user interface the security scores of the entities.** *(Carpenter, [0080], teaches "The IDSS of an embodiment is configured to display the ratings 602 to members via a portal and [0133], teaches "The system of an embodiment comprises a portal coupled to the processor. The portal of an embodiment is configured to allow each investor restricted access to shared data of the plurality of investors. The shared data of an embodiment includes one or more of the investment data, the real-time trade data, the rank, the security ratings, the recommendations, the performance measures, the evaluation, and the comparison")*

And Wanser teaches **(g) annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses.** *(Wanser, [0027] and [0054])*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not and to display the ratings in a portal accessible to consumers so a consumer is aware of who they are interacting with; And to modify the method of newton which gathers information about sources and computed a score with the method of Wanser which provides additional detail about a source because it helps compute a more robust/accurate score.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Kanaan whose telephone number is (571)270-3906. The examiner can normally be reached on Mon-Thurs 7:30-5:00 EST.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Saleh Najjar, can be reached at the following telephone number: (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).

/SIMON KANAAN/
Examiner, Art Unit 2492

Notice of References Cited	Application/Control No. 14/944,484	Applicant(s)/Patent Under Reexamination BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2005/0278726 A1	12-2005	Cano, Charles E.	H04L67/1095	719/315
*	B	US-2012/0215892 A1	08-2012	Wanser; Kelly	H04L61/1552	709/222
*	C	US-7,747,778 B1	06-2010	King; James E.	H04L12/24	709/220
*	D	US-2009/0161629 A1	06-2009	Purkayastha; Debashish	H04W36/0011	370/331
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	2492

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor and Assignee Search + text (PALM)	3/6/2016	SK
USPC: (EAST: 726/1,2,22,25+text)	6/22/2016	SK
CPC (EAST: H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00 + text)	1/6/2017	SK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/SIMON KANAAN/ Examiner.Art Unit 2492	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 4

Complete if Known	
Application Number	14/944,484-Conf. #2464
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan
Attorney Docket Number	BST-004C1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A63	US-2001/0044798-A1	11-22-2001	Nagral et al.	
	A64	US-2002/0083077-A1	06-27-2002	Vardi	
	A65	US-2003/0050862-A1	03-13-2003	Bleicken et al.	
	A66	US-2003/0123424-A1	07-03-2003	Jung	
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	A69	US-2004/0199791-A1	10-07-2004	Poletto et al.	
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	A71	US-2004/0221296-A1	11-04-2004	Ogielski et al.	
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	A75	US-2005/0131830-A1	06-16-2005	Juarez et al.	
	A76	US-2006/0173992-A1	08-03-2006	Weber et al.	
	A77	US-2007/0143851-A1	06-21-2007	Nicodemus et al.	
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Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3] Number[4] Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature	/SIMON P KANAAN/	Date Considered	01/06/2017

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Sheet 2 of 4

Complete if Known	
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	A82	US-2011/0185403-A1	07-28-2011	DOLAN et al.	
	A83	US-2014/0108474-A1	04-17-2014	David et al.	
	A84	US-2015/0310188-A1	10-29-2015	Ford et al.	
	A85	US-5,867,799	02-02-1999	Lang et al.	
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Sheet	3	of	4	Attorney Docket Number	BST-004C1

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Application Number	14/944,484-Conf. #2464
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First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan

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	C92	Computer Network Graph-Bees, http://bioteams.com/2007/04/30/visualizing_complex_networks.html, date accessed September 28, 2016	
	C93	Computer Network Graph-Univ. of Michigan, http://people.cst.cmich.edu/liao1q/research.shtml, date accessed September 28, 2016	
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	C99	RFC 781, https://tools.ietf.org/html/rfc781, date accessed September 28, 2016, 3 pages.	
	C100	RFC 950, https://tools.ietf.org/html/rfc950, date accessed September 28, 2016, 19 pages.	
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Sheet	4	of	4	Attorney Docket Number	BST-004C1

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Application Number	14/944,484-Conf. #2464
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First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan

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	C102	RFC 1834, https://tools.ietf.org/html/rfc1834, date accessed September 28, 2016, 7 pages.	
	C103	SamSpade Network Inquiry Utility, https://www.sans.org/reading-room/whitepapers/tools/sam-spade-934, date accessed September 28, 2016, 19 pages.	
	C104	Security Warrior, Cyrus Peikari, Anton, Chapter 8: Reconnaissance, 6 pages.	
	C105	Snort Intrusion Monitoring System, http://archive.oreilly.com/pub/h/1393, date accessed September 28, 2016, 3 pages.	
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L2	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L3	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L4	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L5	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L6	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L9	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L10	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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			USPAT			
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L21	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L33	0	L26 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L38	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L39	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L40	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L47	1	abor networks	US-	ADJ	ON	2017/01/06

			PGPUB; USPAT			23:11
L48	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L49	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L50	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L55	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L56	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L57	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L58	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L59	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L60	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L61	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L62	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
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L64	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L65	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L66	3	"13240572"	US-	ADJ	ON	2017/01/06

			PGPUB; USPAT			23:11
L67	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L68	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L69	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L70	128	L68 and L69	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L71	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L72	61	L71 and L69	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L73	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L74	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L75	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L76	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L77	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L78	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L79	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L80	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L81	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L82	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L83	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L84	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L85	0	(external$5 or third party) with (security)	US-	ADJ	ON	2017/01/06

		with (commercial near data) with reputation	PGPUB; USPAT			23:11
L86	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L87	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L88	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L89	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L90	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L91	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L92	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L93	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L94	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L95	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L96	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L97	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L98	78	L97 not L96	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L99	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L100	0	L97 and L99	US-PGPUB;	ADJ	ON	2017/01/06 23:11

			USPAT			
L101	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L102	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L103	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L99	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L104	0	L99 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L105	0	L99 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L106	0	L99 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L107	0	L99 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L108	0	L99 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L109	7	L99 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L110	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L111	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L112	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L113	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L114	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L115	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L116	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L117	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L118	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L119	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L120	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L121	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L122	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L123	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L124	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L125	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L126	561	L125 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L127	210	L126 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L128	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L129	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L130	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L131	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L132	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L133	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L134	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L135	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L136	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L137	9	L136 not L135	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L138	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L139	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L140	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L141	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L142	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L143	128	L141 and L142	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L144	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L145	61	L144 and L142	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L146	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L147	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L148	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L149	25	L148 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L150	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L151	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR	US-PGPUB;	ADJ	ON	2017/01/06 23:11

		H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	USPAT			
L152	569	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L153	157	L152 and L151	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L154	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L155	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/01/06 23:11
L156	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L157	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L158	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L159	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L160	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L161	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L162	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L163	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L164	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L165	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L166	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L167	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L168	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L169	0	network with vulnerability with detection	US-	ADJ	ON	2017/01/06

		with compliance with assesment	PGPUB; USPAT			23:11
L170	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L171	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L170	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L172	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L173	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L174	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L175	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L176	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L177	2	L175 and L176	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L178	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L179	2	L175 and L177	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L180	8	L175 and L178	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L181	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L182	14	L176 and L181	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L183	81	L178 and L181	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L184	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L185	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L186	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L187	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L188	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L189	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L190	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L191	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L192	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L193	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L194	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L195	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L196	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L197	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L198	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L199	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L200	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L201	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L202	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L203	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L204	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L205	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L206	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L207	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L208	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L209	78	L208 not L207	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L210	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L211	0	L208 and L210	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L212	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L213	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L214	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L210	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L215	0	L210 and user behavior	US-PGPUB;	ADJ	ON	2017/01/06 23:11

			USPAT			
L216	0	L210 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L217	0	L210 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L218	0	L210 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L219	0	L210 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L220	7	L210 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L221	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L222	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L223	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L224	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L225	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L226	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L227	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L228	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L229	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L230	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L231	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L232	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L233	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L234	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L235	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L236	561	L235 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L237	210	L236 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L238	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L239	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L240	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L241	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L242	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L243	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L244	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L245	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L246	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L247	9	L246 not L245	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L248	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L249	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L250	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L251	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L252	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L253	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L254	128	L252 and L253	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L255	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L256	61	L255 and L253	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L257	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L258	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L259	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L260	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L261	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L262	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L263	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L264	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L265	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L266	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L267	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L268	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L269	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11

L270	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L271	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L272	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L273	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L274	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L275	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L276	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L277	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L278	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L279	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L280	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L281	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L282	78	L281 not L280	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L283	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:11
L284	0	L281 and L283	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L285	0	(insustry reports or internet monitoring	US-	ADJ	ON	2017/01/06

		web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	PGPUB; USPAT			23:11
L286	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:11
L287	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L283	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L288	0	L283 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L289	0	L283 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L290	0	L283 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L291	0	L283 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L292	0	L283 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L293	7	L283 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L294	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L295	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4) and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L296	26	((external$5 or third party) with audit$4) and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L297	270	((external$5 or third party) with audit$4) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L298	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L299	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L300	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB;	ADJ	ON	2017/01/06 23:12

		and rat$3 and commercial	USPAT			
L301	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L302	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L303	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L304	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L305	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L306	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L307	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L308	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L309	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L310	561	L309 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L311	210	L310 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L312	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L313	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L314	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L315	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L316	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L317	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L318	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L319	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L320	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L321	9	L320 not L319	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L322	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L323	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L324	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L325	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L326	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L327	128	L325 and L326	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L328	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L329	61	L328 and L326	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L330	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L331	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L332	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L333	25	L332 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L334	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L335	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

		H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)				
L336	569	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L337	157	L336 and L335	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L338	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L339	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/01/06 23:12
L340	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L341	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L342	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L343	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L344	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L345	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L346	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L347	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L348	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L349	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L350	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L351	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L352	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L353	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L354	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L355	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L354	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L356	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L357	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L358	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L359	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L360	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L361	2	L359 and L360	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L362	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L363	2	L359 and L361	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L364	8	L359 and L362	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L365	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L366	14	L360 and L365	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L367	81	L362 and L365	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L368	2	"14944484"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L369	9	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L370	0	L369 and dig tool	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L371	0	L356 and (dig tool)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L372	0	L356 and (dig with tool)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L373	1	L356 and (dig)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L374	2	(dig) with published IP address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L375	2	(dig) with published near3 address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L376	384	(dig) with address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L377	14	(dig) with address with domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L393	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L394	2	L393 and dig	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L395	2	"20150074579"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L397	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L398	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L399	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L400	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L401	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L402	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L403	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L404	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L405	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L406	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L407	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L408	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L409	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L410	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L411	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L412	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L413	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L414	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L415	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L416	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L417	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L418	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L419	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L420	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L421	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L422	78	L421 not L420	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L423	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L424	0	L421 and L423	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L425	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L426	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L427	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L423	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L428	0	L423 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L429	0	L423 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L430	0	L423 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L431	0	L423 and public with features	US-PGPUB; USPAT; USOCR; EPO;	ADJ	ON	2017/01/06 23:12

			DERWENT			
L432	0	L423 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L433	7	L423 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L434	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L435	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L436	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L437	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L438	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L439	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L440	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L441	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L442	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L443	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L444	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L445	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L446	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L447	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L448	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L449	561	L448 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L450	210	L449 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L451	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L452	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L453	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L454	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L455	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L456	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L457	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L458	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L459	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L460	9	L459 not L458	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L461	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L462	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L463	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L464	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L465	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L466	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L467	128	L465 and L466	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L468	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L469	61	L468 and L466	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L470	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L471	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L472	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L473	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L474	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L475	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L476	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L477	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L478	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L479	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L480	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L481	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L482	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L483	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L484	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L485	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L486	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L487	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L488	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L489	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L490	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L491	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L492	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L493	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L494	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L495	78	L494 not L493	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L496	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L497	0	L494 and L496	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L498	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L499	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L500	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L496	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L501	0	L496 and user behavior	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L502	0	L496 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L503	0	L496 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L504	0	L496 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L505	0	L496 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L506	7	L496 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L507	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L508	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L509	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L510	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L511	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L512	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L513	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L514	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L515	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L516	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L517	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L518	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L519	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L520	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L521	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L522	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L523	561	L522 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L524	210	L523 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L525	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L526	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L527	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L528	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L529	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L530	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L531	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L532	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L533	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L534	9	L533 not L532	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L535	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L536	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L537	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L538	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L539	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L540	128	L538 and L539	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L541	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L542	61	L541 and L539	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L543	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L544	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L545	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L546	25	L545 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L547	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L548	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L549	569	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L550	157	L549 and L548	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L551	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L552	0	"11237642"	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT; USOCR			
L553	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L554	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L555	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L556	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L557	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L558	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L559	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L560	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L561	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L562	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L563	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L564	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L565	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L566	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L567	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L568	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

		networks or user behavior) and L567				
L569	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L570	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L571	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L572	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L573	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L574	2	L572 and L573	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L575	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L576	2	L572 and L574	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L577	8	L572 and L575	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L578	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L579	14	L573 and L578	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L580	81	L575 and L578	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L581	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L582	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L583	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L584	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L585	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L586	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L587	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L588	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L589	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L590	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L591	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L592	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L593	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L594	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L595	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L596	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L597	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L598	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L599	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L600	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L601	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L602	3	arbor networks and renesys	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L603	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L604	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L605	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L606	78	L605 not L604	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L607	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L608	0	L605 and L607	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L609	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L610	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L611	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L607	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L612	0	L607 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L613	0	L607 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L614	0	L607 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L615	0	L607 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L616	0	L607 and externally	US-	ADJ	ON	2017/01/06

			PGPUB; USPAT; USOCR; EPO; DERWENT			23:12
L617	7	L607 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:12
L618	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L619	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L620	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L621	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L622	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L623	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L624	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L625	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L626	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L627	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L628	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L629	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L630	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L631	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L632	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L633	561	L632 and third party	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L634	210	L633 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L635	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L636	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L637	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L638	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L639	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L640	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L641	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L642	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L643	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L644	9	L643 not L642	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L645	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L646	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L647	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L648	5202	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L649	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L650	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L651	128	L649 and L650	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L652	779	(organization or company) same reputation same (score or rating)	US-PGPUB;	ADJ	ON	2017/01/06 23:12

			USPAT			
L653	61	L652 and L650	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L654	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L655	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L656	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L657	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L658	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L659	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L660	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L661	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L662	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L663	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L664	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L665	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L666	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L667	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L668	29	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L669	13	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L670	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L671	0	malwareurl$5	US-PGPUB;	ADJ	ON	2017/01/06 23:13

			USPAT			
L672	2	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L673	2	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L674	178	arbor networks	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L675	3	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L676	6612	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L677	82	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L678	160	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L679	78	L678 not L677	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L680	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:13
L681	0	L678 and L680	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L682	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L683	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L684	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L680	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L685	0	L680 and user behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13

L686	0	L680 and behavior	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L687	0	L680 and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L688	0	L680 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:13
L689	0	L680 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:13
L690	7	L680 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:13
L691	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L692	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L693	26	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L694	270	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L695	516	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L696	486	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L697	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L698	2	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L699	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L700	7	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L701	6	security and renesys	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L702	1	abor networks	US-	ADJ	ON	2017/01/06

			PGPUB; USPAT			23:13
L703	56	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L704	25	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L705	50	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L706	1540	site secure	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L707	561	L706 and third party	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L708	210	L707 and assess$3	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L709	249	network reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L710	234	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L711	20	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L712	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L713	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L714	556	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L715	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L716	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L717	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L718	9	L717 not L716	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L719	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L720	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L721	5202	(organization or company or entity) same	US-	ADJ	ON	2017/01/06

		reputation	PGPUB; USPAT			23:13
L722	1299	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L723	20075	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L724	128	L722 and L723	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L725	779	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L726	61	L725 and L723	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L727	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L728	19	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L729	36	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L730	25	L729 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L731	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L732	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L733	569	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L734	157	L733 and L732	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L735	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L736	0	"11237642"	US-PGPUB; USPAT;	ADJ	ON	2017/01/06 23:13

			USOCR			
L737	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L738	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L739	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L740	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L741	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L742	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L743	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L744	41	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L745	35	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L746	49	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L747	6	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L748	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L749	12	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L750	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L751	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2017/01/06 23:13
L752	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L751	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13

L753	328	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L754	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L755	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L756	125	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L757	133	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L758	2	L756 and L757	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L759	305	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L760	2	L756 and L758	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L761	8	L756 and L759	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L762	47273	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L763	14	L757 and L762	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L764	81	L759 and L762	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L765	2	"14944484"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L766	9	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L767	0	L766 and dig tool	US-	ADJ	ON	2017/01/06

			PGPUB; USPAT			23:13
L768	0	L753 and (dig tool)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L769	0	L753 and (dig with tool)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L770	1	L753 and (dig)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L771	2	(dig) with published IP address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L772	2	(dig) with published near3 address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L773	384	(dig) with address	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L774	14	(dig) with address with domain	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L775	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L776	2	L775 and dig	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L777	2	"20150074579"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L778	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L779	2	L778 and (portal)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L780	4	(portal) with (security rating)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L799	0	("US-20010044798-A1" | "US-20020083077-A1" | "US-20030050862-A1" | "US-20030123424-A1" | "US-20040024859-A1" | "US-20040133561-Al" | "US-20040199791-Al" | "US-20040199792-Al" | "US-20040221296-Al" | "US-20040250134-Al" | "US-20050071450-A1" | "US-20050080720-A1" | "US-20050131830-A1" | "US-20060173992-Al" | "US-20070143851-Al" | "US-20080162931-Al" | "US-20090044272-A1" | "US-20090193054-	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13

		AI" | "US-20100262444-AI").PN.				
L800	0	("US-20010044798-A1" | "US-20020083077-A1" | "US-20030050862-A1" | "US-20030123424-A1" | "US-20040024859-A1" | "US-20040133561-AI" | "US-20040199791-AI" | "US-20040199792-AI" | "US-20040221296-AI" | "US-20040250134-AI" | "US-20050071450-A1" | "US-20050080720-A1" | "US-20050131830-A1" | "US-20060173992-AI" | "US-20070143851-AI" | "US-20080162931-AI" | "US-20090044272-A1" | "US-20090193054-AI" | "US-20100262444-AI").PN.	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:41
L801	19	("20010044798" "20020083077" "20030050862" "20030123424" "20040024859" "20040133561" "20040199791" "20040199792" "20040221296" "20040250134" "20050071450" "20050080720" "20050131830" "20060173992" "20070143851" "20080162931" "20090044272" "20090193054" "20100262444").PN.	US-PGPUB; USPAT	OR	ON	2017/01/06 23:44
L802	0	L801 and (naming convention)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L803	0	L801 and (naming with convention)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L804	0	L801 and (naming)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L805	15	L801 and (nam$3)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L806	0	L801 and (nam$3 convention)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L807	0	L801 and (nam$3 near3 convention)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:44
L808	0	L801 and (ip with information with entity with name)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:45
L809	25	(naming convention) and (ip with information with entity with name)	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:46

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L378	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L379	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L380	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L381	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L382	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L383	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12

L384	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L385	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L386	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L387	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L388	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L389	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L390	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L391	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:12
L392	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:12
L396	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:12
L781	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:13
L782	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L783	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L784	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L785	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L786	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L787	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L788	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L789	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L790	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L791	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L792	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L793	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L794	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L795	3	"13240572"	US-PGPUB; USPAT	ADJ	ON	2017/01/06 23:13
L796	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:13
L797	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:13
L798	1	"Term Removed"	US-PGPUB	ADJ	ON	2017/01/06 23:13

1/6/2017 11:51:11 PM
C:\Users\skanaan\Documents\EAST\Workspaces\14944484.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	**Art Unit**
	SIMON KANAAN	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	03/06/2016	06/22/2016	01/06/2017						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	✓						
	9	✓	✓	✓						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
	17	✓	✓	✓						
	18	✓	✓	✓						
	19		✓	✓						

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14944484	Filing Date	2015-11-18	Docket Number (if applicable)	BST-004C1	Art Unit	2492
First Named Inventor	Stephen Boyer			Examiner Name	Simon P. Kanaan		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☐ Amendment/Reply
- ☒ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Petition for Extension of Time

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 07-1700

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-14)
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Signature of Registered U.S. Patent Practitioner			
Signature	/Joel E. Lehrer/	Date (YYYY-MM-DD)	2016-12-02
Name	Joel E. Lehrer	Registration Number	56401

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

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

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 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.

