

AO 120 (Rev. 08/10)

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

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

DOCKET NO. 2:22-cv-248	DATE FILED 7/5/2022	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Biometric Associates, LP		DEPENDANT Lululemon Athletica, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Jabaa, LLC
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT		
CLERK	(BY) DEPUTY CLERK	DATE

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

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

DOCKET NO. 2:21-cv-00461	DATE FILED 12/20/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Jabaa, LLC		DEPENDANT Five Below, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Jabaa, LLC
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DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT Court ACCEPTS AND ACKNOWLEDGES that all claims against Five Below in the above-captioned action are DISMISSED WITH PREJUDICE
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CLERK <i>David A. O'Poole</i>	(BY) DEPUTY CLERK ch	DATE 5/20/22
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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AO 120 (Rev. 08/10)

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 filed in the U.S. District Court _____ for the Eastern District of Texas _____ on the following

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

DOCKET NO. 2:21-cv-00461	DATE FILED 12/20/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Jabaa, LLC		DEPENDANT Five Below, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Jabaa, LLC
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DECISION/JUDGEMENT		
CLERK	(BY) DEPUTY CLERK	DATE

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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court _____ for the Eastern District of Texas _____ on the following

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

DOCKET NO. 2:21-cv-00341	DATE FILED 8/30/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Jabaa, LLC		DEPENDANT Caleres, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Jabaa, LLC
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
Accordingly, all pending claims and causes of action in this case by and between Plaintiff and Defendant are DISMISSED WITH PREJUDICE

CLERK <i>David A. O'Poole</i>	(BY) DEPUTY CLERK nkl	DATE 12/22/21
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AO 120 (Rev. 08/10)

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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court _____ for the Eastern District of Texas _____ on the following

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

DOCKET NO. 2:21-cv-234	DATE FILED 6/29/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Jabaa, LLC		DEPENDANT Foot Locker, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Jabaa, LLC
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT Court ACCEPTS AND ACKNOWLEDGES, and pursuant to Fed. R. Civ. P. 41(a)(1)(A)(i), all pending claims and causes of action in the above-captioned case are DISMISSED WITH PREJUDICE

CLERK <i>David A. O'Loole</i>	(BY) DEPUTY CLERK ch	DATE 9/27/21
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.);

DOCKET NO. 2:20-cv-365	DATE FILED 11/18/2020	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Biometric Associates, LP		DEFENDANT Ulta Beauty, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Biometric Associates, LP
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DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT Having considered the Notice of Dismissal, the Court ACCEPTS AND ACKNOWLEDGES that all claims in the above-captioned case are DISMISSED WITH PREJUDICE. Each party is to bear its own costs and fees. The Clerk of Court is directed to CLOSE the above-captioned case as no parties or claims remain.

CLERK <i>David A. O'Toole</i>	(BY) DEPUTY CLERK <i>Helen Gunning</i>	DATE 10/8/21
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☐ Trademarks or ☒ Patents. (☐ the patent action involves 35 U.S.C. § 292.);

DOCKET NO. 2:21-cv-42	DATE FILED 2/8/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Biometric Associates, LP		DEPENDANT American Eagle Outfitters, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 7,480,637	1/20/2009	Biometric Associates, LP
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT Having considered the Notice, the Court ACCEPTS AND ACKNOWLEDGES that all claims in the above-captioned case are DISMISSED WITH PREJUDICE.

CLERK <i>David A. O'Toole</i>	(BY) DEPUTY CLERK nkl	DATE 5/12/21
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DOCKET NO. 2:21-cv-42	DATE FILED 2/8/2021	U.S. DISTRICT COURT for the Eastern District of Texas
PLAINTIFF Biometric Associates, LP		DEPENDANT American Eagle Outfitters, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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Best Available Copy

01/23/2017 17:12

410-467-4585

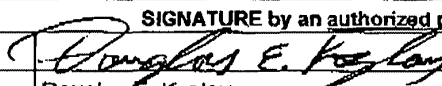
FEDEX OFFICE 0903

PAGE 02

Doc Code: MES.GIB

Document Description: Certification of Micro Entity Status (Gross Income Basis)

PTO/SB/15A (07-14)

CERTIFICATION OF MICRO ENTITY STATUS (GROSS INCOME BASIS)			
Application Number or Control Number (if applicable): 11/317,141		Patent Number (if applicable): 7,480,637	
First Named Inventor: Kozlay, Douglas E.		Title of Invention: Internet transaction authentication apparatus, method, and system for improving security of Internet transactions	
The applicant hereby certifies the following—			
(1) SMALL ENTITY REQUIREMENT – The applicant qualifies as a small entity as defined in 37 CFR 1.27. (2) APPLICATION FILING LIMIT – Neither the applicant nor the inventor nor a joint inventor has been named as the inventor or a joint inventor on more than four previously filed U.S. patent applications, excluding provisional applications and international applications under the Patent Cooperation Treaty (PCT) for which the basic national fee under 37 CFR 1.492(a) was not paid, and also excluding patent applications for which the applicant has assigned all ownership rights, or is obligated to assign all ownership rights, as a result of the applicant's previous employment. (3) GROSS INCOME LIMIT ON APPLICANTS AND INVENTORS – Neither the applicant nor the inventor nor a joint inventor, in the calendar year preceding the calendar year in which the applicable fee is being paid, had a gross income, as defined in section 61(a) of the Internal Revenue Code of 1986 (26 U.S.C. 61(a)), exceeding the "Maximum Qualifying Gross Income" reported on the USPTO Web site at http://www.uspto.gov/patents/law/micro_entity.jsp which is equal to three times the median household income for that preceding calendar year, as most recently reported by the Bureau of the Census. (4) GROSS INCOME LIMIT ON PARTIES WITH AN "OWNERSHIP INTEREST" – Neither the applicant nor the inventor nor a joint inventor has assigned, granted, or conveyed, nor is under an obligation by contract or law to assign, grant, or convey, a license or other ownership interest in the application concerned to an entity that, in the calendar year preceding the calendar year in which the applicable fee is being paid, had a gross income, as defined in section 61(a) of the Internal Revenue Code of 1986, exceeding the "Maximum Qualifying Gross Income" reported on the USPTO Web site at http://www.uspto.gov/patents/law/micro_entity.jsp which is equal to three times the median household income for that preceding calendar year, as most recently reported by the Bureau of the Census.			
SIGNATURE by an authorized party set forth in 37 CFR 1.33(b)			
Signature			
Name		Douglas E. Kozlay	
Date	01/21/2017	Telephone	443-570-4765
Registration No.		n/a	
☐ There is more than one inventor and I am one of the inventors who are jointly identified as the applicant. The required additional certification form(s) signed by the other joint inventor(s) are included with this form.			



PTO/AIA/123 (08-12)

Approved for use through 11/30/2014. OMB 0651-0055
 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
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CHANGE OF CORRESPONDENCE ADDRESS Patent

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

Patent Number	7,480,637
Issue Date	1/20/2009
Application Number	11/317,141
Filing Date	12/23/2005
First Named Inventor	Kozlay, Douglas
Attorney Docket Number	

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

☐ The address associated with Customer Number:

OR

☒ **Firm or Individual Name** Douglas Kozlay

1101 E33rd Street
 Suite E303

Address

City Baltimore, MD 21218

State MD

ZIP 21218

Country USA

Telephone 443 5704765

Email dkozlay@baimobile.com

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

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

I am the:

☒ Patentee.

☐ If the Patentee was not the applicant for patent (37 CFR 1.42), then a Statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is enclosed or was filed on _____. See 37 CFR 3.71.

☐ Attorney or agent of record. Registration Number _____

☐ Patent practitioner acting in a representative capacity whose correspondence address is the correspondence address of record. Notice has been given to the patentee or owner. Registration Number _____

Signature *Douglas Kozlay*

Typed or Printed Name Douglas Kozlay

Date 1/23/2017

Telephone 443 5704765

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, see below.

☐ *Total of _____ forms are submitted.

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

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

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JAN 31 2017



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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/317,141	01/20/2009	7480637	AMK-4107-22	9035

23117 7590 12/29/2008
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

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 74 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 Customer Service Center of the Office of Patent Publication at (571)-272-4200.

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

Douglas Kozlay, Timonium, MD;

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)

23117 7590 10/06/2008

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

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.
-----------------	-------------	----------------------	---------------------	------------------

11/317,141 12/23/2005 Douglas Kozlay AMK-4107-22 9035

TITLE OF INVENTION: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, & SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	01/06/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
ELISCA, PIERRE E	3621	705-067000

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

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

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 NIXON & VANDERHYE P.C.
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

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

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

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Biometric Associates, LP

Timonium, Maryland

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

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

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

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

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 14-1140 (enclose an extra copy of this form).

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

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

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

Authorized Signature /Alan M. Kagen/

Date December 15, 2008

Typed or printed name Alan M. Kagen

Registration No. 36,178

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

KOZLAY

Serial No. 11/317,141

Filed: December 23, 2005

For: INTERNET TRANSACTION AUTHENTICATION
APPARATUS, METHOD, AND SYSTEM FOR IMPROVING
SECURITY OF INTERNET TRANSACTIONS

* * * * *

Conf. No. 9035

Atty. Ref.: AMK-4107-22

TC/A.U.: 3621

Examiner: P. Elisca

December 15, 2008

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

Sir:

**COMMENTS ON EXAMINER'S STATEMENT
OF REASONS FOR ALLOWANCE**

With respect to the Examiner's Statement of Reasons for Allowance in the Notice of Allowance dated October 6, 2008, Applicant respectfully disagrees with the Examiner to any extent that such statement characterizes the invention in a manner at variance with the actual wording of the claims.

As set forth in the Notice of Allowance, these comments are being filed along with the payment of the Issue Fee.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Alan M. Kagen/
Alan M. Kagen
Reg. No. 36,178

AMK:jls
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

1415819

Electronic Patent Application Fee Transmittal				
Application Number:		11317141		
Filing Date:		23-Dec-2005		
Title of Invention:		INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, & SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS		
First Named Inventor/Applicant Name:		Douglas Kozlay		
Filer:		Alan Mark Kagen/Janet Stoy		
Attorney Docket Number:		AMK-4107-22		
Filed as Small Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee	2501	1	755	755
Publ. Fee- early, voluntary, or normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1055

Electronic Acknowledgement Receipt	
EFS ID:	4456353
Application Number:	11317141
International Application Number:	
Confirmation Number:	9035
Title of Invention:	INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, & SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS
First Named Inventor/Applicant Name:	Douglas Kozlay
Customer Number:	23117
Filer:	Alan Mark Kagen/Janet Stoy
Filer Authorized By:	Alan Mark Kagen
Attorney Docket Number:	AMK-4107-22
Receipt Date:	15-DEC-2008
Filing Date:	23-DEC-2005
Time Stamp:	16:00:48
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$1055
RAM confirmation Number	1315
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Issue Fee Payment (PTO-85B)	4107-22issfee.pdf	106167	no	1
			8d4e41351da068b2277e04623662090396763746		
Warnings:					
Information:					
2	Post Allowance Communication - Incoming	4107-22comments.pdf	72790	no	1
			f893bb38257d379d5ba67c07ece5f0d870b871aa		
Warnings:					
Information:					
3	Fee Worksheet (PTO-06)	fee-info.pdf	31855	no	2
			55e29b4681f6059223a4447dab6a0380ae80e772		
Warnings:					
Information:					
Total Files Size (in bytes):			210812		
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
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NOTICE OF ALLOWANCE AND FEE(S) DUE

23117 7590 10/06/2008

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

ELISCA, PIERRE E

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 10/06/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/317,141	12/23/2005	Douglas Kozlay	AMK-4107-22	9035

TITLE OF INVENTION: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, & SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	01/06/2009

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

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

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

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

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

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

If the SMALL ENTITY is shown as NO:

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

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

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

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

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

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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P.O. Box 1450
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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23117 7590 10/06/2008

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

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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.
-----------------	-------------	----------------------	---------------------	------------------

11/317,141 12/23/2005 Douglas Kozlay AMK-4107-22 9035

TITLE OF INVENTION: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, & SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	01/06/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
ELISCA, PIERRE E	3621	705-067000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____ (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____ 3 _____
---	---

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

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

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

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

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

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

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

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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

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

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

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/317,141	12/23/2005	Douglas Kozlay	AMK-4107-22	9035
23117	7590	10/06/2008	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			ELISCA, PIERRE E	
			ART UNIT	PAPER NUMBER
			3621	
DATE MAILED: 10/06/2008				

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

The Patent Term Adjustment to date is 74 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 74 day(s).

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

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

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

Notice of Allowability	Application No.	Applicant(s)	
	11/317,141	KOZLAY, DOUGLAS	
	Examiner	Art Unit	
	Pierre E. Elisca	3621	

-- 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 8/15/2008.

2. ☒ The allowed claim(s) is/are 1-24.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 * Certified copies not received: _____.

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

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 (b) ☐ 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. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>3/24/2008</u> 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal Patent Application 6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____. 7. ☐ Examiner's Amendment/Comment 8. ☒ Examiner's Statement of Reasons for Allowance 9. ☐ Other _____.
---	---

/ Pierre E. Elisca/ Primary Examiner, Art Unit 3621	
--	--

REASONS FOR ALLOWANCE

1. This is an Examiner's statement of reasons for allowance. The closest prior art of record Karthik US PG Pub 2005/0165700 A1 discloses a biometric verification system for electronic transactions over the web.

Jp2006127178 A, Yamamura, Kazuhisa discloses a system for personal authentication by collating personal biological information.

However, neither Karthik nor Yamamura singularly or in combination discloses the recited feature:

As per claims 1, 7, 15, 20, and 21 "transaction security software resident within and executing on said at comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic transaction authentication software for authenticating transactions, at least one of a memory and a communications buffer coupled to said external communications interface, and a communication subsystem coupled into said external communications interface for relaying data messages between at least one external system and said apparatus".

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 571 272 6706. The examiner can normally be reached on 6:30 to 5:00. Hoteler.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571 272 6779. 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.

/ Pierre E. Elisca/
Primary Examiner, Art Unit 3621

Notice of References Cited	Application/Control No. 11/317,141	Applicant(s)/Patent Under Reexamination KOZLAY, DOUGLAS	
	Examiner Pierre E. Elisca	Art Unit 3621	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2005/0165700	07-2005	Karthik, Kaleedhass	705/067
*	B	US-2006/0123465	06-2006	Ziegler, Robert	726/002
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	jp2006127178 A	05-2006	JP	Yamamura, Kazuhisa	
	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.



