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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

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

Inventor Information:

Inventor	1				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Bjorn	Markus	Jakobsson			
Residence Information (Select One) • US Residency Non US Residency Active US Military Service						
City	Portola Valley	State/Province	CA	Country of Residence	US	
Mailing Address of Inventor:						
Address 1	118 Ramona Rd.					
Address 2						
City	Portola Valley	State/Province	CA			
Postal Code	94028	Country	US			
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.						

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.		
For further information see 37 CFR 1.33(a).		
☐ An Address is being provided for the correspondence information of this application.		
Customer Number	21912	
Email Address		Add Email Remove Email

Application Information:

Title of the Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
Attorney Docket Number	MJAKP001C3	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	12	Suggested Figure for Publication (if any)	

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☒ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	21912		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	15948744	2018-04-09

Application Data Sheet 37 CFR 1.76		Attorney Docket Number		MJAKP001C3	
		Application Number			
Title of Invention		METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD			
Prior Application Status		Patented		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15948744	Continuation of	13875245	2013-05-01	9972010	2018-05-15
Prior Application Status		Patented		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13875245	Continuation of	13099981	2011-05-03	8458041	2013-06-04
Prior Application Status		Expired		Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13099981	Claims benefit of provisional	61332140	2010-05-06		
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.				Add	

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

			Remove
Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ^j (if applicable)
Additional Foreign Priority Data may be generated within this form by selecting the Add button.			Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

☐ NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.			
Applicant	1	Remove	
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.			
		Clear	
☒ Assignee	Legal Representative under 35 U.S.C. 117		Joint Inventor
Person to whom the inventor is obligated to assign.		Person who shows sufficient proprietary interest	
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:			
Name of the Deceased or Legally Incapacitated Inventor:			
If the Applicant is an Organization check here. ☒			
Organization Name	RightQuestion, LLC		
Mailing Address Information For Applicant:			
Address 1	118 Ramona Rd.		
Address 2			
City	Portola Valley	State/Province	CA
Country	US	Postal Code	94028
Phone Number		Fax Number	
Email Address			
Additional Applicant Data may be generated within this form by selecting the Add button. Add			

Assignee Information including Non-Applicant Assignee Information:

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

Assignee 1				
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.				
				Remove
If the Assignee or Non-Applicant Assignee is an Organization check here.				☐
Prefix	Given Name	Middle Name	Family Name	Suffix
Mailing Address Information For Assignee including Non-Applicant Assignee:				
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Address 2				
City		State/Province		
Country i		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.				Add

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Yeu-Ting George Cheng/		Date (YYYY-MM-DD)	2020-06-04
First Name	Yeu-Ting George	Last Name	Cheng	Registration Number 69408
Additional Signature may be generated within this form by selecting the Add button.				Add

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	MJAKP001C3
		Application Number	
Title of Invention	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

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

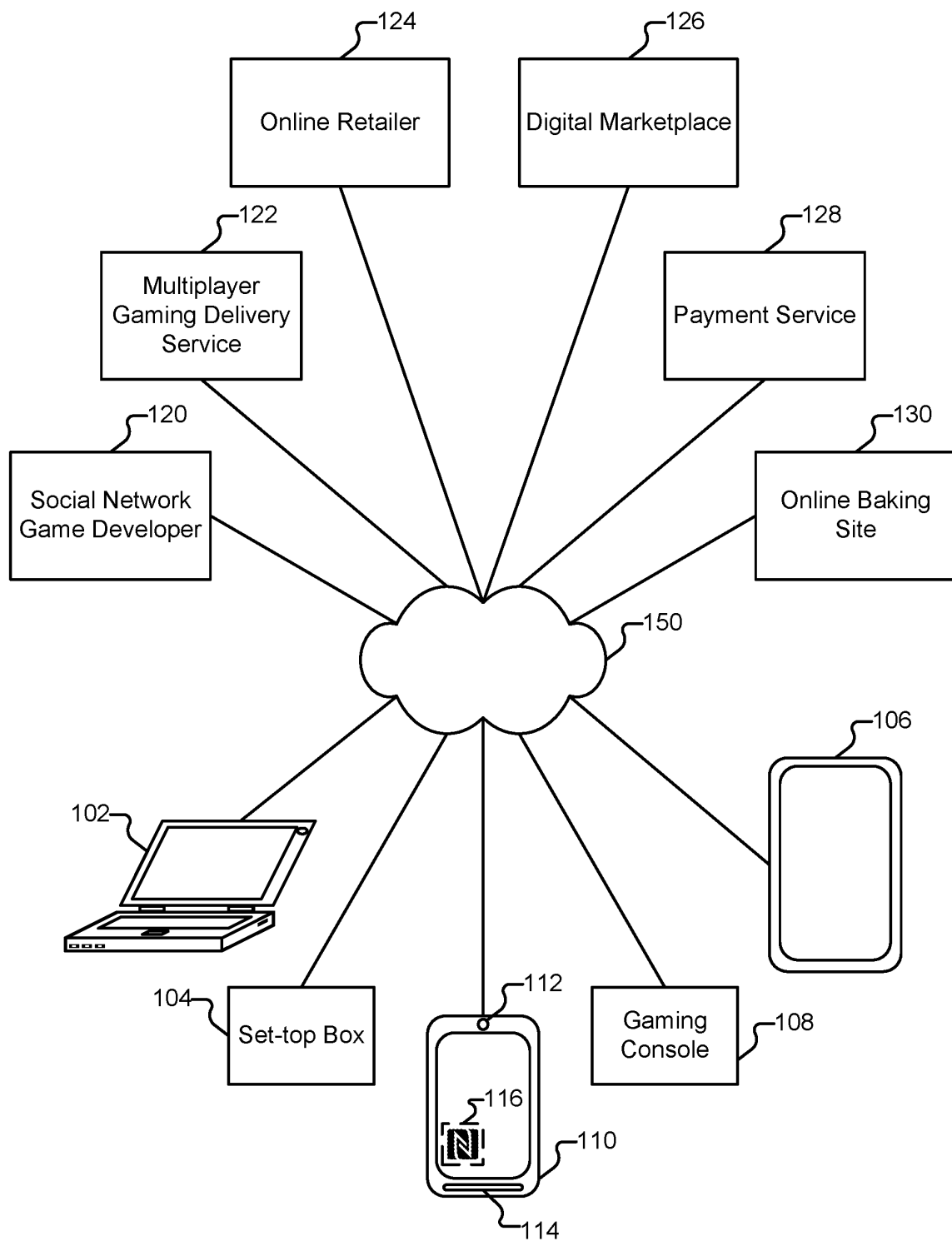
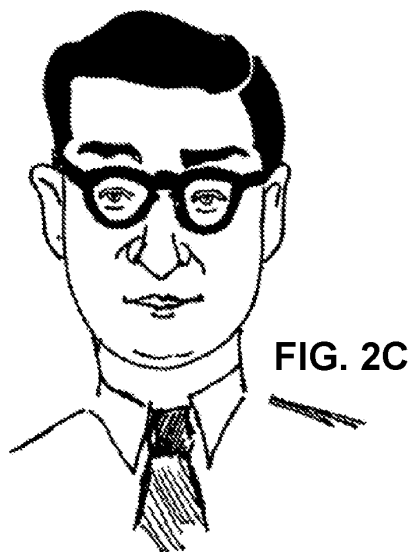
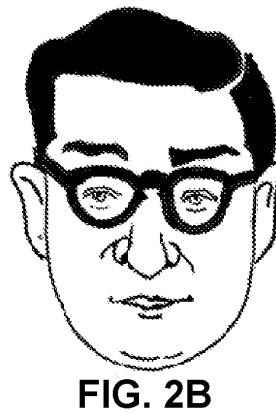
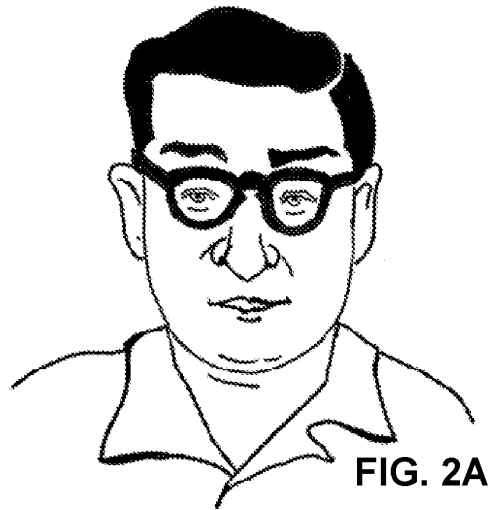