Electronic Patent Application Fee Transmittal

Application Number:	14944484
Filing Date:	18-Nov-2015
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	Joel E. Lehrer/Tricia Ayube
Attorney Docket Number:	BST-004C1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	2252	1	300	300
Miscellaneous:				
RCE- 1st Request	2801	1	600	600
		Total in USD ($)		**900**

Electronic Acknowledgement Receipt

EFS ID:	27673604
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	51414
Filer:	Joel E. Lehrer/Tricia Ayube
Filer Authorized By:	Joel E. Lehrer
Attorney Docket Number:	BST-004C1
Receipt Date:	02-DEC-2016
Filing Date:	18-NOV-2015
Time Stamp:	14:47:49
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$900
RAM confirmation Number	120516INTEFSW14482700
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	Computer_Network_Graph-Bees.pdf	207194 3cc813ad9c99a15c7b4cdd1d921e5151619a1fa4	no	2
Warnings:					
Information:					
2	Non Patent Literature	Computer_Network_Graph-Univ_of_Michigan.pdf	1401588 5654d5b2092bd561913ee2c72411e00aa75229c3	no	5
Warnings:					
Information:					
3	Non Patent Literature	Hacking_Exposed_6.pdf	7778648 d64413fd9c277891c77430a183e00dd9ed7ca5de	no	37
Warnings:					
Information:					
4	Non Patent Literature	MaxMind-1.pdf	133758 5fc357d2d0dd11cf50f26cff7f7dd5ee5b5cea79	no	3
Warnings:					
Information:					
5	Non Patent Literature	netcraft.pdf	131825 5f176c8066bf3cf6c4f351818dde4c1c7c630047	no	2
Warnings:					
Information:					
6	Non Patent Literature	NetScantools.pdf	324744 e65971e76eb7f0cf039aa6939baabfffba89c577	no	2
Warnings:					
Information:					

7	Non Patent Literature	Network_Security_Assessment.pdf	1803210 8851b10c8673685c1ebb024df2d9d024cda8a0e7	no	13
Warnings:					
Information:					
8	Non Patent Literature	RFC_781.pdf	69980 1a73605238b4e6334b712d84b3f93eb8b9576e2a	no	3
Warnings:					
Information:					
9	Non Patent Literature	RFC_950.pdf	169354 681cc289d3e9b452e440586eaa748cbabdaab571	no	19
Warnings:					
Information:					
10	Non Patent Literature	RFC_954.pdf	85018 0a2126ca9a84163b1844d0899611744c4328b84d	no	5
Warnings:					
Information:					
11	Non Patent Literature	RFC_1834.pdf	158464 8c1d213719c09948c479153c9d88dcfe0eee1c18	no	7
Warnings:					
Information:					
12	Non Patent Literature	SamSpade.pdf	293552 46cbe14c8a00b793836dfe7ef4799f2a0012a8bf	no	19
Warnings:					
Information:					
13	Non Patent Literature	Security_Warrior.pdf	1084077 86e9779f8188529b9832a55870ab897b4884e4e2	no	6
Warnings:					
Information:					

14	Non Patent Literature	Snort_Intrusion.pdf	180052 8910cf0232ea438abab13a3977a68a5918c63489	no	3
Warnings:					
Information:					
15	Non Patent Literature	Wikipedia-Crowdsourcing.pdf	617990 2a7561636614883ba01bd57aad055ea4f5a4c647	no	25
Warnings:					
Information:					
16	Transmittal Letter	IDS.pdf	20454 b61a136059cce46265dea98099608831cafc31fe	no	2
Warnings:					
Information:					
17	Information Disclosure Statement (IDS) Form (SB08)	SB08.pdf	54594 93269cd2f927d44661e927892e8f495e02be8a4f	no	4
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
18	Extension of Time	EOT.pdf	22708 52988e9eea845197e2bc950b861ee26913f96ac7	no	1
Warnings:					
Information:					
19	Request for Continued Examination (RCE)	RCE.pdf	74571 437d6d0bdeee0cee4c5fdfb7d996ac0a92ebed12	no	3
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
20	Fee Worksheet (SB06)	fee-info.pdf	32242 177180beb0c765d890c2dfaff99c8b49286d3380	no	2
Warnings:					
Information:					

Total Files Size (in bytes):	14644023

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.

Docket No.: BST-004C1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen Boyer et al.

Application No.: 14/944,484 Confirmation No.: 2464

Filed: November 18, 2015 Art Unit: 2492

For: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM Examiner: Simon P. Kanaan

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

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

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Supplemental Information Disclosure Statement, pursuant to 37 CFR 1.114(c), accompanies the Request for Continued Examination (37 CFR 1.114) submitted herewith.

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h),

the filing of this Supplemental Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Supplemental Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 07-1700, under Order No. **BST-004C1**.

Dated: December 2, 2016

Respectfully submitted,

Electronic signature: /Joel E. Lehrer/
Joel E. Lehrer
Registration No.: 56,401
GOODWIN PROCTER LLP
100 Northern Avenue
Boston, Massachusetts 02210
(617) 570-1000
Attorney for Applicant

ACTIVE/88837888.1

PTO/SB/08a (07-09)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	4

Complete if Known	
Application Number	14/944,484-Conf. #2464
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan
Attorney Docket Number	BST-004C1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A63	US-2001/0044798-A1	11-22-2001	Nagral et al.	
	A64	US-2002/0083077-A1	06-27-2002	Vardi	
	A65	US-2003/0050862-A1	03-13-2003	Bleicken et al.	
	A66	US-2003/0123424-A1	07-03-2003	Jung	
	A67	US-2004/0024859-A1	02-05-2004	Bloch et al.	
	A68	US-2004/0133561-A1	07-08-2004	Burke	
	A69	US-2004/0199791-A1	10-07-2004	Poletto et al.	
	A70	US-2004/0199792-A1	10-07-2004	Tan et al.	
	A71	US-2004/0221296-A1	11-04-2004	Ogielski et al.	
	A72	US-2004/0250134-A1	12-09-2004	Kohler et al.	
	A73	US-2005/0071450-A1	03-31-2005	Allen et al.	
	A74	US-2005/0080720-A1	04-14-2005	Betz et al.	
	A75	US-2005/0131830-A1	06-16-2005	Juarez et al.	
	A76	US-2006/0173992-A1	08-03-2006	Weber et al.	
	A77	US-2007/0143851-A1	06-21-2007	Nicodemus et al.	
	A78	US-2008/0162931-A1	07-03-2008	Lord et al.	
	A79	US-2009/0044272-A1	02-12-2009	Jarrett	
	A80	US-2009/0193054-A1	07-30-2009	Karimisetty et al.	
	A81	US-2010/0262444-A1	10-14-2010	Atwal et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3] Number[4] Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08a (07-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 4

Complete if Known	
Application Number	14/944,484-Conf. #2464
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan
Attorney Docket Number	BST-004C1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A82	US-2011/0185403-A1	07-28-2011	DOLAN et al.	
	A83	US-2014/0108474-A1	04-17-2014	David et al.	
	A84	US-2015/0310188-A1	10-29-2015	Ford et al.	
	A85	US-5,867,799	02-02-1999	Lang et al.	
	A86	US-6,016,475	01-18-2000	Miller et al.	
	A87	US-6,792,401	09-14-2004	Nigro et al.	
	A88	US-7,100,195	08-29-2006	Underwood	
	A89	US-7,748,038	06-29-2010	Olivier et al.	
	A90	US-8,429,630	04-23-2013	Nickolov et al.	
	A91	US-8,504,556	08-06-2013	Rice et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3] Number[4] Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	3	of	4	Attorney Docket Number	BST-004C1

Complete if Known	
Application Number	14/944,484-Conf. #2464
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C92	Computer Network Graph-Bees, http://bioteams.com/2007/04/30/visualizing_complex_networks.html, date accessed September 28, 2016	
	C93	Computer Network Graph-Univ. of Michigan, http://people.cst.cmich.edu/liao1q/research.shtml, date accessed September 28, 2016	
	C94	Hacking Exposed 6, S. McClure et al., copyright 2009, 37 pages.	
	C95	MaxMind, https://www.maxmind.com/en/about-maxmind, https://www.maxmind.com/en/geoip2-isp-database, date accessed September 28, 20116, 3 pages.	
	C96	Netcraft, www.netcraft.com, date accessed September 28, 2016, 2 pages.	
	C97	NetScanTools Pro, http://www.netscantools.com/nstpromain.html, date accessed September 28, 2016, 2 pages.	
	C98	Network Security Assessment, C. McNab, copyright 2004, 13 pages.	
	C99	RFC 781, https://tools.ietf.org/html/rfc781, date accessed September 28, 2016, 3 pages.	
	C100	RFC 950, https://tools.ietf.org/html/rfc950, date accessed September 28, 2016, 19 pages.	
	C101	RFC 954, https://tools.ietf.org/html/rfc954, date accessed September 28, 2016, 5 pages.	

Examiner Signature		Date Considered	

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

[1] Applicant's unique citation designation number (optional). [2] Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	4	of	4	Attorney Docket Number	BST-004C1

Complete if Known	
Application Number	14/944,484-Conf. #2464
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Art Unit	2492
Examiner Name	Simon P. Kanaan

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C102	RFC 1834, https://tools.ietf.org/html/rfc1834, date accessed September 28, 2016, 7 pages.	
	C103	SamSpade Network Inquiry Utility, https://www.sans.org/reading-room/whitepapers/tools/sam-spade-934, date accessed September 28, 2016, 19 pages.	
	C104	Security Warrior, Cyrus Peikari, Anton, Chapter 8: Reconnaissance, 6 pages.	
	C105	Snort Intrusion Monitoring System, http://archive.oreilly.com/pub/h/1393, date accessed September 28, 2016, 3 pages.	
	C106	Wikipedia, https://en.wikipedia.org/wiki/Crowdsourcing, date accessed September 28, 2016	

Examiner Signature		Date Considered	

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

[1] Applicant's unique citation designation number (optional). [2] Applicant is to place a check mark here if English language Translation is attached.

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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) BST-004C1
Application Number 14/944,484-Conf. #2464	Filed November 18, 2015
For INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM	
Art Unit 2492	Examiner S. Kanaan

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):

	Fee	Small Entity Fee	Micro Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☒ Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$ 300.00
☐ Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐ Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐ Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

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

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ 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 07-1700 .

☒ Payment made via EFS-Web.

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.

☒ attorney or agent of record. Registration number 56,401 .

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

/Joel E. Lehrer/	December 2, 2016
Signature	Date
Joel E. Lehrer	(617) 570-1057
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ * Total of 1 forms are submitted.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/944,484	Filing Date 11/18/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

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

APPLICATION AS AMENDED – PART II

AMENDMENT **12/02/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

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

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
PARTHENIA D. MERRILL

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
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/944,484	11/18/2015	Stephen Boyer	BST-004C1

CONFIRMATION NO. 2464

51414
GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

PUBLICATION NOTICE



Title: Information Technology Security Assessment System

Publication No.US-2016-0323308-A1
Publication Date:11/03/2016

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 Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	BST-005	2464

51414 7590 10/28/2016

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

EXAMINER
KANAAN, SIMON P

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
10/28/2016	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTBOS@GOODWINPROCTER.COM
PSOUSA-ATWOOD@GOODWINPROCTER.COM
GLENN.WILLIAMS@GOODWINPROCTER.COM

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 14/944,484	**Applicant(s)** BOYER ET AL.	
	Examiner SIMON KANAAN	**Art Unit** 2492	**AIA (First Inventor to File) Status** No

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

THE REPLY FILED 05 October 2016 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance;

(2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

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

9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

14. ☐ Other: _____.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: .
Claim(s) objected to: .
Claim(s) rejected: 1-19.
Claim(s) withdrawn from consideration: .

/SALEH NAJJAR/ Supervisory Patent Examiner, Art Unit 2492	/SIMON KANAAN/ Examiner, Art Unit 2492

Continuation of 3. NOTE: Applicant's amendments "wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses," change the scope of the claims requiring further search and consideration. .

Continuation of 12. does NOT place the application in condition for allowance because: Applicant's amendments "wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses," change the scope of the claims requiring further search and consideration.

Docket No.: BST-005
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen Boyer et al.

Application No.: 14/944,484 | Confirmation No.: 2464

Filed: November 18, 2015 | Art Unit: 2492

For: Information Technology Security Assessment System | Examiner: Kanaan, Simon P.

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

AMENDMENT AND RESPONSE

This paper is being submitted in response to the Final Office Action mailed from the U.S. Patent and Trademark Office on July 5, 2016, for the above-identified patent application. No fees are believed necessary for filing this paper; however, the Commissioner is hereby authorized to charge any shortfall in fees to deposit account No. 07-1700, Order No. BST-005.

Please make the following amendments, without prejudice, and consider the following remarks.

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

Remarks begin on page 5 of this paper.

DO NOT ENTER: /S.P.K/

10/21/2016

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/944,484	11/18/2015	Stephen Boyer	BST-005

CONFIRMATION NO. 2464

POA ACCEPTANCE LETTER

51414
GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
100 Northern Avenue
BOSTON, MA 02210

OC000000086348670

Date Mailed: 10/11/2016

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/05/2016.

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

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

/qtran/

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	14/944,484
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Title	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	BST-005

SIGNATURE of Applicant or Patent Practitioner

Signature	/Joel E. Lehrer/	Date (Optional)	October 5, 2016
Name	Joel E. Lehrer	Registration Number	56,401
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ *Total of 1 forms are submitted.

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

[X] I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above: 051414

OR

[ ] I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

[X] 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 (if the Applicant is a juristic entity, list the Applicant name in the box):

BitSight Technologies, Inc.

[ ] Inventor or Joint Inventor (title not required below)

[ ] Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

[X] Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

[ ] Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	[signature]	Date (Optional)	10/5/16
Name			
Title			

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

[ ] Total of 1 forms are submitted.

PTO/AIA/96 (08-12)
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STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: Stephen Boyer et al.

Application No./Patent No.: 14/944,484 Filed/Issue Date: November 18, 2015

Titled: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

BitSight Technologies, Inc. , 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. [x] 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. [x] 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 037071 , Frame 0556 , 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.

PTO/AIA/96 (08-12)
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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.

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.

/Joel E. Lehrer/	October 5, 2016
Signature	Date
Joel E. Lehrer	56,401
Printed or Typed Name	Title or Registration Number

Electronic Acknowledgement Receipt

EFS ID:	27130190
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	26161
Filer:	Joel E. Lehrer/Tricia Ayube
Filer Authorized By:	Joel E. Lehrer
Attorney Docket Number:	38879-0006002
Receipt Date:	05-OCT-2016
Filing Date:	18-NOV-2015
Time Stamp:	17:10:29
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		Amendment_and_Response_to_Final_Office_Action.pdf	39542 74ae45d8b6097232fea3ea3c642f7674ad83ed84	yes	9

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Response After Final Action	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	9

Warnings:					
Information:					
2		POA.pdf	639203 7cc59d34db6410e7c420b8a3067c3ea9947cb493	yes	4

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Power of Attorney	1	2
	Assignee showing of ownership per 37 CFR 3.73	3	4

Warnings:	
Information:	
Total Files Size (in bytes):	678745

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stephen Boyer et al.

Application No.: 14/944,484 | Confirmation No.: 2464

Filed: November 18, 2015 | Art Unit: 2492

For: Information Technology Security Assessment System | Examiner: Kanaan, Simon P.

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

AMENDMENT AND RESPONSE

This paper is being submitted in response to the Final Office Action mailed from the U.S. Patent and Trademark Office on July 5, 2016, for the above-identified patent application. No fees are believed necessary for filing this paper; however, the Commissioner is hereby authorized to charge any shortfall in fees to deposit account No. 07-1700, Order No. BST-005.

Please make the following amendments, without prejudice, and consider the following remarks.

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

Remarks begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

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

Claim Listing

1. (Currently amended) A computer implemented method comprising

at least partly by computer, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated, wherein mapping technical assets to respective companies or other entities comprises determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses,

automatically by a computer that uses sensors on the Internet collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities,

automatically by a computer, deriving observations about the technical assets from the collected security characterizations,

automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business.

2. (Original) The method of claim 1 in which the technical assets comprise an IP space.

3. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises querying a regional Internet registry.

4. (Previously Presented) The method of claim 3 in which maintaining an entity map comprises submitting a name of one of the entities to the regional Internet registry.

5. (Previously Presented) The method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.

6. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using a domain name associated with the entity.

7. (Previously Presented) The method of claim 6 in which maintaining an entity map comprises using a dig tool on the domain name to determine a published IP address.

8. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises probing IP addresses around a published IP address.

9. (Original) The method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address.

10. (Previously Presented) The method of claim 6 in which maintaining an entity map comprises adapting the domain name with server naming conventions.

11. (Previously Presented) The method of claim 6 in which maintaining an entity map comprises using nslookup to verify an IP address associated with the domain name.

12. (Original) The method of claim 2 comprising using the IP space for collecting the security characterizations.

13. (Original) The method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.

14. (Original) The method of claim 1 in which the technical assets comprise ranges of IP addresses.

15. (Original) The method of claim 1 in which the technical assets comprise servers.

16. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using information received from Internet Service Providers.

17. (Previously Presented) The method of claim 1 in which maintaining an entity map comprises using heuristics.

18. (Original) The method of claim 17 comprising persistently updating the heuristics.

19. (Currently Amended) A computer implemented method comprising

at least partly by a computer operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,

the maintaining of the entity map comprising, automatically using sensors on the Internet to collect externally observable security characterizations of the technical assets that have been mapped to each of the entities, (a) submitting names of the entities to regional Internet registries using various spellings of the names, (b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions, (d) probing IP addresses around published IP addresses, (e) using nslookup to verify IP addresses associated with domain names, (f) using information received from Internet Service Providers, (g) annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses and ([[g]]h) applying heuristics,

automatically by a computer, deriving observations about the technical assets from the collected security characterizations,

automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations, and

through a communication network, exposing to users in a user interface the security scores of the entities.

REMARKS

Applicant hereby amends claims 1 and 19. Upon entry of this Amendment and Response, there will be a total of 19 claims pending, with 2 independent claims (claims 1 and 19). The amendments to the claims have been made without prejudice and to further clarify the invention. Support for the amendments can be found in the application as filed, for example, on page 13, lines 5-25. No new matter has been added.

Reconsideration is respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 101

Claims 1-19 are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicant respectfully traverses this rejection of the amended claims for at least the reasons presented below.

The Office action states:

> Claim(s) 1 is/are directed to collecting characterization of entities and generating a score based on the collected data. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more that the judicial exception because they are "An Idea 'Of Itself'" (See "Collecting and comparing known information" and "comparing data to determine a risk level"). The additional language teaches mapping technical assets, automatically performing tasks by a computer, collecting eternally[sic] observable characterization and generating a security score based on the security characterizations. However, these additional elements are not sufficient to amount to significantly more than the judicial exception because the limitations are merely instructions to implement the abstract ideaon a computer and require no more than a generic computer to perform generic computer functions that are well-understood , routine and conventional activities previously known in the industry.

Applicants respectfully submit that this analysis of the claim as a whole falls short of the Federal Circuit's recent guidance in Bascom Global Internet Svcs. V. AT&T Mobility, which requires "more than recognizing that each claim element, by itself, was known in art." Rather, "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces."

Here, the claims, as amended, provide a specific technique for generating and maintaining an entity map that allows for more efficient observations of network activity

attributed to entities within the map. Regardless of whether the individual limitations that form this claimed concept are routine and conventional, the Office action does not explain why the combination of such limitations is also routine and conventional but, rather, merely makes conclusory statements on the same without any basis.

Claim 1 is also patent eligible for substantially the same reasons as the claims at issue in DDR Holdings, LLC v. Hotels.com, 773 F.3d 1245 (Fed. Cir. 2014). In DDR Holdings, the claims at issue were directed to techniques for "making two web pages look the same" or to "syndicated commerce on the computer using the Internet" (p. 1257). The Federal Circuit concluded that even if those techniques were abstract ideas, the claims were still patent eligible "because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet" (DDR Holdings, p. 1257). Like the claims in DDR Holdings, claim 1 does not merely recite a known method along with the requirement to perform the steps of the method on a computer. Rather, claim 1 recites a method for maintaining an entity map that is not well-understood, routine, or conventional. For at least this additional reason, claim 1 recites patent-eligible subject matter.

Accordingly, Applicant respectfully submits that the claims, as amended, recite patentable subject matter. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 101 is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-18

Claims 1-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0250122 by Newton ("Newton") in view of U.S. Publication No. 2006/0212925 by Shull et al. ("Shull") and U.S. Publication No. 2007/0282730 by Carpenter et al. ("Carpenter").

Briefly, Newton appears to describe a network intelligence database that gathers information about individual networks using network information agents (e.g., spam levels, hosted services, active security measures, etc.). See Newton at [0015], [0016], [0022], and [0031]. The network intelligence agents provide the gathered information to a network intelligence database, which may be accessed via a customer network security system. The

network security system may then be used to secure a network based on the stored data. Ibid. A Policy Enforcer (PE) then translates conceptual rules that describe which networks may communicate with the customer's network into generic rules for application across the customer's devices. See id. at [0053] and [0055].

Newton does not, however, teach "mapping technical assets to respective companies or other entities" based on "determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses" as recited in amended independent claim 1. Such a technique addresses a specific problem when trying to attribute IP addresses to entities without specific IP address ranges or catalogs.

As stated on page 8 of the Office action, "Newton does not teach automatically by a computer generating a security rating for each of the entities using the entity map and the derived observations, through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business." For this, the Examiner relies on Shull and Carpenter.

Briefly, Shull appears to describe methods, systems, and software for monitoring communications between a client computer and an online entity, and associating trust scores to the online entity. See, Shull at para. [0010]. The system may block communication between an online entity and a client computer or may display a warning depending on the online entity's trust score(s). See id. at para. [0012]. Multiple trust scores may be provided for an online entity evaluating the online entity's trustworthiness in a category of behavior. Ibid.

Carpenter appears to describe systems and methods for gathering investment information from peers and trusted sources and providing real-time portfolio trading and sharing. See Carpenter at para. [0022]. The investment data sharing system (IDSS) uses members' data to automate and formalize shared investment advice. See id. at para. [0024].

Neither Shull nor Carpenter teach "mapping technical assets to respective companies or other entities" by "determining IP information by annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses," as recited in amended independent claim 1. Shull specifically does not teach annotating a common entity name with server name conventions. Further, Carpenter is silent on the use of IP addresses in the methods or systems used to collect data.

It is advantageous to attempt to construct actual domain names because, in some cases, no information regarding an entity's IP addresses may be publicly available. In these cases, known server naming conventions may be used to annotate the entity name by prepending the name with terms such as SMTP, MAIL, etc. that are commonly used. This method enables the computer to efficiently "guess" at the potential IP addresses of an entity and build a more accurate cybersecurity rating.

Because claims 2-18 depend from independent claim 1 and, therefore, include all of the limitations thereof, Applicant respectfully submits that claims 2-18 are allowable as well, for at least the same reasons. Withdrawal of the grounds for rejection is respectfully requested.

Claim 19

Claims 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0250122 by Newton ("Newton") in view of U.S. Publication No. 2006/0212925 by Shull et al. ("Shull") and U.S. Publication No. 2007/0282730 by Carpenter et al. ("Carpenter").

As described above, none of Newton, Shull, or Carpenter describe annotating a common entity name with server naming conventions thereby deriving a likely server name having assigned IP addresses," as recited in amended independent claim 19. Accordingly, Applicant respectfully requests withdrawal of the grounds for rejection.

CONCLUSION

By responding in the foregoing remarks only to particular positions taken by the Examiner, Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist. Finally, Applicant's decision to amend or cancel any claim should not be understood as implying that Applicant agrees with any positions taken by the Examiner with respect to that claim or other claims.

Applicant respectfully submits that, in light of the foregoing remarks, claims 1-19 are in condition for allowance, and requests that the application proceed to issue. If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues and to work with the Examiner toward placing the application in condition for allowance.