UNITED STATES PATENT AND TRADEMARK OFFICE

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BIB DATA SHEET

CONFIRMATION NO. 9035

SERIAL NUMBER 11/317,141	FILING or 371(c) DATE 12/23/2005 RULE	CLASS 705	GROUP ART UNIT 3621	ATTORNEY DOCKET NO. AMK-4107-22		
APPLICANTS Douglas Kozlay, Timonium, MD; ** CONTINUING DATA ***** ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 02/03/2006						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/PIERRE E ELISCA/</u> Examiner's Signature		☐ Met after Allowance P.E Initials	STATE OR COUNTRY MD	SHEETS DRAWINGS 4	TOTAL CLAIMS 24	INDEPENDENT CLAIMS 5
ADDRESS NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203 UNITED STATES						
TITLE Internet transaction authentication apparatus, method, & system for improving security of internet transactions						
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				

<i>Index of Claims</i> 	Application/Control No. 11317141	Applicant(s)/Patent Under Reexamination KOZLAY, DOUGLAS
	Examiner Pierre E Elisca	Art Unit 3621

✓	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	09/30/2008								
	1	=								
	2	=								
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	4	=								
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Search Notes 	Application/Control No. 11317141	Applicant(s)/Patent Under Reexamination KOZLAY, DOUGLAS
	Examiner Pierre E Elisca	Art Unit 3621

SEARCHED			
Class	Subclass	Date	Examiner
705	67	9/30/2008	P.E
713	186	9/30/2008	P.E
705	50	9/30/2008	P.E

SEARCH NOTES		
Search Notes	Date	Examiner
West Search	9/30/2008	P.E
JP Search	9/30/2008	P.E

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
705	67	9/30/2008	P.E
705	50	9/30/2008	P.E
713	186	9/30/2008	P.E

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Issue Classification 	Application/Control No. 11317141	Applicant(s)/Patent Under Reexamination KOZLAY, DOUGLAS
	Examiner Pierre E Elisca	Art Unit 3621

ORIGINAL						INTERNATIONAL CLASSIFICATION													
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED								
705		67				G	0	6	F	17 / 60 ()									
CROSS REFERENCE(S)																			
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																		
705	50																		
713	186																		

☒ 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

NONE		Total Claims Allowed:	
		24	
(Assistant Examiner)	(Date)		
/ Pierre E Elisca/ Primary Examiner.Art Unit 3621	9/30/2008	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	7

PUB-NO: JP02006127178A
DOCUMENT-IDENTIFIER: JP 2006127178 A
TITLE: BIOMETRICS AUTHENTICATION SYSTEM

PUBN-DATE: May 18, 2006

INVENTOR-INFORMATION:

NAME	COUNTRY
YAMAMURA, KAZUHISA	
ITO, TADAHIRO	

ASSIGNEE-INFORMATION:

NAME	COUNTRY
HITACHI OMRON TERMINAL SOLUTIONS CORP	

APPL-NO: JP2004314998
APPL-DATE: October 29, 2004

INT-CL (IPCR) :

TYPE	IPC	DATE	IPC-OLD
IPCP	G06K17/00	20060101	G06K017/00
IPFC	G06F21/20	20060101	G06F021/20
IPFC	G06Q40/00	20060101	G06Q040/00
IPFC	G07D9/00	20060101	G07D009/00

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a system for personal authentication by collating personal biological information wherein a burden on a customer is reduced in continuous transactions and an unauthorized transaction by an operator is prevented.

SOLUTION: In continuous transactions involving personal authentication by collating biological information, the result of authentication at the first transaction is held, and the next transactions are performed based on the authentication result. An effective period is set for the authentication result held, and the result is taken over only for the effective period. The customer load for authentication at every transaction can be reduced, and an unauthorized transaction by an operator can be prevented.

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WEST Search History for Application 11317141

Creation Date: 2008093008:17

Query	DB	Op.	Plur.	Thes.	Date
(customer\$1 near3 authentication) and biometric	PGPB, USPT	OR	YES		09-30-2008
((customer\$1 near3 authentication) and biometric) and fingerprint near3 sensor\$1	PGPB, USPT	OR	YES		09-30-2008
(customer\$1 near3 authentication) and biometric	JPAB	OR	YES		09-30-2008



NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON VA 22203

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AUG 15 2008

OFFICE OF PETITIONS

In re Application of
Douglas Kozlay
Application No. 11/317,141
Filed: December 23, 2005
Attorney Docket No.: **AMK-4107-22**

ON PETITION

This is a decision on the petition filed March 24, 2008 under 37 CFR 1.137(b),¹ to revive the above-identified application.

The petition is **GRANTED**.

This application became abandoned for failure to timely reply to the non-Final Office Action mailed December 28, 2006. A shortened statutory period of three months was set for replying to the non-Final Office Action. No extensions of time having been requested, this application became abandoned March 29, 2007. Accordingly, a Notice of Abandonment was mailed August 28, 2007.

This matter is being referred to Technology Center 3621 for appropriate action on the amendment filed March 24, 2008.

Telephone inquiries concerning this matter should be directed to the undersigned Petitions Attorney at (571) 272-3212.

Patricia Faison-Ball
Senior Petitions Attorney
Office of Petitions

¹ Effective December 1, 1997, the provisions of 37 CFR 1.137(b) now provide that where the delay in reply was unintentional, a petition may be filed to revive an abandoned application or a lapsed patent pursuant to 37 CFR 1.137(b). A grantable petition filed under the provisions of 37 CFR 1.137(b) must be accompanied by:

(1) the required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing application. In a nonprovisional application filed on or after June 8, 1995, and abandoned for failure to prosecute, the required reply may also be met by the filing of a request for continued examination in compliance with § 1.114. In an application or patent, abandoned or lapsed for failure to pay the issue fee or any portion thereof, the required reply must be the payment of the issue fee or any outstanding balance thereof. In an application abandoned for failure to pay the publication fee, the required reply must include payment of the publication fee.

(2) the petition fee as set forth in 37 CFR 1.17(m);

(3) a statement that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 CFR 1.137(b) was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional; and

(4) any terminal disclaimer (and fee as set forth in 37 CFR 1.20(d)) required pursuant to 37 CFR 1.137(c)).

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

KOZLAY

Atty. Ref.: AMK-4107-22; Confirmation No. 9035

Appl. No. 11/317,141

TC/A.U. 3621

Filed: December 23, 2005

Examiner: P. Elisca

For: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, AND
SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

* * * * *

March 24, 2008

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

Sir:

PETITION TO REVIVE UNINTENTIONALLY ABANDONED APPLICATION

Pursuant to 37 C.F.R. 1.137(b), Applicant hereby petitions to revive the above-identified patent application. The entire delay in filing the required reply to the outstanding Office Action of December 28, 2006 until the filing of this Petition was unintentional.

With reference to 37 C.F.R. § 1.137(b), a Reply was timely filed on March 28, 2007 (listed in PAIR as Miscellaneous Incoming Letter). In addition, a Supplemental Amendment is submitted herewith. Since a reply was filed before the three month deadline, Applicant does not believe a fee is due. If an alternative determination is made, the Patent Office is authorized to charge the Petition Fee of \$770.00 to our Deposit Account (Deposit Account No. 14-1140).

Accordingly, it is respectfully requested that the above-identified patent application be revived.

1318004

KOZLAY
Appl. No. 11/317,141
March 24, 2008

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Alan M. Kagen/
 Alan M. Kagen
 Reg. No. 36,178

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901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

KOZLAY

Atty. Ref.: AMK-4107-22; Confirmation No. 9035

Appl. No. 11/317,141

TC/A.U. 3621

Filed: December 23, 2005

Examiner: P. Elisca

For: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, AND
SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

* * * * *

March 24, 2008

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

Sir:

SUPPLEMENTAL AMENDMENT FILED WITH PETITION TO REVIVE

In response to the Office Action dated December 28, 2006, please amend the
above-identified patent application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2.

Remarks/Arguments begin on page 9.

1317773

AMENDMENTS TO THE CLAIMS:

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

1. (Original) A biometric customer authentication apparatus for improving online transaction security and for assuring the identity of a customer, comprising:
 - an electronic enclosure including a fingerprint sensor disposed thereupon and further including an external communications interface;
 - at least one processor comprised within said enclosure and coupled to said fingerprint sensor;
 - transaction security software resident within and executing on said at least one processor further comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic transaction authentication software for authenticating transactions;
 - at least one of a memory and a communications buffer coupled to said at least one processor and further coupled to said external communications interface; and
 - a communications subsystem coupled into said external communications interface for relaying data messages between at least one external system and said apparatus.
2. (Original) The apparatus of Claim 1, wherein said external communications interface further comprises a physical interface connector for physical insertion into an external interface port disposed upon one of a host system and said at least one external system.
3. (Original) The apparatus of Claim 2, wherein said external communications interface further comprising said physical interface connector, further comprises a USB connector for

insertion into an external interface port disposed upon one of said host system and said at least one external system.

4. (Original) The apparatus of Claim 1, wherein said external communications interface further comprises a first wireless transceiver for wirelessly communicating with a second wireless transceiver communications interface aboard one of a host system and said at least one external system.

5. (Original) The apparatus of Claim 1, wherein said at least one of a memory and a communications buffer is further adapted for storing and retrieving data and for communicating data messages between said apparatus and said at least one external system via said external communications interface.

6. (Original) The apparatus of Claim 1, further adapted for cryptographically encapsulating said data messages into secure data messages to effectuate secure data transmission including sending said secure data messages to said at least one external system only after completion of biometric fingerprint authentication by said customer initiating said transaction.

7. (Currently Amended) A method for securely processing and responding to a website-initiated transaction authentication request, comprising the steps of:

(1) receiving in a customer authentication apparatus said website-initiated transaction authentication message for cryptographically confirming the web site's identity and for requesting said apparatus provide a corroborating response including a biometric authentication of an enrolled customer and further including a cryptographic encapsulation of said response in order to prove that said response originates from a legitimate customer;

(2) biometrically authenticating said customer by ~~means of~~ said customer authentication apparatus prior to transmitting said response to said request;

(3) performing said cryptographic encapsulation of said response by said customer authentication apparatus only after successful completion of said biometric authentication of said customer using fingerprint biometrics;

(4) transmitting said response to said request; and

(5) verifying by at least one of said website and at least one external system that said response satisfactorily authenticates said customer;

8. (Original) The method of Claim 7, wherein said step of performing cryptographic encapsulation of said transaction authentication response by said customer authentication apparatus also includes the step of explicitly identifying said customer authentication apparatus.

9. (Original) The method of Claim 7, wherein said step of transmitting said transaction authentication response further comprises transmitting said cryptographically encapsulated secure data message by an external communications interface comprising an external interface connector disposed upon said customer authentication apparatus after said external interface connector has been inserted into an external interface port on an external system.

10. (Original) The method of Claim 7, wherein said step of transmitting said transaction authentication response further comprises transmitting said cryptographically encapsulated secure data message by an external communications interface comprising a wireless transceiver comprised within said customer authentication apparatus after said apparatus is within range of an external system having a wireless transceiver communications interface.

11. (Original) The method of Claim 7, wherein said step 1 of cryptographically authenticating that said request originates from a legitimate customer and step 2 of biometrically

authenticating said customer is indicated by means of at least one of a visual indicator cue and an audible indicator cue and a displayed indicator cue.

12. (Original) The method of Claim 11, wherein said visual indicator cue comprises at least one of lighting a light emitting diode and lighting a general purpose indicator light and displaying a visual indicator cue on a display.

13. (Original) The method of Claim 11, wherein said audible indicator cue comprises the sounding of at least one of a beep tone and a chime tone.

14. (Original) The method of Claim 11, wherein said displayed indicator cue further comprises at least one of a predetermined indicator legend cue and a predetermined symbol cue and a predetermined image cue.

15. (Original) A method for generating a customer-initiated transaction request from an authorized customer initiating said request, comprising the steps of:

(1) biometrically authenticating said customer using a customer authentication apparatus prior to transmission of said customer-initiated transaction request;

(2) processing, assembling, and cryptographically encapsulating an assertion of a successful biometric authentication of said customer and a provision of a time-varying parameter to prevent replay attacks encapsulated therewithin prior to transmission thereof;

(3) transmitting by said customer authentication apparatus said cryptographically encapsulated request to at least one external system further comprising at least one of a website and an authentication service provider;

(4) receiving by said at least one external system said request and verifying that said request originated from an authenticated customer;

(5) responding to said request using a secure data message comprising a cryptographic transaction authentication response and transmitting said response to said customer authentication apparatus;

(6) receiving and verifying by said customer authentication apparatus that said response to said request represents a response from a legitimate website; and

(7) actuating at least one of a visual indicator cue and an audible indicator cue and a displayed indicator cue on said transaction authentication apparatus indicating that said response has been received from a legitimate website.

16. (Original) The method of Claim 15, wherein said step 1 of cryptographically authenticating that said request originates from a legitimate customer and step 2 of biometrically authenticating said customer is indicated by means of at least one of a visual indicator cue and an audible indicator cue and a displayed indicator cue.

17. (Original) The method of Claim 16, wherein said visual indicator cue comprises at least one of lighting a light emitting diode and lighting a general purpose indicator light and displaying a visual indicator cue on a display.

18. (Original) The method of Claim 16, wherein said audible indicator cue comprises the sounding of at least one of a beep tone and a chime tone.

19. (Original) The method of Claim 16, wherein said displayed indicator cue further comprises at least one of a predetermined indicator legend cue and a predetermined symbol cue and a predetermined image cue.

20. (Currently Amended) A method for improving online transaction security, the steps comprising:

(1) enrolling a person into a customer authentication apparatus;

(2) deploying said person and said customer authentication apparatus together at an external system where at least one transaction can be generated;

(3) communicating between said customer authentication apparatus and said external system;

(4) authenticating said person by ~~means of~~ said customer authentication apparatus while said apparatus is communicating with said external system;

(5) initiating and generating of said at least one request by said person after said apparatus has authenticated said person;

(6) transmitting a request message indicating that said person was authenticated by said apparatus and that said transaction was initiated by an authenticated person; and

(7) receiving in said host system said authenticated-person-initiated-transaction message.

21. (Currently Amended) A system for initiating, authenticating and completing transactions by at least one customer using a biometric customer authentication apparatus, comprising:

said at least one customer enrolled into said customer authentication apparatus;

said customer authentication apparatus including (i) a fingerprint sensor coupled to a processor, ~~and including~~ (ii) an external communications interface adapted for communicating with at least one external system, and (iii) transaction security software resident within and executing on said processor and further comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic transaction authentication software for authenticating transactions;

said at least one external system adapted for communicating with said customer authentication apparatus and having at least one of a physical external communications interface port and a wireless communications interface for receiving secure data messages; and

at least one transaction processing application residing within said at least one external system including at least one part of a web application accessed by said at least one external system adapted for transmitting and receiving requests and responses to and from ~~a~~said customer authentication apparatus.

22. (Original) The system of Claim 21, wherein a trusted third party Authentication Service Provider performs authentication services on behalf of at least one customer authentication apparatus and said at least one external system.