FIG. 1



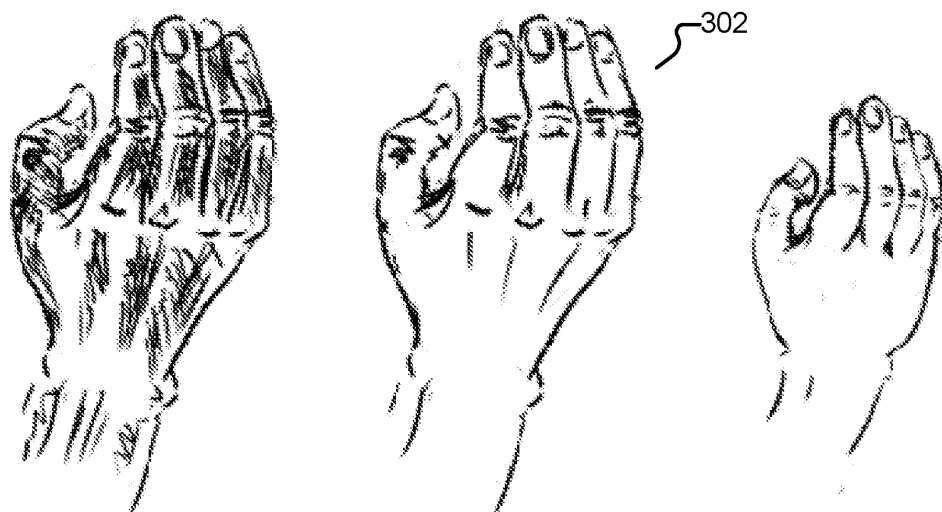
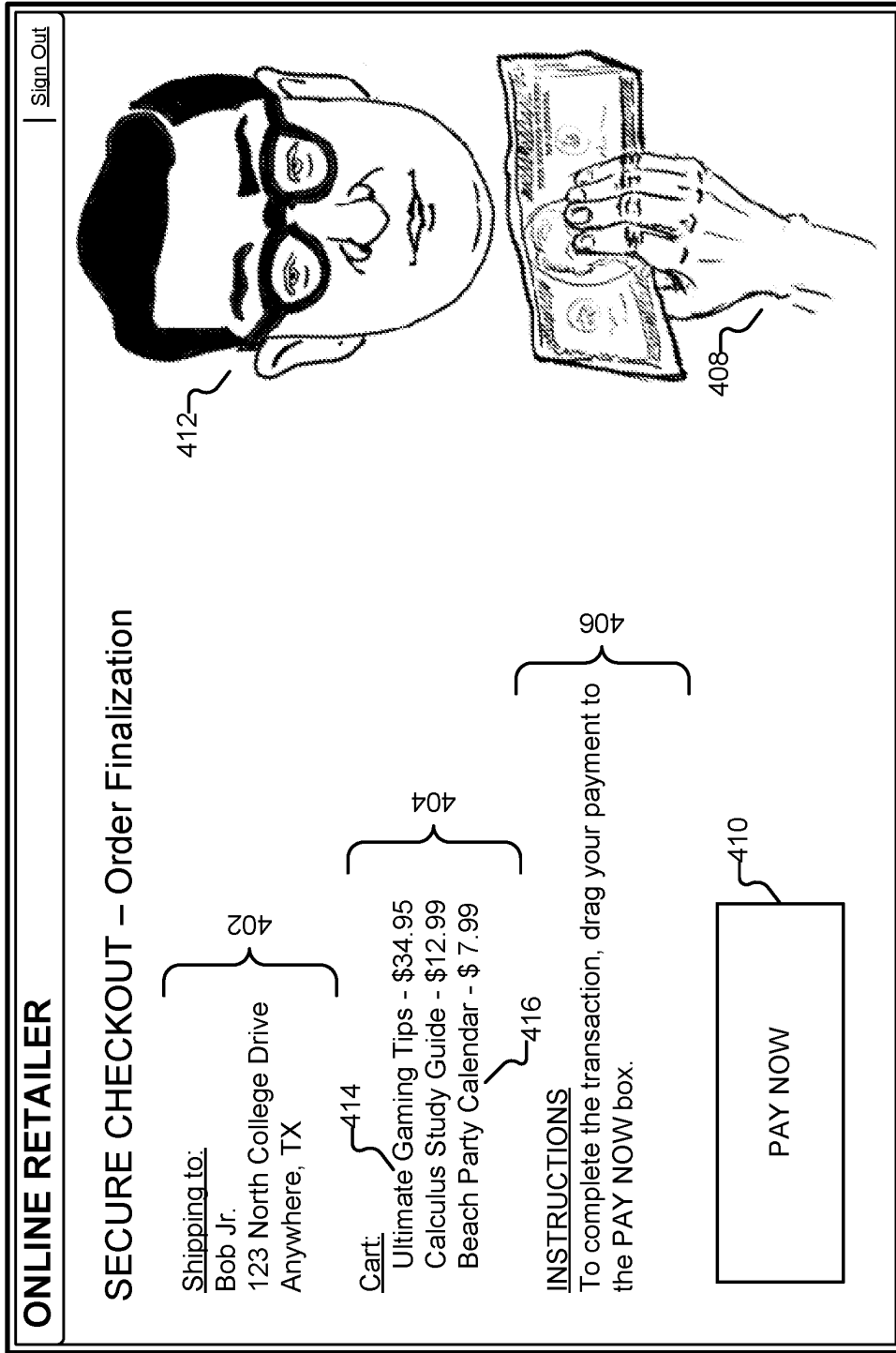