Dated: October 5, 2016

Respectfully submitted,

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/944,484	Filing Date 11/18/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

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

APPLICATION AS AMENDED – PART II

AMENDMENT	10/05/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

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

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

LIE
WANDA MEREDITH

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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/944,484	11/18/2015	Stephen Boyer	38879-0006002

CONFIRMATION NO. 2464

NEW OR REVISED PPD NOTICE

26161
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

OC000000084702162

NOTICE OF NEW OR REVISED PROJECTED PUBLICATION DATE

The above-identified application has a new or revised projected publication date. The current projected publication date for this application is 11/03/2016. If this is a new projected publication date (there was no previous projected publication date), the application has been cleared by Licensing & Review or a secrecy order has been rescinded and the application is now in the publication queue.

If this is a revised projected publication date (one that is different from a previously communicated projected publication date), the publication date has been revised due to processing delays in the USPTO or the abandonment and subsequent revival of an application. The application is anticipated to be published on a date that is more than six weeks different from the originally-projected publication date.

More detailed publication information is available through the private side of Patent Application Information Retrieval (PAIR) System. The direct link to access PAIR is currently http://pair.uspto.gov. Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Questions relating to this Notice should be directed to the Office of Data Management, Application Assistance Unit at (571) 272-4000, or (571) 272-4200, or 1-888-786-0101.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	38879-0006002	2464

26161 7590 07/05/2016
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
KANAAN, SIMON P	

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
07/05/2016	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 14/944,484	Applicant(s) BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	AIA (First Inventor to File) Status No

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

Period for Reply

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

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

Status

1)☒ Responsive to communication(s) filed on *5/25/2016*.

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

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

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

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

Disposition of Claims*

5)☒ Claim(s) *1-19* 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) *1-19* is/are rejected.

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

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

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

Application Papers

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

11)☒ The drawing(s) filed on *11/18/2015* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

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

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

Priority under 35 U.S.C. § 119

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

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

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

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

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

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

Attachment(s)

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

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/18/15,3/31/16*.

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

4) ☐ Other: _____.

DETAILED ACTION

Office Action Summary

1. Claims 1-19 are pending in the instant application.

2. Amendments files 5/25/2016 have been entered. Claims 1, 3-8, 10-11, 16-17 have been amended accordingly and new independent claim 19 has been added.

3. Claims 1 is rejected under Double Patenting with application 13/240,572.

4. Claims 1-19 are rejected under 35 USC § 101.

5. Claims 1-19 are rejected under 35 USC § 103.

6. Applicant's arguments filed 5/25/2016 have been considered but are moot based on new grounds of rejection necessitated by applicant's amendments as applicants amendments changed the scope of the invention and required further search and consideration. (Also see "Applicant's Arguments and Examiner's Response" section below)

Notice of Pre-AIA or AIA Status

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

8. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Applicant's Arguments and Examiner's Response

9. Applicant's arguments filed 5/25/2016 have been considered but are not persuasive. As for applicant arguments:

a. Applicant argues that the provisional double patenting stating: "Claim 1 in this application refers to mapping of technical assets to entities and generating a security score based on the mapped technical assets. Claim 1 of the 13/240,572 application does not recite mapping of technical assets to entities. On the other hand, claim 1 of the 13/240,572 application does recite a number of features that are not recited in claim 1 of this application. It is incorrect to say that claim 1 here is broader than claim 1 of the 13/240,572, application because the two claims recite different non-overlapping features."

Examiner disagrees as claim 1 of the 13/240,572 states "collecting information about two or more companies that have computer systems" which is mapping technical assets to companies.

b. Applicant states that they amended claim 1 to alleviate examiner's concerns in regards to the 35 U.S.C. 101 rejection.

Examiner disagrees as amended claim 1 is still directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. The additional language added "automatically by a computer" and "communication network" and "portal" are not sufficient to amount to significantly more than the judicial exception because the limitations are

merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry. Computers are known to perform tasks automatically and networks and portals are industry norms.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/forms/. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

11. Claim 1 provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 13/240,572 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because the instant application is broader than application 13/240,572.

12. This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claim(s) 1 is/are directed to collecting characterization of entities and generating a score based on the collected data. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because they are "An Idea 'Of Itself'" (See “Collecting and comparing known information” and “Comparing data to determine a risk level”). The additional language teaches mapping technical assets, automatically performing tasks by a computer, collecting eternally observable characterization and generating a security score based on the security characterizations. However, these additional elements are not sufficient to amount to significantly more than the judicial exception because the limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry. Further, the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of a computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claim 1-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chris Newton (US Pre-Grant Publication No: 2004/0250122 A1) hereinafter referred to as Newton in view of in view of Shull et al. (US Pre-Grant Publication No: 2006/0212925 A1) hereinafter referred to as Shull and Carpenter et al. (US Pre-Grant Publication No: 2007/0282730) hereinafter referred to as Carpenter.

As per **claim 1**, Newton teaches **a computer implemented method comprising at least partly by computer, maintaining in a database an entity map that maps technical assets to respective companies or other entities with which the assets are associated,** *(Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company which is an asset mapping to entity)*

automatically by a computer that uses sensors on the Internet collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and*

data mining internet which is public information. And [0040], teaches device agents gathering information i.e. automatically)

automatically by a computer, deriving observations about the technical assets from the collected security characterizations, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)*

but Newton does not teach **automatically by a computer generating a security rating for each of the entities using the entity map and the derived observations, through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business.**

However, *(Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)*

And *(Carpenter, [0080], teaches "The IDSS of an embodiment is configured to display the ratings 602 to members via a portal and [0133], teaches "The system of an embodiment comprises a portal coupled to the processor. The portal of an embodiment is configured to allow each investor restricted access to shared data of the plurality of investors. The shared data of an embodiment includes one or more of the investment data, the real-time trade data, the rank, the security ratings, the recommendations, the performance measures, the evaluation, and the comparison")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not and to display the ratings in a portal accessible to consumers so a consumer is aware of who they are interacting with.

As per **claim 2**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise an IP space.** *(Newton, [0022], teaches "Active security measures, firewalls, IDSs" and [0016] teaches "Hosted services (web servers, email servers)")*

As per **claim 3**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises querying a regional**

Internet registry. *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface")*

As per **claim 4**, Newton in view of Shull and Carpenter teaches **the method of claim 3 in which maintaining an entity map comprises submitting a name of one of the entities to the regional Internet registry.** *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 5**, Newton in view of Shull and Carpenter teaches **the method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.** *(Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))*

As per **claim 6**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using a domain name**

associated with the entity. *(Newton, [0029], teaches "Address, contact information." also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 7**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises using a dig tool on the domain name to determine a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 8**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises probing IP addresses around a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 9**, Newton in view of Shull and Carpenter teaches **the method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 10**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises adapting the domain name with server naming conventions. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 11**, Newton in view of Shull and Carpenter teaches **the method of claim 6 in which maintaining an entity map comprises using nslookup to verify an IP address associated with the domain name. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 12**, Newton in view of Shull and Carpenter teaches **the method of claim 2 comprising using the IP space for collecting the security characterizations.** *(Newton, [0025], teaches "inappropriate content served (hate sites, porn, pirated software)")*

As per **claim 13**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.** *(Newton, [0019] teaches "organization associations: owned by, partnered with whom")*

As per **claim 14**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise ranges of IP addresses.** *(Newton, [0021], teaches "Bandwidth connection to the Internet")*

As per **claim 15**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which the technical assets comprise servers.** *(Newton, [0016], teaches "Hosted services (web servers, email servers)")*

As per **claim 16**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using information received from Internet Service Providers.** *(Newton, [0047], teaches "Search Engine Agent, for example a Google.TM. Agent")*

As per **claim 17**, Newton in view of Shull and Carpenter teaches **the method of claim 1 in which maintaining an entity map comprises using heuristics.** *(Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

As per **claim 18**, Newton in view of Shull and Carpenter teaches **the method of claim 17 comprising persistently updating the heuristics**. (*Newton, [0041], teaches giving different information different weight where less weight given to information as it*

becomes less important over time which is a statistical correlation with the information collected.)

As per **claim 19**, Newton teaches **a computer implemented method comprising at least partly by a computer operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,** *(Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company which is an asset mapping to entity)*

the maintaining of the entity map comprising, automatically using sensors on the Internet to collect externally observable security characterizations of the technical assets that have been mapped to each of the entities, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information. And [0040], teaches device agents gathering information i.e. automatically)* **(a) submitting names of the entities to regional Internet registries using various spellings of the names,** *(Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a*

domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))

(d) probing IP addresses around published IP addresses, *(Newton, [0020], teaches peer ISPSs)*

(f) using information received from Internet Service Providers, and (g) applying heuristics, *(Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

automatically by a computer, deriving observations about the technical assets from the collected security characterizations, *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)*

but Newton does not teach **(b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions, (e) using nslookup to verify IP addresses associated with domain names, automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations, and through a communication network, exposing to users in a user interface the security scores of the entities.**

However, Shull teaches **(b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions,** *(Shull, [0035],*

teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)") **(e) using nslookup to verify IP addresses associated with domain names, (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")* **automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations,** *(Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)*

And Carpenter teaches **through a communication network, exposing to users in a user interface the security scores of the entities.** *(Carpenter, [0080], teaches "The IDSS of an embodiment is configured to display the ratings 602 to members via a portal and [0133], teaches "The system of an embodiment comprises a portal coupled to the processor. The portal of an embodiment is configured to allow each investor restricted access to shared data of the plurality of investors. The shared data of an embodiment includes one or more of the investment data, the real-time trade*

data, the rank, the security ratings, the recommendations, the performance measures, the evaluation, and the comparison")

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not and to display the ratings in a portal accessible to consumers so a consumer is aware of who they are interacting with.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Kanaan whose telephone number is (571) 270-3906. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Saleh Najjar, can be reached at the following telephone number: (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).

/S. K./
Examiner, Art Unit 2492
/SALEH NAJJAR/
Supervisory Patent Examiner, Art Unit 2492

Notice of References Cited	Application/Control No. 14/944,484	Applicant(s)/Patent Under Reexamination BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2007/0282730 A1	12-2007	Carpenter; Steven A.	G06Q40/06	705/36R
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC 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.

Substitute Disclosure Form / U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	38879-0006002	14/944,484
	Applicant: BitSight Technologies, Inc.	
	Filing Date: November 18, 2015	Group Art Unit: 2492

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	1.	2012/0166458	06-2012	Laudanski et al.			
	2.	2008/0140495	06-2008	Bhamidipaty et al.			
	3.	2012/0158725	06-2012	Molloy et al.			
	4.	2014/0204803	07-2014	Nguyen			

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Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	5.	PAIR transaction history of US application no. 14/021,585 and pending claims as of March 22, 2016.
	6.	PAIR transaction history of US application no. 13/240,572, application as filed and pending claims as of March 22, 2016.

Examiner Signature	Date Considered
/Simon Kanaan/	06/22/2016

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Substitute Disclosure Form / U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	38879-0006002	unknown
	Applicant: BitSight Technologies, Inc.	
	Filing Date: November 18, 2015	Group Art Unit: unknown

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Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant BitSight Technologies, Inc.	
		Filing Date November 18, 2015	Group Art Unit unknown

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	Filing Date: November 18, 2015	Group Art Unit: unknown

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	60.	PAIR transaction history of US application no. 61/386,156 as of October 7, 2015.
	61.	PAIR transaction history and pending claims of USSN 14/021,585 as of November 18, 2015.
	62.	Application as filed, PAIR transaction history and pending claims of USSN 13/240,572 as of November 18, 2015.

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/Simon Kanaan/	06/22/2016

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	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	03/06/2016	06/22/2016							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
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	16	✓	✓							
	17	✓	✓							
	18	✓	✓							
	19		✓							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L4	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L5	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L6	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L7	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L8	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L9	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L10	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L11	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L12	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L13	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L14	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L15	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L16	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L17	26	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L18	11	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L19	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L20	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L21	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L22	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L23	158	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L24	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L25	6128	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L26	72	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L27	139	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L28	67	L27 not L26	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L29	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L30	0	L27 and L29	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L31	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L29	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L32	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

		networks or user behavior) and L29				
L33	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L29	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L34	0	L29 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L35	0	L29 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L36	0	L29 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L37	0	L29 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L38	0	L29 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L39	7	L29 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L40	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L41	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L42	248	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L43	478	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L44	452	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L45	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L46	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L47	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L48	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB;	ADJ	ON	2016/06/22 16:21

		and rating and commercial data	USPAT			
L49	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L50	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L51	53	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L52	23	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L53	45	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L54	1494	site secure	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L55	549	L54 and third party	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L56	206	L55 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L57	228	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L58	213	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L59	18	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L60	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L61	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L62	511	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L63	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L64	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L65	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L66	8	L65 not L64	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L67	2	"20040250122"	US-PGPUB;	ADJ	ON	2016/06/22 16:21

			USPAT			
L68	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L69	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L70	4872	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L71	1200	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L72	19937	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L73	128	L71 and L72	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L74	722	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L75	61	L74 and L72	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L76	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L77	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L78	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L79	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L80	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L81	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L82	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L83	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L84	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L85	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L86	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and	US-PGPUB;	ADJ	ON	2016/06/22 16:21

		(commercial near data) and reputation	USPAT			
L87	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L88	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L89	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L90	26	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L91	11	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L92	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L93	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L94	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L95	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L96	158	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L97	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L98	6128	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L99	72	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L100	139	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L101	67	L100 not L99	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L102	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21

		$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.				
L103	0	L100 and L102	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L104	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L102	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L105	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L102	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L106	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L102	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L107	0	L102 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L108	0	L102 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L109	0	L102 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L110	0	L102 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L111	0	L102 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L112	7	L102 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L113	35	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L114	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L115	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L116	248	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L117	478	((external$5 or third party) with (audit$4	US-	ADJ	ON	2016/06/22

		or observ$5)) and reputation and security	PGPUB; USPAT			16:21
L118	452	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L119	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L120	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L121	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L122	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L123	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L124	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L125	53	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L126	23	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L127	45	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L128	1494	site secure	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L129	549	L128 and third party	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L130	206	L129 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L131	228	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L132	213	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L133	18	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L134	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L135	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L136	511	network (reputation or assess$4 or rat$3)	US-	ADJ	ON	2016/06/22

		with public	PGPUB; USPAT			16:21
L137	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L138	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L139	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L140	8	L139 not L138	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L141	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L142	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L143	4872	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L144	1200	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L145	19937	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L146	128	L144 and L145	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L147	722	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L148	61	L147 and L145	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L149	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L150	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L151	35	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L152	24	L151 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L153	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

		G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)				
L154	41873	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L155	527	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L156	146	L155 and L154	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L157	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L158	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/22 16:21
L159	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L160	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L161	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L162	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L163	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L164	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L165	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L166	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L167	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L168	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L169	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L170	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L171	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L172	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L173	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L174	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L173	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L175	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L176	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L177	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L178	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L179	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L180	0	L178 and L179	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L181	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L182	0	L178 and L180	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L183	4	L178 and L181	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L184	41873	((H04L63/20 OR H04L63/145 OR	US-	ADJ	ON	2016/06/22

		H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	PGPUB; USPAT			16:21
L185	10	L179 and L184	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L186	72	L181 and L184	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L187	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L188	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L189	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L190	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L191	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L192	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L193	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L194	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L195	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L196	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L197	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L198	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L199	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L200	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L201	26	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L202	11	internet monitoring with report and	US-	ADJ	ON	2016/06/22

		public	PGPUB; USPAT			16:21
L203	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L204	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L205	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L206	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L207	158	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L208	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L209	6128	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L210	72	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L211	139	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L212	67	L211 not L210	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L213	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L214	0	L211 and L213	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L215	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L213	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L216	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L213	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L217	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L213	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L218	0	L213 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L219	0	L213 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L220	0	L213 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L221	0	L213 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L222	0	L213 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L223	7	L213 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L224	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L225	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L226	248	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L227	478	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L228	452	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L229	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L230	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L231	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L232	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L233	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L234	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L235	53	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L236	23	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L237	45	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L238	1494	site secure	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L239	549	L238 and third party	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L240	206	L239 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L241	228	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L242	213	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L243	18	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L244	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L245	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L246	511	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L247	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L248	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L249	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L250	8	L249 not L248	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L251	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L252	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L253	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L254	4872	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L255	1200	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L256	19937	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L257	128	L255 and L256	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L258	722	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L259	61	L258 and L256	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L260	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L261	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L262	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L263	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L264	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L265	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L266	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L267	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L268	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L269	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L270	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21

L271	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L272	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L273	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L274	26	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L275	11	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L276	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L277	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L278	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L279	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L280	158	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L281	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L282	6128	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L283	72	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L284	139	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L285	67	L284 not L283	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L286	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21

		2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.				
L287	0	L284 and L286	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L288	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L286	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L289	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L286	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L290	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L286	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L291	0	L286 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L292	0	L286 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L293	0	L286 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L294	0	L286 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L295	0	L286 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L296	7	L286 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:21
L297	35	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L298	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L299	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L300	248	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L301	478	((external$5 or third party) with (audit$4 or observ$5)) and reputation and	US-PGPUB;	ADJ	ON	2016/06/22 16:21

		security	USPAT			
L302	452	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L303	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L304	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L305	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:21
L306	5	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L307	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L308	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L309	53	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L310	23	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L311	45	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L312	1494	site secure	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L313	549	L312 and third party	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L314	206	L313 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L315	228	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L316	213	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L317	18	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L318	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L319	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L320	511	network (reputation or assess$4 or rat$3) with public	US-PGPUB;	ADJ	ON	2016/06/22 16:22

			USPAT			
L321	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L322	10	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L323	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L324	8	L323 not L322	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L325	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L326	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L327	4872	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L328	1200	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L329	19937	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L330	128	L328 and L329	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L331	722	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L332	61	L331 and L329	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L333	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L334	18	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L335	35	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L336	24	L335 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L337	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22

		(external$5 or third party) and (security) and (WGET or RSYNC or CURL)				
L338	41873	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L339	527	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L340	146	L339 and L338	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L341	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L342	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/06/22 16:22
L343	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L344	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L345	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L346	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L347	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L348	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L349	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L350	40	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L351	33	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L352	45	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L353	5	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L354	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22

L355	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L356	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L357	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/06/22 16:22
L358	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L357	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L359	292	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L360	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L361	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L362	102	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L363	122	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L364	0	L362 and L363	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L365	285	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L366	0	L362 and L364	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L367	4	L362 and L365	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L368	41873	((H04L63/20 OR H04L63/145 OR	US-	ADJ	ON	2016/06/22

		H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	PGPUB; USPAT			16:22
L369	10	L363 and L368	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L370	72	L365 and L368	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L371	0	"14944484"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L372	9	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L373	0	L372 and dig tool	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L374	0	L359 and (dig tool)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L375	0	L359 and (dig with tool)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L376	0	L359 and (dig)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L377	0	(dig) with published IP address	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L378	0	(dig) with published near3 address	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L379	370	(dig) with address	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L380	12	(dig) with address with domain	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L396	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L397	2	L396 and dig	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L398	1	"20150074579"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L400	10	(US-20040193918-$ or US-20050080720-$ or US-20040221296-$ or US-	US-PGPUB;	ADJ	ON	2016/06/22 17:53

		20050108415-$ or US-20040250122-$ or US-20120166458-$).did. or (US-5867799-$ or US-6016475-$ or US-7100195-$ or US-7748038-$).did.	USPAT			
L402	2	l400 and (portal)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 17:54
L403	2	(portal) with (security rating)	US-PGPUB; USPAT	ADJ	ON	2016/06/22 17:57

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	1	"Term Removed"	US-PGPUB	ADJ	ON	2016/06/22 16:21
L381	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L382	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L383	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L384	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L385	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L386	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L387	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L388	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L389	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L390	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L391	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L392	0	"11237642"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L393	1	"11368329"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L394	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/06/22 16:22
L395	1	"Term Removed"	US-PGPUB	ADJ	ON	2016/06/22 16:22
L399	1	"Term Removed"	US-PGPUB	ADJ	ON	2016/06/22 16:22
L401	1	"Term Removed"	US-PGPUB	ADJ	ON	2016/06/22 17:53

6/22/2016 6:07:34 PM
C:\Users\skanaan\Documents\EAST\Workspaces\14944484.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	2492

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor and Assignee Search + text (PALM)	3/6/2016	SK
USPC: (EAST: 726/1,2,22,25+text)	6/22/2016	SK
CPC (EAST: H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00 + text)	6/22/2016	SK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/SIMON KANAAN/ Examiner.Art Unit 2492	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor	:	Stephen Boyer	Art Unit	:	Unknown
Serial No.	:	14/944,484	Examiner	:	Unknown
Filed	:	November 18, 2015	Conf. No.	:	2464
Title	:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM			

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

REPLY TO ACTION DATED MARCH 11, 2016

List of claims (replacing prior versions)

1. (currently amended) A computer implemented method comprising

at least partly by computer, maintaining in a database an entity map that maps ~~mapping between~~ technical assets ~~that are associated with security characterizations of the respective entities,~~ to ~~the~~ respective companies or other entities with which the assets are associated,

automatically by a computer that uses sensors on the Internet collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, ~~and~~

automatically by a computer, deriving observations about the technical assets from the collected security characterizations,

automatically by a computer, generating a security ~~score~~ rating for each of the entities ~~based on~~ using the entity map and the derived observations, ~~the collected characterizations of the mapped technical assets of each of the entities~~ and

through a communication network, exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business.

2. (original) The method of claim 1 in which the technical assets comprise an IP space.

3. (currently amended) The method of claim 1 in which maintaining an entity map ~~the mapping~~ comprises querying a regional Internet registry.

4. (currently amended) The method of claim 3 in which maintaining an entity map ~~the mapping~~ comprises submitting a name of one of the entities to the regional Internet registry.

5. (currently amended) The method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.

6. (currently amended) The method of claim 1 in which maintaining an entity map ~~the mapping~~ comprises using a domain name associated with the entity.

7. (currently amended) The method of claim 6 in which maintaining an entity map ~~the mapping~~ comprises using a dig tool on the domain name to determine a published IP address.

8. (currently amended) The method of claim 1 in which maintaining an entity map ~~the mapping~~ comprises probing IP addresses around a published IP address.

9. (original) The method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address.

10. (currently amended) The method of claim 6 in which maintaining an entity map ~~the mapping~~ comprises adapting the domain name with server naming conventions.