23. (Original) The system of Claim 21, wherein said customer authentication apparatus communicates with an external system by means of a USB interface connector.

24. (Original) The system of Claim 21, wherein said transaction authentication apparatus communicates with an external system by means of a wireless communications link.

REMARKS/ARGUMENTS

Claims 1-24 are present in this application. By this Amendment, claims 7, 20 and 21 have been amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 1-24 were rejected under 35 U.S.C. §103(a) over U.S. Published Patent Application No. 2005/0165700 to Karthik in view of U.S. Published Patent Application No. 2006/0123465 to Ziegler. This rejection is respectfully traversed.

Financial institutions (and other security-intensive transaction environments) often stipulate or prefer that they not be required to support software in user machines. With the system architecture and methodology of the claimed invention, authentication resides within the apparatus and not in the user's or web host's system. As such, dedicated software on the user's computer is not required. Rather, the claimed system treats a user's computer as a passive conduit to the Internet. The authentication nexus and primary workhorse is the apparatus, and not the user's computer. System authentication intelligence is largely embedded into individual end user devices, and not the computer and/or website and/or network. Additionally, the devices defined according to the claimed invention each operate independently of any selected computer into which they are inserted; that is, the user can go from one selected machine to another without having to load any special software. See, for example, paragraph [0019] and the Abstract of the Disclosure.

Karthik describes a security system wherein installation of a server authentication program is performed in a web-server of a web-service provider. A client software component is downloaded and installed at a workstation of the client. See, for example, paragraphs [0019] and [0030]. As noted above, in contrast, the claimed invention provides that the authentication

process at the user-side resides within the portable apparatus, not the client workstation. Karthik further describes that its invention uses database servers like Relation Database Management System (RDBMS), Database Management System and other data storage systems for storing the “biometrics” information. See, for example, paragraph [0027]. In the claimed invention, in contrast, the biometrics template information resides entirely within the user’s portable apparatus and is never transmitted on the network, nor is it ever stored in a database server, whether encrypted or not.

Ziegler does not correct the deficiencies of Karthik. Ziegler describes software installed in the user’s computer and is thus readily distinguishable from the claimed invention. Ziegler uses a “biometric network” available to its “authentication authority;” rather, according to the claimed invention, the biometric authentication system is entirely contained within the user’s portable hardware apparatus and is not part of the authentication server. Indeed, Ziegler provides that “a biometric network is accessible by the authentication authority for authenticating the first and the second end point within the biometric network” See, for example, Ziegler’s Abstract and paragraph [0013].

These important distinctions are embodied in the independent claims of the present invention. Claims 1 and 21 define a biometric customer authentication apparatus wherein transaction security software is resident within and executing on a processor comprised within an electronic enclosure. The processor additionally includes biometric fingerprint authentication software for authenticating authorized customers and also including cryptographic transaction authentication software for authenticating transactions. Related subject matter is defined in the method of independent claim 7 (see step (2) biometrically authenticating said customer by said customer authentication apparatus prior to transmitting said response to said request; and step (3)

performing said cryptographic encapsulation of said response by said customer authentication apparatus only after successful completion of said biometric authentication of said customer using fingerprint biometrics) and method claim 15 (see, e.g., step (1) biometrically authenticating said customer using a customer authentication apparatus prior to transmission of said customer-initiated transaction request; and step (3) transmitting by said customer authentication apparatus said cryptographically encapsulated request to at least one external system further comprising at least one of a website and an authentication service provider).

Method claim 20 defines a step of deploying an enrolled person and a customer authentication apparatus together at an external system. Claim 20 additionally defines a step of communicating between the customer authentication apparatus and the external system, and a step of authenticating the person by means of the customer authentication apparatus while the apparatus is communicating with the external system. As noted above, at least this subject matter is lacking in Karthik and Ziegler.

Since at least these important features are lacking in Karthik and Ziegler, taken singly or in combination, Applicant respectfully submits that the rejection is misplaced.

With regard to the dependent claims, Applicant submits that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

KOZLAY
Appl. No. 11/317,141
March 24, 2008

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Alan M. Kagen/
 Alan M. Kagen
 Reg. No. 36,178

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Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Atty Dkt. AMK-4107-22
C#/M#

Confirmation No.: 9035

KOZLAY

Group Art Unit: 3621

Serial No. 11/317,141

Examiner: P. Elisca

Filed: December 23, 2005

Date: March 24, 2008

Title: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, AND SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS

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

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of the reference(s) is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☐ This Information Disclosure Statement ("IDS") is being filed within three (3) months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.
- ☒ This IDS is being filed more than three (3) months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☐ a. I hereby certify that each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this IDS. 37 C.F.R. 1.97(e)(1).
- ☐ a.1. I hereby certify that this communication was not received by any individual designated in Section 1.56(c) more than 30 days prior to the filing of the Information Disclosure Statement. 37 C.F.R. §1.704(d).
- ☐ b. I hereby certify that no item of information in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR§1.56(c) more than three (3) months prior to the filing of this IDS. 37 C.F.R. 1.97(e)(2).
- ☒ c. The fee of \$180.00 under 37 C.F.R. 1.17(p) is submitted herewith. Please credit or debit Deposit Acct No. 14-1140 as needed to ensure consideration of the disclosed information. A duplicate copy of this paper is attached.
- ☐ This IDS is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Attached is our check in the amount of \$180.00 in payment of the fee under 37 C.F.R. 1.17(p). Please credit or debit Deposit Account No. 14-1140 as needed to ensure consideration of the disclosed information. A duplicate copy of this paper is attached.
- ☐ a. I hereby certify that each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this IDS. 37 C.F.R. 1.97(e)(1).
- ☐ a.1. I hereby certify that this communication was not received by any individual designated in Section 1.56(c) more than 30 days prior to the filing of the Information Disclosure Statement. 37 C.F.R. §1.704(d).
- ☐ b. I hereby certify that no item of information in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR§1.56(c) more than three (3) months prior to the filing of this IDS. 37 C.F.R. 1.97(e)(2).
- ☐ Relevance of the non-English language reference(s) is discussed in the present specification.
- ☐ The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.
- ☐ A concise explanation of the relevance of the non-English language reference(s) appears in the Appendix hereto.
- ☐ The Examiner's attention is directed to co-pending U.S. Patent Application No. _____, filed _____, which is directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.
- ☐ Copies of the references were cited by or submitted to the Office in parent Application No. _____ (filed _____), which is relied upon for an earlier filing date under 35 U.S.C. 120. Thus, Form PTO/SB/08 is attached without copies of these references. 37 C.F.R.1.98(d).
- ☐ Other.

901 North Glebe Road, 11th Floor
Arlington, Virginia 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
AMK:jls

NIXON & VANDERHYE P.C.
By Atty: Alan M. Kagen, Reg. No. 36,178

Signature: _____/Alan M. Kagen/

1257078

INFORMATION DISCLOSURE CITATION	ATTY. DOCKET NO.	SERIAL NO.
	4107-22	11/317,141
(Use several sheets if necessary)	APPLICANT	
	KOZLAY	
	FILING DATE	GROUP
	December 23, 2005	3621

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,681,328	1/2004	Harris et al.			
	6,808,111	10/2004	Kashef et al.			
	6,950,939	9/2005	Tobin			

FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

*Examiner	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 application.

Form PTO/SB/08 (Also PTO-1449)

Electronic Patent Application Fee Transmittal				
Application Number:		11317141		
Filing Date:		23-Dec-2005		
Title of Invention:		Internet transaction authentication apparatus, method, & system for improving security of internet transactions		
First Named Inventor/Applicant Name:		Douglas Kozlay		
Filer:		Alan Mark Kagen/Janet Stoy		
Attorney Docket Number:		AMK-4107-22		
Filed as Large Entity				
Utility Filing Fees				
Description		Fee Code	Quantity	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	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt

EFS ID:	3042627
Application Number:	11317141
International Application Number:	
Confirmation Number:	9035
Title of Invention:	Internet transaction authentication apparatus, method, & system for improving security of internet transactions
First Named Inventor/Applicant Name:	Douglas Kozlay
Customer Number:	23117
Filer:	Alan Mark Kagen/Janet Stoy
Filer Authorized By:	Alan Mark Kagen
Attorney Docket Number:	AMK-4107-22
Receipt Date:	24-MAR-2008
Filing Date:	23-DEC-2005
Time Stamp:	16:22:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 180
RAM confirmation Number	1540
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Petition for review by the Office of Petitions.	4107-22pettorevive.pdf	75055 f376bc7cb58f254b56dc4889afc309b8f8e11505	no	2
Warnings:					
Information:					
2		4107-22suppamd.pdf	102693 c44e833e0265a3c8fbc31ea42302724c87062c59	yes	12
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Supplemental Response or Supplemental Amendment		1	1	
	Claims		2	8	
	Applicant Arguments/Remarks Made in an Amendment		9	12	
Warnings:					
Information:					
3		4107-22ids.pdf	97067 8899f5fa5e208319d75d0c4faaab71f8d6171cb8	yes	2
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Information Disclosure Statement Letter		1	1	
	Information Disclosure Statement (IDS) Filed		2	2	
Warnings:					
Information:					
4	Fee Worksheet (PTO-06)	fee-info.pdf	8211 1e521fab872c33510445669830224089799cb3d0	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			283026		

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 11/317,141		Filing Date 12/23/2005		☐ To be Mailed	
APPLICATION AS FILED – PART I										
(Column 1)			(Column 2)			SMALL ENTITY ☒ OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =		OR	X \$ =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =			X \$ =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL				
APPLICATION AS AMENDED – PART II										
(Column 1)			(Column 2)			(Column 3)		SMALL ENTITY OR OTHER THAN SMALL ENTITY		
AMENDMENT	03/23/2008	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 24	Minus	** 24	= 0	X \$25 =	0	OR	X \$ =	
	Independent (37 CFR 1.16(h))	* 5	Minus	***5	= 0	X \$105 =	0	OR	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
					TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE		
AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =	OR	X \$ =		
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =	OR	X \$ =		
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
					TOTAL ADD'L FEE		TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

Legal Instrument Examiner:
/WANDA BROWN/

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.

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.

Change of CORRESPONDENCE ADDRESS Application Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	11/317,141
	Filing Date	December 23, 2005
	First Named Inventor	Douglas E. Kozlay
	Art Unit	3621
	Examiner Name	P. Elisca
	Attorney Docket Number	AMK-4107-22

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



The address associated with Customer Number:

23117**OR****Firm or Individual Name**

Address

City

State

Zip

Country

Telephone

Email

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

I am the:



Applicant/Inventor



Assignee of record of the entire interest.

Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96/)

Attorney or agent of record. Registration Number 36,178

Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See C.F.R. § 1.33(a)(1). Registration Number: _____

Signature

/Alan M. Kagen/

Typed or
Printed Name

Alan M. Kagen

Date

October 3, 2007

Telephone

703-816-4031

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

*Total of 1 forms are submitted.

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

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

Electronic Acknowledgement Receipt	
EFS ID:	2272614
Application Number:	11317141
International Application Number:	
Confirmation Number:	9035
Title of Invention:	Internet transaction authentication apparatus, method, & system for improving security of internet transactions
First Named Inventor/Applicant Name:	Douglas Kozlay
Correspondence Address:	Douglas Kozlay Suite 304 9475 Deereco Road - Timonium MD 21093 US 14102527210 dougkozlay@biometricassociates.com
Filer:	Alan Mark Kagen/Janet Stoy
Filer Authorized By:	Alan Mark Kagen
Attorney Docket Number:	AMK-4107-22
Receipt Date:	03-OCT-2007
Filing Date:	23-DEC-2005
Time Stamp:	10:57:49
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Change of Address	4107-22corresadd.pdf	107651 735653b4dd1ca75d9c9ff8bbc3e448a6c27ad316	no	1
Warnings:					
Information:					
Total Files Size (in bytes):			107651		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/317,141	12/23/2005	Douglas Kozlay	AMK-4107-22

Douglas Kozlay
 Suite 304
 9475 Deereco Road
 Timonium, MD 21093

CONFIRMATION NO. 9035



OC000000026029657

Date Mailed: 09/26/2007

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 09/18/2007.

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.

AT
 Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199
 OFFICE COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

KOZLAY

Atty. Ref.: AMK-4107-22

Serial No. 11/317,141

Group: 3621

Filed: December 23, 2005

Examiner: P. Elisca

For: INTERNET TRANSACTION AUTHENTICATION
APPARATUS, METHOD, AND SYSTEM FOR
IMPROVING SECURITY OF INTERNET
TRANSACTIONS

* * * * *

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

Sir:

**EXCLUSIVE SUBSTITUTE POWER OF ATTORNEY
AND EXCLUSIVE PROSECUTION HEREAFTER BY
ASSIGNEE UNDER 37 C.F.R. §§ 1.36, 3.71 AND 3.73**

Biometric Associates, ~~/~~LP, being the owner of all right, title and interest in the above-identified patent application, hereby revokes all previous powers of attorney in this case, if any, and hereby appoints the attorneys of **Customer Number 23117** individually and collectively its attorneys to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith, and with the resulting patent.

Biometric Associates, ~~/~~LP also authorizes Nixon & Vanderhye to act and rely solely on instructions communicated from the person, attorney, firm or other organization sending instructions to Nixon & Vanderhye on behalf of the owner.

1249179

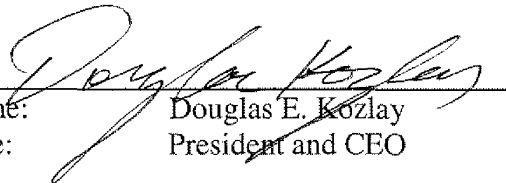
KOZLAY
Serial No. 11/317,141

Certificate Under 37 C.F.R. §3.73(b)

Biometric Associates, /LLP, having a place of business at 9475 Deereco Road, Suite 304, Timonium, Maryland 21093, states that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventors to the aforesaid assignee, a copy of the assignment being attached.

The undersigned (whose title is typed below) is empowered to sign this statement on behalf of Biometric Associates, /LLP.