FIG. 3



400 → **FIG. 4**

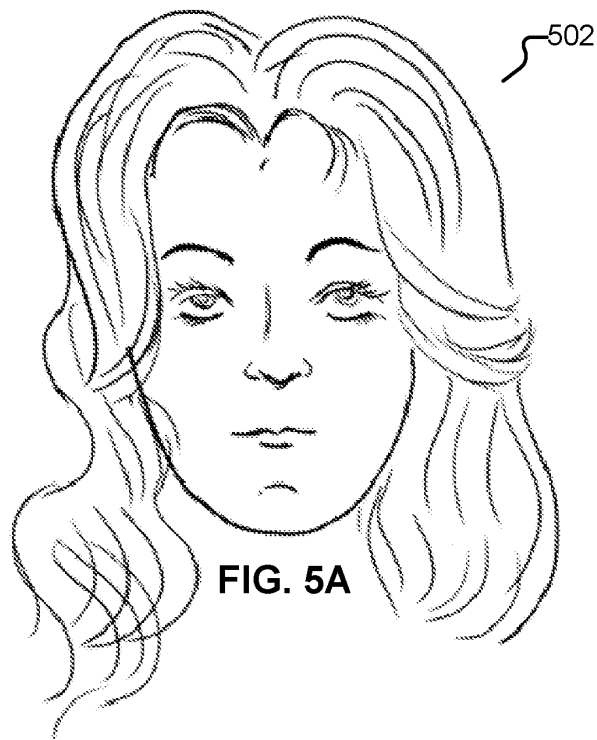


FIG. 5A

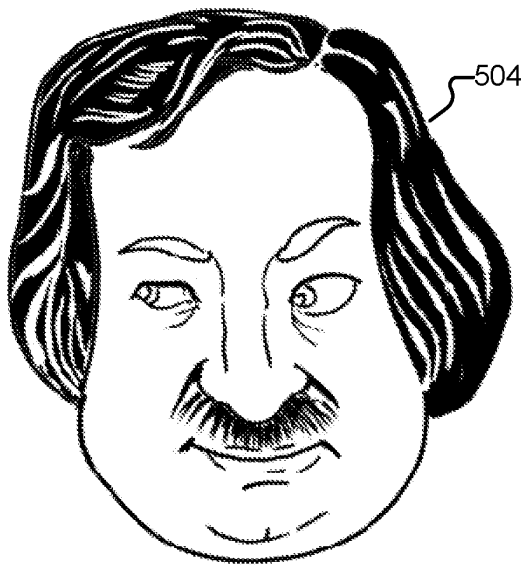


FIG. 5B

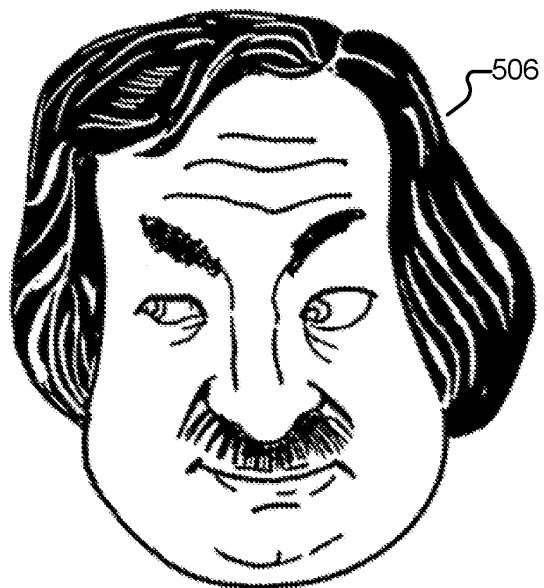


FIG. 5C

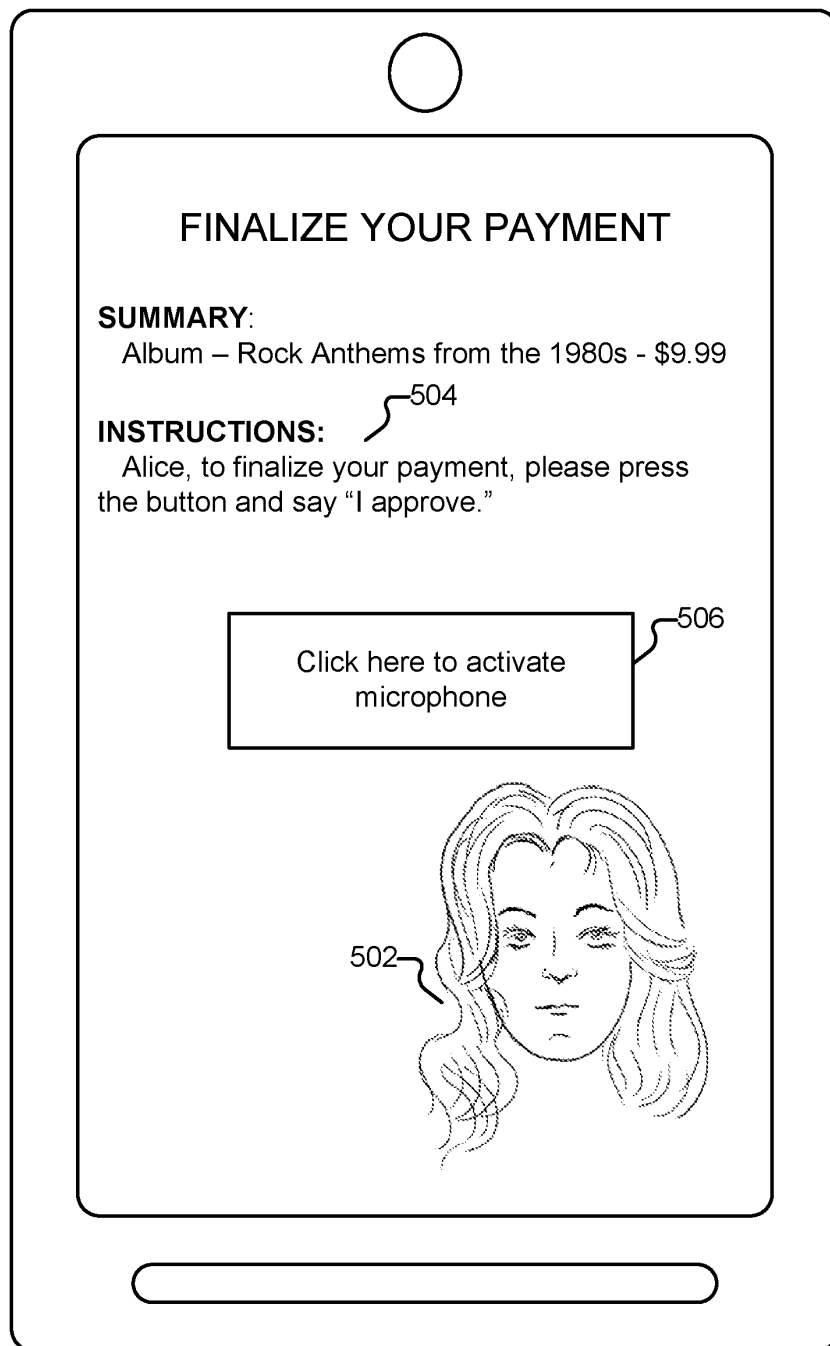


FIG. 6

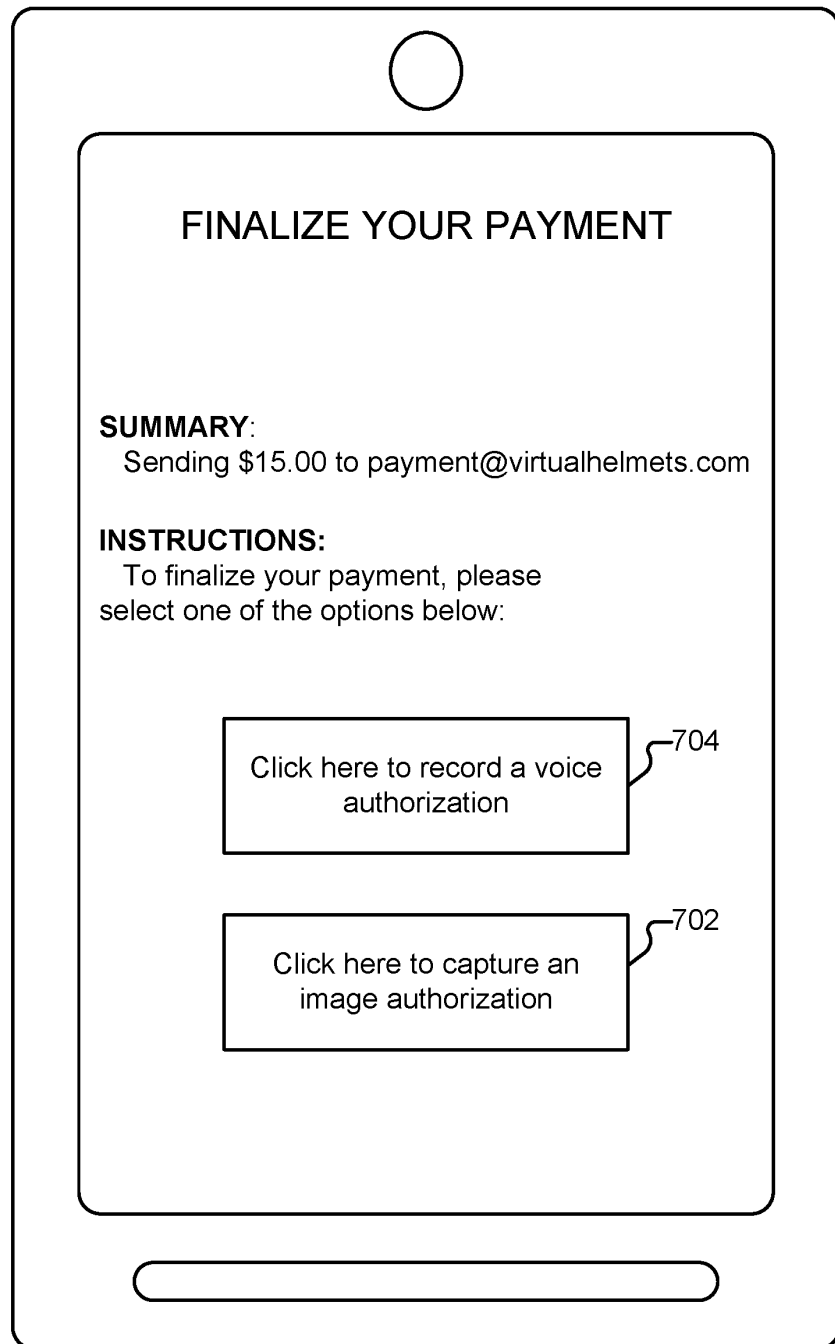


FIG. 7

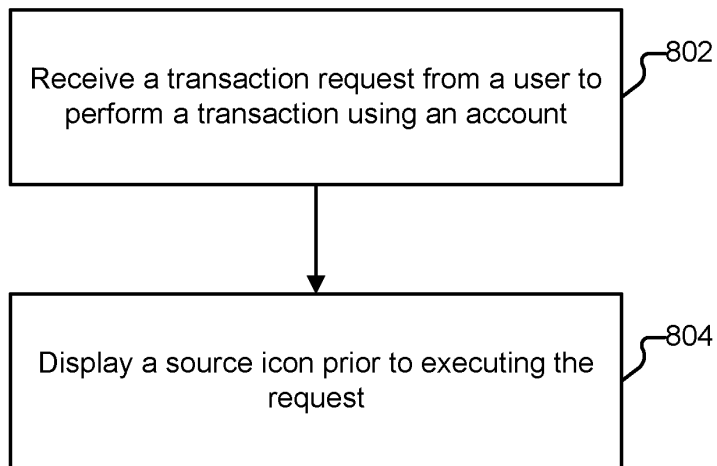


FIG. 8

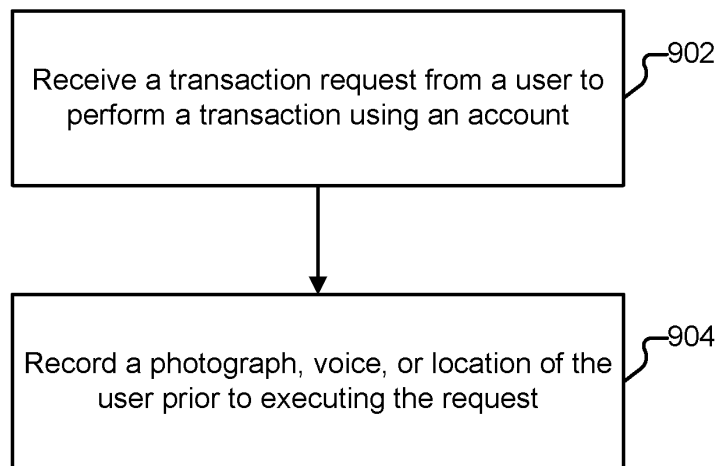


FIG. 9

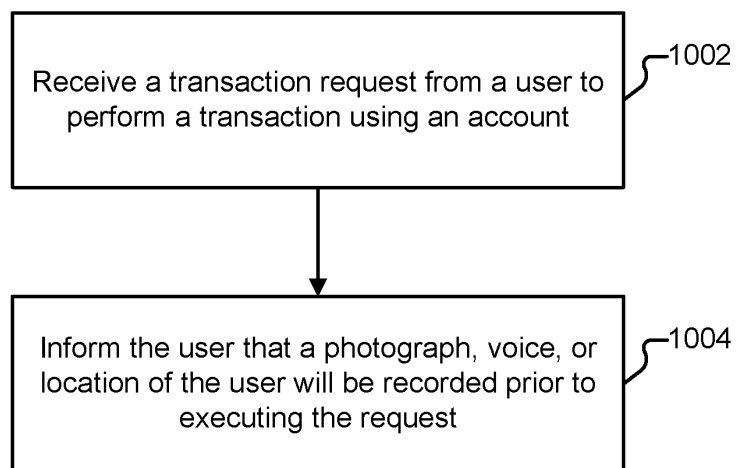


FIG. 10

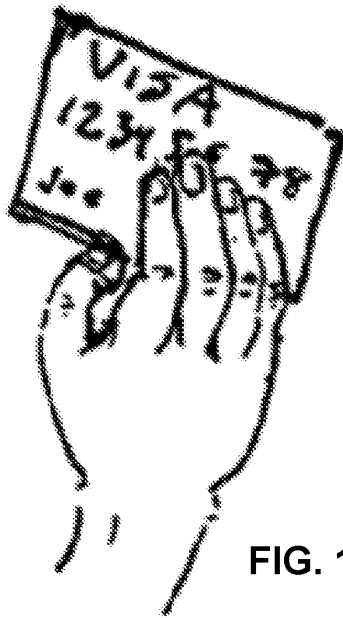


FIG. 11A

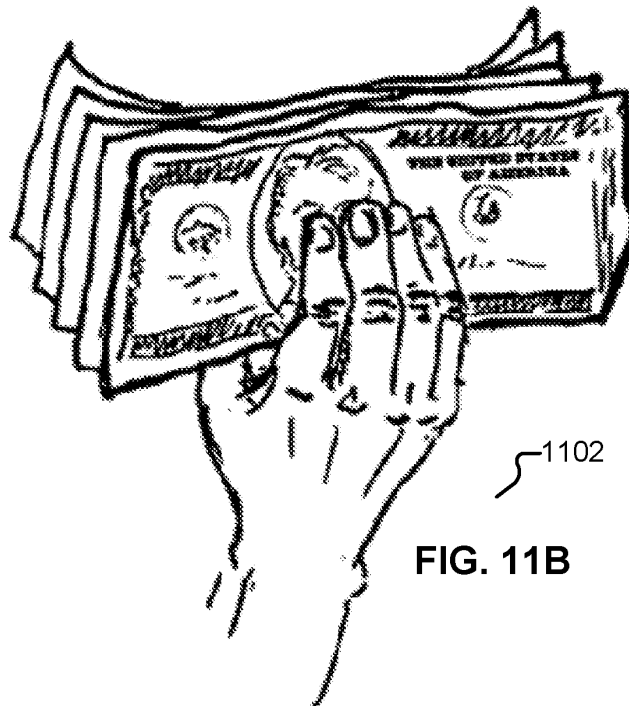


FIG. 11B

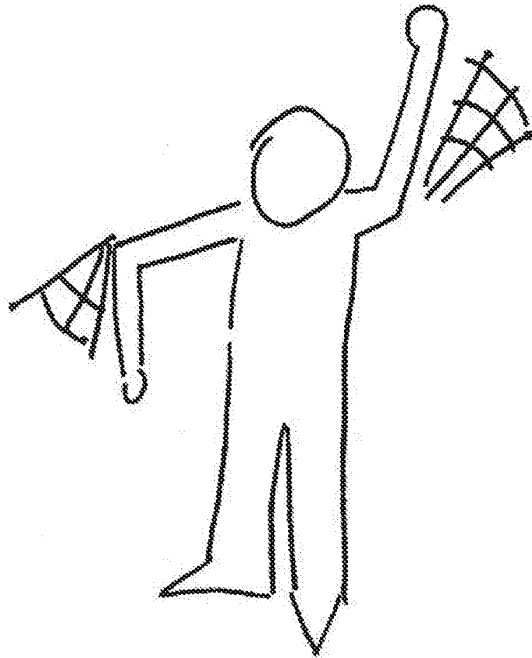


FIG. 12A

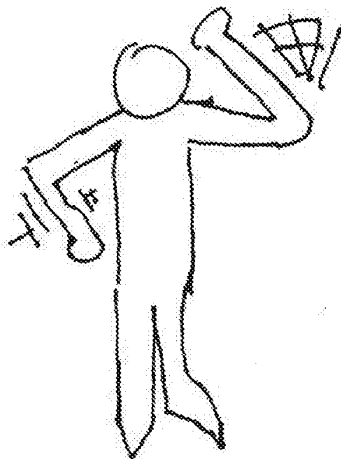


FIG. 12B

Electronic Acknowledgement Receipt	
EFS ID:	39631980
Application Number:	16893237
International Application Number:	
Confirmation Number:	5805
Title of Invention:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
First Named Inventor/Applicant Name:	Bjorn Markus Jakobsson
Customer Number:	21912
Filer:	Yeu-Ting George Cheng/Elaine Nguyen
Filer Authorized By:	Yeu-Ting George Cheng
Attorney Docket Number:	MJAKP001C3
Receipt Date:	04-JUN-2020
Filing Date:	
Time Stamp:	19:01:13
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	Application Data Sheet	MJAKP001C3_ADS.pdf	1823476	no	8
			244d1d3def2e414f4e82211cce79bb2186975e93		

Warnings:

Information:					
2	Specification	MJAKP001C3_APP.pdf	170329	no	24
			cd3ad6483e5cdcd5cfa7ea364761ccccc8e937b6		
Warnings:					
Information:					
3	Drawings-only black and white line drawings	MJAKP001C3_APP_Figures.pdf	793582	no	12
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <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.					

Attorney Docket No. MJAKP001C3

APPLICATION FOR UNITED STATES PATENT

METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

By Inventor:

Bjorn Markus Jakobsson
Portola Valley, CA

Assignee: RightQuestion, LLC

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Telephone (408) 973-2585

METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

CROSS REFERENCE TO OTHER APPLICATIONS

[0001] This application is a continuation of co-pending U.S. Patent Application No. 15/948,744 entitled METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD filed April 09, 2018, which is incorporated herein by reference for all purposes, which is a continuation of U.S. Patent Application No. 13/875,245 entitled METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD filed May 1, 2013, now U.S. Patent No. 9,972,010, which is incorporated herein by reference for all purposes, which is a continuation of U.S. Patent Application No. 13/099,981 entitled METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD BY INCREASING GUILT DURING A PURCHASE TRANSACTION filed May 3, 2011, now U.S. Patent No. 8,458,041, which is incorporated herein by reference for all purposes, which claims priority to U.S. Provisional Patent Application No. 61/332,140 entitled REDUCING FRAUD filed May 6, 2010 which is incorporated herein by reference for all purposes.

BACKGROUND OF THE INVENTION

[0002] Fraudulent transactions are an ongoing problem. One way fraud is committed is by one individual stealing another individual's credit card and using that stolen card to perform transactions at physical locations, such as to purchase gasoline or groceries. Fraud can also be perpetrated in the context of electronic transactions. Electronic fraud can be particularly devastating because the perpetrator does not need physical access to a victim's credit card (or other resource) to perform the fraud. Improved techniques to prevent fraud would be useful. Improved techniques to identify those who commit fraud would also be useful.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] Various embodiments of the invention are disclosed in the following detailed description and the accompanying drawings.

[0004] Figure 1 illustrates an example of an environment in which fraudulent transactions can occur.

[0005] Figure 2A illustrates an image of an individual.

[0006] Figure 2B illustrates an image of an individual.

[0007] Figure 2C illustrates an image of an individual.

[0008] Figure 3 illustrates a selection of hands.

[0009] Figure 4 illustrates an embodiment of an interface.

[0010] Figure 5A illustrates an image of an individual.

[0011] Figure 5B illustrates an image of an individual.

[0012] Figure 5C illustrates an image of an individual.