11. (currently amended) The method of claim 6 in which maintaining an entity map ~~the mapping~~ comprises using nslookup to verify an IP address associated with the domain name.

12. (original) The method of claim 2 comprising using the IP space for collecting the security characterizations.

13. (original) The method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.

14. (original) The method of claim 1 in which the technical assets comprise ranges of IP addresses.

15. (original) The method of claim 1 in which the technical assets comprise servers.

16. (currently amended) The method of claim 1 in which maintaining an entity map ~~the mapping~~ comprises using information received from Internet Service Providers.

17. (currently amended) The method of claim 1 in which maintaining an entity map ~~the mapping~~ comprises using heuristics.

18. (original) The method of claim 17 comprising persistently updating the heuristics.

19. (new) A computer implemented method comprising

at least partly by a computer operating with a database, maintaining an entity map that maps technical assets that comprise an IP space to respective entities with which the assets are associated,

the maintaining of the entity map comprising, automatically using sensors on the Internet to collect externally observable security characterizations of the technical assets that have been mapped to each of the entities, (a) submitting names of the entities to regional Internet registries using various spellings of the names, (b) using domain names associated with the entities, (c) adapting the domain names using server naming conventions, (d) probing IP addresses around

published IP addresses, (e) using nslookup to verify IP addresses associated with domain names, (f) using information received from Internet Service Providers, and (g) applying heuristics,

automatically by a computer, deriving observations about the technical assets from the collected security characterizations,

automatically by a computer, generating a security rating for each of the entities using the entity map and the derived observations,-and

through a communication network, exposing to users in a user interface the security scores of the entities.

REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

> **8. Claim 1 provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 13/240,572 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because the instant application is broader than application 13/240,572.**
>
> **9. This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.**

The applicant respectfully disagrees. Claim 1 in this application refers to mapping of technical assets to entities and generating a security score based on the mapped technical assets. Claim 1 of the 13/240,572 application does not recite mapping of technical assets to entities. On the other hand, claim 1 of the 13/240,572 application does recite a number of features that are not recited in claim 1 of this application. It is incorrect to say that claim 1 here is broader than claim 1 of the 13/240,572, application because the two claims recite different non-overlapping features.

> **11. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claim(s) 1 is/are directed to collecting characterization of entities and generating a score based on the collected data. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because they are "An Idea 'Of Itself"' (See "Collecting and comparing known information" and "Comparing data to determine a risk level"). The additional language teaches mapping technical assets, collecting eternally observable characterization and generating a security score based on the security characterizations. However, these additional elements are not sufficient to amount to significantly more than the judicial exception because the limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry. Further, the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of a computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.**

The applicant has amended claim 1 to accommodate the examiner's concerns.

> **13. Claim 1-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chris Newton (US Pre-Grant Publication No: 2004/0250122 A1) hereinafter referred to as Newton in view of in view of Shull et al. (US Pre-Grant Publication No: 2006/0212925A 1) hereinafter referred to as Shull.**

The applicant has amended claim 1 and respectfully disagrees with the examiner that claim1 would have been obvious from the Newton reference in view of Shull, for reasons discussed below.

> **As per claim 1, Newton discloses a computer implemented method comprising at least partly by computer, mapping between technical assets that are associated with security characterizations of the respective entities, to the respective entities, (Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company)**

The applicant has amended claim 1 to recite features that were not describe and would not have been made obvious by Newton.

Newton maintained a network intelligence database that stored properties of networks including "hosted services (web servers, email servers)"; "public wireless"; and "organization associations: owned by, partnered with whom". Newton also established "respective reputations for networks". Newton used the database to enable enforcement of policies that were defined by users. As Newton explained in column 5 beginning at 2, "the Policy enforcer 20 then takes that concept, and with the help of the C-NID 14, turns it into a rule set of matching networks, and feeds it to the NID device agent on the mail server 46." In other words, the user in the Newton system defined a policy; the enforcer then located matching networks in the database and enforced the policy against those networks. The emphasis has been added to the word "network" in this paragraph because, among other things, it is significant that Newton did not describe and would not have made obvious a system that maintained in a database an "entity map that maps technical assets to respective entities."

In particular, claim 1 has been amended to recite the feature of "automatically, by a computer, deriving observations about the technical assets from the collected security characterizations." In some implementations, for example, the badness of an IP address can be derived from the intensity and duration of the events of the IP address.

Newton did store properties of networks in a database, but Newton neither described nor would have made obvious "deriving observations" about the technical assets of entities from "collected security characterizations", let alone doing so "automatically by a computer". Nor is that

surprising, because Newton's concern was quite different, namely to enforce user defined policies against communication networks.

Also claim 1 recites that a "security rating" is generated for each of the entities and that is done using the "entity map in the derived observations." Again, although Newton mentioned establishing "reputations" of networks, Newton did not describe and would not have made obvious anything about the generation of a security rating of an entity, let alone generating such a security rating automatically by computer.

The applicant also has added to claim 1 the feature of "exposing to users in a user interface of a portal, information about the security ratings of the entities that is useful to decisions about entities with which to do business." With respect to this feature, too, Newton did not describe and would not have made obvious anything about exposing to users in a user interface of a portal information about the security ratings of the entities that is useful to decisions about entities with which to do business. Newton was not concerned with entities or with security ratings for the entities or with helping a user to make decisions about which entities to do business with and of course Newton did not provide such information to the user through a user interface of a portal.

> **collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, and (Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)**
>
> **but Newton does not teach generating a security score for each of the entities based on the collected characterizations of the mapped technical assets of each of the entities.**

As discussed above, the applicant does not concede that is the only feature of amended claim 1 missing from Newton.

> **However, (Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)**
>
> **It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.**

Claim 1, as amended, recites that a security rating is generated using an entity map that maps technical assets to entities and using observations about the technical assets that are derived from the collected security characterizations. Also recited in claim 1 is the feature that "information about the security ratings of the entities that is useful to decisions about entities with which to do business" is "exposed to users in a user interface of a portal". Shull did not describe and would not have made obvious at least these features, which also were missing from Newton.

As per claim 2, Newton in view of Shull teaches the method of claim 1 in which the technical assets comprise an IP space. (Newton, [0022], teaches "Active security measures, firewalls, IDSs" and [0016] teaches "Hosted services (web servers, email servers)")

As per claim 3, Newton in view of Shull teaches the method of claim 1 in which the mapping comprises querying a regional Internet registry. (Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface' }

As per claim 4, Newton in view of Shull teaches the method of claim 3 in which the mapping comprises submitting a name of one of the entities to the regional Internet registry. (Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")

As per claim 5, Newton in view of Shull teaches the method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name. (Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))

As per claim 6, Newton in view of Shull teaches the method of claim 1 in which the mapping comprises using a domain name associated with the entity.

(Newton, [0029], teaches "Address, contact information. " also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")

As per claim 7, Newton in view of Shull teaches the method of claim 6 in which the mapping comprises using a dig tool on the domain name to determine

a published IP address. (Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy']

As per claim 8, Newton in view of Shull teaches the method of claim 1 in which the mapping comprises probing IP addresses around a published IP address. (Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name

and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy'}

As per claim 9, Newton in view of Shull teaches the method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address. (Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data'}

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per claim 10, Newton in view of Shull teaches the method of claim 6 in which the mapping comprises adapting the domain name with server naming conventions. (Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per claim 11, Newton in view of Shull teaches the method of claim 6 in which the mapping comprises using nslookup to verify an IP address associated with the domain name. (Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per claim 12, Newton in view of Shull teaches the method of claim 2 comprising using the IP space for collecting the security characterizations.

(Newton, [0025], teaches "inappropriate content served (hate sites, porn, pirated software)")

As per claim 13, Newton in view of Shull teaches the method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with. (Newton, [0019] teaches "organization associations: owned by, partnered with whom")

As per claim 14, Newton in view of Shull teaches the method of claim 1 in which the technical assets comprise ranges of IP addresses. (Newton, [0021], teaches "Bandwidth connection to the Internet'}

As per claim 15, Newton in view of Shull teaches the method of claim 1 in which the technical assets comprise servers. (Newton, [0016], teaches "Hosted services (web servers, email servers)")

As per claim 16, Newton in view of Shull teaches the method of claim 1 in which the mapping comprises using information received from Internet Service Providers. (Newton, [0047], teaches "Search Engine Agent, for example a Google. TM. Agent'}

As per claim 17, Newton in view of Shull teaches the method of claim 1 in which the mapping comprises using heuristics. (Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)

As per claim 18, Newton in view of Shull teaches the method of claim 17 comprising persistently updating the heuristics. (Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply any charges or credits to deposit account 06-1050, referencing attorney docket 38879-0006002.

Respectfully submitted,

Date:/5/25/16/_____

/David L. Feigenbaum/_____
David L. Feigenbaum
Reg. No. 30,378

Customer Number 26161
Fish & Richardson P.C.
Telephone: (617) 542-5070
Facsimile: (877) 769-7945

23504012.doc

Electronic Acknowledgement Receipt

EFS ID:	25880842
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	26161
Filer:	David L Feigenbaum/jennifer franco
Filer Authorized By:	David L Feigenbaum
Attorney Docket Number:	38879-0006002
Receipt Date:	25-MAY-2016
Filing Date:	18-NOV-2015
Time Stamp:	13:17:46
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		response.pdf	107545 ab2a84a75a6a92c476f7dce7d29b16d471dff67a	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	10
Warnings:			
Information:			
	Total Files Size (in bytes):	107545	

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

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

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

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

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/944,484	Filing Date 11/18/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

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

APPLICATION AS AMENDED – PART II

AMENDMENT **05/25/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

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

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

LIE
/ANNETTE SMITH/

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
14/944,484	11/18/2015	Stephen Boyer	38879-0006002

CONFIRMATION NO. 2464

26161
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

NONPUBLICATION RESCISSION LETTER



Date Mailed: 04/08/2016

Communication Regarding Rescission Of Nonpublication Request and/or Notice of Foreign Filing

Applicant's rescission of the previously-filed nonpublication request and/or notice of foreign filing is acknowledged. The paper has been reflected in the Patent and Trademark Office's (USPTO's) computer records so that the earliest possible projected publication date can be assigned.

The projected publication date is to be determined pending completion of Security Review..

If applicant rescinded the nonpublication request before or on the date of "foreign filing,"[1] then no notice of foreign filing is required.

If applicant foreign filed the application after filing the above application and before filing the rescission, and the rescission did not also include a notice of foreign filing, then a notice of foreign filing (not merely a rescission) is required to be filed within 45 days of the date of foreign filing. See 35 U.S.C. § 122(b)(2)(B)(iii), and Clarification of the United States Patent and Trademark Office's Interpretation of the Provisions of 35 U.S.C. § 122(b)(2)(B)(ii)-(iv), 1272 Off. Gaz. Pat. Office 22 (July 1, 2003).

If a notice of foreign filing is required and is not filed within 45 days of the date of foreign filing, then the application becomes abandoned pursuant to 35 U.S.C. § 122(b)(2)(B)(iii). In this situation, applicant should either file a petition to revive or notify the Office that the application is abandoned. See 37 CFR 1.137(f). Any such petition to revive will be forwarded to the Office of Petitions for a decision. Note that the filing of the petition will not operate to stay any period of reply that may be running against the application.

Questions regarding petitions to revive should be directed to the Office of Petitions at (571) 272-3282.

[1] Note, for purpose of this notice, that "foreign filing" means "filing an application directed to the same invention in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing".

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

/sstephanos/

Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. 14/944,484
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant BitSight Technologies, Inc.	
(37 CFR §1.98(b))		Filing Date November 18, 2015	Group Art Unit 2492

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	1.	2012/0166458	06-2012	Laudanski et al.			
	2.	2008/0140495	06-2008	Bhamidipaty et al.			
	3.	2012/0158725	06-2012	Molloy et al.			
	4.	2014/0204803	07-2014	Nguyen			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	5.	PAIR transaction history of US application no. 14/021,585 and pending claims as of March 22, 2016.
	6.	PAIR transaction history of US application no. 13/240,572, application as filed and pending claims as of March 22, 2016.

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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))

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

Application Number	14/944,484
Filing Date	November 18, 2015
First Named Inventor	Stephen Boyer
Title	Information Technology Security Assessment System
Atty Docket Number	38879-0006002
Art Unit	2492
Examiner	Simon P. Kanaan

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).*

/David L. Feigenbaum/ — Signature
March 31, 2016 — Date

David L. Feigenbaum — Typed or printed name
30,378 — Registration Number, if applicable

(617) 542-5070
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			
Name (Print/Type)		Date	

23508138.doc

Electronic Patent Application Fee Transmittal

Application Number:	14944484
Filing Date:	18-Nov-2015
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	David L Feigenbaum/jennifer franco
Attorney Docket Number:	38879-0006002

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	2806	1	90	90
		Total in USD ($)		**90**

Electronic Acknowledgement Receipt

EFS ID:	25363717
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	26161
Filer:	David L Feigenbaum/jennifer franco
Filer Authorized By:	David L Feigenbaum
Attorney Docket Number:	38879-0006002
Receipt Date:	31-MAR-2016
Filing Date:	18-NOV-2015
Time Stamp:	16:32:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$90
RAM confirmation Number	3460
Deposit Account	061050
Authorized User	FISH & RICHARDSON P C

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		6002-IDS-1449.pdf	131444 19086d65d738dbfb700897b7610a826e11115616	yes	3
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	2	
	Information Disclosure Statement (IDS) Form (SB08)		3	3	
Warnings:					
Information:					
2	Non Patent Literature	4001-TH-.pdf	111418 af69019d5fc4eefe257fa7b4742c3d9ae7eb22bd	no	2
Warnings:					
Information:					
3	Non Patent Literature	6001-TH-PC-APP.pdf	1080149 bfc6289482bfe155b0158455b6fdd8b5a062627d	no	46
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
4	Rescind Nonpublication Request for Pre Grant Pub	6002-rescind.pdf	165511 b76f73e12de6432aa0ce58bdab6ab5ee366236c5	no	1
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30182 7760804e0f343c7ff8c0a15bbca164a1838f52bd	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1518704		

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor	:	Stephen Boyer	Art Unit	:	2492
Serial No.	:	14/944,484	Examiner	:	Simon P. Kanaan
Filed	:	November 18, 2015	Conf. No.	:	2464
Title	:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM			

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

INFORMATION DISCLOSURE STATEMENT

Please consider the references listed on the attached PTO-1449 form.

A copy of the United States patent document will be provided upon request. Copies of all non-U.S. patent documents and other documents are enclosed.

The United States patent applications and/or patents listed below contain material related to material in this application. Copies of the applications and/or patents, their current claims (in the case of patents), and their transaction histories from the patent office public PAIR website are enclosed (or were provided previously with information disclosure statements identified in the table).

The applicant invites the examiner to consider the claims and claim amendments of these other applications and/or patents, and the positions of the examiners and the applicant that appear in their prosecution histories. The applicant understands that the examiner has direct access to these papers at the patent office, but will be happy to provide copies to the examiner upon request.

US serial number and filing date/ status	Examiner and group art unit	Is patent or application attached and listed on form 1449 and/or what is the date of a prior information disclosure statement with which it was submitted	In the case of an application, are claims attached or what is the date of a prior information disclosure statement with which they were submitted	Is current PAIR transaction history attached and listed on form 1449
61/386,156 9/24/2010 Expired	N/A	No	No	No
61/492,287 6/1/2011 Issued	N/A	No	No	No - Unavailable in PAIR
14/021,585 9/9/2013 Pending	Omar R. Abdul-Ali GAU 2142	No – published application listed on 1449 form	Yes	Yes
13/240,572 9/22/2011 Pending	Simon P. Kanaan GAU 2492	Yes	Yes	Yes

This statement is being filed after a first action on the merits, but before receipt of a final action or a notice of allowance. A late submission fee in the amount of $90, specified by 37 CFR §1.17(p), is being paid with this statement.

Apply any necessary charges or credits to deposit account 06-1050, referencing the above attorney docket number.

Please contact the undersigned if there are any questions regarding this Statement.

Respectfully submitted,

Date:/3/31/16/_____

/David L. Feigenbaum/_____
David L. Feigenbaum
Reg. No. 30,378

Customer Number 26161
Fish & Richardson P.C.
Telephone: (617) 542-5070
Facsimile: (877) 769-7945

23506697.doc

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	38879-0006002	2464

26161 7590 03/11/2016
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER
KANAAN, SIMON P

ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
03/11/2016	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 14/944,484	Applicant(s) BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	AIA (First Inventor to File) Status No

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

Period for Reply

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

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

Status

1)☒ Responsive to communication(s) filed on *11/18/2015*.

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

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

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

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

Disposition of Claims*

5)☒ Claim(s) *1-18* 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) *1-18* is/are rejected.

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

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

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

Application Papers

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

11)☒ The drawing(s) filed on *11/18/2015* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

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

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

Priority under 35 U.S.C. § 119

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

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

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

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

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

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

Attachment(s)

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

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/18/2015*.

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

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Office Action Summary

3. Claims 1-18 are pending in the instant application.

4. Claims 1 is rejected under Double Patenting with application 13/240,572.

5. Claims 1-18 are rejected under 35 USC § 101.

6. Claims 1-18 are rejected under 35 USC § 103.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least

one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/forms/. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more

information about eTerminal Disclaimers, refer to

http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

8. Claim 1 provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 13/240,572 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because the instant application is broader than application 13/240,572.

9. This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claim(s) 1 is/are directed to collecting characterization of entities and generating a score based on the collected data. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because they are "An Idea 'Of Itself'" (See “Collecting and comparing known information” and “Comparing data to determine a risk level”). The additional language teaches mapping technical assets, collecting eternally observable characterization and generating a security score based on the security

characterizations. However, these additional elements are not sufficient to amount to significantly more than the judicial exception because the limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry. Further, the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of a computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 1-18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chris Newton (US Pre-Grant Publication No: 2004/0250122 A1) hereinafter referred to as Newton in view of in view of Shull et al. (US Pre-Grant Publication No: 2006/0212925 A1) hereinafter referred to as Shull.

As per **claim 1**, Newton discloses **a computer implemented method comprising at least partly by computer, mapping between technical assets that are associated with security characterizations of the respective entities, to the**

respective entities, *(Newton, [0012] teaches that every network in the world would have a rating in the database and [0030] teaches establishing a reputation for a network, and [0031] teaches having multiple agents gathering data and figure 1, items 24, teaches information about the network includes "company info resources" i.e. network is associated with a company)*

collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, and *(Newton, [0044]-[0048] and [0029], teaches information gathered externally from multiple sources including proxy information and data mining internet which is public information.)*

but Newton does not teach **generating a security score for each of the entities based on the collected characterizations of the mapped technical assets of each of the entities.**

However, *(Shull [0058] and figure 8, item 812, teaches creating a score for an entity from multiple sources which is similar to a credit score which informs requester of the trust of the entity, this score is received by the requester where activities are accounted for both legitimate (i.e. positive) and illegitimate (i.e. negative) and [0069] and [0073], teaches giving an overall trust score between 1 and 5 i.e. a normalized composite score where 1 is a reputable business and 5 is likely engaged in illicit activity.)*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different

collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 2**, Newton in view of Shull teaches **the method of claim 1 in which the technical assets comprise an IP space.** *(Newton, [0022], teaches "Active security measures, firewalls, IDSs" and [0016] teaches "Hosted services (web servers, email servers)")*

As per **claim 3**, Newton in view of Shull teaches **the method of claim 1 in which the mapping comprises querying a regional Internet registry.** *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface")*

As per **claim 4**, Newton in view of Shull teaches **the method of claim 3 in which the mapping comprises submitting a name of one of the entities to the regional Internet registry.** *(Newton, [0032], teaches "a plurality of network information agents for gathering information about networks and providing the information to the master network intelligence database via the first communication interface" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 5**, Newton in view of Shull teaches **the method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.** *(Newton, [0019], teaches "Organization associations" also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)"))*

As per **claim 6**, Newton in view of Shull teaches **the method of claim 1 in which the mapping comprises using a domain name associated with the entity.** *(Newton, [0029], teaches "Address, contact information." also Shull, [0035], teaches "An online entity may be a person and/or business (such as the owner of a domain, the operator of a server, etc.), a domain name, a hostname, an IP address (and/or network block)")*

As per **claim 7**, Newton in view of Shull teaches **the method of claim 6 in which the mapping comprises using a dig tool on the domain name to determine a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 8**, Newton in view of Shull teaches **the method of claim 1 in which the mapping comprises probing IP addresses around a published IP address.** *(Newton, [0027], teaches "Geographic placement" and [0029], teaches "Address, contact information" and Shull, [0036], teaches "The identifying information and/or aggregate history of the domain name and/or IP address may also be analyzed and/or assigned a probability score indicating the probability that the entity is trustworthy")*

As per **claim 9**, Newton in view of Shull teaches **the method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 10**, Newton in view of Shull teaches **the method of claim 6 in which the mapping comprises adapting the domain name with server naming**

conventions. (*Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 11**, Newton in view of Shull teaches **the method of claim 6 in which the mapping comprises using nslookup to verify an IP address associated with the domain name. (***Shull, [0033], teaches "entity's trustworthiness may include, without limitation, WHOIS data, network registration data, UDRP data, DNS record data, hostname data")*

It would have been obvious at the time of the invention for one of the ordinary skill in the art to modify the method of collecting security characteristics from multiple sources as taught by Newton by creating a score representative of the different collected data as taught by Shull because it would aid the requester in determining whether the entity is trusted or not.

As per **claim 12**, Newton in view of Shull teaches **the method of claim 2 comprising using the IP space for collecting the security characterizations.**

(Newton, [0025], teaches "inappropriate content served (hate sites, porn, pirated software)")

As per **claim 13**, Newton in view of Shull teaches **the method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.** *(Newton, [0019] teaches "organization associations: owned by, partnered with whom")*

As per **claim 14**, Newton in view of Shull teaches **the method of claim 1 in which the technical assets comprise ranges of IP addresses.** *(Newton, [0021], teaches "Bandwidth connection to the Internet")*

As per **claim 15**, Newton in view of Shull teaches **the method of claim 1 in which the technical assets comprise servers.** *(Newton, [0016], teaches "Hosted services (web servers, email servers)")*

As per **claim 16**, Newton in view of Shull teaches **the method of claim 1 in which the mapping comprises using information received from Internet Service Providers.** *(Newton, [0047], teaches "Search Engine Agent, for example a Google.TM. Agent")*

As per **claim 17**, Newton in view of Shull teaches **the method of claim 1 in which the mapping comprises using heuristics.** *(Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

As per **claim 18**, Newton in view of Shull teaches **the method of claim 17 comprising persistently updating the heuristics**. (*Newton, [0041], teaches giving different information different weight where less weight given to information as it becomes less important over time which is a statistical correlation with the information collected.)*

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Kanaan whose telephone number is (571) 270-3906. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Saleh Najjar, can be reached at the following telephone number: (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).