Biometric Associates, /LLP

9/16/07 By: 
Date Name: Douglas E. Kozlay
Title: President and CEO

Attachment: Copy of Assignment

COPY

AMK-4107-22

ASSIGNMENT FOR PATENT APPLICATION
(All Rights)

WHEREAS, Douglas E. Kozlay (hereinafter ASSIGNOR), of 9475 Deereco Road, Suite 304, Timonium, Maryland 21093, has made an invention entitled INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, AND SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS, for which a so-entitled application for Letters Patent of the United States was filed in the United States Patent and Trademark Office on December 23, 2005 under Serial No. 11/317,141;

WHEREAS, Biometric Associates, ~~LLP~~ (hereinafter ASSIGNEE), having an office and place of business at 9475 Deereco Road, Suite 304, Timonium, Maryland 21093, is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;

ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;

ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and

COPY

1249177

COPY

ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

9/16/07
Date

Douglas E. Kozlay
Douglas E. Kozlay

Witnessed by:

Name: _____ Date: _____

Name: _____ Date: _____

COPY

Electronic Acknowledgement Receipt	
EFS ID:	2208630
Application Number:	11317141
International Application Number:	
Confirmation Number:	9035
Title of Invention:	Internet transaction authentication apparatus, method, & system for improving security of internet transactions
First Named Inventor/Applicant Name:	Douglas Kozlay
Correspondence Address:	Douglas Kozlay Suite 304 9475 Deereco Road - Timonium MD 21093 US 14102527210 dougkozlay@biometricassociates.com
Filer:	Alan Mark Kagen/Janet Stoy
Filer Authorized By:	Alan Mark Kagen
Attorney Docket Number:	1223-2005
Receipt Date:	18-SEP-2007
Filing Date:	23-DEC-2005
Time Stamp:	13:24:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	4107-22power.pdf	117124 92382423b360aadc3952aecead071d6c6522758b	no	4
Warnings:					
Information:					
Total Files Size (in bytes):			117124		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/317,141	12/23/2005	Douglas Kozlay	1223-2005	9035
7590		08/28/2007		
Douglas Kozlay Suite 304 9475 Deereco Road Timonium, MD 21093				
			EXAMINER	
			ELISCA, PIERRE E	
			ART UNIT	PAPER NUMBER
			3621	
			MAIL DATE	DELIVERY MODE
			08/28/2007	PAPER

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

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

Notice of Abandonment	Application No.	Applicant(s)	
	11/317,141	KOZLAY, DOUGLAS	
	Examiner	Art Unit	
	Pierre E. Elisca	3621	

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

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 28 December 2006.
 - (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
 - (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
 - (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
 - (d) ☒ 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 dated _____), 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 drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

Many attempts have been made to contact Applicant's representative.


PIERRE EDDY ELISCA
PRIMARY EXAMINER
TECHNOLOGY CENTER 3600

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



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APPLICATION NUMBER	FILING OR 371(c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/317,141	12/23/2005	Douglas Kozlay	1223-2005

CONFIRMATION NO. 9035

Douglas Kozlay
Suite 304
9475 Deereco Road
Timonium, MD21093

Title: Internet transaction authentication apparatus, method, & system for improving security of internet transactions

Publication No. US-2007-0150419-A1

Publication Date: 06/28/2007

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 publicly 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 703-305-3028.

Pre-Grant Publication Division, 703-605-4283

9475 Deereco Road
Suite 304
Timonium, MD 21083
410-252-7210
410-252-7214

**Biometric
Associates, LP**

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MAR 28 2007

Fax

To: Pierre E. ELISA From: ~~Gus Hochstet~~ Douglas Kozlony
Fax: 571 273 8300 Pages: 4
Phone: 443 573 4765 Date: 3/28/07
Re: App 11/31/04 cc:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

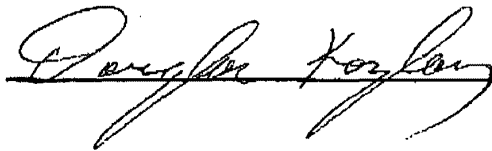
Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571)-273-8300 on March 28, 2007.

Typed or printed name of person signing this certificate:

Douglas Kozlay

Signature:



RE: Application 11/317,141

Art Unit 3621, Examiner Pierre E. Elisca

Response to office action mailed on 12/28/2006

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MAR 28 2007

In the United States Patent Office

RE: Application 11/317,141
Applicant: Kozlay, Douglas
Art Unit 3621
Examiner: Pierre E. Elisca

March 28, 2007

This is in response to the office action mailed on 12/28/2006.

The inventor respectively submits the following in response to Claim Rejections 35 USC Par 103, items 3 and 4.

My invention is specifically designed to avoid a problem that has prevented banks and other institutions from issuing Biometric USB devices. The issuing institutions want to avoid installing software of any kind into the user's workstation or PC because it presents a potential support problem for the bank, especially in mass deployments.

As described in line 11 of my abstract: *"Instead of making online transactions under control of programs in the customer PC, the ITA performs the complete transaction using biometric user authentication and strong cryptographic device authentication, all provisioned entirely within the ITA, itself."*

And in my first claim: "...at least one processor comprised within said enclosure and coupled to said fingerprint sensor;

transaction security software resident within and executing on said at least one processor;"

Any software that is loaded into the user's workstation has the potential to conflict with the user's system or configuration, requiring calls to the issuer's help desk. Sometimes the user will blame the software for malfunctions simply because it was the last thing that the user remembers loading. It also means that the device cannot be used for secure authentication and transactions on unprepared PC's at work, school or other places that the user wishes to use. Based upon their experience with deploying consumer software, the banks require that an internet transaction authentication device perform its functions without downloading or installing any software onto the user's workstation or PC. The inventor has succeeded in building and deploying Internet Transaction Authenticators that process the authentication functions entirely in a program that resides in the removable USB device, logging onto the web site and performing cryptographic authentication/transactions without loading any program into the computer. Accordingly, this difference of not requiring a program in the user's PC is the main trust of my invention.

By contrast, in Karthik's first claim it is stated: "*a client software component, said client software component being downloaded and installed at a workstation of the user,*".

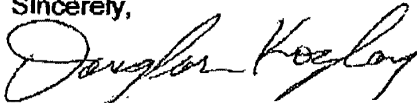
Neither Karthik nor Ziegler talks about an independent device that is deliberately made a mobile device like the ITA. I believe that this is a non-obvious and crucial difference that is required in order to makes the invention acceptable for institutional deployment.

"Both Karthik and Ziegler are combined by the Examiner, here. Notwithstanding, I respectfully submit that while not illogical to do so on the superficial level, once the present invention is looked at in additional detail, it will be seen that the Internet Transaction Authenticator claimed therein, is explicitly not tightly-coupled or connected to a dedicated user computing machine or workstation containing and executing transaction authentication security software installed on said user computing machine or said workstation. NB: except for connecting to the internet via a USB (or other) port on said workstation or user computing machine, there is no transaction authentication security installed except within the ITA apparatus itself.

Since neither Karthik nor Ziegler talks about an independent and mobile device that does not use software in the PC, it would not make sense to combine Karthik and Ziegler, given that the present invention is designed and organized and invented to be a totally standalone and independent authentication device. I would like to draw the Examiner's attention to the core differentiating feature of my instant invention, to provide an Internet Transaction Authenticator which is not in any way dependent on loading software in a user machine. Furthermore, it is readily observed that in the patent applications of both Karthik and Ziegler, both refer to a workstation-based security infrastructure which does not exist at all in the most preferred embodiments of the present invention. Additionally, it must be considered that the user-ergonomics (no cumbersome user installations and/or user apparatus/user machine dependencies) are superior in the present invention, than those of Karthik or Ziegler. Furthermore, it must be noted that costs of the instant invention to the user and to the application provider are potentially substantially reduced, due to lack of need to perform installation of the transaction authentication security software on the user machine or workstation and the eliminated or greatly reduced need for help-desk support.

In response to item number 5, please delete the words "means for" from the subject claim.

Sincerely,



Douglas Kozlay, Inventor



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/317,141	12/23/2005	Douglas Kozlay	1223-2005	9035
7590		12/28/2006		
Douglas Kozlay Suite 304 9475 Deereco Road Timonium, MD 21093				
			EXAMINER	
			ELISCA, PIERRE E	
			ART UNIT	PAPER NUMBER
			3621	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

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

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	11/317,141	KOZLAY, DOUGLAS	
	Examiner	Art Unit	
	Pierre E. Elisca	3621	

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

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

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

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ 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

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

1. This office action is in response to Application No. 11/317,141 filed on 12/23/2005.
2. Claims 1-24 are pending.

Claim Rejections - 35 USC § 103

3. 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 negated by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Karthik US 2005/0165700 A1 in view of Ziegler US 2006/0123465 A1.

As per claims 1, 4, 5 Karthik substantially discloses a biometric verification system for electronic transactions over the Web, the system comprising:

An electronic enclosure including a finger sensor disposed thereupon, at least one processor comprised within said enclosure and coupled to said fingerprint sensor, transaction security software resident within and executing on said at least one processor further comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic transaction authentication software for authenticating transactions (see., Karthik, abstract, specifically wherein said security system for electronic commerce for verifying the

authenticity of a user including: a server authentication program installed in a web-server at a website of a web-service provider(see., pages 1-6, [0010]-[0130] and for fingerprint see., [0017]-[0053]).

Karthik fails to explicitly disclose the limitation wherein said an external communication interface. However, Ziegler discloses a method/system of authentication on an open network. A HSM interface 110 may be interfaced directly or indirectly with a HSM 114 for loading a key-encryption-key (KEK), key pairs as well as any other activity necessary to meet X9 standards for key management. Accordingly, the HSM interface 110 may be connected directly to any for example using an SCSI, serial port, parallel port, USB port. Therefore, the HSM 110 of Ziegler is interpreted as an external communication interface (see., Ziegler, pages 5-17, [0084]-[0193]). Accordingly, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the biometric verification of Karthik by including an external communication interface as taught by Ziegler because this would provide reasonable levels of transactional security, and suitable for authenticating network transactions on an open network.

As per claim 2, Ziegler discloses the claimed limitations wherein said external communications interface further comprises a physical interface connector for physical insertion into an external interface port disposed upon one of a host system and said at least one external system (see., Ziegler, pages 5-17, [0084]-[0193]).

As per claim 3, Ziegler discloses the claimed limitations wherein said external communications interface further comprising said physical interface connector, further comprises a USB connector for insertion into an external interface port disposed upon one of said host system and said at least one external system (see., Ziegler, pages 5-17, [0084]-[0193]).

As per claim 6, Karthik discloses the claimed limitations wherein said cryptographically encapsulating said data messages into secure data messages to effectuate secure data transmission including sending said secure data messages to said at least one external system only after completion of biometric fingerprint authentication by said customer initiating said transaction (see., pages 1-6, [0010]-[0130] and for fingerprint see., [0017]-[0053]).

As per claims 7, 8 and 10-24 Karthik substantially discloses a biometric verification method for electronic transactions over the Web, the system comprising:
Confirming the web site's identity and for requesting said apparatus provide a corroborating response including a biometric authentication of an enrolled customer and further including a cryptographic encapsulation of said response in order to prove that said response originates from a legitimate customer, biometrically authenticating said customer by means of said customer authentication apparatus prior to transmitting said response to said request, performing said cryptographic encapsulation of said response by said customer authentication apparatus only after successful completion of said

biometric authentication of said customer using fingerprint biometrics, transmitting said response to said request (see., Karthik, abstract, specifically wherein said security system for electronic commerce for verifying the authenticity of a user including: a server authentication program installed in a web-server at a website of a web-service provider(see., pages 1-6, [0010]-[0130] and for fingerprint see., [0017]-[0053]).

Karthik fails to explicitly disclose the limitation wherein said an external communication interface. However, Ziegler discloses a method/system of authentication on an open network. A HSM interface 110 may be interfaced directly or indirectly with a HSM 114 for loading a key-encryption-key (KEK), key pairs as well as any other activity necessary to meet X9 standards for key management. Accordingly, the HSM interface 110 may be connected directly to any for example using an SCSI, serial port, parallel port, USB port. Therefore, the HSM 110 of Ziegler is interpreted as an external communication interface (see., Ziegler, pages 5-17, [0084]-[0193]). Accordingly, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the biometric verification of Karthik by including an external communication interface as taught by Ziegler because this would provide reasonable levels of transactional security, and suitable for authenticating network transactions on an open network.

As per claim 9, Karthik discloses the claimed limitations wherein said cryptographically encapsulating said data messages into secure data messages to effectuate secure data transmission including sending said secure data messages to said at least one external system only after completion of biometric fingerprint authentication by said customer

initiating said transaction (see., pages 1-6, [0010]-[0130] and for fingerprint see., [0017-
[0053])).

Claim Objections

5. Claim 7 is objected to because of the following informalities: Claim 7, line 10 recites the word "means", Applicant is advised to remove it. Appropriate correction is required.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 571 272 6706. The examiner can normally be reached on 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571 272 6779. 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.



Pierre Eddy Elisca

Primary Examiner

December 18, 2006

Notice of References Cited	Application/Control No. 11/317,141	Applicant(s)/Patent Under Reexamination KOZLAY, DOUGLAS	
	Examiner Pierre E. Elisca	Art Unit 3621	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2006/0123465	06-2006	Ziegler, Robert	726/002
*	B	US-2005/0165700	07-2005	Karthik, Kaleedhass	705/067
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

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

Refine Search

Search Results -

Terms	Documents
L11 and customer\$1 near3 authenticat\$3	0

Database:

US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L13

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Clear

Interrupt

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DATE: Monday, December 18, 2006

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<u>L13</u>	L11 and customer\$1 near3 authenticat\$3	0	<u>L13</u>
<u>L12</u>	L11 and customer\$1 near3 authenticat\$3	0	<u>L12</u>
<u>L11</u>	USB near3 external and authentication	396	<u>L11</u>
<u>L10</u>	L7 and USB near3 external	0	<u>L10</u>
<u>L9</u>	L8 and USB near3 external	0	<u>L9</u>
<u>L8</u>	L7 and fingerprint\$3	49	<u>L8</u> <i>completed all</i>
<u>L7</u>	(customer\$1 near1 authenticat\$3) and USB	83	<u>L7</u>
<u>L6</u>	(customer\$1 near3 authenticat\$3) and USB	140	<u>L6</u>
<u>L5</u>	L4 and usb	0	<u>L5</u>
<u>L4</u>	L2 and fingerprint\$3	11	<u>L4</u>
<u>L3</u>	L2 and ubs and fingerprint\$3	0	<u>L3</u>
<u>L2</u>	L1 and customer near3 authenticat\$3	16	<u>L2</u>
<u>L1</u>	(internet near3 transaction near3 authenticat\$3 or ita)	1062	<u>L1</u>

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Search Results - Record(s) 1 through 10 of 11 returned.