[0013] Figure 6 illustrates an embodiment of an interface.

[0014] Figure 7 illustrates an embodiment of an interface.

[0015] Figure 8 illustrates an embodiment of a process for reducing fraud.

[0016] Figure 9 illustrates an embodiment of a process for reducing fraud.

[0017] Figure 10 illustrates an embodiment of a process for reducing fraud.

[0018] Figure 11A illustrates an example of a transaction icon.

[0019] Figure 11B illustrates an example of a transaction icon.

[0020] Figure 12A illustrates an example of a motion performed by a user of a gaming console.

[0021] Figure 12B illustrates an example of a motion performed by a user of a gaming console.

DETAILED DESCRIPTION

[0022] The invention can be implemented in numerous ways, including as a process; an apparatus; a system; a composition of matter; a computer program product embodied on a computer readable storage medium; and/or a processor, such as a processor configured to execute instructions stored on and/or provided by a memory coupled to the processor. In this specification, these implementations, or any other form that the invention may take, may be referred to as techniques. In general, the order of the steps of disclosed processes may be altered within the scope of the invention. Unless stated otherwise, a component such as a processor or a memory described as being configured to perform a task may be implemented as a general component that is temporarily configured to perform the task at a given time or a specific component that is manufactured to perform the task. As used herein, the term ‘processor’ refers to one or more devices, circuits, and/or processing cores configured to process data, such as computer program instructions.

[0023] A detailed description of one or more embodiments of the invention is provided below along with accompanying figures that illustrate the principles of the invention. The invention is described in connection with such embodiments, but the invention is not limited to any embodiment. The scope of the invention is limited only by the claims and the invention encompasses numerous alternatives, modifications and equivalents. Numerous specific details are set forth in the following description in order to provide a thorough understanding of the invention. These details are provided for the purpose of example and the invention may be practiced according to the claims without some or all of these specific details. For the purpose of clarity, technical material that is known in the technical fields related to the invention has not been described in detail so that the invention is not unnecessarily obscured.

[0024] Figure 1 illustrates an example of an environment in which fraudulent transactions can occur. The techniques described herein can be used with devices and services that are not protected by passwords, or where passwords are commonly shared. They can be implemented by web services, using JavaScript (or similar technology). They can also be implemented as browser extensions and dedicated software installed on the appropriate device.

[0025] As used herein, “fraudulent” transactions include both prosecutable criminal actions and actions which might not warrant criminal action but where a person nonetheless loses something of value without providing informed consent. As shown, users of clients 102-110 engage in transactions involving various service providers 120-130 via one or more networks (represented herein as a single network cloud 150). In several of the examples described below, traditional protections against fraudulent activities are either disabled (e.g., by a given site not requiring a password due to a stored cookie, or the password being supplied automatically by a browser) or rendered moot (e.g., by a given user sharing a password with another user). Examples of both legitimate and fraudulent transactions involving clients 102-110 and providers 120-130 are as follows:

[0026] Example (1): Legitimate: The owner of laptop 102 purchases books and movies from online retailer 124 via a browser application installed on client 102. The laptop owner is typically not challenged to provide a password at checkout time because of cookies stored on the laptop or because retailer 124 otherwise recognizes laptop 102. Fraudulent: A family member of the laptop owner purchases a magazine from retailer 124, using laptop 102, without the laptop owner’s permission.