/S. K./
Examiner, Art Unit 2432
/SALEH NAJJAR/
Supervisory Patent Examiner, Art Unit 2492

Notice of References Cited	Application/Control No. 14/944,484	Applicant(s)/Patent Under Reexamination BOYER ET AL.	
	Examiner SIMON KANAAN	Art Unit 2492	Page 1 of 1

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*	C	US-7,100,195 B1	08-2006	Underwood; Roy Aaron	G06F9/4443	707/999.009
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	H	US-				
	I	US-				
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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
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	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.

Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant BitSight Technologies, Inc.	
(37 CFR §1.98(b))		Filing Date November 18, 2015	Group Art Unit unknown

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Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
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Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No

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	17.	"Twenty Critical Controls for Effective Cyber Defense: Consensus Audit," Version 2.3, November 13, 2009, retrieved on April 9, 2010 from http://www.sans.org/critical-security-controls/print.php.
	18.	"An Executive View of IT Governance," IT Governance Institute, 2009, 32 pages.
	19.	Lippmann, R.P., et aI., "An Annotated Review of Papers on Attack Graphs," Project Report IA-1, Lincoln Laboratory, Massachusetts Institute of Technology, March 31, 2005, 39 pages.

Examiner Signature	Date Considered
/Simon Kanaan/	03/06/2016

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.K./

Black Lotus Ex. 1002, Page 332 of 424

Substitute Disclosure Form / U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	38879-0006002	unknown
	Applicant: BitSight Technologies, Inc.	
	Filing Date: November 18, 2015	Group Art Unit: unknown

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Examiner Signature	Date Considered
/Simon Kanaan/	03/06/2016

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Black Knite Ex. 1002, Page 333 of 424

Substitute Disclosure Form / U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	38879-0006002	unknown
	Applicant: BitSight Technologies, Inc.	
	Filing Date: November 18, 2015	Group Art Unit: unknown

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Examiner Signature	Date Considered
/Simon Kanaan/	03/06/2016

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Black Lotus Ex. 1002, Page 334 of 424

Substitute Disclosure Form / U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	38879-0006002	unknown
	Applicant: BitSight Technologies, Inc.	
	Filing Date: November 18, 2015	Group Art Unit: unknown

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	60.	PAIR transaction history of US application no. 61/386,156 as of October 7, 2015.
	61.	PAIR transaction history and pending claims of USSN 14/021,585 as of November 18, 2015.
	62.	Application as filed, PAIR transaction history and pending claims of USSN 13/240,572 as of November 18, 2015.

Examiner Signature	/Simon Kanaan/	Date Considered	03/06/2016

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CONFIRMATION NO. 2464

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/944,484	11/18/2015	726	2492	38879-0006002

APPLICANTS

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Stephen Boyer, Cambridge, MA;
Nagarjuna Venna, Waltham, MA;
Megumi Ando, Cambridge, MA;

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

This application is a CON of 13/240,572 09/22/2011
which claims benefit of 61/492,287 06/01/2011
and claims benefit of 61/386,156 09/24/2010

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

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☐ Yes ☑ No	☐ Yes ☑ No	/SIMON P KANAAN/ Examiner's Signature	☐ Initials	MA	3	18	1

ADDRESS

FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022
UNITED STATES

TITLE

Information Technology Security Assessment System

FILING FEE RECEIVED		
800	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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	2492

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor and Assignee Search + text (PALM)	3/6/2016	SK
USPC: (EAST: 726/1,2,22,25+text)	3/6/2016	SK
CPC (EAST: H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00 + text)	3/6/2016	SK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/SIMON KANAAN/ Examiner.Art Unit 2492	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14944484	BOYER ET AL.
	Examiner	Art Unit
	SIMON KANAAN	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	03/06/2016								
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	3	✓								
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	13	✓								
	14	✓								
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	18	✓								

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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L4	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L5	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L6	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L7	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L8	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L9	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L10	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L11	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L12	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L14	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L16	10	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L17	0	malwareurl	US-PGPUB;	ADJ	ON	2016/03/06 22:23

			USPAT			
L18	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L20	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L21	153	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L22	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L23	5851	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L24	70	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L25	134	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L29	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L27	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L30	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L27	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L31	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L27	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L32	0	L27 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L33	0	L27 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L34	0	L27 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L35	0	L27 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L36	0	L27 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L37	7	L27 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L38	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L39	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L40	240	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L41	455	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L42	432	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L43	269	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L44	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L45	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L46	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L47	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L48	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L50	49	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L51	21	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L52	43	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L53	1457	site secure	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L54	534	L53 and third party	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L55	203	L54 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L56	220	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L58	17	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L59	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L60	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L61	493	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L62	275	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L63	9	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L64	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L65	7	L64 not L63	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L70	4696	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L71	1144	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L72	19584	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L73	126	L71 and L72	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L74	688	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L75	59	L74 and L72	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L76	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L77	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L78	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L79	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L80	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L81	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L82	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L83	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L84	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L85	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L86	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L87	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

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L89	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L90	25	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L91	10	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L92	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L93	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L94	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L97	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L98	5851	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L99	70	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L107	0	L102 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L108	0	L102 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L109	0	L102 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L110	0	L102 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L111	0	L102 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
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L117	455	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L118	432	((external$5 or third party) with (audit$4 or observ$5)) and reputation and	US-PGPUB;	ADJ	ON	2016/03/06 22:23

		security and rat$3	USPAT			
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L122	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L127	43	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L128	1457	site secure	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L129	534	L128 and third party	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L130	203	L129 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L131	220	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L133	17	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L134	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L135	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L136	493	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L137	275	network (reputation or assess$4 or rat$3)	US-	ADJ	ON	2016/03/06

		with public and security	US-PGPUB; USPAT			2016/03/06 22:23
L138	9	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L139	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
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L141	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L142	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L143	4696	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L144	1144	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L145	19584	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L146	126	L144 and L145	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L147	688	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L148	59	L147 and L145	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L151	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L152	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L153	34	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L154	24	L153 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L155	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L156	39380	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L157	511	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L158	144	L157 and L156	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L159	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L160	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/03/06 22:23
L163	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L164	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L165	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L166	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L167	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L168	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L169	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L170	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L171	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L172	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L173	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L174	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L175	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L176	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L177	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L178	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L177	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L179	275	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L180	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L181	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L183	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L184	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L185	0	L183 and L184	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L186	269	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L187	0	L183 and L185	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L188	0	L183 and L186	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L189	39380	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

		H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)				
L190	8	L184 and L189	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L191	63	L186 and L189	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L192	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L193	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L194	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L195	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L196	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L197	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L198	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L199	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L200	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L201	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L202	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L203	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L204	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L205	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L206	25	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L207	10	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L208	0	malwareurl	US-	ADJ	ON	2016/03/06

			PGPUB; USPAT			22:23
L209	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L210	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L211	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L212	153	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L213	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L214	5851	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L215	70	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L216	134	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L217	64	L216 not L215	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L218	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L219	0	L216 and L218	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L220	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L218	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L221	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L218	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L222	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L218	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L223	0	L218 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L224	0	L218 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L225	0	L218 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L226	0	L218 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L227	0	L218 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L228	7	L218 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L229	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L230	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L231	240	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L232	455	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L233	432	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L234	269	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L235	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L236	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L237	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L238	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L239	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L240	49	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L241	21	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L242	43	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L243	1457	site secure	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L244	534	L243 and third party	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L245	203	L244 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L246	220	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L247	205	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L248	17	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L249	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L250	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L251	493	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L252	275	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L253	9	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L254	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L255	7	L254 not L253	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L256	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L257	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L258	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L259	4696	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L260	1144	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L261	19584	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L262	126	L260 and L261	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L263	688	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L264	59	L263 and L261	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L265	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L266	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L267	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L268	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L269	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L270	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L271	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L272	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L273	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L274	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L275	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L276	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L277	0	(external$5 or third party) with (security) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L278	0	(external$5 or third party) with (commercial near data) with reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L279	25	internet monitoring with report	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L280	10	internet monitoring with report and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L281	0	malwareurl	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L282	0	malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L283	0	www$malwareurl$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L284	0	www$malwareurl$com	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L285	153	arbor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L286	1	arbor networks and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L287	5851	reputation and domain	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L288	70	reputation and domain and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L289	134	reputation and (insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L290	64	L289 not L288	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L291	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L292	0	L289 and L291	US-	ADJ	ON	2016/03/06

			PGPUB; USPAT			22:23
L293	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L291	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L294	0	(industry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L291	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L295	0	(industry reports or internet monitoring or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L291	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L296	0	L291 and user behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L297	0	L291 and behavior	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L298	0	L291 and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L299	0	L291 and public with features	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L300	0	L291 and externally	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L301	7	L291 and external	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L302	34	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L303	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L304	24	((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L305	240	((external$5 or third party) with audit$4)and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L306	455	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L307	432	((external$5 or third party) with (audit$4 or observ$5)) and reputation and	US-PGPUB;	ADJ	ON	2016/03/06 22:23

		security and rat$3	USPAT			
L308	269	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L309	0	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data sources	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L310	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L311	4	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rating and commercial data	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L312	4	security and renesys	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L313	1	abor networks	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L314	49	(network near3 vulnerability) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L315	21	(network near3 assessment) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L316	43	(network near3 assessment) with external$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L317	1457	site secure	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L318	534	L317 and third party	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L319	203	L318 and assess$3	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L320	220	network reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L321	205	network reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L322	17	network reputation with (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L323	10	network reputation with (rat$3 or assess$4) and public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L324	3	network reputation with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L325	493	network (reputation or assess$4 or rat$3) with public	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L326	275	network (reputation or assess$4 or rat$3)	US-	ADJ	ON	2016/03/06

		with public and security	US-PGPUB; USPAT			22:23
L327	9	network (reputation or assess$4 or rat$3) with public with security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L328	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L329	7	L328 not L327	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L330	2	"20040250122"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L331	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L332	4696	(organization or company or entity) same reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L333	1144	(organization or company or entity) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L334	19584	726/1,2,22,25.ccls.	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L335	126	L333 and L334	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L336	688	(organization or company) same reputation same (score or rating)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L337	59	L336 and L334	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L338	2	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation and (proprietary information)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L339	16	network (reputation or assess$4 or rat$3) with public with secur$5	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L340	34	726/1,2,22,25.ccls. and ((external$5 or third party) with audit$4)and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L341	24	L340 AND ((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L342	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L343	39380	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L344	511	(network or organization or entity) reputation and (rat$3 or assess$4)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L345	144	L344 and L343	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L346	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L347	0	"11237642"	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/03/06 22:23
L348	0	"13240572"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L349	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L350	0	apparatus and method for network vulnerability detection and compliance	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L351	0	network vulnerability detection and compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L352	0	network vulnerability detection compliance assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L353	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L354	7	network with vulnerability with detection with compliance with assessment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L355	39	726/2,22,25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L356	31	726/2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L357	42	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L358	3	726/1,2,22,25.ccls. and (external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L359	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L360	11	726/25.ccls. and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

L361	0	network with vulnerability with detection with compliance with assesment	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L362	20	US-7194769-$.DID. OR US-7290275-$.DID. OR US-7971252-$.DID. OR US-20040010709-$.DID. OR US-20050138413-$.DID. OR US-20080047018-$.DID. OR US-20080209565-$.DID. OR US-20090265787-$.DID. OR US-20090293128-$.DID. OR US-2007304-$.DID. OR US-5200596-$.DID. OR US-2009104-$.DID. OR US-422009D-$.DID. OR US-1331018-$.DID.	US-PGPUB; USPAT; USOCR; EPO; DERWENT	ADJ	ON	2016/03/06 22:23
L363	0	(insustry reports or internet monitoring web site or news article or court record) and (renesys or propriety data or arbor networks or user behavior) and L362	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L364	275	network (reputation or assess$4 or rat$3) with public and security	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L365	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L366	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L367	92	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.) and (external$5 or third party) and (security) and (WGET or RSYNC or CURL)	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L368	118	(external$5 or third party) and (security) and (commercial near data) and reputation	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L369	0	L367 and L368	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L370	269	((external$5 or third party) with (audit$4 or observ$5)) and reputation and security and rat$3 and commercial	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L371	0	L367 and L369	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L372	0	L367 and L370	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L373	39380	((H04L63/20 OR H04L63/145 OR H04L67/306 OR H04L63/14 OR H04L51/12 OR H04L61/1511 OR H04L63/0236 OR H04L63/104 OR	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23

		H04L63/1433 OR H04L9/321 OR G06F21/577 OR G06F21/00).CPC.)				
L374	8	L368 and L373	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L375	63	L370 and L373	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:23
L384	0	"14944484"	US-PGPUB; USPAT	ADJ	ON	2016/03/06 22:45

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L49	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L69	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L149	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L150	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L161	0	"11237642"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L162	1	"11368329"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L182	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L376	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L377	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L378	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L379	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L380	0	"11237642"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L381	1	"11368329"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23
L382	0	"13240572"	US-PGPUB; USPAT; * No UPAD	ADJ	ON	2016/03/06 22:23

3/6/2016 10:45:32 PM
C:\Users\skanaan\Documents\EAST\Workspaces\14944484.wsp

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/944,484	11/18/2015	Stephen Boyer	38879-0006002	2464

26161 7590 01/22/2016
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
ART UNIT	PAPER NUMBER
2492	

NOTIFICATION DATE	DELIVERY MODE
01/22/2016	ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

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Commissioner for Patents
United States Patent and Trademark Office
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Doc Code:
TRACK1.GRANT

Decision Granting Request for Prioritized Examination (Track I or After RCE)	Application No.:14/944,484

1. THE REQUEST FILED November 18, 2015 IS **GRANTED.**

The above-identified application has met the requirements for prioritized examination
- A. ☒ for an original nonprovisional application (Track I).
- B. ☐ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination.** The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

- A. filing a **petition for extension of time** to extend the time period for filing a reply;
- B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims**, or a multiple dependent claim;
- C. filing a **request for continued examination**;
- D. filing a notice of appeal;
- E. filing a request for suspension of action;
- F. mailing of a notice of allowance;
- G. mailing of a final Office action;
- H. completion of examination as defined in 37 CFR 41.102; or
- I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to Kimberly Inabinet at 571-272-4618.

/Kimberly Inabinet/ Paralegal Specialist, Office of Petitions

Office of Petitions: Routing Sheet



Application No. 14/944,484

This application is being forwarded to your office for further processing. A decision has been rendered on a petition filed in this application, as indicated below. For details of this decision, please see the document PET.OP.DEC filed on the same date as this document.

- [X] **GRANTED**
- [ ] **DISMISSED**
- [ ] **DENIED**

Office of Petitions: Decision Count Sheet

Mailing Month: 1

Application No.: 14944484

For US serial numbers: enter number only, no slashes or commas. Ex: 10123456
For PCT: enter "51+single digit of year of filing+last 5 numbers", Ex. for PCT/US05/12345, enter 51512345

Deciding Official: Kimberly Inabinet

Count (1) - Palm Credit 14/944,484

Decision: GRANT

FINANCE WORK NEEDED
☐ Select Check Box for YES

Decision Type: 643 - Track One request

Notes:

Count (2)

Decision: n/a

FINANCE WORK NEEDED
☐ Select Check Box for YES

Decision Type: NONE

Notes:

Count (3)

Decision: n/a

FINANCE WORK NEEDED
☐ Select Check Box for YES

Decision Type: NONE

Notes:

Initials of Approving Official (if required)

If more than 3 decisions, attach 2nd count sheet & mark this box ☐

Printed on: *1/15/2016*

Office of Petitions Internal Document - Ver. 5.0

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/944,484	11/18/2015	2447	800	38879-0006002	18	1

CONFIRMATION NO. 2464

26161
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

FILING RECEIPT



Date Mailed: 12/10/2015

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**

Inventor(s)

Stephen Boyer, Cambridge, MA;
Nagarjuna Venna, Waltham, MA;
Megumi Ando, Cambridge, MA;

Applicant(s)

BitSight Technologies, Inc., Cambridge, MA;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 13/240,572 09/22/2011
which claims benefit of 61/492,287 06/01/2011
and claims benefit of 61/386,156 09/24/2010

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: No

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No
**** SMALL ENTITY ****
Title

Information Technology Security Assessment System

Preliminary Class

709

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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 (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/944,484

APPLICATION AS FILED - PART I

	(Column 1)	(Column 2)	SMALL ENTITY		OR	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	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	18 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	730		TOTAL	

APPLICATION AS AMENDED - PART II

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

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

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

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
14/944,484	11/18/2015	Stephen Boyer	38879-0006002

CONFIRMATION NO. 2464

26161
FISH & RICHARDSON P.C. (BO)
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

INFORMAL NOTICE

OC00000079238111

Date Mailed: 12/10/2015

INFORMATIONAL NOTICE TO APPLICANT

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
  Stephen Boyer
  Nagarjuna Venna
  Megumi Ando

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

/ygizaw/

FISH.
FISH & RICHARDSON

Street Address
Fish & Richardson P.C.
One Marina Park Drive
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Mail Address
P.O. Box 1022
Minneapolis, MN 55440-1022

617 542 5070 main
877 769 7945 fax

November 18, 2015

Attorney Docket No.: 38879-0006002

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

Presented for filing is a new continuation patent application for prioritized examination of:

Inventor(s): STEPHEN BOYER, NAGARJUNA VENNA AND MEGUMI ANDO

Title: INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

This application claims the benefit of priority to the following application(s):

Application No.	Country	Filing Date (MM/DD/YYYY)
13/240,572	United States	09/22/2011
61/492,287	United States	06/01/2011
61/386,156	United States	09/24/2010

Enclosed are the following papers, including those required to receive a filing date under 37 C.F.R. § 1.53(b):

	Pages
Specification	23
Claims	2
Abstract	1
Drawing(s)	3

Enclosures:

— Application Data Sheet, 7 pages.
— New disclosure information, including:
Information disclosure statement, 2 pages.
PTO-1449, 4 pages.
— Request for Non Publication, 1 page.
— Certification and Request for Prioritized Examination (Track I), 1 page

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Commissioner for Patents
November 18, 2015

This application is a continuation application and claims priority under 35 U.S.C. §120 to U.S. application 13/240,572, filed September 22, 2011, entitled "Information Technology Security Assessment System", which claims priority to U.S. Prov. Pat. App. No. 61/386,156 entitled "Enterprise Information Security Score" and filed on Sept. 24, 2010; and 61/492,287 entitled "Information Technology Security Assessment System" and filed on June 1, 2011 which are hereby incorporated herein in their entirety by reference.

Applicant claims small entity status. See 37 CFR 1.27.

Basic Filing Fee			$70
Search Fee			$300
Examination Fee			$360
Publication fee			$0
Track I processing fee			$70
Track I prioritized examination fee			$2000
Total Claims 18	over 20	**0 x $40**	$0
Independent Claims 1	over 3	**0 x $210**	$0
Fee for Multiple Dependent claims			$0
Application size fee for each 50 pages over 100 Total Sheets: 29x .75 - 100/50 = 0x			$0
Total Filing fee			$2800

The filing fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply all charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 38879-0006002.

If this application is found to be incomplete, or if a telephone conference would otherwise be helpful, please call the undersigned at (617) 542-5070.

Please direct all correspondence to the following:

26161
PTO Customer Number

FISH.
FISH & RICHARDSON

Commissioner for Patents
November 18, 2015

Respectfully submitted,

/David L. Feigenbaum/

David L. Feigenbaum

Reg. No. 30,378
23461016.doc

Doc Code: TRACK1.REQ
Document Description: TrackOne Request

PTO/AIA/424 (03-14)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Stephen Boyer	Non provisional Application Number (if known):	
Title of Invention:	Information Technology Security Assessment System		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1), the prioritized examination fee set forth in 37 CFR 1.17(c), and if not already paid, the publication fee set forth in 37 CFR 1.18(d) have been filed with the request. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.

2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims.

3. The applicable box is checked below:

I. ☒ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

i. (a) The application is an original non provisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original non provisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, **or** the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

i. A request for continued examination has been filed with, or prior to, this form.
ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
iii. The application is an original non provisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /David L. Feigenbaum/	Date November 18, 2015
Name (Print/Typed) David L. Feigenbaum	Practitioner Registration Number 30,378

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

☒ *Total of 1 forms are submitted.