☐ 1. Document ID: US 20050261938 A1

L4: Entry 1 of 11

File: PGPB

Nov 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050261938

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050261938 A1

TITLE: Method for remote authentication of pharmaceutical products

PUBLICATION-DATE: November 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Silverbrook, Kia	Balmain		AU
Lapstun, Paul	Balmain		AU

US-CL-CURRENT: 705/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 2. Document ID: US 20050261937 A1

L4: Entry 2 of 11

File: PGPB

Nov 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050261937

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050261937 A1

TITLE: Pharmaceutical product packaging

PUBLICATION-DATE: November 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Silverbrook, Kia	Balmain		AU
Lapstun, Paul	Balmain		AU

US-CL-CURRENT: 705/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 3. Document ID: US 20050261936 A1

L4: Entry 3 of 11

File: PGPB

Nov 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050261936
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050261936 A1

TITLE: Interactive pharmaceutical product packaging

PUBLICATION-DATE: November 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Silverbrook, Kia	Balmain		AU
Lapstun, Paul	Balmain		AU

US-CL-CURRENT: 705/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw De
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☐ 4. Document ID: US 20050261935 A1

L4: Entry 4 of 11

File: PGPB

Nov 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050261935
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050261935 A1

TITLE: Pharmaceutical product tracking

PUBLICATION-DATE: November 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Silverbrook, Kia	Balmain		AU
Lapstun, Paul	Balmain		AU

US-CL-CURRENT: 705/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw De
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☐ 5. Document ID: US 20050259818 A1

L4: Entry 5 of 11

File: PGPB

Nov 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050259818
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050259818 A1

TITLE: Method for authentication of pharmaceutical products

PUBLICATION-DATE: November 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Silverbrook, Kia	Balmain		AU
Lapstun, Paul	Balmain		AU

US-CL-CURRENT: 380/55; 340/5.8, 380/51, 705/2, 713/176

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 6. Document ID: US 20050165700 A1

L4: Entry 6 of 11

File: PGPB

Jul 28, 2005

PGPUB-DOCUMENT-NUMBER: 20050165700

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050165700 A1

TITLE: Biometric verification for electronic transactions over the web

PUBLICATION-DATE: July 28, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Karthik, Kaleedhass	Kuala Lumpur		MY

US-CL-CURRENT: 705/67

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 7. Document ID: US 20040139348 A1

L4: Entry 7 of 11

File: PGPB

Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040139348

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040139348 A1

TITLE: System for secure, identity authenticated, and immediate financial transactions as well as activation of varied instrumentalities

PUBLICATION-DATE: July 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Norris, Carroll Boyd JR.	Austin	TX	US

US-CL-CURRENT: 713/186

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 20020010857 A1

L4: Entry 8 of 11

File: PGPB

Jan 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020010857

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020010857 A1

TITLE: Biometric verification for electronic transactions over the web

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Karthik, Kaleedhass	Kuala Lumpur		MY

US-CL-CURRENT: 713/168; 705/64

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 9. Document ID: US 20010027527 A1

L4: Entry 9 of 11

File: PGPB

Oct 4, 2001

PGPUB-DOCUMENT-NUMBER: 20010027527

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010027527 A1

TITLE: Secure transaction system

PUBLICATION-DATE: October 4, 2001

INVENTOR-INFORMATION:

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Khidekel, Yuri	Lafayette	CA	US
Balashov, Alex	San Ramon	CA	US
Bashmakov, Vladimir	Walnut Creek	CA	US

US-CL-CURRENT: 726/9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 10. Document ID: US 6957771 B2

L4: Entry 10 of 11

File: USPT

Oct 25, 2005

US-PAT-NO: 6957771

DOCUMENT-IDENTIFIER: US 6957771 B2.

**** See image for Certificate of Correction ****

TITLE: System for secure, identity authenticated, and immediate financial transactions as well as activation of varied instrumentalities

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. De
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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122305

20427 U.S. PTO

PTO/SB/05 (04-05)

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UTILITY
PATENT APPLICATION
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	1223-2005
First Inventor	Douglas Kozlay
Title	Internet Transaction Authentication ...
Express Mail Label No.	EQ 204753219 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ **Fee Transmittal Form** (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ **Applicant claims small entity status.**
See 37 CFR 1.27.
3. ☒ **Specification** [Total Pages 28]
Both the claims and abstract must start on a new page
(For information on the preferred arrangement, see MPEP 608.01(a))
4. ☒ **Drawing(s)** (35 U.S.C. 113) [Total Sheets 4]
5. **Oath or Declaration** [Total Sheets 2]
a. ☒ Newly executed (original or copy)
b. ☐ A copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
name in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ **Application Data Sheet.** See 37 CFR 1.76
7. ☐ **CD-ROM or CD-R** in duplicate, large table or
Computer Program (Appendix)
☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
(if applicable, items a. - c. are required)
a. ☐ Computer Readable Form (CRF)
b. ☐ Specification Sequence Listing on:
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ii. ☐ Paper
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Alexandria VA 22313-1450

ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers** (cover sheet & document(s))
Name of Assignee _____
10. ☐ **37 CFR 3.73(b) Statement** ☐ **Power of Attorney**
(when there is an assignee)
11. ☐ **English Translation Document** (if applicable)
12. ☒ **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
☐ Copies of citations attached
13. ☐ **Preliminary Amendment**
14. ☒ **Return Receipt Postcard** (MPEP 503)
(Should be specifically itemized)
15. ☐ **Certified Copy of Priority Document(s)**
(if foreign priority is claimed)
16. ☐ **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ **Other:** _____

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

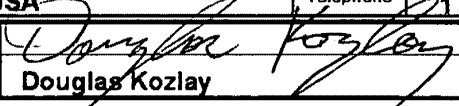
☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

Prior application information: Examiner _____ Art Unit: _____

19. CORRESPONDENCE ADDRESS

☐ The address associated with Customer Number: _____ OR ☒ Correspondence address below

Name	Douglas Kozlay				
Address	9475 Deereco Road, Suite 304				
City	Timonium	State	Maryland	Zip Code	21093
Country	USA	Telephone	410 252 7210	Email	dkozlay@biometricassociates.com

Signature		Date	12/23/2005
Name (Print/Type)	Douglas Kozlay	Registration No.	(Attorney/Agent)

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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122305

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PTO/SB/17 (12/04v2)

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Effective on 12/09/2004.
Fees pursuant to the Consolidated Appropriations Act 2005 H.R. 45181

FEE TRANSMITTAL

For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) **800**

Complete If Known

Application Number _____
 Filing Date _____
 First Named Inventor **Douglas Kozlay**
 Examiner Name _____
 Art Unit _____
 Attorney/Agent No. **1223-2005**

METHOD OF PAYMENT (check all that apply)

- ☐ Check ☒ Credit Card ☐ Money Order ☐ Note ☐ Other (please identify): _____
- ☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____
- For the above identified deposit account, the Director is hereby authorized to: (check all that apply)
- ☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
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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-2036.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	500.00
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Total Claims 24 - 20 or HP = 4 Extra Claims 4 x 25 = 100

HP = Highest number of total claims paid for, if greater than 20

Indep. Claims 5 - 3 or HP = 2 Extra Claims 2 x 100 = 200

HP = Highest number of independent claims paid for, if greater than 3

Small Entity	
Fee (\$)	Fee (\$)
50	25
200	100
360	180
Multiple Dependent Claims	
Fee (\$)	Fee Paid (\$)
	<u>0</u>

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequences or computer listings under 37 CFR 1.52(c)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets 100 = Extra Sheets 150 = Number of each additional 50 or fraction thereof 3 x 125 = 375

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): _____

Fees Paid (\$)

SUBMITTED BY

Signature Douglas Kozlay Registration No. _____ Telephone **1 410 252 7210**
 Name (Print/Type) **Douglas Kozlay** (Attorney/Agent) Date **12/23/2005**

This collection of information is required by 37 CFR 1.136. 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 30 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 1480, Alexandria, VA 22312-1480. 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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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventor: Douglas Kozlay

9475 Deereco Road, Suite 304

Timonium, Maryland 21093

Contact Number: (443) 570-4765

**TITLE: INTERNET TRANSACTION AUTHENTICATION APPARATUS, METHOD, &
SYSTEM FOR IMPROVING SECURITY OF INTERNET TRANSACTIONS**

10 BACKGROUND OF THE INVENTION:

1. Field of the Invention:

The field of the invention is transaction authentication and security for online,
internet, and other communicated transactions, more particularly, the invention
relates to fingerprint authentication of a user or customer at transaction time
using a mobile customer authentication apparatus (which is also referred to as an
Internet Transaction Authentication (ITA)). The ITA cryptographically assures the
identity of a website to a customer and biometrically assures the identity of
customer to a website. An ITA is typically connected into any standard (e.g.,
USB) interface when web access is desired. The ITA is enabled only after the
user (customer) authenticates themselves to the ITA.

2. Related Art:

While there are numerous and diverse products implementing fingerprint sensor
devices, the undersigned has not located any equivalent art which consolidates
and integrates all aspects of the authentication in one portable equal to the
present invention. Notwithstanding, it must be noted that other transaction
authentication mechanisms and protocols are well known in the industry, e.g.,
EMV (Europay Mastercard Visa) or SET (secure electronic transactions)
protocol, are utilitarian and functional, their functions are distributed or shared
for some authentication applications, however, these are carried out within the
user's computer or in within the merchant's computer, teller machine, or other

vendor authentication resource. Token devices such as smartcards are only used to perform the cryptographic operations or retain the user's identity.

5 US Patent 6,681,328 to Harris, et al discloses a method for verifying the identity of a customer using a central switch to request the ID of a user by means of standard formats such as EMV or SET. However, unlike the present invention, the patent does not disclose an integrated hardware apparatus that incorporates all user authentication functions as well as provide local transaction functions within a mobile, portable device, nor does the patent mention biometrically
10 authenticating users, nor does it disclose providing service for "contact" and "contactless" applications.

US Patent 6,808,111 to Kashef, et al discloses a terminal for accepting a smartcard. The present invention, by contrast, does not use smartcards or
15 smartcard reading terminals at all. Additionally, the patent does not discuss biometric authentication of customers, nor does it describe a means for integrating all the necessary authentication functions into an integrated customer authentication apparatus.

20 By contrast, in the present invention, all of the following are performed within the ITA device itself: biometric authentication of a user and display of authentication results; cryptographic verification of external system(s); cryptographic encapsulation of the authentication data sent to the external system(s); and positive identification of the ITA itself.

25 In US Patent 6,950,939 to Tobin a means for carrying out transactions on a memory device is disclosed, such as a smartcard. However, biometric authentication on the device is not claimed. Further, the Tobin device neither indicates to the customer that biometric authentication is successful, nor does the
30 device indicate that the accessed website is valid and recognized.

NECESSITY OF THE INVENTION:

It is well-known that even as security technologies evolve forward, simultaneously, security challenges are substantially increasing. This is particularly so regarding financial transactions (e.g., online transactions and purchases; other monetary transactions such as ticket purchases at kiosks; PC-centric transactions such as money-related email communications; etc.).

Two very damaging types of internet fraud have befallen customers of websites owned by banks, online stores, and investment companies: In the first case, “cloned” (fraudulent but appearing legitimate) websites are created by technologically sophisticated criminals and held out as genuine websites. Unsuspecting customers are directed to criminals’ websites by spam or weblink misdirection; customers naively enter sensitive personal data into password login fields and/or order entry screens with credit card payment fields. The internet criminals then harvest the ill-gotten data and use it in many destructive ways. In the second case, an imposter uses customer PINs or passwords stolen as described above, or by a Trojan Horse program (e.g., B02K or Sub7), or by “data-interception-by-remote-transmission” technique or by communication “sniffing”, or by hacking into account password databases, etc. Regardless how the stolen data is obtained, the perpetrator executes illegitimate transactions to sell stock, empty a bank account, or make unauthorized purchases.

Accordingly, any personal apparatus for improving security and safety of online transactions by biometrically assuring customer identity and by cryptographically authenticating legitimate websites should be welcome in the art.

OBJECTS OF THE INVENTION:

It is one primary object of the present invention, to provide a personal, mobile, portable Internet Transaction Authentication (ITA) peripheral apparatus capable

of improving security of online transactions. It is a related primary object, to provide a secure identification device which uses fingerprint biometrics to authenticate an authorized customer, and which uses strong cryptography to reduce the risk of fraud. It is another object to provide an ITA which provides

5 visual and/or audible cues to the customer that indicates (1) successful biometric authentication of a customer and (2) cryptographic authentication of the authenticity of a remote website, thereby improving and contributing to online transactions security. It is yet another related object, to provide an ITA apparatus for transmitting a cryptographically encapsulated data message that irrefutably

10 identifies an enrolled customer, while identifying the apparatus and biometrically authenticating the customer. It is another related object, to provide an ITA which can successfully respond to a cryptographic challenge issued by one or more external systems, such as one or more authentication service providers or, one or more financial institutions. It is another related object that such communications

15 are performed end-to-end between the ITA apparatus and external systems such that no other interim processing of the message is necessary or possible.

It is another primary object, to provide an ITA system and method for organizing and deploying a plurality of user-authenticating ITA devices administered and

20 controlled by an ITA administration system and system administrator. It is a related object, to provide a system and method for deploying ITAs in conjunction with centrally- and/or remotely-administered hosts and/or merchant systems. It's a related object, to provide methods and systems for administering ITAs, for logging ITA transactions, for issuing cryptographic challenges to individual ITA

25 apparatuses in response to customer-initiated transaction requests, for verifying responses to issued cryptographic requests, and for interfacing with application service providers and/or financial institutions to obtain additional transaction authentication, payment, and transaction processing details.

It's a related object to provide a wireless version of the ITA which is capable of securely communicating with merchant point-of-presence transactions processing machines and upstream external systems.

- 5 It is yet another primary object, to provide a mobile ITA apparatus having a USB port interface comprising a USB connector for interconnecting with standard USB interfaces (e.g., a PC-based USB port, a PDA-based USB port, a cellular phone or smartphone USB port, or other USB interface device).
- 10 It is another primary object of the present invention, to provide an ITA apparatus, methods, and systems which are capable of providing a "Card Present" equivalent level of assurance of legitimacy of an ITA transaction, to provide assurances equal to or better than an actual physical "Card Present". NB: "Card Present" transactions are those where a physical card is presented in person by
- 15 a customer directly at the point of sale, thereby justifying lower card transaction fees due to reduced risk.

SUMMARY OF THE INVENTION:

- 20 An Internet Transaction Authentication (ITA) apparatus is disclosed. One preferred embodiment employs a small-form-factor enclosure with a USB interface connector. Other communications mechanisms are available, such as wireless communications.
- 25 One key, differentiating aspect of the invention relates to the transaction completion capabilities of the ITA: Instead of making requested customer transactions under control of programs in a customer PC and/or in a Merchant computer, PC, and/or other processing intermediary or external system, the ITA itself performs the customer's identification and transaction confirmation of the
- 30 customer's acceptance of the transaction.

Except for the destination financial institution and/or application service provider (e.g., an authentication service provider) interfaces, the ITA-initiated biometric authentication, ITA-authenticated customer authentication and cryptographic transaction protection is 100% consummated in the ITA, itself. Transactions can
5 be initiated either by customers or by merchants, depending on the application.

The ITA is capable of initiating and authenticating any financial transaction. The complete transaction sequence is cryptographically encapsulated for transport all the way from within the ITA to the financial organization that authorizes payment
10 to the merchant. This cryptographic encapsulation is impervious to software threats in the customer's computer and on the Internet and provides a "Card Present" level of transaction security due to positive customer identification.