[0027] Example (2): Legitimate: Set-top box 104 is connected to a television and used to rent digital copies of movies from digital marketplace 126. Stored within set-top box 104 is the credit card information of the individual renting the movies. Fraudulent: A roommate of the individual uses device 104 to rent a movie without the individual’s permission.

[0028] Example (3): Legitimate: The owner of tablet 106 uses online banking site 130 to manage various bank accounts, transfer money between accounts, and to pay bills. The owner of tablet 106 also uses payment service 128 to send electronic payments for items won at an online auction site. Fraudulent: The spouse of the tablet owner uses the tablet to pay personal bills using a jointly held bank account (without prior agreement that such actions are acceptable) or to send payments using payment service 128 on behalf of the tablet owner without the tablet owner’s permission.

[0029] Example (4): Legitimate: Gaming console 108 is located in the living room of a family with two boys and is in communication with multiplayer gaming delivery service 122,

which allows players to collaborate in multiplayer games and to trade virtual goods with one another. The boys each have accounts on gaming console 108 and with gaming delivery service 122 and play games using gaming console 108. Fraudulent: The first brother accesses the second brother's accounts, without his permission, and causes the second brother's game character to transfer a digital good to the first brother's game character.

[0030] Example (5): Legitimate: The owner of telephony device 110 is a mother, with a daughter that does not have a telephony device of her own. The mother allows the daughter to use device 110 to play a game produced by social network game developer 120. Developer 120 sells digital goods that can be used within the games it produces. Fraudulent: The mother has explicitly told the daughter that the daughter may not purchase digital goods from the game developer. The daughter ignores her mother's instructions and purchases digital goods using device 110. Another example of a fraudulent transaction is where the daughter uses device 110 to send a premium SMS (e.g., to contribute money to a disaster relief fund) or to download for-pay applications from digital marketplace 126 without her mother's permission.

[0031] Example (6): Legitimate: Telephony device 110 includes typical components such as a CPU, RAM, a front facing camera 112, and a microphone 114. Telephony device 110 also includes a near field communication ("NFC") chip 116. The owner of telephony device 110 uses NFC chip 116 as a payment method for items such as lunch and cups of coffee at a café that supports NFC transactions. The owner of the device has the device configured to automatically unlock when it is within a certain distance from home and work. The café is within the area defined as "work" and thus unlocked. Fraudulent: The owner of device 110 and a coworker visit the café for lunch. On their way out of the café, the owner of device 110 leaves her purse (and device 110) on the table to visit the restroom. The coworker would like to buy a pack of gum from the café cashier but realizes that he has left his wallet at the office. The coworker pays for the gum using the NFC capabilities of device 110, without the owner's knowledge.

[0032] In each of the above examples of fraudulent transactions, the would-be perpetrators (also referred to herein as "fraudsters") are family members, friends, colleagues, or persons that otherwise have some personal relation with the victim. These fraudsters are probably not hardened criminals, but regular people who fall for the temptation. In some of the

cases (e.g., Example 6), the fraudster may believe that they will eventually pay back the money. The fraudsters are generally people who would reject pickpocketing as immoral, and who would not take cash out of the wallet of the victim or forge checks on behalf of the victim. Yet, in each of the examples above, the otherwise honest fraudsters are nonetheless committing fraudulent transactions.

[0033] Two reasons that people refrain from committing fraudulent acts are (1) associated feelings of guilt and (2) the risk of getting caught. Thus, a daughter might refrain from taking money from her mother's purse because she would feel guilty doing so, and/or because there is a high risk of being caught, particularly if the daughter is an only child. One reason that the same daughter (e.g., as explained in Example 5 above) might fraudulently use her mother's phone to purchase digital goods (or send a premium SMS) is because the associated guilt she would feel in doing so is less than the guilt she would feel for taking money out of her mother's purse (e.g., because physical cash is a concrete, tangible item while a digital payment for a digital good is a more abstract concept). In the case of the premium SMS, the daughter might actually experience a net positive feeling for contributing to charity (albeit with money that does not belong to her). Another reason that the daughter might fraudulently use her mother's phone to purchase digital goods (or send an SMS) is that the risk of being caught is less than if she were to take money from her mother's purse. For example, the mother may have automatic payments set up for her phone bill and thus not scrutinize the line items incurred by the daughter, especially if such transactions are relatively small.

[0034] Described herein are techniques for increasing the guilt felt by fraudsters when they are about to commit a fraudulent transaction. In at least some cases, a reminder that moral implications are attached to performing a transaction will cause a fraudster to abort a fraudulent transaction. Also described herein are techniques for increasing the likelihood (either real or as perceived by the fraudster) that the fraudulent act will be detected. In both cases, the impact on legitimate transactions (either by the device/account owner, or by a person given explicit permission to perform a transaction by the device/account owner) is minimal (e.g., does not delay or complicate legitimate transactions).

[0035] The techniques for increasing guilt can also be used in situations not involving fraud, such as where the legitimate owner of a device wishes to change a legitimate (but not desirable) behavior through self-induced guilt.

[0036] Increasing Feelings of Guilt

[0037] One reason that an otherwise honest person might engage in a fraudulent transaction is that the monetary value of the transaction is abstract. The more concrete the value of a transaction is, the more guilty a fraudster might feel when perpetrating the fraud. A \$20 bill, when held in a person's hand and presented to a merchant, is a tangible item with a concrete value. When the same amount of money is involved in an electronic transaction (e.g., the purchase of a book or set of magazines), the amount of money involved may seem less concrete.

[0038] Another reason that an otherwise honest person might engage in a fraudulent transaction is that the victim of the transaction is anonymous. The more human the victim is made to be, the more guilty a fraudster might feel when perpetrating the fraud. In order to take money out of her mother's purse, a daughter must confront the fact that she is taking money away from a real person (and presumably a person that she loves). Other items in the purse, such as photographs in a wallet, or a set of keys with a personalized key ring, will further reinforce that the victim is a particular individual – Mom. When the same amount of money is involved in an electronic transaction, the identity of the victim will likely be less pronounced, and may be seemingly absent, such as where the daughter sends a premium SMS with her mother's phone.

[0039] Feelings of guilt for engaging in fraudulent transactions can be increased both by making a given transaction more concrete, and by emphasizing the victim's identity. Examples of both approaches will now be presented in conjunction with the following scenario: Suppose a father ("Bob") has a son ("Bob Jr.") in college. Bob and Bob Jr. live in different cities. Bob wants to make sure that Bob Jr. has enough money for school books, and has provided Bob Jr. with his username and password for online retailer 124. Bob has specifically told Bob Jr. that it is ok for Bob Jr. to purchase schoolbooks using Bob's account with online retailer 124. Bob Jr. is generally a trustworthy individual.

[0040] As part of an enrollment process (e.g., with online retailer 124), Bob is asked to provide an image that represents himself. The enrollment process may be voluntary, may be required for new users but not required for existing users, may be imposed on users who have previously been involved in chargebacks or other questioned transactions, or as part of any other appropriate situation.

[0041] An example of an image provided by Bob is illustrated in Figure 2A. The image may be a photograph, an avatar, or other representation of Bob, either generated by Bob, selected by Bob, or automatically obtained, such as by fetching a profile photograph that Bob has selected for use with a social networking site. The image may also be of something with which Bob closely identifies, such as a favorite pet, or may be a textual representation of Bob (e.g., a logo that reads “Super Dad”). If Bob is accessing retailer 124 via a computer, he may choose to upload a JPEG or other file that is stored on his computer. If Bob is accessing retailer 124 via a telephony device with a camera (whether with a browser, a third party application, or via an application made available by retailer 124), Bob may use the telephony device’s camera to provide an image.

[0042] The provided image can be manipulated, such as by tools made available by retailer 124, to enhance it or remove unnecessary details. In the example shown in Figure 2B, automatic face recognition and cropping has been applied to the image of 2A.

[0043] Bob can also provide multiple images. For example, Bob can provide an image that corresponds to a “personal” version of himself (e.g., as shown in Figure 2A) and can also provide an image that corresponds to a “business” version of himself (e.g., as shown in Figure 2B). In some embodiments, the additional image(s) are automatically generated, such as by a tie being automatically added to the image shown in Figure 2B. Similarly, Bob can choose to enhance Figure 2B by adding other accessories, such as a medieval helmet, or exaggerating features.

[0044] Also as part of the enrollment process, Bob is asked to select an image of a hand that best matches his own hand. Bob selects hand 302 from the choices presented in Figure 3. In some embodiments, the hand is automatically selected for Bob after analysis of his provided image.

[0045] The images selected by Bob, along with other images, such as representations of money, can be displayed at checkout time. Suppose Bob Jr. is shopping for books to help him with a calculus class he is taking. Bob Jr. has added a calculus study guide to his cart, but has also added some additional items that do not relate to his studies. Specifically, Bob Jr. has added a computer game guide and a calendar of beach parties. If Bob Jr. had been handed cash by his father “to be used for school books,” Bob Jr. might have spent the money as instructed and returned the change to his father. In an online shopping environment, however, the abstract nature of the amount of money involved, as well as the reduced emphasis on the owner of the money (i.e., his dad), have tempted Bob Jr. to buy things that he should not.

[0046] Figure 4 illustrates an embodiment of an interface. The example shown is a representation of an interface, as rendered in a browser application of a personal computer, that would be shown to Bob Jr. during a checkout process. Other interfaces, such as would be displayed by device 106 or device 110 when those devices are used to contact site 124, can also be used in conjunction with the techniques described herein.