AmericanLegalNet, Inc.
www.FormsWorkflow.com

NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)		
	First Named Inventor	Stephen Boyer
	Title	Information Technology Security Assessment System
	Attorney Docket Number	38879-0006002

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

/David L. Feigenbaum/	November 18, 2015
Signature	Date
David L. Feigenbaum	30,378
Typed or printed name	Registration Number, if applicable
617-542-5070	
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)).**

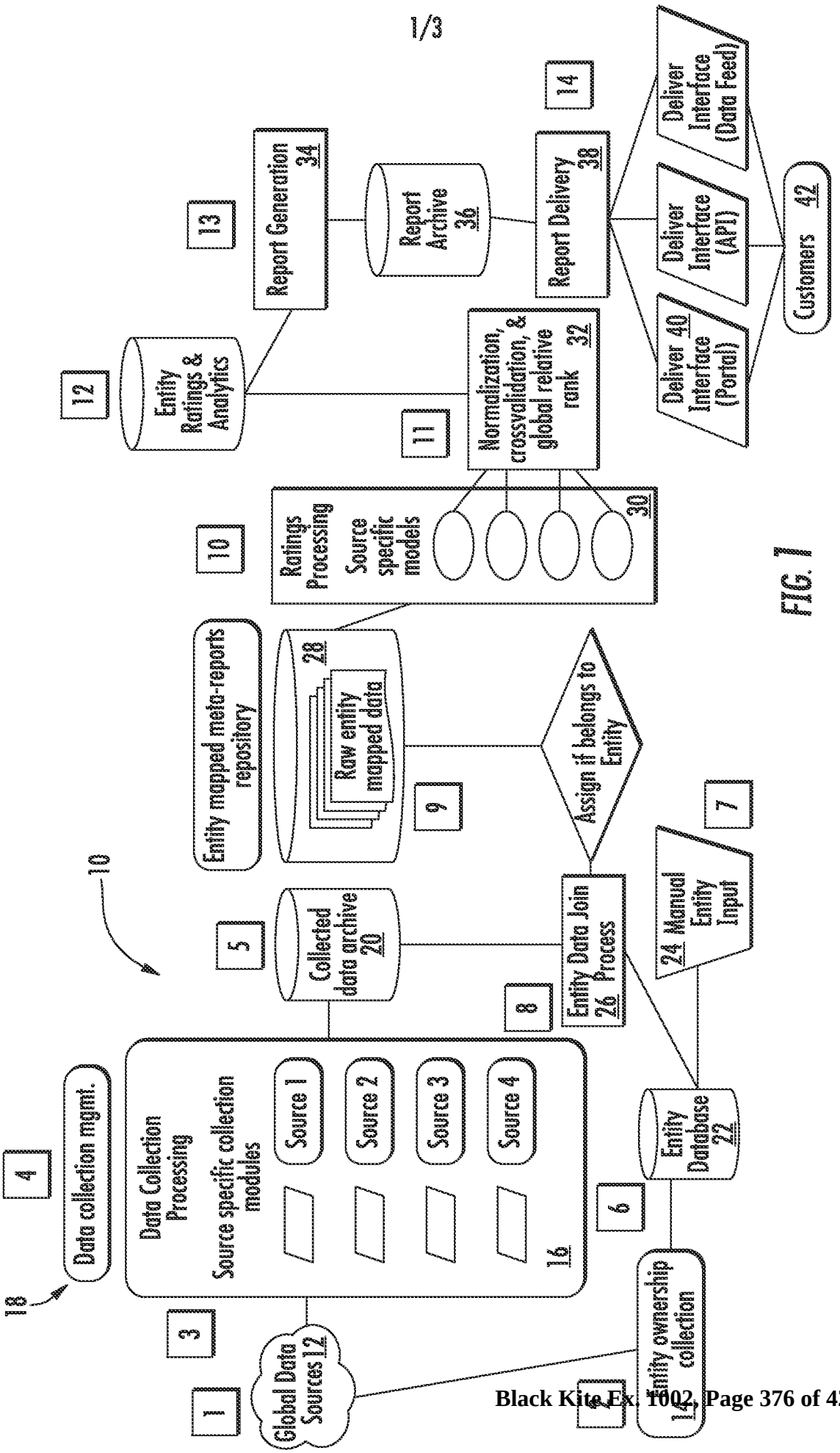

1/3
Global Data Sources 12
Entity ownership collection
Data collection mgmt.
Data Collection Processing
Source specific collection modules
Source 1
Source 2
Source 3
Source 4
Collected data archive 20
Entity Data Join 26 Process
Assign if belongs to Entity
Raw entity mapped data
Entity mapped meta-reports repository
Ratings Processing
Source specific models
Normalization, crossvalidation, & global relative rank 32
Entity Ratings & Analytics
Report Generation 34
Report Archive 36
Report Delivery 38
Deliver Interface (Data Feed)
Deliver Interface (API)
Deliver Interface (Portal)
Customers 42
24 Manual Entity Input
Entity Database 22
10

FIG. 1

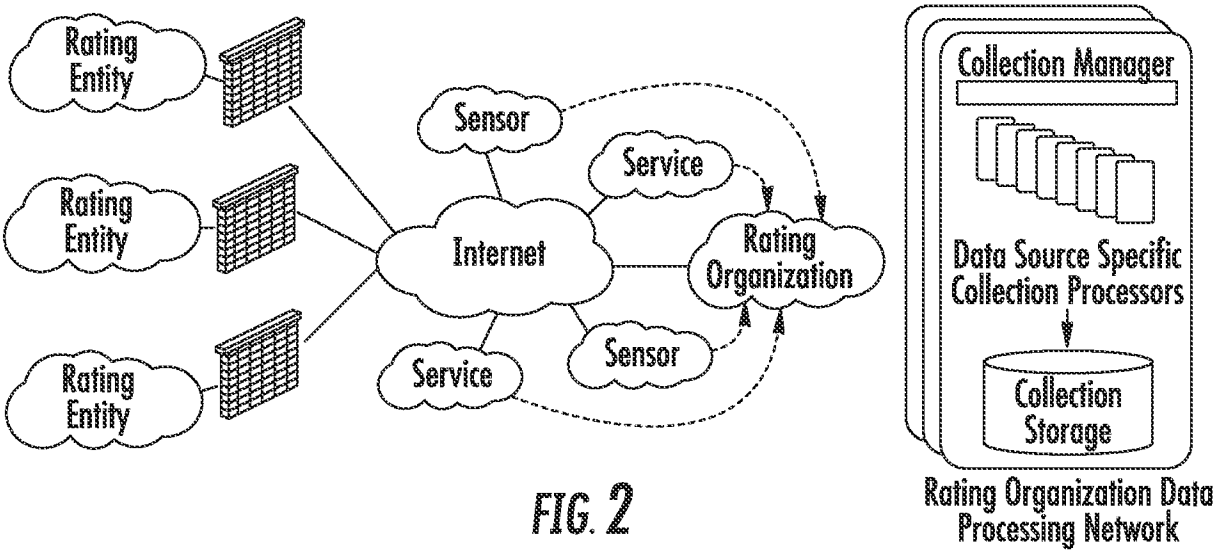

Rating Entity
Rating Entity
Rating Entity
Internet
Sensor
Service
Rating Organization
Service
Sensor
Collection Manager
Data Source Specific Collection Processors
Collection Storage
Rating Organization Data Processing Network

FIG. 2

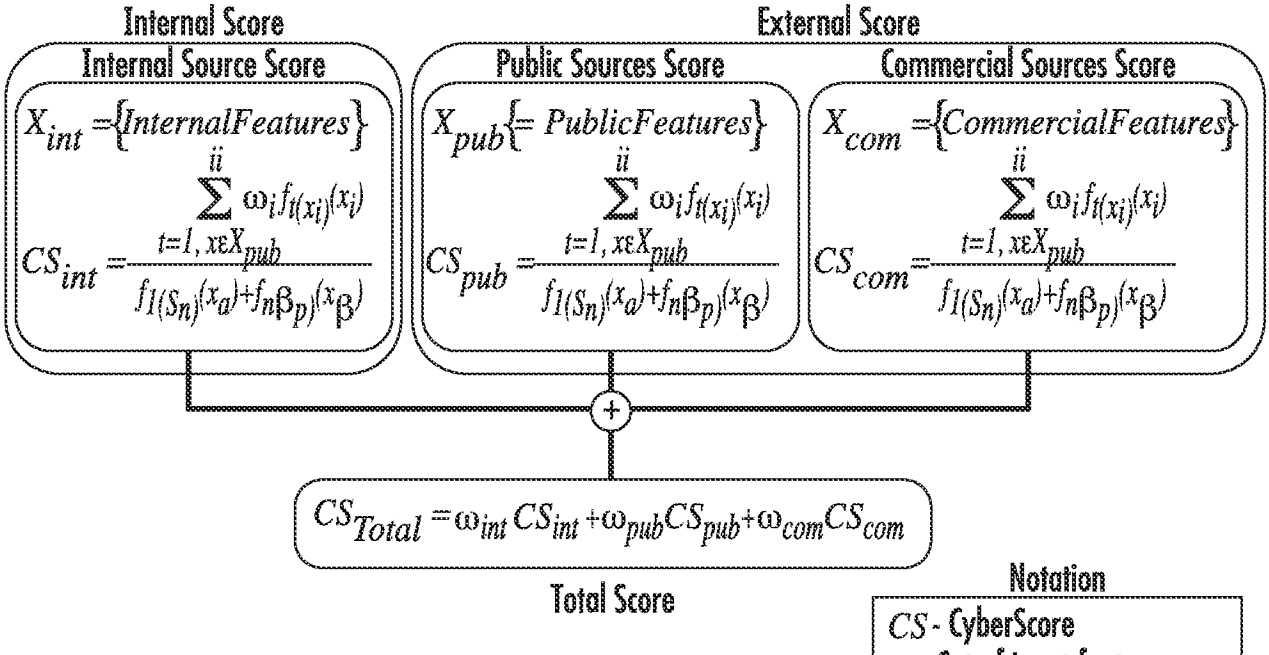

Internal Score
Internal Source Score
$X_{int} = \{InternalFeatures\}$
$CS_{int} = \frac{\sum_{t=1, x \varepsilon X_{pub}}^{ii} \omega_i f_{t(x_i)}(x_i)}{f_{1(S_n)}(x_\alpha) + f_n \beta_p)(x_\beta)}$
External Score
Public Sources Score
$X_{pub} \{= PublicFeatures\}$
$CS_{pub} = \frac{\sum_{t=1, x \varepsilon X_{pub}}^{ii} \omega_i f_{t(x_i)}(x_i)}{f_{1(S_n)}(x_\alpha) + f_n \beta_p)(x_\beta)}$
Commercial Sources Score
$X_{com} = \{CommercialFeatures\}$
$CS_{com} = \frac{\sum_{t=1, x \varepsilon X_{pub}}^{ii} \omega_i f_{t(x_i)}(x_i)}{f_{1(S_n)}(x_\alpha) + f_n \beta_p)(x_\beta)}$
+
$CS_{Total} = \omega_{int} CS_{int} + \omega_{pub} CS_{pub} + \omega_{com} CS_{com}$
Total Score
Notation
CS - CyberScore
X - Set of input features
$\sum^{ii} \omega_i = 1$ - Feature weights
$f_{t(x)}(x)$ - Feature transformation

FIG. 3

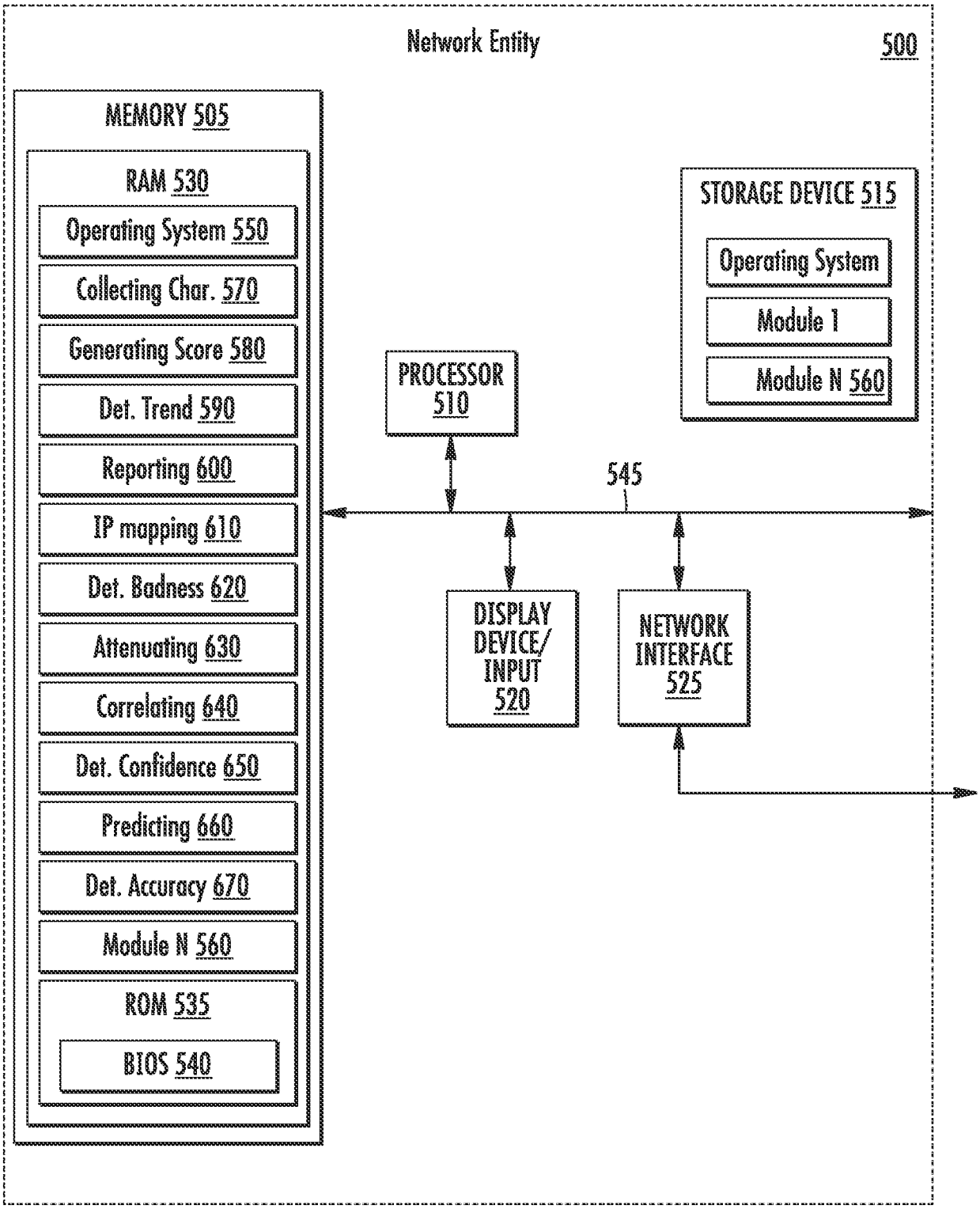

Network Entity
500
MEMORY 505
RAM 530
Operating System 550
Collecting Char. 570
Generating Score 580
Det. Trend 590
Reporting 600
IP mapping 610
Det. Badness 620
Attenuating 630
Correlating 640
Det. Confidence 650
Predicting 660
Det. Accuracy 670
Module N 560
ROM 535
BIOS 540
PROCESSOR 510
545
STORAGE DEVICE 515
Operating System
Module 1
Module N 560
DISPLAY DEVICE/ INPUT 520
NETWORK INTERFACE 525

FIG. 4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor	:	Stephen Boyer	Art Unit	:	Unknown
Serial No.	:	unknown	Examiner	:	Unknown
Filed	:	November 18, 2015			
Title	:	INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM			

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

INFORMATION DISCLOSURE STATEMENT

Please consider the references listed on the attached PTO-1449 form.

A copy of the United States patent document will be provided upon request. Copies of all non-U.S. patent documents and other documents are enclosed.

The United States patent applications and/or patents listed below contain material related to material in this application. Copies of the applications and/or patents, their current claims (in the case of patents), and their transaction histories from the patent office public PAIR website are enclosed (or were provided previously with information disclosure statements identified in the table).

The applicant invites the examiner to consider the claims and claim amendments of these other applications and/or patents, and the positions of the examiners and the applicant that appear in their prosecution histories. The applicant understands that the examiner has direct access to these papers at the patent office, but will be happy to provide copies to the examiner upon request.

US serial number and filing date/ status	Examiner and group art unit	Is patent or application attached and listed on form 1449 and/or what is the date of a prior information disclosure statement with which it was submitted	In the case of an application, are claims attached or what is the date of a prior information disclosure statement with which they were submitted	Is current PAIR transaction history attached and listed on form 1449
61/386,156 9/24/2010 Expired	N/A	No	No	No
61/492,287 6/1/2011 Issued	N/A	No	No	No - Unavailable in PAIR

14/021,585 9/9/2013 Pending	TBA GAU 2431	No – published application listed on 1449 form	Yes	Yes
13/240,572 9/22/2011 Pending	Simon P. Kanaan GAU 2423	Yes	Yes	Yes

Under 35 USC §120, this application relies on the earlier filing date of application serial number 13/240,572, filed on September 22, 2011. The following references were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application:

Desig. IDs:

1-60

This statement is being filed with the application.

Apply any necessary charges or credits to deposit account 06-1050, referencing the above attorney docket number.

Please contact the undersigned if there are any questions regarding this Statement.

Respectfully submitted,

Date:/11/18/15/_____

/David L. Feigenbaum/_____
David L. Feigenbaum
Reg. No. 30,378

Customer Number 26161
Fish & Richardson P.C.
Telephone: (617) 542-5070
Facsimile: (877) 769-7945
23461021.doc

Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant BitSight Technologies, Inc.	
(37 CFR §1.98(b))		Filing Date November 18, 2015	Group Art Unit unknown

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	1.	2004/0250122	12-2004	Newton, Chris			
	2.	2004/0193918	09-2004	Green et al.			
	3.	2005/0108415	05-2005	Turk et al.			
	4.	7,194,769	03-2007	Lippmann et al.			
	5.	7,290,275	10-2007	Baudoin et al.			
	6.	7,971,252	06-2011	Lippmann et al.			
	7.	2004/0010709	01-2004	Baudoin et al.			
	8.	2005/0138413	06-2005	Lippmann et al.			
	9.	2008/0047018	02-2008	Baudoin et al.			
	10.	2008/0209565	08-2008	Baudoin et al.			
	11.	2009/0265787	10-2009	Baudoin et al.			
	12.	2009/0293128	11-2009	Lippmann et al.			
	13.	2006/0212925	09-2006	Shull et al.			
	14.	2015/0074579	3-2015	Gladstone et al			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	15.	Edmonds, Robert, "ISC Passive DNS Architecture", Internet Systems Consortium, Inc., March 2012 (18 pages).
	16.	SBIR Phase I: Enterprise Cyber Security Scoring, CyberAnalytix, LLC, http://www.nsf.gov/awardsearch/showAward. do?AwardNumber=1013603, April 28, 2010.
	17.	"Twenty Critical Controls for Effective Cyber Defense: Consensus Audit," Version 2.3, November 13, 2009, retrieved on April 9, 2010 from http://www.sans.org/critical-security-controls/print.php.
	18.	"An Executive View of IT Governance," IT Governance Institute, 2009, 32 pages.
	19.	Lippmann, R.P., et aI., "An Annotated Review of Papers on Attack Graphs," Project Report IA-1, Lincoln Laboratory, Massachusetts Institute of Technology, March 31, 2005, 39 pages.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant BitSight Technologies, Inc.	
(37 CFR §1.98(b))		Filing Date November 18, 2015	Group Art Unit unknown

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	20.	Artz, Michael Lyle, "NetSPA: A Network Security Planning Architecture," Massachusetts Institute of Technology, May 24, 2002, 97 pages.
	21.	Nye, John, "Avoiding Audit Overlap," Moody's Risk Services, Presentation, Source Boston, March 14,2008, 19 pages.
	22.	"Agreed Upon Procedures," Version 4.0, BITS, The Financial Institution Shared Assessments Program, Assessment Guide, September 2008, 56 pages.
	23.	"Master Security Criteria," Version 3.0, BITS Financial Services Security Laboratory, October, 2001, 47 pages.
	24.	The Financial Institution Shared Assessments Program, Industry Positioning and Mapping Document, BITS, October 2007, 44 pages.
	25.	Browne, Niall, et al., "Shared Assessments Program AUP and SAS70 Frequently Asked Questions," BITS, 4 pages.
	26.	"Shared Assessments: Getting Started," BITS, 2008, 4 pages.
	27.	Boyer, Stephen, et aI., "Playing with Blocks: SCAP-Enable Higher-Level Analyses, MIT Lincoln Laboratory, 5th Annual IT Security Automation Conference, October 26-29, 2009, 35 pages.
	28.	Buckshaw, Donald L., "Use of Decision Support Techniques for Information System Risk Management," submitted for publication in Wiley's Encyclopedia of Quantitative Risk Assessment in January 2007, 11 pages.
	29.	Buehler, Kevin S., et al., "Running with risk," The McKinsey Quarterly, No.4, 2003, pp. 40-49.
	30.	Chu, Matthew, et al., "Visualizing Attack Graphs, Reachability, and Trust Relationships with NAVIGATOR," MIT Lincoln Library, VizSEC '10, Ontario, Canada, September 14, 2010, 12 pages.
	31.	The CIS Security Metrics v1.0.0, The Center for Internet Security, May 11, 2009, 90 pages.
	32.	Method Documentation, CNSS Risk Assessment Tool Version 1.1, March 31, 2009, 24 pages.
	33.	Crowther, Kenneth G., et al., "Principles for Better Information Security through More Accurate, Transparent Risk Scoring," Journal of Homeland Security and Emergency Management, Vol. 7, Issue 1, Article 37, 2010, 20 pages.
	34.	"Assuring a Trusted and Resilient Information and Communications Infrastructure," Cyberspace Policy Review, May, 2009, 76 pages.
	35.	Davis, Lois M., et al., "The National Computer Security Survey (NCSS) Final Methodology," Technical report prepared for the Bureau of Justice Statistics, Safety and Justice Program, RAND Infrastructure, Safety and Environment (lSE), 2008, 91 pages.
	36.	Dillon-Merrill, PhD., Robin L, et aI., "Logic Trees: Fault, Success, Attack, Event, Probability, and Decision Trees," Wiley Handbook of Science and Technology for Homeland Security, 13 pages.
	37.	Dun & Bradstreet, The DUNSRight Quality Process: Power Behind Quality Information, 24 pages.
	38.	The Dun & Bradstreet Corp. Stock Report, Standard & Poor's, June 6, 2009, 8 pages.
	39.	Equifax Inc. Stock Report, Standard & Poor's, June 6, 2009, 8 pages.
	40.	The Fair Credit Reporting Act (FCRA) of the Federal Trade Commission (FTC), July 30, 2004, 86 pages.