The ITA is deployed as a stand-alone personal authenticator and/or as an extra
15 layer of transaction security, and is complementary to existing security regimens. In one embodiment, the ITA plugs into a USB port on desktop PCs, laptop PCs, tablet PCs, "smartphones", and/or other compatible devices having USB ports. In an alternate embodiment, the ITA wirelessly transmits and receives data messages to and from a host computer's USB transceiver, which may be either
20 built into the host, or implemented with an add-on USB transceiver.

The ITA apparatus also improves security of other transactions amenable to the features and benefits of the ITA apparatus.

25 An "E-Commerce"-oriented online application and system is also disclosed, which implements and uses the ITA apparatus, followed by credit or debit card processing between the website and the clearinghouse. A method for using and deploying an ITA apparatus is disclosed, as well as a method for organizing and interfacing a plurality of ITAs to form an ITA system.

30

BRIEF DESCRIPTION OF THE FIGURES AND REFERENCE NUMERALS

Brief Description of Figures

Figure 1A shows two views of the ITA apparatus, in USB dongle form

Figure 1B shows a view of the ITA apparatus in a wireless embodiment

5 **Figure 2** shows transaction flow between ITA, host computer, Internet, website and a bank or financial processing center

Figure 3 Provides a simplified example of the data between the customer, ITA and the website.

Figure 4 shows a simple example of a flow chart for an authenticating

10 transaction between a website and the ITA

Figure 5 illustrates an Authentication Service Provider (ASP) model in which a third party service handles the authentication transaction and identifies the ITA and the customer to the website. A financial institution is also shown to illustrate financial transactions.

15 **Figure 6** is a table of a sequence of transaction steps to authenticate a customer to a website, for example, to enable access to the customer's account.

Figure 7 is a table of a sequence of transaction steps to authenticate a customer to a website, and process a credit card transaction.

20 Reference Numerals

10 Electronic enclosure body of the ITA (customer authentication apparatus)

12 USB connector extending from the body

14 Fingerprint sensor array

25 16 Processor for USB interface, biometrics and transaction processing

18 Green LED

20 Red LED

22 Printed circuit substrate or PCB for ITA components

24 Battery for the ITA in wireless card form

30 26 Local radio circuit and internal loop antenna in wireless card form

102 Internet Transaction Authenticator (ITA) apparatus

- 104 Customer's PC connected to the Internet
- 106 Internet website server system (here indicated by a cash register style)
- 108 Authentication Service Provider (ASP)
- 110 Bank and/or other financial intermediary and/or card transaction processor(s)

5

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to **Figure 1A**, two different views of the USB dongle version of the ITA apparatus are shown. The **electronics enclosure body 10** of the ITA is commonly fabricated from high-impact plastic or other durable material. Body 10 includes embedded electronics, including at least one printed circuit board (PCB) or printed circuit substrate such as **circuit substrate 22**, upon which ITA components are populated. On the substrate 22, components include at least one processor or microcontroller such as **processor 16**. To provide motive force for the ITA, a **power supply interface 24** is coupled to substrate 22; processor 16 is also coupled to power supply interface 24. It must be noted, that power supply interface 24 (not explicitly shown) derives power via the USB connector interface insertion into the USB port on the Host PC or Merchant PC external system.

The processor 16 is multifunctional, providing USB interface processing, fingerprint biometrics processing, transactions processing, and other processing, based on the configuration implemented. Resident within and executing within the processor 16, is transaction security software. Processor 16 also contains memory for the execution of programs plus communications buffers for sending and receiving data. Protected non-volatile memory retains the ID of the ITA and its' cryptographic key(s). Optionally, there can be protected memory available to the customer so that the ITA can additionally serve as a virtual disk drive as is commonly done with USB dongles.

The ITA's USB external interface is implemented in **USB connector 12**.

Connector 12 extends out from the main body 10 of the ITA, and connector 12 is also coupled into the circuit substrate 22 and power supply 24.

5 Additionally, a biometric fingerprint authentication component is provided, such as integrated **fingerprint sensor array 14**, which is also coupled into substrate 22). In the embodiment shown in Figure 1, there are also a plurality of light-emitting diodes, **LED 18** and **LED 20**, which are coupled to the fingerprint sensor array 14, processor 16, and which are mounted on substrate 22. Alternatively, a
10 visual indicator cue could be provisioned using a built-in LCD display on the ITA; in this case, a predetermined symbol or message can appear to indicate successful biometric authentication of a customer and successful cryptographic authentication of a website.

15 In operation, the ITA is brought to whatever location and target machine it is intended to be used with by the person enrolled by an ITA system administrator. When an enrolled person is ready to initiate their transaction, they first insert the ITA USB connector 12 into an available USB port on a target machine. After interconnecting the ITA into the USB interface port, the enrolled person applies
20 their enrolled finger(s) onto the sensor array 14 to authenticate themselves again for matching on the ITA and for subsequent transmission to the target machine. **LED 18 turns green** and is lit after the enrolled person or user has been successfully authenticated to the ITA. Alternatively, LED 18 may turn yellow when the user has been successfully biometrically authenticated to the ITA; it
25 may then turn green when the identity of a website has been cryptographically authenticated by the website or the authentication service provider. **LED 20 is lit red** to indicate that the user has not been authenticated by the fingerprint sensor. If the authentication attempt succeeds, then the ITA will securely inform the remote system using the protocols described below.

30

Transactions can be initiated either by the customer in response to what is seen on a website, or can be initiated by the website detecting that the customer is attempting to use the website.

5 Referring now to **Figure 5** which shows the connection between the ITA 102, the host computer 104, the internet, the website system which is represented in this image by a merchant cash register 106, the optional authentication service provider 108, and an optional transaction clearinghouse 110, as shown in the transaction flow of Figure 6, step 1. The customer sees a website indicated in
10 step 1 by a dotted line with arrowheads. The customer then begins to use the website, causing the website to initiate a request for authentication of the customer before proceeding with the website application. In this example, the website merchant has elected to use an application service provider (ASP) to create a time-varying challenge that is sent unmodified via the internet through
15 the host computer to the ITA. Optionally, the challenge concatenated with known data can be encrypted under the user (ITA) key, the corresponding key of which is at the ASP, and this can be decrypted by the ITA using its' key to regenerate the known data. If this known data is correct, then the ITA can, using its' indicator light, inform the customer that he is performing the transaction with a
20 website known to the ASP, thereby preventing the customer from further communication with a bogus website which is not known to the ASP.

If the user has achieved successful biometric authentication to the ITA, then the ITA will encrypt a packet of data containing the challenge concatenated with the
25 identity of the ITA and an indication of the results of the authentication. This packet is then transmitted without modification via the host computer 104 and the internet to the authentication service provider 108. The ASP looks up in its database a key corresponding to the key in the ITA and uses this key to decrypt the packet. If the decrypted data contains the original challenge and indicates
30 proper authentication, then the ASP has verified that the identity of the ITA and the identity of the customer and returns this information to the website 106.

At the completion of this transaction, the website is now able to proceed with either logon or a financial transaction. The financial transaction may entail a credit card transaction with a clearinghouse, which may be performed using existing protocols such as EMV or SET (as shown in Figure 6).

5

By contrast, a transaction may be initiated by the customer in which case the transaction arrows of Figures 6 and 7 are reversed (indicating the opposite flow of data). If the customer has been biometrically authenticated to the ITA, then the ITA may send a packet of data containing a challenge, the results of the biometric authentication, and a unique number corresponding to an enumerated ITA to the ASP. The ASP will then issue a response to this challenge using a packet encrypted with a key corresponding to the key in the ITA, and the ITA will then decrypt this to cryptographically authenticate the ASP (and by implication the website). It will then illuminate the LEDs to indicate that the customer has been successfully authenticated to the ASP and that the website is known the ASP, and hence is presumably safe. The ASP then so informs the website that the transaction was successful, so that the website can proceed with its' transaction.

20

Figure 1B shows a view of the ITA apparatus 10, in a wireless version. The figure and reference numbers are the same as the USB model in Figure 1A except for a change in physical form from that of a stick-type enclosure to a card or similar form, and the replacement of the USB interface with a radio circuit such as a Bluetooth or ZigBee chip with antenna 26. The fingerprint sensor 14, LED 18, LED 20 and processor 16 are the same as figure 1a. The wireless version may also require a battery 24 to provide power, or alternatively, may use sources such as radio frequency energy or solar energy.

30

Figure 2 shows transaction flow between ITA 102, host computer, a website symbolized here by a transactions terminal 106, and a bank or financial

processing center where the website or the bank performs the back-end processing for authentication described in the procedure below. This is a simplified drawing that does not use a separate authentication service provider and does not describe credit card processing.

5

Figure 3 Provides a simplified example of the data that is either transacted between the customer's ITA and the website or between the customer's ITA and the bank, depending upon which entity performs customer authentication.

10 **Figure 4** shows a simplifying example of a flow chart for an authenticating transaction between a website (described in the Fig. 4 as a merchant and indicated by the transaction terminal or cash register 106 and the ITA 102. The steps are the same as steps 1 through 4, in the section below.

15 **Figure 5** illustrates an Authentication Service Provider (ASP) model in which a third party service handles the authentication transaction and identifies the ISP holder to the Merchant. A financial institution is also shown to illustrate financial transactions.

20 **Figure 6** is a table of a sequence of transaction steps to authenticate a customer to a merchant, for example, to enable access to the customer's account. This transaction flow has been described in the description in the Figure 1A and a financial transaction example is provided in Figure 7.

25 **Figure 7** shows a Transaction Flow Table where an Authenticated Service Provider is part of the transaction process and processes a credit card transaction. The following steps are performed to carry out authentication. There are no authentication steps performed on the customer's host computer and no data is passed through the host computer and the Internet except in cryptographically
30 protected form.

Step Operation/Result/Action:

- 5 **Step 1** For example, the customer accesses a host website on **Host Computer 104** to conduct investment transactions or purchase items from a web shopping cart of website **Merchant 106**. The website 106 requests that the **Authentication Service Provider (ASP) 108** issue a customer authentication request. The merchant's request may contain the web address of the customer. The Authentication Service Provider 108 sends a random or time-varying challenge to the ITA 102 (as is well known to the art, e.g., ISO/IEC 9798-2, which describes challenge/response security techniques). This encrypted challenge, using standards known to the arts, such as FIPS 197, AES (advanced encryption standards) is different for every transaction in order to enable the system to detect and prevent replay attacks.
- 15 **Step 2** In the following discussion in Figures 5 through 7, we will refer to the website as the "merchant" as one example of a possible website. The customer responds to the challenge of Step 1 by inserting an **ITA 102** into a USB port and placing a finger on the biometric sensor (if that hasn't already been done). The ITA biometrically authenticates the customer and cryptographically authenticates the message received from the website merchant or an **Authentication Service Provider (ASP) 108**. There corroborations enable the ITA to proceed with the transaction. If the fingerprint check is successful and the challenge from the cryptographic ASP can be cryptographically verified, then a light (e.g., an LED or other visual cue or indicator) will be lit to notify the customer that the transaction may proceed. Note that the Host Computer 104 and the internet are not parties to the transaction except to relay and pass the request packet through to the ASP 108.
- 25 **Step 3** Using its unique cryptographic key, the ITA 102 encrypts the challenge along with an ITA – ID, customer authentication information, and optionally

a credit card number, and returns this encrypted information to the merchant website or ASP 108. The ASP 108 is the only party that knows the cryptographic key that is securely stored within the ITA 102. The key cannot be read out of the secure internal storage of the ITA and the key is never transmitted for any reason.

Step 4 The ASP 108 decrypts the packet information, checks the ITA – ID and challenge to determine if it matches what was sent to the ITA. If it does, then the identity of the ITA 102 has been cryptographically authenticated and because the ITA was enabled, the identity of the customer has also been biometrically authenticated. The ASP 108 then uses the authenticated identity of the customer and the merchant to send an acknowledgement of the transaction to the Merchant 106. The ASP 108 has now completed its tasks.

Step 5 The Merchant 106 may optionally verify the account with the Bank or credit card organization 110 and, if the transaction is authorized, displays an acknowledgement to the Customer on the web site and complete the transaction. The Merchant is now committed to the transaction because the customer has non-reputably and digitally “signed” the authorized transaction using a cryptographically validated ITA, thereby proving his or her identity. This authentication provides the logical equivalent of a signed, physical “Card present” transaction.

Step 6 If this was a credit card transaction, then the Merchant organization will authenticate itself to the Bank 110 using standard financial protocols and complete the credit card payment process.

There are two kinds of service provided by the Authentication Service Provider (ASP). In the case described above, the Customer’s ITA provided the credit card

number in a secure, encrypted protocol such as EMV and the ASP only provided positive authentication of the identities of the Customer and the keyed ITA.

5 Alternatively, the ASP can provide the credit card number if the number has been previously enrolled in its secure database.

Based on the foregoing disclosures, various embodiments of the present invention have been articulated. It should be obvious to one skilled in the art that various aspects of the invention can be changed without changing the scope or
10 impact of the invention. Furthermore, it should also be noted that the present invention integrates all transactions processing tasks normally performed in end-to-end systems in multiple different software and hardware products, within one enclosure and without any additional processing. Also, various embodiments of the ITA may include other displays than LEDs. |

I CLAIM:

1. A biometric customer authentication apparatus for improving online transaction security and for assuring the identity of a customer, comprising:
 - 5 an electronic enclosure including a fingerprint sensor disposed thereupon and further including an external communications interface;

 at least one processor comprised within said enclosure and coupled to said fingerprint sensor;
 - 10 transaction security software resident within and executing on said at least one processor further comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic transaction authentication software for
15 authenticating transactions;

 at least one of a memory and a communications buffer coupled to said at least one processor and further coupled to said external communications interface;
 - 20 and

 a communications subsystem coupled into said external communications interface for relaying data messages between at least
25 one external system and said apparatus.
2. The apparatus of Claim 1, wherein said external communications interface
30 further comprises a physical interface connector for physical insertion into an external interface port disposed upon one of a host system and said at least one external system.

3. The apparatus of Claim 2, wherein said external communications interface further comprising said physical interface connector, further comprises a USB connector for insertion into an external interface port disposed upon one of said host system and said at least one external system.

5

4. The apparatus of Claim 1, wherein said external communications interface further comprises a first wireless transceiver for wirelessly communicating with a second wireless transceiver communications interface aboard one of a host system and said at least one external system.

10

5. The apparatus of Claim 1, wherein said at least one of a memory and a communications buffer is further adapted for storing and retrieving data and for communicating data messages between said apparatus and said at least one external system via said external communications interface.

15

6. The apparatus of Claim 1, further adapted for cryptographically encapsulating said data messages into secure data messages to effectuate secure data transmission including sending said secure data messages to said at least one external system only after completion of biometric fingerprint authentication by said customer initiating said transaction.