[0047] In region 402, Bob Jr.’s shipping address is shown. In region 404, the contents of Bob Jr.’s shopping cart is shown. Instructions for completing the transaction are presented in region 406. Specifically, in order to pay, Bob Jr. must click on hand 408 and drag it to region 410 of the interface. In various embodiments, such as where the interface is rendered on mobile device 110, other actions may also be taken, such as by swiping hand 408 with a finger to drag it to region 410, or speaking “pay now” or “I agree to pay” into a microphone. In the latter cases, the hand would automatically move in response to the spoken words. In addition, if the user speaks “pay now,” the user’s voice can be recorded and used for audit purposes described in more detail below. If the device includes a built-in finger scanner or other biometric equipment that allows the automatic capture of biometric information of the user performing the transaction, that biometric information can also be used for audit purposes, also as described in more detail below. Such biometric information may be partial (e.g., the size or shape of a fingerprint) or more complete (e.g., a fingerprint).

[0048] Also included in interface 400 is an image of Bob’s face 412. To complete the transaction, Bob Jr. is dragging money away from his father and presenting it as payment for the

items in his cart. If Bob himself was performing a transaction, the act of taking money away from himself would not likely cause any additional burden on the completion of the transaction. Similarly, if Bob Jr. was only purchasing the math study guide, he also would likely not be impeded in completing the transaction. However, where, as is illustrated in Figure 4, Bob Jr. has included items in his cart for which his father has not authorized payment, having to drag the money away from his father may cause Bob Jr. to reconsider whether he wants to purchase items 414 and 416.

[0049] Figures 5A-5C illustrate additional examples of images used in conjunction with the techniques described herein. Figure 5A is an image of “Alice,” the owner of telephony device 110. Installed on device 110 (either as a native feature of the operating system of the device or as a third party application) is an application that implements techniques described herein. As part of an enrollment with the application, Alice is asked to photograph herself using camera 112 and is also asked to create a short voice sample. Both pieces of data are stored on device 110 and, in some embodiments, are not transmitted beyond the phone.

[0050] Figures 5B and 5C are two images provided by Charlie, an owner of tablet device 106. Specifically, Figure 5C represents an “upset” version of Charlie – his eyebrows are raised and his brow is furrowed. Suppose Charlie has given tablet device 106 to his daughter on the condition that she does not spend more than \$10/month on applications for it. The tablet is configured to charge Charlie’s credit card or to append charges to Charlie’s phone bill, as applicable. Each time his daughter buys an application, up to the \$10 total amount, she will be shown the image illustrated in Figure 5A as part of the purchase process (e.g., as a reminder that her dad has set a spending policy). Suppose Charlie’s daughter has already spent \$9.50 for a given month, and is about to purchase an additional application costing \$5. This time, as part of the purchase process, instead of being presented with the image shown in Figure 5B, she is shown image 506 – indicating that her father will be unhappy if she completes the transaction. In various embodiments, an animation of the transition from image 504 to image 506 is automatically generated and presented to Charlie’s daughter. If Charlie himself makes the purchase, or if his daughter has asked permission to exceed the \$10/month limit, being presented with Figure 5C will not hinder the transaction, because Charlie will not in fact be upset by the transaction. However, if no such authorization has been given, Charlie’s daughter might

reconsider completing the purchase – either asking Charlie if it is ok to exceed the amount, or waiting until next month to buy the application.

[0051] Detecting Fraud

[0052] One reason that an otherwise honest person might engage in a fraudulent transaction is that the risk of being caught is low. As one example, an employee might take for personal use items such as pens or staplers from a supply closet if no one else is present at the time. However, if the employee's boss was also present in the supply closet, the employee would likely not be tempted to take the items. In the case of transactions such as where Alice's daughter buys digital goods without Alice's permission, or sends a premium SMS, the risk that Alice will notice any individual transgression is low – particularly if Alice has automatic payments set up for her phone bills.

[0053] Described herein are techniques for both increasing the likelihood that fraudulent transactions will be detected, and for causing a fraudster to believe that his or her fraudulent transactions will be detected (irrespective of whether such a detection actually takes place).

[0054] Figure 6 illustrates an embodiment of an interface. Suppose Alice would like to purchase digital music using device 110. As part of the checkout process, Alice is presented with the interface shown (as rendered on device 110). As mentioned in conjunction with the discussion of Figure 5A, as part of an enrollment process, Alice was asked to photograph herself, and to provide a short voice sample. As part of the checkout process, Alice is shown the image she provided at registration (502). The checkout process is personalized, providing instructions (504) for Alice (by name) on how to complete the transaction. Specifically, Alice is asked to click on box 506 to activate the microphone 112 of device 110. She will then be asked to repeat the phrase she selected at registration, asked to state a particular word or set of words appearing on the screen (such as "I agree" or an arbitrary string), or otherwise provide an audio recording.

[0055] A variety of actions can be taken in response to the providing of audio input via microphone 112. In some embodiments, the recorded audio is immediately played back to the purchaser, along with a message, such as, "If you would still like to proceed, press 1." In some embodiments, analysis is performed within device 110 to determine whether the previously

recorded voice and the currently supplied voice are the same. If the voice is a sufficient match (e.g., as determined by a Fast Fourier Transform or other appropriate technique), the transaction is allowed to proceed. If the voice is not a match within some tolerance, the voice can be stored for a period of time (e.g., in case a dispute arises), an alert can be sent to Alice, an alert can be sent to a carrier, and/or other appropriate actions can be taken. In some embodiments, the analysis is provided by a third party, such as the owner of digital marketplace 126. Finally, in some embodiments, no actions are taken with respect to the currently supplied voice – the instructions provided in 504 serve as a deterrent against fraudulent activity because a fraudster will erroneously believe, based on the instructions, that he or she will be caught and will not complete the transaction. Uploading voice samples (or creating them for on-device use) can also serve as a substitute or addition to uploading images (or creating them for on-device use). For example, a user can record his or her voice saying, “This is my money,” to be played when a payment is about to be performed. The actual owner of the money will not be deterred by hearing this recording, nor will a user with permission, but a user without permission will be reminded of this fact. Similarly, a short movie of the device or account owner can be used instead of an image or a voice sample, or in addition to these.

[0056] As the owner of device 110 making a legitimate transaction, interacting with the interface shown in Figure 6 will provide a minimal intrusion on Alice’s ability to purchase digital music. Similarly, if Alice’s daughter is purchasing the album, with Alice’s permission, Alice’s daughter will not feel guilty when confronting image 502 and need not be concerned that the voice sample she provides will implicate her in any wrongdoing, because she has Alice’s explicit permission to make the purchase. However, in the event Alice’s daughter is purchasing music on device 110 without Alice’s permission, her experience will be different. Specifically, Alice’s daughter may feel guilt after seeing her mother’s image, and/or will be deterred from making the purchase with the belief that her mother will be alerted that her daughter has made an unauthorized purchase.

[0057] Figure 7 illustrates an embodiment of an interface. The example shown is an alternate embodiment of the interface shown in Figure 6. In this example, to complete a transaction for digital goods (e.g., with social network game developer 120), the purchaser is given a choice of either providing an audio sample (by selecting box 704), or providing a

photograph (by selecting box 702). If the purchaser selects box 702, the purchaser will be asked to photograph himself or otherwise provide a form of photographic authorization.

[0058] In some embodiments, an analysis of the photograph is performed as part of the transaction. Techniques for confirming that the object being photographed is alive (e.g., by taking multiple photographs in rapid succession) can be employed to help make sure that the fraudster isn't using camera 112 to photograph a printed picture of the legitimate user. The application of various rules, such as requiring that a face be detected in the captured image or that a certain amount of flesh tone be present in the picture can also be implemented. Similar rules can be applied to other types of capture, such as requiring that a GPS be turned on prior to a transaction taking place, or requiring that provided audio conform to general rules that define what human utterances sound like.

[0059] The photograph can be stored (either on the device or with a party such as a carrier or with site 120) for some period of time in case a dispute arises. In various embodiments, no action is taken, but a fraudulent purchaser will be lead to believe that they will be caught if they engage in a fraudulent transaction. Other contextual information can also be captured (or threatened to be captured) and analyzed, if applicable. As one example, a would-be purchaser can be warned that their location will be captured as part of the transaction. As another example, the purchaser can be asked to write out "I agree" or "I want to pay Bob," and the handwriting sample is recorded. As yet another example, the size of a finger involved in a touchscreen action can be recorded (e.g., to indicate whether it was a child's finger or an adult's finger), and if the device is appropriately equipped, a fingerprint of the user can be captured. In the case of a fingerprint, the device may not be capable of capturing a fingerprint, but a would-be fraudster can be dissuaded from committing fraud by being informed that the touch screen of the device is capable of capturing the fingerprint.

[0060] Alerts can be generated if the captured contextual information does not comport with what would be expected. For example, a user could specify that if transactions are performed by a small finger (e.g., a child's), the device owner should be alerted. As another example, the device owner can specify that an alert should be generated whenever transactions are made in locations other than the user's home or office. The alerts may be sent to the

implicated device (e.g., as an SMS or as a popup box), but can also be sent to an alternate location, such as to an email address specified by the owner. In some embodiments, the generated alert includes the captured contextual information. For example, if a voice is captured, a copy of the audio recording could be emailed to the owner of the device whenever the audio recording is determined to not match a sample previously provided by the device owner.

[0061] In the scenario where captured contextual information is sent off of a device, e.g., to a carrier or to social network game developer 120, the quality of the information collected need not be of a nature sufficient to mount a criminal case. Even rudimentary contextual information can be useful in resolving whether a charge that is claimed by a device owner to have been made without his consent was made by an unknown criminal, the owner himself, or a person known to the owner.

[0062] Figure 8 illustrates an embodiment of a process for reducing fraud. In some embodiments, the process shown in Figure 8 is performed on a device such as device 110. In other embodiments, the process shown in Figure 8 is performed at least in part on a server, such as a server providing an interface to a site of online retailer 124. The process begins at 802 when a request to perform a transaction using an account is received from a user. As one example, at 802, Bob Jr. has selected a “checkout” button in an interface provided by online retailer 124 after adding various items to a shopping cart. At 804, a source icon is displayed prior to executing the request. As one example, at 804, Bob Jr. is presented with face 412.