Examiner Signature	Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant BitSight Technologies, Inc.	
		Filing Date November 18, 2015	Group Art Unit unknown

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	41.	Report to the Congress on Credit Scoring and Its Effects on the Availability and Affordability of Credit, Board of Governors of the Federal Reserve System, August 2007, 304 pages.
	42.	Stone-Gross, Brett, et al., "FIRE: Finding Rogue Networks," 10 pages.
	43.	Ingols, Kyle, et al., "Modeling Modern Network Attacks and Countermeasures Using Attack Graphs," MIT Lincoln Laboratory, 16 pages.
	44.	Ingols, Kyle, et al., "Practical Attack Graph Generation for Network Defense," MIT Lincoln Library, IEEE Computer Society, Proceedings of the 22nd Annual Computer Security Applications Conference (ACSAC'06), 2006, 10 pages.
	45.	Ingols, Kyle, et al., "Practical Experiences Using SCAP to Aggregate CND Data," MIT Lincoln Library, Presentation to NIST SCAP Conference, September 24, 2008, 59 pages.
	46.	Johnson, Eric, et al., "Information Risk and the Evolution of the Security Rating Industry," March 24, 2009, 27 pages.
	47.	Lippmann, R.P., et al., "Evaluating and Strengthening Enterprise Network Security Using Attack Graphs," Project Report IA-2, MIT Lincoln Laboratory, October 5, 2005, 96 pages.
	48.	"Assessing Risk in Turbulent Times," A Workshop for Information Security Executives, Glassmeyter/McNamee Center for Digital Strategies, Tuck School of Business at Dartmouth, Institute for Information Infrastructure Protection, 2009, 17 pages.
	49.	Lippmann, Richard, et al., "Validating and Restoring Defense in Depth Using Attack Graphs," MIT Lincoln Laboratory, 10 pages.
	50.	"Plugging the Right Holes," Lab Notes, MIT Lincoln Library, Posted July 2008, retrieved September 14, 2010 from http://www.11.miLedufpublicationsflabnotesfpluggingtherightho!. .. , 2 pages.
	51.	Rare Events, October 2009, JASON, The MITRE Corporation, October 2009, 104 pages.
	52.	Lippmann, Rich, et al., "NetSPA: a Network Security Planning Architecture, MIT Lincoln Laboratory, 11 pages.
	53.	Proposal and Award Policies and Procedures Guide, Part I - Proposal Preparation & Submission Guidelines GPG, The National Science Foundation, February 2009, 68 pages.
	54.	Paxson, Vern, "How The Pursuit of Truth Led Me To Selling Viagra," EECS Department, University of California, International Computer Science Institute, Lawrence Berkeley National Laboratory, August 13, 2009, 68 pages.
	55.	"Report on Controls Placed in Operation and Test of Operating Effectiveness," EasCorp, January 1 through December 31,2008, prepared by Crowe Horwath, 58 pages.
	56.	Taleb, Nassim N., et al., "The Six Mistakes Executives Make in Risk Management," Harvard Business Review, October 2009, 5 pages.
	57.	2009 Data Breach Investigations Report, study conducted by Verizon Business RISK Team, 52 pages.
	58.	Williams, Leevar, et al., "GARNET: A Graphical Attack Graph and Reachability Network Evaluation Tool," MIT Lincoln Library, VizSEC 2009, pp. 44-59.
	59.	Williams, Leevar, et al., "An Interactive Attack Graph Cascade and Reachability Display," MIT Lincoln Laboratory, 17 pages.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Disclosure Form (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 38879-0006002	Application No. unknown
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant BitSight Technologies, Inc.	
		Filing Date November 18, 2015	Group Art Unit unknown

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	60.	PAIR transaction history of US application no. 61/386,156 as of October 7, 2015.
	61.	PAIR transaction history and pending claims of USSN 14/021,585 as of November 18, 2015.
	62.	Application as filed, PAIR transaction history and pending claims of USSN 13/240,572 as of November 18, 2015.

Examiner Signature	Date Considered
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INFORMATION TECHNOLOGY SECURITY ASSESSMENT SYSTEM

ACKNOWLEDGEMENT

This invention was made with government support under 1127185 awarded by the National Science Foundation. The government has certain rights to this invention.

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation application and claims priority under 35 U.S.C. §120 to U.S. application 13/240,572, filed September 22, 2011, entitled "Information Technology Security Assessment System", which claims priority to U.S. Prov. Pat. App. No. 61/386,156 entitled "Enterprise Information Security Score" and filed on September. 24, 2010; and 61/492,287 entitled "Information Technology Security Assessment System" and filed on June 1, 2011 which are hereby incorporated herein in their entirety by reference.

BACKGROUND

The present invention relates to systems for determining the security of information systems and, in particular, for evaluating the security of third-party computer systems.

When a company wants to reduce its cyber security risk of doing business with another company's computer systems, it either performs, or hires an outside firm to perform, a cyber security assessment of the other company to determine if it is following good security practices. The theory is that these good practices make it difficult for attackers to compromise the networks of the other company. If the auditing company is satisfied with the assessment, it may choose to continue doing business with the other company. Or, it may ask the other company to make some improvements to its security systems or terminate the business relationship.

Generally, these audits are slow, expensive and impractical given the high volume of service provider security systems that need to be characterized by the company. And, the inventors have noted that audits are not entirely predictive of the performance of the security systems.

SUMMARY

A method and system is disclosed for creating a composite security rating from security characterization data of a third party computer system. The security characterization data is derived from externally observable characteristics of the third party computer system. Advantageously, the composite security rating has a relatively high likelihood of corresponding to an internal audit score despite use of externally observable security characteristics. Also, the method and system may include use of multiple security characterizations all solely derived from externally observable characteristics of the third party computer system.

A method of evaluating information security of a third party computer system is disclosed. The method includes collecting at least two security characterizations of the third party computer system. A composite security rating is generated using the at least two security characterizations. Advantageously, the two security characterizations are derived from externally observable characteristics of the third party system.

Each of the security characterizations may be from an associated one of a plurality of independent entities. For example, the independent entities may include commercial data sources. Also, the security characterizations may be derived without permission of the third party system.

The security characterizations may include multiple data types, such as breach disclosures, block lists, configuration parameters, malware servers, reputation metrics, suspicious activity, spyware, white lists, compromised hosts, malicious activity, spam activity, vulnerable hosts, phishing, user-behavior or e-mail viruses. The externally observable characteristics may also include serving of malicious code or communications with known attacker controlled networks.

The externally observable characteristics may be evidence of internal security controls or outcomes or operational execution of security measures of the third party computer system.

The collecting and generating steps may be repeated to generate a series of scores and the series examined to determine a trend. Also, the scores may be reported to a consumer. For instance, reporting may include reporting a warning based on a change in the scores. Or, reporting may include posting the score and warning to a web portal.

Collecting the security characterizations may include using various tools such as WGET, RSYNC, CURL or interfaces that may be characterization specific.

The method may also include mapping the third party computer system to an IP space and using the IP space for collecting the security characterizations. Mapping, for example, may include querying a Regional Internet Registry (RIR), such as by submitting an entity name to the RIR. Querying an entity name may include querying for variations of the entity name.

Mapping may also include using a domain name associated with the third party computer system. For example, tools such as nslookup or dig may be used on the domain name to determine a published IP address. Mapping may also include probing addresses around the published IP address. For example, IP addresses could be probed in powers of two around the published IP address. Mapping could also include adapting the domain name to server naming conventions and using tools like nslookup to verify an IP address associated with the domain name.

Generating the composite security rating may include assessing vulnerability and resilience of the third party computer systems. Vulnerability, for example, may include a number of IP addresses with malicious behavior. Resilience may be inversely proportional to a duration of malicious behavior.

The IP space may include a plurality of IP addresses. And, the composite security rating may correspond to an intensity and duration of malicious activity determined from one of the security characterizations. Generation of the composite security rating may include aggregation of a plurality of individual security metrics and/or the IP addresses associated with the third party computer system.

Determination of the individual security metric may include adjusting for false positives in the security characterizations. Correlating data across multiple related security characterizations may help improve the quality of any single security characterization. Further, adjusting for false positives may include determining an occurrence of an event, which includes persistent, reported activity on one of the IP addresses for a predetermined period of time. It may also include determining an intensity of the IP address for the predetermined period of time, such as a day.

Determining the intensity may include increasing intensity in proportion to a number of reporting targets from the security characterizations.

Determining an individual security metric may include assigning a raw score for each of the IP addresses appearing on a block list as one of the security characterizations. After an IP address is delisted, the raw score may be exponentially attenuated.

The individual security metric may also incorporate a raw score in proportion to a CIDR block size.

Individual security metrics or the composite ratings may be normalized based on, for example, network size or a number of employees.

Security characterizations may also include positive information about an organization that's aggregated into the composite rating.

The method could also include statistically correlating the composite security rating with actual outcomes and adjusting the generating step based on the statistical correlations.

Further, the method may include determining a confidence range of the composite security rating. For example, the confidence range may be based on a redundancy of the security characterizations or a size of the third party computer system.

The method may also include determining an accuracy of each of the security characterizations, such as by determining a level of coverage of the third party computer system by the security characterizations.

Also disclosed herein are a system and computer program product for data collection and scoring, including systems and software for performing the methods described above.

Another method may include generating a composite security rating using at least one security characterization that's derived from externally observable characteristics of the third party computer system wherein the composite security rating has a relatively high likelihood of corresponding to an internal audit score.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Figure 1 is a schematic of a system for evaluating information security;

Figure 2 is a schematic of a system for gathering security data from external sensors;

Figure 3 is a schematic of a composite security rating calculation; and

Figure 4 is a schematic of a distributed system for evaluating information security.

DETAILED DESCRIPTION

Generally, the present invention includes a method, system and computer program

product for creating composite security ratings from security characterization data of a third party computer system. The security characterization data is derived from externally observable characteristics of the third party computer system. Advantageously, the composite security rating has a relatively high likelihood of corresponding to an internal audit score despite use of externally observable security characteristics. Also, the method and system may include use of multiple security characterizations all solely derived from externally observable characteristics of the third party computer system.

The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the singular forms "a", "an" and "the" are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will be further understood that the terms "comprises" and/or "comprising," when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

The corresponding structures, materials, acts, and equivalents of all means or step plus function elements in the claims below are intended to include any structure, material, or act for performing the function in combination with other claimed elements as specifically claimed. The description of the present invention has been presented for purposes of illustration and description, but is not intended to be exhaustive or limited to the invention in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the invention. The embodiment was chosen and described in order to best explain the principles of the invention and the practical application, and to enable others of ordinary skill in the art to understand the invention for various embodiments with various modifications as are suited to the particular use contemplated.

Any combination of one or more computer readable medium(s) may be utilized. The computer readable medium may be a computer readable signal medium or a computer readable storage medium. A computer readable storage medium may be, for example, but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, or device, or any suitable combination of the foregoing. More specific examples (a non-exhaustive list) of the computer readable storage medium would include

the following: an electrical connection having one or more wires, a portable computer diskette, a hard disk, a random access memory (RAM), a read-only memory (ROM), an erasable programmable read-only memory (EPROM or Flash memory), an optical fiber, a portable compact disc read-only memory (CD-ROM), an optical storage device, a magnetic storage device, or any suitable combination of the foregoing. In the context of this document, a computer readable storage medium may be any tangible medium that can contain, or store a program for use by or in connection with an instruction execution system, apparatus, or device.

A computer readable signal medium may include a propagated data signal with computer readable program code embodied therein, for example, in baseband or as part of a carrier wave. Such a propagated signal may take any of a variety of forms, including, but not limited to, electro-magnetic, optical, or any suitable combination thereof. A computer readable signal medium may be any computer readable medium that is not a computer readable storage medium and that can communicate, propagate, or transport a program for use by or in connection with an instruction execution system, apparatus, or device.

Program code embodied on a computer readable medium may be transmitted using any appropriate medium, including but not limited to wireless, wireline, optical fiber cable, RF, etc., or any suitable combination of the foregoing.

Computer program code for carrying out operations for aspects of the present invention may be written in any combination of one or more programming languages, including an object oriented programming language such as Java, Smalltalk, C++ or the like and conventional procedural programming languages, such as the "C" programming language or similar programming languages. The program code may execute entirely on the user's computer, partly on the user's computer, as a stand-alone software package, partly on the user's computer and partly on a remote computer or entirely on the remote computer or server. In the latter scenario, the remote computer may be connected to the user's computer through any type of network, including a local area network (LAN) or a wide area network (WAN), or the connection may be made to an external computer (for example, through the Internet using an Internet Service Provider).

Aspects of the present invention are described below with reference to flowchart illustrations and/or block diagrams of methods, apparatus (systems) and computer program products according to embodiments of the invention. It will be understood that each block

of the flowchart illustrations and/or block diagrams, and combinations of blocks in the flowchart illustrations and/or block diagrams, can be implemented by computer program instructions. These computer program instructions may be provided to a processor of a general purpose computer, special purpose computer, or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer or other programmable data processing apparatus, create means for implementing the functions/acts specified in the flowchart and/or block diagram block or blocks.

These computer program instructions may also be stored in a computer readable medium that can direct a computer, other programmable data processing apparatus, or other devices to function in a particular manner, such that the instructions stored in the computer readable medium produce an article of manufacture including instructions which implement the function/act specified in the flowchart and/or block diagram block or blocks.

The computer program instructions may also be loaded onto a computer, other programmable data processing apparatus, or other devices to cause a series of operational steps to be performed on the computer, other programmable apparatus or other devices to produce a computer implemented process such that the instructions which execute on the computer or other programmable apparatus provide processes for implementing the functions/acts specified in the flowchart and/or block diagram block or blocks.

Referring again to Fig. 1, a system 10 for evaluating information security of a third party computer system includes the following systems: a global data source 12, an entity ownership collector 14, a data collection processor 16, a data collection management 18, a data archive 20, an entity database 22, a manual entity input 24, an entity data join process 26, an entity mapped meta-reports repository 28, a ratings processing 30, a normalization, consolidation and global relative rank 32, a report generation 34, a report archive 36 and a report delivery 38 systems. Different delivery modules 40 are configured to use different methods to deliver the reports to customers 42.

The global data source system 12 obtains data sources that characterize any observation about an entity (e.g., a third party computer system) and these sources can be highly varied and disparate. Each data source has a particular vantage point of the security related characteristics of entities.

The entity ownership collection system 14 gathers information about an entity. This

includes information about which IT assets an entity owns, controls, uses, or is affiliated with. Examples of asset ownership include control and operation of an Internet Protocol (IP) network address range or computer services such as web servers residing within that address block. Information about entities also includes relationships such as subsidiaries, affiliates, etc., that describe entity association.

The data collection processing system 16 includes custom modules configured to collect and process unique data sources.

The data collection management system 18 is configured to schedule and coordinate the constant collection of the different data sources.

The data archive 20 is configured to store all of the terabytes of data constantly collected by the data collection management system 18.

The entity database 22 holds all of the information about an entity such as its name, address, web site address, industry sector, IP address ranges owned, etc. This data base includes the "Entity Map" which maps data back to an entity. For example, if observations are made about a particular IP address, the IP address can be looked up in the entity map to determine which entity controls or owns that address. This database is populated by automatic or manual data collection methods, or combinations thereof.

The manual entity input system is configured to place non-automatic data on an entity into the entity database 22.

The entity data join process or system 26 is configured to match the collected data to the entity. In most instances, this is a computationally expensive operation because it requires going though all of the data collected and performing the map operation. Any evidence of security outcomes or configurations in the larger data collection pool is then assigned to an entity based on the entity map.

The entity mapped meta-reports repository 28 contains data summaries of observations made with respect to a particular entity for each data set after the map/join process is complete.

The ratings processing system 30 may include custom models for applying data source specific ratings to determine an entity rating. Each data source generally requires a custom model due to the unique nature of that data source. Each model accounts for the custom attributes and idiosyncrasies of the different data sources that have been mapped to the entity being rated. Custom data source models can account for any data source feature

including temporal and cross-data source behaviors.

The ratings normalization, cross-validation, and relative ranking system 32 is configured to normalize ratings so appropriate entity-to-entity comparisons can be made and the ratings are normalized and ranked within sectors or peer-groups and globally.

An entity and rating analytics repository or archive 36 is configured to hold all of the ratings data and resulting analytics produced by the ratings process.

A report generation system 34 takes the ratings and analytics and generates report objects. These objects are not rendered into any particular presentation format at this stage but are in a generic intermediary format that can be then transformed into a specific deliverable format.

A report delivery system 38 is configured to translate generic reports into a specific report format. Examples of these formats include HTML, PDF, text, and XML. Delivery modules 40 are different methods for delivering the reports include by web portal, API or data feed.

Advantages include ratings based on the quality of outcomes of the information security practices of the third party computer systems and enablement of comparisons of ratings across organizations. The system 10 can be entirely, or to a large extent, automated and need not have the permission of the entity being rated. The reports will allow risk management professionals to monitor, assess and mitigate partner risk by up-to-date ratings due to its persistent monitoring of the third party computer systems. Also, the portal may provide for location of new partners, such as suppliers, with lower risk profiles and improved security postures.

Unlike internal audit systems, the system 10 is not relying upon a correlation between practices and outcomes. Instead, evidence of actual security outcomes is collected through the data source partners.

Also advantageously, trial data on 50 entities revealed that rankings produced using the system 10 matched internal evaluations. In some cases the system 10 revealed problems with the entities not revealed by internal evaluations.

Data Sources

External ratings from data sources available outside an entity provide an information security based view into internal workings of the organization. For example, infection by

malicious software can be determined using non-invasive website scanning technology. Communication between the entity computer system and known attacker controlled networks may reveal when the computer system has been compromised. Also, if an entity computer system is serving malicious code to visitors the system was compromised at some point. The entity may not have the capability to detect such compromises or cannot quickly react operationally to resolve the issue. External observations also can measure operational execution, which may not occur despite good internal policies.

A diverse set of network sensors and services around the Internet collect and observe information about the third party entity computer systems. The system 10 then gathers, processes, and stores the data collected about entities from the sensors and service providers using custom developed data source specific collection processors. The collection manager 18 automates the scheduling and execution of the different collectors.

The global data source system 12 includes hundreds of potential data sources, including, for example during experimental testing, 97 data sources owned by 37 organizations. At least 82 data sources are on active collection, being stored on the data archive 20. Trial ratings were performed on at least 11 data sources from 7 organizations. Rankings were produced on nearly 600 different entities.

A data source is a single type of data from a single organization. For example, if two organizations provide a list of hosts that participate in phishing attacks, they are counted as two data sources. The 15 types of data in Table 3 all provide different information security related views of an organization. New types of data and new sources of existing data types are constantly added to the data sources used to characterize the performance of the entity. Breach disclosures for example indicate that an organization has experienced a particular kind of data or integrity breach. Configuration data on the other hand provides any number of configuration related information and could for example state the type of encryption used on the organization's website.

Table 1 Data Sources Summary

Total Data Sources	97
Total Sourcing Organizations	37
Total Sources on Active Collection	82
Total Different Source Types	15

Table 3 Data Source Types

Breach Disclosures	Spam Activity
Block Lists	Vulnerable Hosts
Configuration Parameters	Spyware
Compromised Hosts	Whitelists
Malicious Activity	Email viruses
Malware Servers	Multi-type
Reputation	Phishing
Suspicious Activity	User Behavior

Of the 97 data sources identified, 82 are on "Active Collection" meaning there is a method for obtaining the data source and that its collection is automated. The high degree of automation helps to satisfy the methodology objective for adoption of techniques that are principally automated.

Table 2 lists the 6 collections methods employed for data acquisition with the "Unknown" category meaning that the sources are identified but the method and ability to collect that data source has yet be determined. The method Instances are the number of data sources that are collected using that particular method. For example, 32 of the sources are collected using the network file transfer and synchronization tool rsync (http://samba.anu.edu.au/rsync/).

Table 2 Data Collection Methods

Methods	Instances	Methods	Instances
WGET	35	WHOIS	1
RSYNC	32	HTTP GET	1
API	13	UNKNOWN	9
MANUAL	6		

A collection processing infrastructure 50, configured to build and validate composite security ratings, is shown in Fig. 2. A plurality of different clouds represents different network segments. Rated Entity clouds 52 are organizations for which the system 10 generates a rating. Those entities include an entity perimeter or boundary, indicated by the firewall that connects to the Internet. Services clouds 54 provide data or reports on observed activity from a rated entity 52. An example of a report from a Service 54 could be a list of hosts that have been participating in malicious activity. Services use Sensor networks 56 to observe the behavior of entities. For example, a sensor could observe SPAM messages sent from a rated entity network 52 to the Internet 58.

Entity Mapping

There is no single central repository that holds information about the IP address allocation. Determining the correct and complete IP address space owned by a given entity improves the reliability and robustness of a rating.

In general, Regional Internet Registries (RIRs) manage the allocation and registration of Internet number resources (IP Addresses, Autonomous System Numbers, etc.) within a particular region of the world. There are five RIRs - ARIN for North America, AfriNIC for Africa, APNIC for Asia Pacific, RIPE for Europe, Middle East, Central Asia, and LACNIC for Latin America.

The RIRs allocate the address space to service providers, corporations, universities, etc. The RIRs provide various interfaces that enable queries of the RIR to determine who owns a given IP address. It is also possible to query the database by an entity name and get a list of IP addresses allocated to that entity. Despite lack of standardization of entity names in the RIR databases, well chosen queries can result in a very high coverage of addresses owned by an entity.

Another problem is that RIRs often allocate large chunks of addresses to Internet Service Providers (ISPs) who go on to allocate smaller address spaces to their customers. ISPs are under no obligation to report this data back to anyone. Most small companies contract with their local ISP for Internet access and don't obtain addresses from RIRs.

These problems are addressed by the entity ownership collection system 14 being configured to execute various heuristic processes including the following non-limiting list of examples:

1. Using the 'dig' (http://linux.die.net/man/1/dig) tool to determine any IP information published by an entity. The dig tool takes the domain name of the entity as an argument. For example, execution of 'dig a.com ANY' returns all IP information published by the entity a.com.

2. Use the IP addresses and domain names published to find ranges of IP addresses actually used. ISPs almost always allocate addresses in size of powers of 2 (2, 4, 8 etc.). Knowing one IP address allows probing around that space. The 'whois' (http://linux.die.net/man/1/whois) tool can be used to determine ownership of neighborhood addresses.

3. Even if the entity does not publish any IP information that can be retrieved through dig, most entities have servers whose names may be guessed. Mail servers for the domain a.com often have the name mail.a.com, SMTP servers tend to be smtp.a.com, FTP servers tend to be ftp.a.com etc. Using a tool like nslookup, the entity ownership collection system 14 can verify if any of these common names are in use by the entity.

4. If an IP address is found, the system 14 is configured to probe around the address (such as in step 2) to determine any addresses in the neighborhood owned by that entity.