20

7. A method for securely processing and responding to a website-initiated transaction authentication request, comprising the steps of:

25

(1) receiving in a customer authentication apparatus said website-initiated transaction authentication message for cryptographically confirming the web site's identity and for requesting said apparatus provide a corroborating response including a biometric authentication of an enrolled customer and further including a cryptographic encapsulation of said response in order to prove that said response originates from a legitimate customer;

30

(2) biometrically authenticating said customer by means of said customer authentication apparatus prior to transmitting said response to said request;

5

(3) performing said cryptographic encapsulation of said response by said customer authentication apparatus only after successful completion of said biometric authentication of said customer using fingerprint biometrics;

10

(4) transmitting said response to said request;

and

15

(5) verifying by at least one of said website and at least one external system that said response satisfactorily authenticates said customer;

8. The method of Claim 7, wherein said step of performing cryptographic encapsulation of said transaction authentication response by said customer authentication apparatus also includes the step of explicitly identifying said customer authentication apparatus.

20

9. The method of Claim 7, wherein said step of transmitting said transaction authentication response further comprises transmitting said cryptographically encapsulated secure data message by an external communications interface comprising an external interface connector disposed upon said customer authentication apparatus after said external interface connector has been inserted into an external interface port on an external system.

25

30

10. The method of Claim 7, wherein said step of transmitting said transaction authentication response further comprises transmitting said cryptographically encapsulated secure data message by an external communications interface comprising a wireless transceiver comprised within said customer authentication apparatus after said apparatus is within range of an external system having a wireless transceiver communications interface.
11. The method of Claim 7, wherein said step 1 of cryptographically authenticating that said request originates from a legitimate customer and step 2 of biometrically authenticating said customer is indicated by means of at least one of a visual indicator cue and an audible indicator cue and a displayed indicator cue.
12. The method of Claim 11, wherein said visual indicator cue comprises at least one of lighting a light emitting diode and lighting a general purpose indicator light and displaying a visual indicator cue on a display.
13. The method of Claim 11, wherein said audible indicator cue comprises the sounding of at least one of a beep tone and a chime tone.
14. The method of Claim 11, wherein said displayed indicator cue further comprises at least one of a predetermined indicator legend cue and a predetermined symbol cue and a predetermined image cue.
15. A method for generating a customer-initiated transaction request from an authorized customer initiating said request, comprising the steps of:
- (1) biometrically authenticating said customer using a customer authentication apparatus prior to transmission of said customer-initiated transaction request;

5 (2) processing, assembling, and cryptographically encapsulating
an assertion of a successful biometric authentication of said
customer and a provision of a time-varying parameter to
prevent replay attacks encapsulated therewithin prior to
transmission thereof;

10 (3) transmitting by said customer authentication apparatus said
cryptographically encapsulated request to at least one
external system further comprising at least one of a website
and an authentication service provider;

15 (4) receiving by said at least one external system said request
and verifying that said request originated from an
authenticated customer;

20 (5) responding to said request using a secure data message
comprising a cryptographic transaction authentication
response and transmitting said response to said customer
authentication apparatus;

(6) receiving and verifying by said customer authentication
apparatus that said response to said request represents a
response from a legitimate website;

25 and

30 (7) actuating at least one of a visual indicator cue and an audible
indicator cue and a displayed indicator cue on said transaction
authentication apparatus indicating that said response has
been received from a legitimate website.

16. The method of Claim 15, wherein said step 1 of cryptographically
authenticating that said request originates from a legitimate customer and step
2 of biometrically authenticating said customer is indicated by means of at
5 least one of a visual indicator cue and an audible indicator cue and a
displayed indicator cue.

17. The method of Claim 16, wherein said visual indicator cue comprises at least
one of lighting a light emitting diode and lighting a general purpose indicator
10 light and displaying a visual indicator cue on a display.

18. The method of Claim 16, wherein said audible indicator cue comprises the
sounding of at least one of a beep tone and a chime tone.

15 19. The method of Claim 16, wherein said displayed indicator cue further
comprises at least one of a predetermined indicator legend cue and a
predetermined symbol cue and a predetermined image cue.

20 20. A method for improving online transaction security, the steps comprising:

- (1) enrolling a person into a customer authentication apparatus;
- (2) deploying said person and said customer authentication
25 apparatus together at an external system where at least one
transaction can be generated;
- (3) communicating between said customer authentication
apparatus and said external system;

30

- (4) authenticating said person by means of said customer authentication apparatus while said apparatus is communicating with said external system;
- 5 (5) initiating and generating of said at least one request by said person after said apparatus has authenticated said person;
- (6) transmitting a request message indicating that said person was authenticated by said apparatus and that said transaction was initiated by an authenticated person;
- 10 and
- (7) receiving in said host system said authenticated-person-initiated-transaction message.
- 15

21. A system for initiating, authenticating and completing transactions by at least one customer using a biometric customer authentication apparatus,

20 comprising:

- said at least one customer enrolled into said customer authentication apparatus;
- 25 said customer authentication apparatus including (i) a fingerprint sensor coupled to a processor, and including (ii) an external communications interface adapted for communicating with at least one external system;
- 30 said at least one external system adapted for communicating with said customer authentication apparatus and having at least one of a

physical external communications interface port and a wireless communications interface for receiving secure data messages;

and

5

at least one transaction processing application residing within said at least one external system including at least one part of a web application accessed by said at least one external system adapted for transmitting and receiving requests and responses to and from a customer authentication apparatus.

10

22. The system of Claim 21, wherein a trusted third party Authentication Service Provider performs authentication services on behalf of at least one customer authentication apparatus and said at least one external system.

15

23. The system of Claim 21, wherein said customer authentication apparatus communicates with an external system by means of a USB interface connector.

20

24. The system of Claim 21, wherein said transaction authentication apparatus communicates with an external system by means of a wireless communications link.

25

30

ABSTRACT:

An Internet Transaction Authentication (ITA) is a customer authentication apparatus disclosed herein. One embodiment employs an enclosure with USB
5 interface capability; a second embodiment employs a similar enclosure with local wireless connectivity. ITA apparatuses achieve two important authentication goals: (1) Cryptographic authentication of websites to customers by providing real-time website validity confirmation so customers know when they've reached legitimate websites (i.e., visual, audible and displayed confirmation); (2) the ITA
10 authenticates customer fingerprint(s) and, if verified, cryptographically authenticates customers to websites to prevent imposters from attempting transactions. Instead of making online transactions under control of programs in the customer PC, the ITA performs the complete transaction using biometric user authentication and strong cryptographic device authentication, all provisioned
15 entirely within the ITA, itself. Transactions are cryptographically encapsulated for uninterruptible end-to-end transport between the ITA and websites and/or financial intermediaries. This arrangement provides a "Card Present" level of transaction security.