[0063] Figure 9 illustrates an embodiment of a process for reducing fraud. In some embodiments, the process shown in Figure 9 is performed on a device such as device 110. The process begins at 902 when a request to perform a transaction using an account is received from a user. As one example, at 902, Alice has selected a “buy now” icon in an interface rendered on device 110. At 904, at least one of a photograph, a movie, a voice, and a location of the user is recorded prior to executing the request. As one example, at 904, Alice’s voice is recorded after she activates the microphone of device 110 by selecting box 506.

[0064] Figure 10 illustrates an embodiment of a process for reducing fraud. In some embodiments, the process shown in Figure 10 is performed on a device such as device 110. The process begins at 1002 when a request to perform a transaction using an account is received from

a user. As one example, at 1002, Alice has selected a “buy now” icon in an interface rendered on device 110. At 1004, the user is informed that at least one of a photograph, a voice, and a location of the user will be taken prior to executing the request. As one example, at 904, Alice is informed that her voice will be recorded after she selects box 506.

[0065] Additional Detail

[0066] Additional information about various aspects of the techniques described herein is provided below.

[0067] Transaction Images

[0068] Illustrated in Figures 11A and 11B are additional examples of a transaction icon (e.g., hand 408). In Figure 11A, Bob’s credit card is depicted instead of a bill. In Figure 11B, the amount of money held by the hand corresponds to the amount of money implicated by the transaction. In various embodiments, which transaction icon is selected occurs automatically, e.g., based on a payment method selected as part of a previous step in a checkout process. The person initiating a transaction can also be presented with a selection of different hands (e.g., one holding a Visa credit card and one holding an American Express credit card) and asked which card to use for payment.

[0069] Other transaction icons can also be used, such as those depicting only the money or credit card (without a hand), or textual labels, such as “\$39.99.” In such cases, the process described in conjunction with Figure 4 could still be employed. For example, if, instead of dragging hand 408, Bob Jr. had to drag a box labeled “\$55.93,” Bob Jr. would likely still feel more guilt than if he was presented with a traditional checkout screen. For example, he would still see Bob’s face 412, and would still be “dragging” money away from Bob. In addition, the account owner (Bob) could be labeled with a tag stating how much funds he has in his account, how much more funds he has approved for Bob Jr. to use for textbooks, how much he permits for monthly expenses, or another appropriate amount. This tag could change as a result of the transaction. In some embodiments “BEFORE” and “AFTER” labels are applied – showing how much Bob had in his account (or otherwise available funds) before and after Bob Jr.’s transaction occurs, or what the “after” result would be if Bob Jr. was to finalize the transaction.

[0070] Transaction icons that do not depict currency or other forms of payment can also be used in conjunction with the techniques described herein. Examples include images of keys, or other indicators of access.

[0071] Destination Images

[0072] In some embodiments, instead of dragging hand 408 to payment box 410, the user is asked to drag the hand to a box indicating shipping preferences, such as how quickly an item should be delivered (e.g., overnight shipping vs. ground shipping), by which carrier an item should be shipped, and/or other appropriate selections, such as whether to pay the full amount now or over a period of three months, and whether the purchases should be gift wrapped. If multiple options are desired (e.g., “(1) gift wrap and (2) ship via carrier A (3) using 3-day shipping”), the user can be asked to drag the transaction representation from one desired option to the next.

[0073] In some cases, such as where a user is transferring money to an individual (instead of, e.g., paying a company such as online retailer 124), an image of the individual to whom money is being transferred is displayed as a destination image, if available. For example, if Alice uses payment service 128 to transfer money to Charlie, in some embodiments, as part of the process, Alice would be presented with a user interface showing image 502 (as the source image), an appropriate hand, such as hand 1102 (as the transaction image), and image 504 (as the destination image). Alice would be instructed to drag money (e.g., by clicking on hand 1102) from herself to Charlie (and/or to a hand included in the representation of Charlie) to complete the transaction. Charlie’s image may be available to payment service 128 because Charlie has specifically provided it for that purpose. Payment service 128 may also scrape or otherwise obtain an image for Charlie from other sources, such as a social networking site. This would deter fraud, but also avoids mistakes by Alice, such as one where she pays her cousin Charlie instead of her boyfriend Charlie.

[0074] Multiple Source Images

[0075] As explained in conjunction with the descriptions of Figures 2A-2C, in some embodiments an account owner provides multiple source images. One reason is as follows.

Suppose Bob has registered multiple credit cards with online retailer 124. Bob's employer has issued Bob a company credit card to use for work-related purchases. Accordingly, one of the credit cards he registers with online retailer 124 is the company-issued credit card. Bob also registers one or more personal credit cards. When Bob (or someone using Bob's account) selects a given credit card as the payment type to be used, an image of Bob associated with that card will be shown (e.g., as face 412). If Bob Jr. attempts to buy items from online retailer 124 using Bob's company-issued credit card, not only will he be reminded that he is taking money from Bob – he will be reminded that he is taking money from Bob's company-issued credit card, possibly subjecting Bob to problems with his employer. This may act as a better deterrent than if a more generic version of Bob was presented, irrespective of which payment method is selected. As another example, being presented with the image shown in Figure 2C may act as a deterrent to Bob himself using the company-issued card for personal purchases, while not impeding his ability to use the card for legitimate purchases.

[0076] Attribution

[0077] In various embodiments, the techniques described herein are used to attribute a non-fraudulent purchaser. As one example, suppose device 104 is used by three different roommates. The device may be configured with three different payment types (e.g., one for each roommate), or may make use of a single account (e.g., resulting in a monthly bill). In some embodiments, when renting a movie, as part of the checkout purchase, the would-be renter is presented with a graphical representation of each of the three roommates and asked to select which roommate is renting the particular movie.

[0078] Audio Output

[0079] In some embodiments, a confirmation of a transaction that is about to take place is outputted by the device being used to perform the transaction. As one example, prior to the completion of the purchase by Bob Jr. of books using Bob's account with online retailer 124, a message could be generated that states, "you are about to complete a purchase using Bob's credit card." As another example, when one user attempts to pay another user via an application provided by payment service 128, as part of the transaction, the application could generate, as

audio output: “You are about to take \$50 from Alice’s checking account and give it to Bob Jones. If you do not wish to do this, press escape now.”

[0080] As another example, the techniques described herein can be used in conjunction with interactive voice response (IVR) systems. Suppose a user is purchasing a ticket to a sporting event using an IVR system and a credit card. As part of the checkout process, the user is asked to speak the name on the credit card. Prior to completion of the transaction, the user’s recorded voice is played back to the user as part of a confirmation, such as: “to confirm, you are about to charge **Joe Smith**’s credit card for \$40,” where “Joe Smith” is the user’s recorded voice and the remainder of the sentence is generated by the IVR system. The output would both demonstrate to a fraudster that the voice has been recorded, and remind the fraudster that a real individual – Joe Smith – will be harmed by a fraudulent transaction.

[0081] Changing Non-Fraudulent Behaviors

[0082] In various embodiments, users are able to configure rules (e.g., with online banking site 130) or with one or more applications installed on the device (including an NFC payment application) to help a legitimate user of the device conform his or her behavior to a desired goal, using the techniques described herein. As one example, Alice may desire to spend a maximum amount of money each month on digital music or ringtones. As another example, Alice may wish to save a certain amount of money each month toward a vacation. In various embodiments, happy versions or unhappy versions of the user will be displayed as part of the transaction. Examples of such versions are shown in Figures 5B and 5C, respectively.

[0083] In various embodiments, the destination image indicates a value statement of the funds transfer, such as a trash can for a payment for ringtones (where the user has identified the transaction previously as not beneficial), an indicator of how much money Alice has spent this month on ringtones, or an image of a purpose like a beach umbrella (symbolizing transfer of money to a savings account for savings towards a vacation). In some embodiments, the selection of these images is performed automatically, according to account types, payment amounts, names of payees, account balances, past purchases, and other contextual information.

[0084] Additional Actions

[0085] In some embodiments, users are asked to answer one or more questions or are asked to solve a simple puzzle. Such additional actions will require a small amount of additional time per transaction (e.g., 5 seconds) and thus not interfere with the convenience of a legitimate transaction. In the case of a fraudulent transaction, however, the additional few seconds required to complete the transaction may pose a sufficient amount of time for the fraudster to reconsider whether or not he wishes to proceed with the transaction.

[0086] Different types of actions can be required for completion of a transaction depending on factors, such as the size and type of the transaction, history of other transactions, user preferences, account balances, and/or other context. The merchant, payment provider, or other entity may require different actions for different types of payments, different contexts, and different users. For example, a given user may have to say “Yes, I agree to pay these charges” for one type of transaction, but “Pay” for another transaction. Instructions of what to say may be provided on the screen, or may be known to the user only.

[0087] Gaming Console with Camera

[0088] Suppose that in order to perform a transaction (e.g., transferring a digital item from one user to another) on gaming console 108, the transferring user is required to perform a customized action, pre-selected by the user, in front of a camera that is integrated with the gaming console. Illustrated in Figure 12A is an example of a user (“David”) performing the selected action, such as as part of an enrollment process. At a later point, David’s younger brother (“Edgar”) attempts to steal a digital item from David by impersonating him, as illustrated in Figure 12B. Edgar performs the action incorrectly, thus indicating that a fraudulent transaction is potentially taking place. In various embodiments, an alert is generated, such as by emailing David an image of Edgar performing the action. For privacy reasons, instead of emailing the image, a general description of the body performing the action could also be provided, such as “an individual 42 inches tall and approximately 100lbs.” As another example, even if Edgar were to perform the correct action, the fact that his size and proportions are different from those of David can be used to generate an alert.