5. Searching around the website of the company often gives a hint of other servers hosted by the company (ex: reports.a.com) which can be used as a starting point for search.

Rating Methodology

Organizational security risk may be measured along two vectors: vulnerability and resilience. An entity's vulnerability is defined as its "physical, technical, organizational, and cultural states," which can be exploited to create a security breach. An entity's resilience is defined to be its ability to recover from a security breach.

The system 10 uses the concepts of vulnerability and resilience by examining

externally observable proxies for them. An example proxy for entity vulnerability is the number of entity-owned IP addresses, which are reported to be malicious. The higher the number of reports the more likely the entity was vulnerable and had been compromised. Resilience is inversely proportional to the duration of detected malicious activity. The shorter the duration of the malicious activity, the higher level of resilience the entity demonstrates as it can quickly identify and remove malicious infections.

To compute the ratings for an entity, the system 10 aggregates all of the data collected pertaining to the IT assets owned by that organization, such as the IP addresses controlled by the entity and the associated activity of those IP addresses. The types of activities depend on the types of data. The data sources may include false positives and the system 10 is configured to account for those uncertainties.

To determine quality metrics for IP address based assets, every IP address is uniquely mapped to an entity. Processing the data from a data source yields a list of IPs for each organization that has demonstrated suspicious or malicious behavior. The processing steps are as follows:

1. For each IP address, determine a security quality metric called "badness".
2. Badness is a number between 0 and 1 that corresponds to the extent and duration of malicious activity that was reported.
3. For each data source in which the IP address is reported, determine a data source specific badness score for that IP.
4. Consolidate the badness score for a given IP across all data sources by cross validating data to determine the aggregate Badness for that IP.
5. Aggregate the badness scores of IPs from an entity to determine the entity's IP asset based security quality metric.

The ratings processing system 30 is configured to account for differences in data sources and types. Given each data source's potentially unique view of an entity, there is not a universal technique that treated them all the same way. Data source specific modeling techniques, for example, were developed for 11 of the 97 data sources in experimental trials in order to demonstrate feasibility and validate the approach. The data sources incorporated accounted for five different data source types: Block Lists, Suspicious Activity, Malicious Servers, Compromised Hosts, and Spamming.

The following two sections give detailed examples of modeling techniques

developed for calculating IP address badness for two different data sources that are representative of the data collected.

One of the data sources is a daily updated list of IP addresses that were reported by volunteer hosts from across the Internet. IP Addresses are reported in this data source if they have communicated with hosts that do not expect any inbound communication from them. It lists many more IP addresses on a given day compared with the other data sources and therefore, provides a significant amount of information contained only in this data source. However, this data source has a high incidence of false positives, where a false positive is an unwarranted report due to an incorrectly configured reporting host (i.e., the target) or a listing of an incorrect IP address due to backscatter.

False positives are accounted for by identifying events – where an event is defined as persistent, reported activity on a single IP address within a time period. For each event, heuristics are applied to determine the average intensity for the event. The intensity of an IP address on a given day is a measure of the confidence that malicious activity originated from the IP address on that day.

For the case where an event spans multiple days, the IP address is generally reported on each day in the event. However, if an IP address is listed on one day but not the next, this omission does not necessarily signify that the host has stopped its malicious behavior; rather, it could be that the host was offline for the day. For example, many corporate hosts are offline for weekends and holidays. Thus, an event is allowed to have short inactive periods, or days without any reports on the IP address. To generate the IP address quality metric, a maximum inactive period of three days is used.

The intensity of an IP address for a given day is calculated dynamically and increases both with the number of reporting targets as well as the duration of the event. Reports with a larger number of targets have larger intensities. This is because false positives due to mis-configured hosts are less likely to have occurred when multiple targets report the same IP address on the same day. Likewise, reports that belong to a persistent event have larger intensities, since persistent reports also signal the legitimacy of the malicious activity on the IP address.

The intensity, I(s) is calculated as follows:

$$I(s) = \begin{cases} 0.1, & \text{if } s < 2 \\ 0.01e^{\frac{\ln(10)(s-1)}{4}}, & \text{if } 2 \le s < 5 \\ 0.8 - 0.7e^{\frac{\ln(10)(s-5)}{4}}, & \text{if } s \le 5 \end{cases}$$

where s is the number of hosts reporting the IP address. Thus, the average intensity, I_{avg}, of an event is the average of the intensities calculated per active day (a day with reports) and is determined as follows:

$$I_{avg} = \frac{I(s)}{T} + \frac{A \cdot I_{prev}}{T},$$

where T is the list time, A is T minus the number of days since the last update, and I_{prev} is the average intensity at the last update. The Badness, B_{IP}, of an IP address is derived from the intensity and duration of the events for the IP, such that recent events are weighted heavier than historical events and is calculated as follows:

$$B_{IP} = min(1, \frac{I_{avg}(1-e^{-0.02})}{1-e^{-0.12}} \sum_{t_1}^{t_n} e^{-0.02}),$$

where t_1 and t_n denote time lapsed from the end and beginning of an event, respectively; and the average intensity is readjusted if the persistence surpasses a threshold.

The second data source example is a host block list that lists IP addresses that have been compromised. Based on an analysis of the data sources collection methods, the block list is considered very reliable in the sense that a listing implies that malicious activity originated from the listed address. This block list removes IP addresses from the list if no malicious activity is detected for a small window of time. Because of the high confidence in the data source's accuracy, any IP address on the block list is assigned a raw Badness of 0.8.

Once an IP address is delisted and is no longer on the block list, its Badness decays exponentially with respect to the time since it was last listed. Thus, the Badness is:

$$B_{IP} = 0.8e^{-\frac{\ln(2)T}{182.625}},$$

where T is the time in days since the last listing. This decay rate corresponds to a half-life of six months.

Various other data sources are handled similarly but the raw score is based on the confidence in the data source's collection methods. Other data sources track CIDR blocks as opposed to individual IP addresses, and so the Badness assigned to a listing on these lists are weighted by the CIDR block size as follows:

$$B_{ip} \approx 0.8We^{-\frac{\ln(2)T}{182.625}},$$

where W is the natural log of the block size.

The total IP space badness of an entity is an aggregation of the badness of the entity's individual IP addresses and/or CIDR blocks. In the simplest model where all data sources are IP address based, the entity badness is the total badness of the IP addresses owned by the entity. To normalize ratings across entities of different sizes, the entity's network size defined as the number of active IP addresses owned by the entity is used:

$$B_{entity} \approx \frac{\sum_{ip \in entity} B_{ip}}{\ln(N)},$$

where N denotes the network size. Normalizing avoids penalizing of smaller entities allowing fair comparisons between entities of differing sizes.

Enhancements to the Ratings Methodology

The system 10 may also include expanded the methodology to support additional and different types of data sources. It could identify data sources that indicate different levels of IT sophistication - such information is a measure of the level of IT practice maturity.

Entity normalization methods can also account for differences in entity size beyond network size. For example, the use of other normalization methods such as number of employees may help produce more robust normalizations under certain circumstances.

Also, statistical properties of the model's internal parameters may be analyzed and adjust based on the findings. For example, certain inputs or features may be disproportionately skewing the ratings and such inputs or features may be modulated through weighting factors.

The composite security rating described above measured, amongst other things, how much, to what extent, and how recently malicious activity was detected on an entity's cumulative IP space. The score could also be adapted to show a level of confidence. For example, a failure to detect malicious activity on an entity's IP space does not necessarily imply non-malicious behavior. Rather, the data sources may lack coverage on the entity's IP space. By outputting a range as opposed to a number, the system 10 is able to convey its confidence in a rating where a larger range necessarily implies a lower confidence, and a

smaller range necessarily implies a higher confidence.

Such a range could be computed from a mean score and a confidence range, which could be determined from a developed discrete choice model. Features such as the Badness scores from each data source could help determine the mean score. Features such as redundancy between data sources and network size could also help determine the confidence range.

Entity mapping may also be improved through other data sources and functions. Data sharing relationships with Internet Service Providers might provide additional data on security outcomes and practices at entity computer systems. Also, consumers of the scoring reports may already have partner-mapping data through the nature of their relationship with the entity or may be able to request the information.

Entity mapping may also be facilitated by persistent updates of the heuristics, such as updating prefixes from BGP announcements and data from Regional Internet Registries.

Data storage used by the system 10 may be improved to minimize the disk space required while supporting rapid inclusion of new entity ratings. For example, high-speed data access layers may be created for daily ratings computation.

Speed and scale can be accomplished through distributed or parallel processing on different systems. A distributed data source query interface may be implemented so that massive and expensive centralized data storage is not required.

The system 10 may also be configured to develop and evaluate predictive capabilities of information security ratings and incorporate them into the rating methodology.

The ability to demonstrate predictability has a dependency on data reliability. For example, improving coverage of malicious events improves data reliability. Statistical evaluations may be used to disambiguate strong entity performance (e.g., no malicious activity) from low coverage (e.g., lack of information on the malicious activity). These evaluations can then be used in the rating methodology.

Statistical evaluations of data coverage may include a data accuracy assessment wherein levels of coverage assurance associated with a particular adopted data source are determined. Also, observations across data sources may be compared to determine data sources of high probability or low probability of coverage for a given entity.

Predictive modeling may include determination of entity historical trends to display

and predict future performance. Regression and machine learning based models may be developed to predict information security performance. Models may be evaluated and further developed for predictive capability through a series of prediction experiments.

Also, the data source features may be analyzed for correlations of high and low performance. For example, entities with behavior "X" tend to perform well and entities that demonstrate property "Y" tend to behave poorly.

Use of External and Internal Security Data

The system 10 may also include internally derived security assessments. For example, such a score computation is shown in Fig. 3. The final score S_{Total} has two components, the Internal score and the External score.

The Internal score, S_{int}, is derived from data collected and observed from inside the enterprise. Data sources that provide inputs to the internal scoring function could include, but are not limited to, the following:

- Vulnerability scans
- Firewall Rules
- Incident Reports
- Configurations
- Software inventory
- Policies
- Controls
- User Behavior

The features from each of the data sources are extracted to create a feature vector. This feature vector is $X_{\text{int}} = \{InternalFeatures\}$ in the "Internal Source Score," as shown in Fig. 3. Features include, but are not limited to, derived metrics from the data sources (e.g., the number of remotely exploitable vulnerabilities from outside the entity, the number of incidents, or the number of vulnerable versions of software).

Each feature x_i in X_{INT} has a corresponding transformation function $f_{t(x_i)}(x_i)$ that performs a normalization transformation such that the resultants can be summed.

Each feature x_i in X_{INT} also has corresponding weight ω_i such that different weights can be placed on the resultant feature transformation where the sum of the weights equal is unity $\sum_{i=1}^{n}\omega_i = 1$. The sum of the transformed and weighted feature vector is computed by summing each resultant for each of the features $\sum_{i=1,x\in X_{\text{int}}}^{n}\omega_i f_{t(x_i)}(x_i)$.

The final score S_{int} is the summation normalized by a set of normalization factors given as $f_{t(x_\alpha)}(x_\alpha)+f_{t(x_\beta)}(x_\beta)$ where each normalization factor $x_\alpha, x_\beta, \ldots$ also has a factor normalization transformation function.

The computation of the Internal Score is given as: $S_{\text{int}} = \frac{\sum_{i=1,x\in X_{\text{int}}}^{n}\omega_i f_{t(x_i)}(x_i)}{f_{t(x_\alpha)}(x_\alpha)+f_{t(x_\beta)}(x_\beta)}$

The External Score is the combination of the Public Sources Score (S_{pub}) and the Commercial Sources (S_{com}). S_{pub} and S_{com} are derived using the same heuristic combinatorial functions as the Internal Score. However, the input data sources, weights, transformation functions and normalization factors are different.

S_{pub} and S_{com} have their own feature vectors $X_{pub} = \{PublicFeatures\}$ and $X_{com} = \{CommercialFeatures\}$ based on the data input sources used.

Data sources in X_{pub} that provide inputs to the S_{pub} score could include but are not limited to the following:

- Industry reports
- Internet monitoring web sites that publish reports (ex: *www.malwareurl.com*)
- News articles
- Court records

Data sources in X_{com} that provide inputs to the S_{com} score could include but are not

limited to the following:

- Company proprietary data collected during operations
- Renesys
- Arbor Networks
- Business intelligence bought from corporations and services
- User Behavior

With the Internal and External Scores computed, the final total score is computed and the weighted sum of the three: $S_{Total} = \omega_{\text{int}} S_{\text{int}} + \omega_{pub} S_{pub} + \omega_{com} S_{com}$

It is possible that the algorithm does not have the same inputs for all entities. More information may be available for some entities compared to other entities. Given this, each data source is assigned a normalized confidence level based on how much they contribute to the computation of the enterprise score. Depending on the actual data that went into rating the company, the confidence level is assigned as a sum of the confidence levels associated with the data sources. The confidence level can be used to assign a range of scores for an enterprise. For instance, if an enterprise is rated as 750 with a confidence level of 0.8, the entity's actual score is reported as (750 – (1 – 0.8) * 100, 750) = (730 – 750). An entity's score is deemed to be unavailable if the confidence level is below a minimum threshold of 0.5.

It should be noted that the S_{int} may be zero due to a lack of available information or permission, wherein S_{total} becomes characteristic only of externally observable characteristics. Also, characteristics for the calculation can be used in conjunction, or vice versa, with functions and aspects of the remaining systems described hereinabove and below.

Distributed System

Referring now to Fig. 4, a schematic diagram of a central server 500, or similar network entity, configured to implement a system for creating a composite security score is provided. As used herein, the designation "central" merely serves to describe the common functionality the server provides for multiple clients or other computing devices and does not require or infer any centralized positioning of the server relative to other computing devices. As may be understood from Fig. 4, the central server 500 may include a processor 510 that communicates with other elements within the central server 500 via a system

interface or bus 545. Also included in the central server 500 may be a display device/input device 520 for receiving and displaying data. This display device/input device 520 may be, for example, a keyboard or pointing device that is used in combination with a monitor. The central server 500 may further include memory 505, which may include both read only memory (ROM) 535 and random access memory (RAM) 530. The server's ROM 535 may be used to store a basic input/output system 540 (BIOS), containing the basic routines that help to transfer information across the one or more networks.

In addition, the central server 500 may include at least one storage device 515, such as a hard disk drive, a floppy disk drive, a CD Rom drive, or optical disk drive, for storing information on various computer-readable media, such as a hard disk, a removable magnetic disk, or a CD-ROM disk. As will be appreciated by one of ordinary skill in the art, each of these storage devices 515 may be connected to the system bus 545 by an appropriate interface. The storage devices 515 and their associated computer-readable media may provide nonvolatile storage for a central server. It is important to note that the computer-readable media described above could be replaced by any other type of computer-readable media known in the art. Such media include, for example, magnetic cassettes, flash memory cards and digital video disks.

A number of program modules may be stored by the various storage devices and within RAM 530. Such program modules may include an operating system 550 and a plurality of one or more (N) modules 560. The modules 560 may control certain aspects of the operation of the central server 500, with the assistance of the processor 510 and the operating system 550. For example, the modules may perform the functions described above and illustrated by the figures and other materials disclosed herein, such as collecting security characterizations 570, generating a composite rating 580, determining a trend 590, reporting the ratings 600, IP mapping 610, determining a badness quality metric 620, attenuating a raw score 630, correlating with statistical outcomes 640, determining a confidence range 650, predicting future performance 660 and determining an accuracy 670.

The flowchart and block diagrams in the figures illustrate the architecture, functionality, and operation of possible implementations of systems, methods and computer program products according to various embodiments of the present invention. In this regard, each block in the flowchart or block diagrams may represent a module, segment, or portion of code, which comprises one or more executable instructions for implementing the

specified logical function(s). It should also be noted that, in some alternative implementations, the functions noted in the block may occur out of the order noted in the figures. For example, two blocks shown in succession may, in fact, be executed substantially concurrently, or the blocks may sometimes be executed in the reverse order, depending upon the functionality involved. It will also be noted that each block of the block diagrams and/or flowchart illustration, and combinations of blocks in the block diagrams and/or flowchart illustration, can be implemented by special purpose hardware-based systems that perform the specified functions or acts, or combinations of special purpose hardware and computer instructions.

The corresponding structures, materials, acts, and equivalents of all means or step plus function elements in the claims below are intended to include any structure, material, or act for performing the function in combination with other claimed elements as specifically claimed. The description of the present invention has been presented for purposes of illustration and description, but is not intended to be exhaustive or limited to the invention in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the invention. The embodiment was chosen and described in order to best explain the principles of the invention and the practical application, and to enable others of ordinary skill in the art to understand the invention for various embodiments with various modifications as are suited to the particular use contemplated.

CLAIMS

1. A computer implemented method comprising

at least partly by computer, mapping between technical assets that are associated with security characterizations of the respective entities, to the respective entities,

collecting externally observable security characterizations of the technical assets that have been mapped to each of the entities, and

generating a security score for each of the entities based on the collected characterizations of the mapped technical assets of each of the entities.

2. The method of claim 1 in which the technical assets comprise an IP space.

3. The method of claim 1 in which the mapping comprises querying a regional Internet registry.

4. The method of claim 3 in which the mapping comprises submitting a name of one of the entities to the regional Internet registry.

5. The method of claim 4 in which submitting the entity name includes submitting spelling variations of the entity name.

6. The method of claim 1 in which the mapping comprises using a domain name associated with the entity.

7. The method of claim 6 in which the mapping comprises using a dig tool on the domain name to determine a published IP address.

8. The method of claim 1 in which the mapping comprises probing IP addresses around a published IP address.

9. The method of claim 8 in which the probing comprises probing addresses in powers of 2 around the published IP address.

10. The method of claim 6 in which the mapping comprises adapting the domain name with server naming conventions.

11. The method of claim 6 in which the mapping comprises using nslookup to verify an IP address associated with the domain name.

12. The method of claim 2 comprising using the IP space for collecting the security characterizations.

13. The method of claim 1 in which the technical assets that are associated with security characterizations of the respective entities comprise technical assets that the entity owns, controls, uses, or is affiliated with.

14. The method of claim 1 in which the technical assets comprise ranges of IP addresses.

15. The method of claim 1 in which the technical assets comprise servers.

16. The method of claim 1 in which the mapping comprises using information received from Internet Service Providers.

17. The method of claim 1 in which the mapping comprises using heuristics.

18. The method of claim 17 comprising persistently updating the heuristics.

ABSTRACT

A method and system for creating a composite security rating from security characterization data of a third party computer system. The security characterization data is derived from externally observable characteristics of the third party computer system. Advantageously, the composite security score has a relatively high likelihood of corresponding to an internal audit score despite use of externally observable security characteristics. Also, the method and system may include use of multiple security characterizations all solely derived from externally observable characteristics of the third party computer system.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	38879-0006002
	Application Number	
Title of Invention	Information Technology Security Assessment System	

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.

Secrecy Order 37 CFR 5.2

☐ 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.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
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Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

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Inventor 3 Remove

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Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	38879-0006002
	Application Number	
Title of Invention	Information Technology Security Assessment System	

City	Cambridge	State/Province	MA	Country of Residence i	US

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City	Cambridge	State/Province	MA
Postal Code	02138	Country i	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	26161		
Email Address	apsi@fr.com	Add Email	Remove Email

Application Information:

Title of the Invention	Information Technology Security Assessment System		
Attorney Docket Number	38879-0006002	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	3	Suggested Figure for Publication (if any)	

Filing By Reference :

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country i

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☒ **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	38879-0006002
	Application Number	
Title of Invention	Information Technology Security Assessment System	

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Customer Number	26161		

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This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(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.
When referring to the current application, please leave the application number blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Continuation of	13/240572	2011-09-22
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
13/240572	Claims benefit of provisional	61/492287	2011-06-01
Prior Application Status			Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
13/240572	Claims benefit of provisional	61/386156	2010-09-24

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Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

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Application Number	Country	Filing Date (YYYY-MM-DD)	Access Code (if applicable)

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	38879-0006002
	Application Number	
Title of Invention	Information Technology Security Assessment System	

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Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

☐ Authorization to Permit Access to the Instant Application by the Participating Offices

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date o f filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	38879-0006002
	Application Number	
Title of Invention	Information Technology Security Assessment System	

Applicant 1 Remove

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

(●) Assignee	( ) Legal Representative under 35 U.S.C. 117	( ) Joint Inventor
( ) Person to whom the inventor is obligated to assign.	( ) Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor :

If the Applicant is an Organization check here. [X]

Organization Name	BitSight Technologies, Inc.		
Mailing Address Information For Applicant:			
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Country [i]	US	Postal Code	02140
Phone Number		Fax Number	
Email Address			

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Assignee Information including Non-Applicant Assignee Information:

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Assignee 1

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	Application Number	
Title of Invention	Information Technology Security Assessment System	

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
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Signature	/David L. Feigenbaum/			Date (YYYY-MM-DD)	2015-11-18
First Name	David	Last Name	Feigenbaum	Registration Number	30378

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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.

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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:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Filer:	David L Feigenbaum/jennifer franco
Attorney Docket Number:	38879-0006002

Filed as Small Entity

Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
Request for Prioritized Examination	2817	1	2000	2000
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70

Petition:	
Patent-Appeals-and-Interference:	
Post-Allowance-and-Post-Issuance:	
Extension-of-Time:	
Miscellaneous:	
Total in USD ($)	**2800**

Electronic Acknowledgement Receipt

EFS ID:	24117242
Application Number:	14944484
International Application Number:	
Confirmation Number:	2464
Title of Invention:	Information Technology Security Assessment System
First Named Inventor/Applicant Name:	Stephen Boyer
Customer Number:	26161
Filer:	David L Feigenbaum/Elizabeth Doherty
Filer Authorized By:	David L Feigenbaum
Attorney Docket Number:	38879-0006002
Receipt Date:	18-NOV-2015
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9		application.pdf	521571 f1511135e01472879d27a61f8e3450626cd5fcfc	yes	26

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10	Application Data Sheet	ADS.pdf	1819322 43cfb5fe0a108834a3f2290d3721e1f1cfe086e4	no	7
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11	Fee Worksheet (SB06)	fee-info.pdf	40638 542473e13d28c7993bf88784f8eec2bd0d3b1318	no	2
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