20

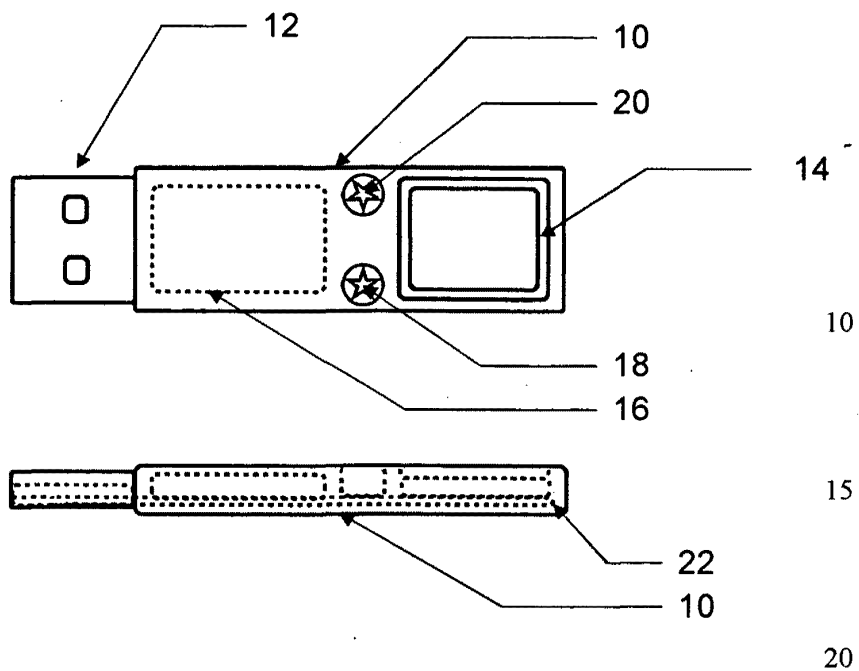


Figure 1A, Internet Transaction Authenticator in USB Dongle Form

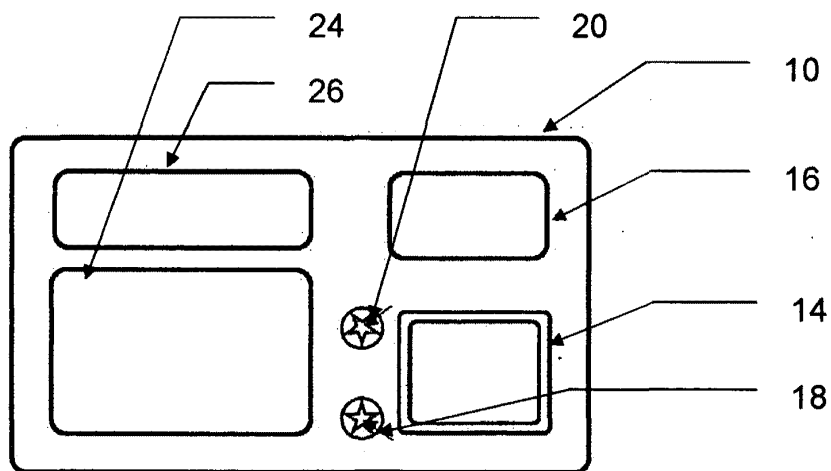


Figure 1B, Internet Transaction Authenticator in Wireless Card Form

Model in which Merchant or Financial Institution Performs Authentication

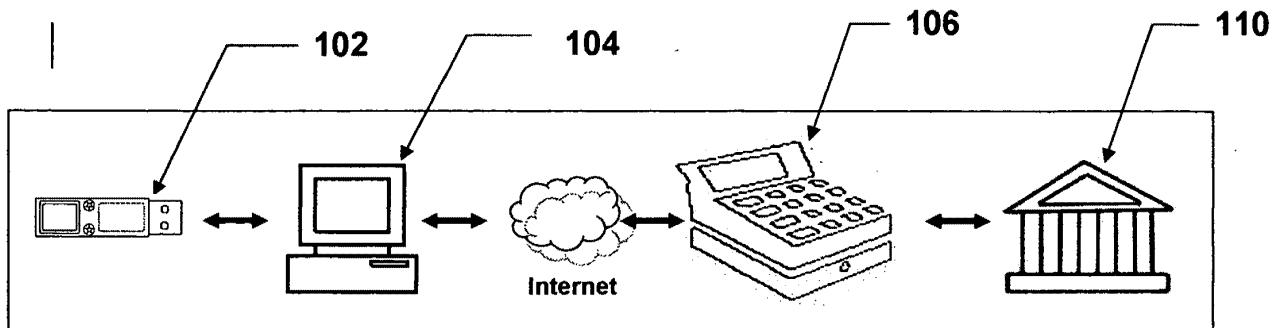


FIG. 2, Transaction Flow between ITA, Merchant, and Financial Processing

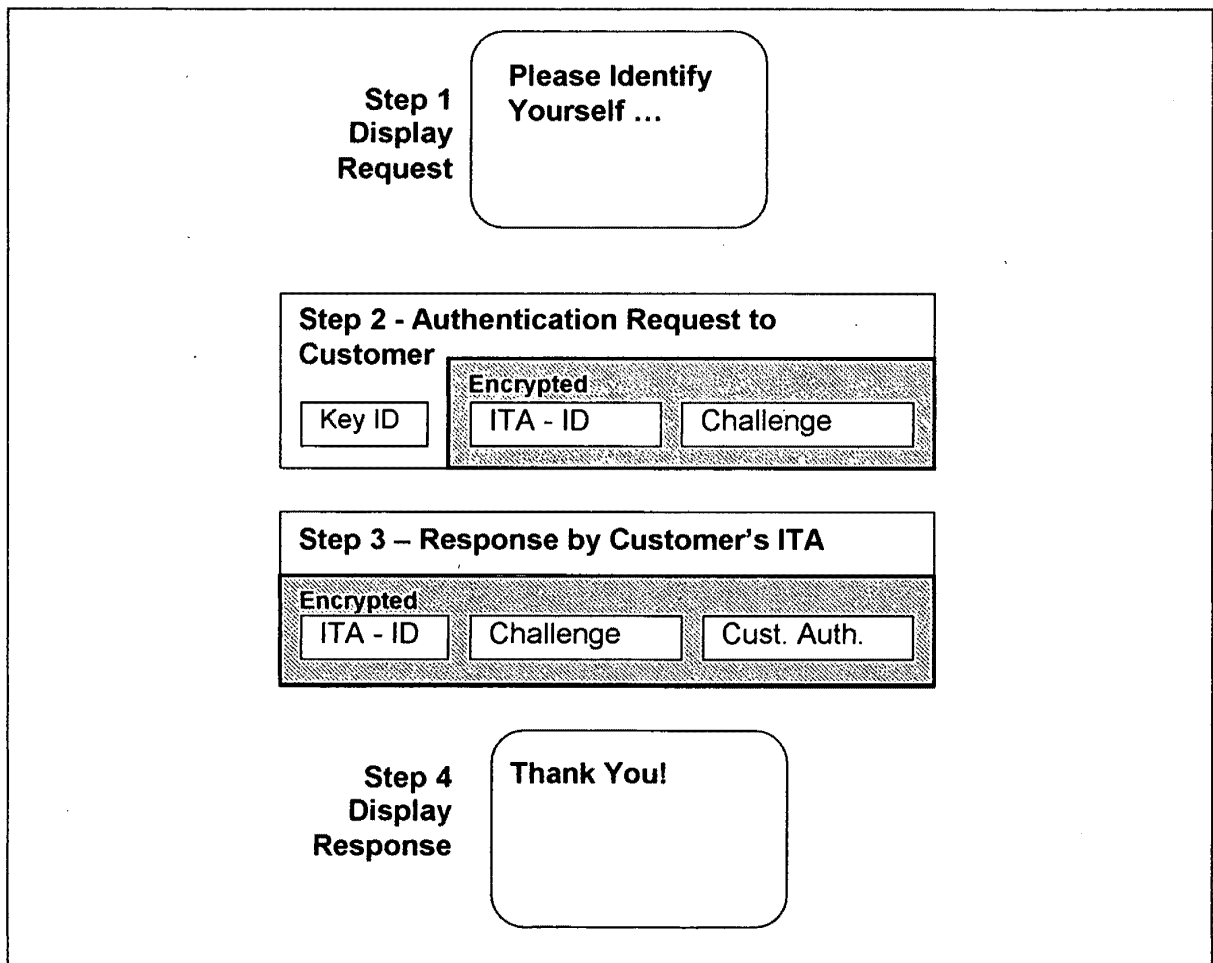


FIG. 3, Simple Example of Transmission Data

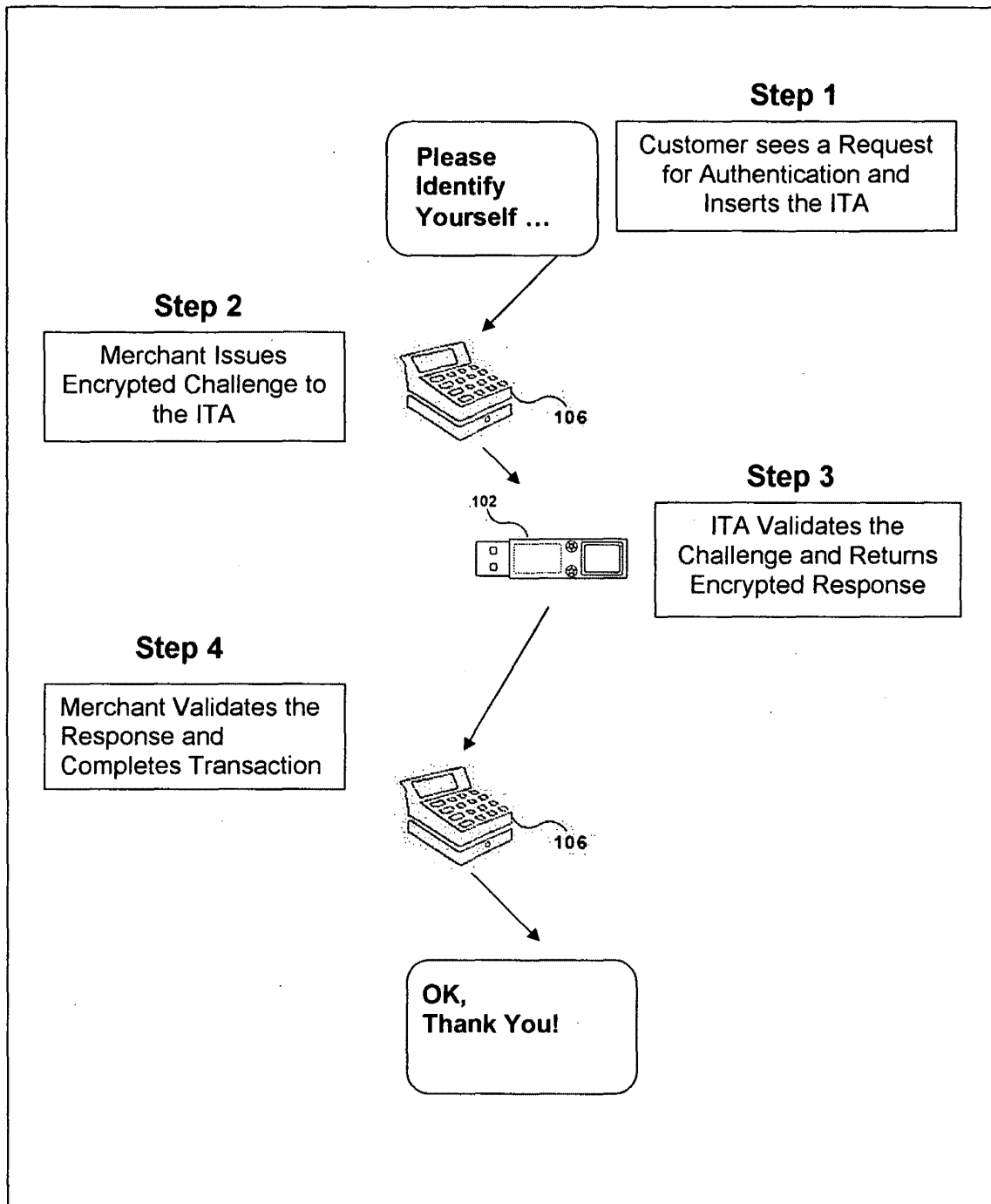


Figure 4, Simple Example of Payment Transaction Flow Chart

Model in which Authentication Service Provider Authenticates Customer

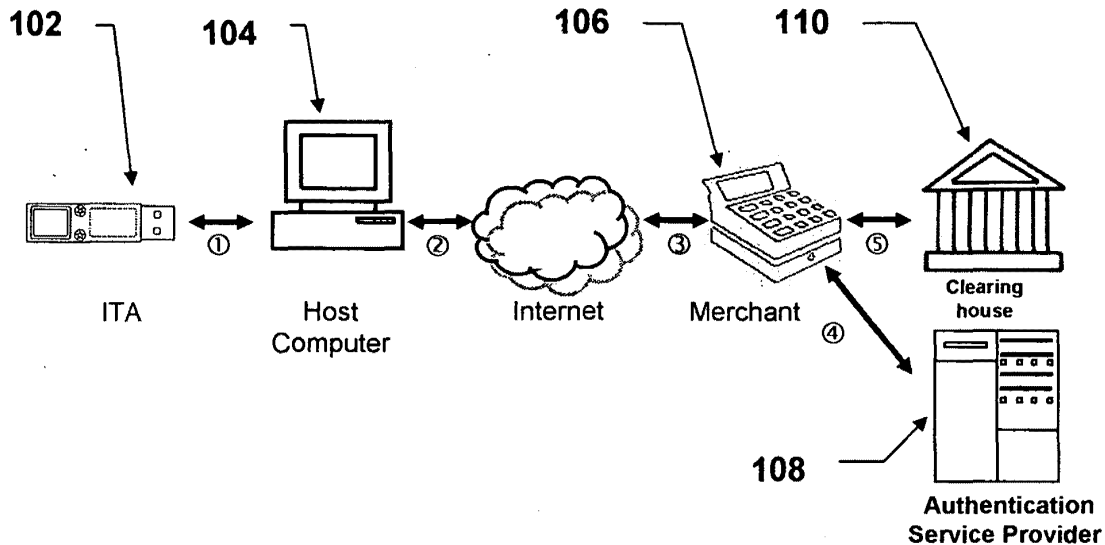


FIG. 5, Transaction Flow with an Authentication Service Provider

Step	Path	ITA Reference: 102	Host Reference: 104	Merchant Reference: 106	Authenticator Reference: 108	Clearinghouse Reference: 110
1	②-③		←	→		
2	①-④	←			→	
3	④-①		←			
4	④			←		

Note: The path numbers ① refer to the data communications paths in Figure 5.

FIG. 6, Transaction Flow Sequence for Simple Logon Authentication

Step	Path	ITA Reference: 102	Host Reference: 104	Merchant Reference: 106	Authenticator Reference: 108	Clearinghouse Reference: 110
1	②-③		←	→		
2	④-①	←			→	
3	①-④		←			
4	④			←		
5	②		←	→		
6	⑤				→	

Note: The path numbers ① refer to the data communications paths in Figure 5.

FIG. 7, Transaction Flow Sequence for Authentication followed by Credit Card Transaction

**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

☒ Declaration Submitted With Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	1223-2005
First Named Inventor	Douglas Kozlay
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Art Unit	
Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Internet Transaction Authentication Apparatus, Method, & System for Improving Security of Internet Transactions

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) as United States Application Number or PCT International

Application Number and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

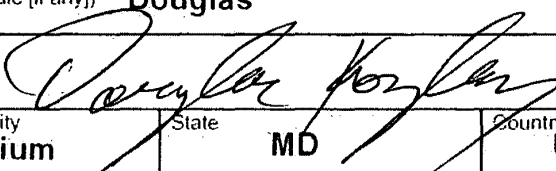
☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ Customer Number: OR ☒ Correspondence address below			
Name Douglas Kozlay			
Address 9475 Deereco Road, Suite 410			
City Timonium		State MD	ZIP 21093
Country USA	Telephone 1 410 252 7210	Fax 1 410 252 7214	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any)) Douglas		Family Name or Surname Kozlay	
Inventor's Signature 		Date 12/23/2005	
Residence: City Timonium	State MD	Country USA	Citizenship USA
Mailing Address 9475 Deereco Road, Suite 410			
City Timonium	State MD	ZIP 21093	Country USA
NAME OF SECOND INVENTOR:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
City	State	ZIP	Country
☐ Additional inventors or a legal representative are being named on the supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.			

PATENT APPLICATION SERIAL NO _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

01/03/2006 DTESSEM1 00000021 11317141

01 FC:2011	150.00 OP
02 FC:2111	250.00 OP
03 FC:2311	100.00 OP
04 FC:2202	100.00 OP
05 FC:2201	200.00 OP

PTO-1556

(5/87)

U.S. Government Printing Office: 2002 — 489-387/88023

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875 Effective December 8, 2004

Application or Docket Number

11317141

APPLICATION AS FILED - PART I

(Column 1)

(Column 2)

SMALL ENTITY

OR

OTHER THAN
SMALL ENTITY

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A
EXAMINATION FEE (37 CFR 1.16(e), (p), or (q))	N/A	N/A
TOTAL CLAIMS (37 CFR 1.16(j))	24 minus 20 =	4
INDEPENDENT CLAIMS (37 CFR 1.16(h))	5 minus 3 =	2
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).	
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))		

RATE (\$)	FEE (\$)
N/A	150.00
N/A	\$250
N/A	\$100
X\$ 25 =	100
X100 =	200
+180=	
TOTAL	800

RATE (\$)	FEE (\$)
N/A	300.00
N/A	\$500
N/A	\$200
X\$50 =	
X200 =	
+360=	
TOTAL	

* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED - PART II

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

OTHER THAN
SMALL ENTITY

AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(i))	*	Minus	**	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=
	Application Size Fee (37 CFR 1.16(s))				
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					

RATE (\$)	ADDITIONAL FEE (\$)
X\$ 25 =	
X100 =	
+180=	
TOTAL ADD'L FEE	

RATE (\$)	ADDITIONAL FEE (\$)
X\$50 =	
X200 =	
+360=	
TOTAL ADD'L FEE	

AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total (37 CFR 1.16(i))	*	Minus	**	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=
	Application Size Fee (37 CFR 1.16(s))				
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					

RATE (\$)	ADDITIONAL FEE (\$)
X\$ 25 =	
X100 =	
+180=	
TOTAL ADD'L FEE	

RATE (\$)	ADDITIONAL FEE (\$)
X\$50 =	
X200 =	
+360=	
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.

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 1460, Alexandria, VA 22313-1460.

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122305

20427 U.S. PTO

PTO/SB/05 (04-05)

Approved for use through 07/31/2008. OMB 0651-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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UTILITY
PATENT APPLICATION
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	1223-2005
First Inventor	Douglas Kozlay
Title	Internet Transaction Authentication ...
Express Mail Label No.	ER 204753219 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ **Fee Transmittal Form** (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ **Applicant claims small entity status.**
See 37 CFR 1.27.
3. ☒ **Specification** [Total Pages 28]
Both the claims and abstract must start on a new page
(For information on the preferred arrangement, see MPEP 608.01(a))
4. ☒ **Drawing(s)** (35 U.S.C. 113) [Total Sheets 4]
5. **Oath or Declaration** [Total Sheets 2]
a. ☒ Newly executed (original or copy)
b. ☐ A copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
name in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ **Application Data Sheet.** See 37 CFR 1.76
7. ☐ **CD-ROM or CD-R** in duplicate, large table or
Computer Program (Appendix)
☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
(if applicable, items a. - c. are required)
a. ☐ Computer Readable Form (CRF)
b. **Specification Sequence Listing on:**
i. ☐ CD-ROM or CD-R (2 copies); or
ii. ☐ Paper
c. ☐ Statements verifying identity of above copies

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

ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers** (cover sheet & document(s))
Name of Assignee _____
10. ☐ **37 CFR 3.73(b) Statement** ☐ **Power of Attorney**
(when there is an assignee)
11. ☐ **English Translation Document** (if applicable)
12. ☒ **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
☐ Copies of citations attached
13. ☐ **Preliminary Amendment**
14. ☒ **Return Receipt Postcard** (MPEP 503)
(Should be specifically itemized)
15. ☐ **Certified Copy of Priority Document(s)**
(if foreign priority is claimed)
16. ☐ **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ **Other:** _____

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

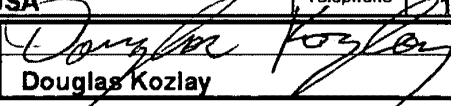
☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

Prior application information: Examiner _____ Art Unit: _____

19. CORRESPONDENCE ADDRESS

☐ The address associated with Customer Number: _____ OR ☒ Correspondence address below

Name	Douglas Kozlay				
Address	9475 Deereco Road, Suite 304				
City	Timonium	State	Maryland	Zip Code	21093
Country	USA	Telephone	410 252 7210	Email	dkozlay@biometricassociates.com

Signature		Date	12/23/2005
Name (Print/Type)	Douglas Kozlay	Registration No.	(Attorney/Agent)

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Effective on 12/09/2004.
Fees pursuant to the Consolidated Appropriations Act 2005 H.R. 45181

FEE TRANSMITTAL

For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 800

Complete If Known

Application Number _____
 Filing Date _____
 First Named Inventor **Douglas Kozlay**
 Examiner Name _____
 Art Unit _____
 Attorney/Agent No. **1223-2005**

METHOD OF PAYMENT (check all that apply)

- ☐ Check ☒ Credit Card ☐ Money Order ☐ Note ☐ Other (please identify): _____
- ☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____
- For the above identified deposit account, the Director is hereby authorized to: (check all that apply)
- ☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	500.00
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Total Claims: 24 - 20 or HP = 4 Extra Claims 4 x 25 = 100 Fee Paid (\$)

HP = Highest number of total claims paid for, if greater than 20

Indep. Claims: 5 - 3 or HP = 2 Extra Claims 2 x 100 = 200 Fee Paid (\$)

HP = Highest number of independent claims paid for, if greater than 3

Fee Description	Fee (\$)	Small Entity Fee (\$)
	Fee (\$)	Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180
Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
		<u>0</u>

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequences or computer listings under 37 CFR 1.52(c)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets: 100 = Extra Sheets: 150 = Number of each additional 50 or fraction thereof: 3 x 125 = 375 Fee Paid (\$)

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): _____

Fee Paid (\$)

SUBMITTED BY

Signature: Douglas Kozlay Registration No. (Attorney/Agent) _____ Telephone: **1 410 252 7210**

Name (Print/Type): **Douglas Kozlay** Date: **12/23/2005**

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