[0089] NFC Payments

[0090] As explained above, some devices such as telephony device 110 include NFC capabilities. In some embodiments, the techniques described herein are adapted for use in conjunction with a payment scenario using NFC technology. As one example, an application installed on device 110 may be configured to facilitate the use of device 110 in making NFC payments. As part of an NFC transaction, the application could display Alice's face 502 on the screen of mobile device 110, reminding someone paying with the device that the device belongs to Alice. As with other embodiments described above, completion of the transaction could be made contingent on the holder of device 110 dragging a representation of money, stating "I agree to pay" out loud, or taking any other appropriate action, such as those described above.

[0091] As another example, the point of sale terminal supporting NFC capabilities may incorporate the techniques described herein. For example, as part of a transaction, the point of sale terminal could be configured to state the name of the account holder out loud, increasing the risk of detection of fraudulent transactions. For example, if Bob attempts to pay with Alice's phone, the point of sale terminal might say out loud, "Please confirm you would like to pay, Alice." If the point of sale terminal is integrated with other infrastructure, such as a database holding user images, Alice's image can be displayed on the terminal as part of the transaction – reminding Bob that he is stealing from Alice (unless he is performing a transaction with Alice's phone with her permission).

[0092] Although the foregoing embodiments have been described in some detail for purposes of clarity of understanding, the invention is not limited to the details provided. There are many alternative ways of implementing the invention. The disclosed embodiments are illustrative and not restrictive.

[0093] WHAT IS CLAIMED IS:

CLAIMS

1. A system, comprising:
a processor configured to:
receive a transaction request from a user to perform a transaction using an
5 account; and
display a source icon prior to executing the request, wherein the source icon
includes a graphical representation of an owner of the account; and
a memory coupled to the processor and configured to provide the processor with
instructions.

10

ABSTRACT OF THE DISCLOSURE

[0094] Techniques for reducing fraud are disclosed. A transaction request is received from a user to perform a transaction using an account. In one approach, a source icon is displayed prior to executing the request. The source icon includes a graphical representation of an owner of the account. In another approach, at least one of a photograph and a voice of the user is recorded prior to executing the request. In a third approach, the user is informed that at least one of a photograph, a voice print, and location data will be taken prior to executing the transaction request.



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
16/893,237	06/04/2020		0.00	MJAKP001C3	1	1

CONFIRMATION NO. 5805

FILING RECEIPT



0000000117726323

21912
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

Date Mailed: 06/15/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Bjorn Markus Jakobsson, Portola Valley, CA;

Applicant(s)

RightQuestion, LLC, Portola Valley, CA;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 15/948,744 04/09/2018
which is a CON of 13/875,245 05/01/2013 PAT 9972010
which is a CON of 13/099,981 05/03/2011 PAT 8458041
which claims benefit of 61/332,140 05/06/2010

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 06/11/2020

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/893,237**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

**** SMALL ENTITY ****

Title

METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

Preliminary Class

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

page 2 of 4

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/893,237	
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	75		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	330		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	380		N/A	
TOTAL CLAIMS (37 CFR 1.16(j))	1	minus 20 = *	x 50 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1	minus 3 = *	x 230 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
				TOTAL		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.				785			
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		OTHER THAN SMALL ENTITY
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	RATE(\$)
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	ADDITIONAL FEE(\$)
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
				TOTAL ADD'L FEE		TOTAL ADD'L FEE	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		OTHER THAN SMALL ENTITY
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	RATE(\$)
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	ADDITIONAL FEE(\$)
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
				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 found in the appropriate box in column 1.							



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3

CONFIRMATION NO. 5805

FORMALITIES LETTER

21912
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014



Date Mailed: 06/15/2020

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
- The application search fee must be submitted.
- The application examination fee must be submitted.
- Surcharge as set forth in 37 CFR 1.16(f) must be submitted.

The surcharge is due for any one of:

- late submission of the basic filing fee, search fee, or examination fee,
- late submission of inventor's oath or declaration,
- filing an application that does not contain at least one claim on filing, or
- submission of an application filed by reference to a previously filed application.

SUMMARY OF FEES DUE:

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. Small entity discount is in effect. If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- \$ **75** basic filing fee.
- \$ **80** surcharge.
- \$ **330** search fee.
- \$ **380** examination fee.
- \$(**0**) previous unapplied payment amount.
- \$ **865** TOTAL FEE BALANCE DUE.

Items Required To Avoid Processing Delays:

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's

oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
Bjorn Markus Jakobsson

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

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Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice".
<https://portal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

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

/mhaile/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Not Assigned
Filed:	June 04, 2020	Art Unit:	Not Assigned
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§1.56 AND 1.97(B)
BEFORE MAILING OF A FIRST OFFICE ACTION

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

Dear Sir:

The references listed in the attached PTO SB/08 may be material to examination of the above-identified patent application. Applicants disclose the list of these references in compliance with their duty of disclosure pursuant to 37 CFR §§1.56 and 1.97. The Examiner is requested to make these references of official record in this application. The above-identified application is a continuation of prior application U.S. Patent Application No. 15/948,744, which is a continuation of prior application U.S. Patent Application No. 13/875,245, which is a continuation of prior application U.S. Patent Application No. 13/099,981. This prior application is being relied upon for an earlier filing date under 35 U.S.C. § 120. Because the listed references were either cited by the PTO, or submitted to the PTO in the prior application, under 37 CFR §1.98(d), Applicants submit that copies need not be provided.

This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

Application Serial No. 16/893,237
Attorney Docket No. MJAKP001C3

This Information Disclosure Statement is being filed (1) with the above-referenced application or (2) within three months of the filing date of the above-referenced application or (3) before the mailing date of a first Office Action on the merits or (4) before the mailing date of a first Office Action after filing of a Request for Continued Examination. Accordingly, it is believed that no fees are due in connection with the filing of this Information Disclosure Statement. However, if it is determined that any fees are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 50-0685 (Order No. MJAKP001C3).

Respectfully submitted,

Dated: July 21, 2020

/Yeu-Ting George Cheng/
Yeu-Ting George Cheng
Registration No. 69408
408-207-4765

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Fax 408-973-2595

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)

Approved for use through 11/30/2020. OMB 0651-0031

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

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16893237
	Filing Date	2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson
	Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	MJAKP001C3

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5428734		1995-06-27	HAYNES THOM R	
	2	6091835		2000-07-18	SMITHIES CHRISTOPHER P K	
	3	6208659		2001-03-27	GOVINDARAJAN RANGAPRASAD	
	4	6851094		2005-02-01	ROBERTSON WILLIAM H	
	5	7930220		2011-04-19	GAW DEREK	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010026632		2001-10-04	TAMAI SEIICHIRO	

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

Application Number		16893237
Filing Date		2020-06-04
First Named Inventor	Bjorn Markus Jakobsson	
Art Unit	N/A	
Examiner Name	N/A	
Attorney Docket Number	MJAKP001C3	

2	20010042042		2001-11-15	STOKES CHRISTOPHER JOHN	
3	20020046055		2002-04-18	MARTINO RICHARD	
4	20020116293		2002-08-22	LAO GUILLERMO	
5	20020152137		2002-10-17	LINDQUIST WESLEY	
6	20040254855		2004-12-16	SHAH DARSHATKUMAR	
7	20050049981		2005-03-03	MIXON STEPHEN RANDALL	
8	20050187883		2005-08-25	BISHOP FRED	
9	20050197922		2005-09-08	PEZARIS PETER	
10	20070233614		2007-10-04	MCNELLEY JULIE	
11	20080040426		2008-02-14	SYNSTELIEN DON	
12	20090013359		2009-01-08	BUTLER JON	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16893237
	Filing Date	2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson
	Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	MJAKP001C3

	13	20090171810		2009-07-02	MENGERINK MATTHEW	
	14	20090288012		2009-11-19	HERTEL PHILIPP FRANK HERMANN UDO	
	15	20090288015		2009-11-19	FUJIOKA ROBB	
	16	20110112931		2011-05-12	HU TIE	
	17	20120110341		2012-05-03	BEIGI HOMAYOON	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

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

If you wish to add additional Foreign Patent Document citation information please click the Add button.

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Art Explosion, Nova Development 2002	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16893237
	Filing Date	2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson
	Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	MJAKP001C3

2	BOUKHONINE et al., Future Security Approaches and Biometrics, Communications of the Association for Information Systems, December 2005, Pages 937-966, Volume 16
3	Mittapelli, Chaitanya Reddy. Online shopping. Diss. Kansas State University, 2008.
4	Sengottuvelan, P. and A. Wahi. "Analysis of Living and Dead Finger Impression Identification for Biometric Application." Conference on Computational Intelligence and Multimedia Applications, 2007. International Conference on Vol. 2. IEEE, 2007.

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

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

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

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		16893237
	Filing Date		2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson	
	Art Unit	N/A	
	Examiner Name	N/A	
	Attorney Docket Number	MJAKP001C3	

CERTIFICATION STATEMENT

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

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

OR

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

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Yeu-Ting George Cheng/	Date (YYYY-MM-DD)	2020-07-21
Name/Print	Yeu-Ting George Cheng	Registration Number	69408

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

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

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

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

Electronic Patent Application Fee Transmittal				
Application Number:		16893237		
Filing Date:		04-Jun-2020		
Title of Invention:		METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
First Named Inventor/Applicant Name:		Bjorn Markus Jakobsson		
Filer:		Yeu-Ting George Cheng/Elaine Nguyen		
Attorney Docket Number:		MJAKP001C3		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY FILING FEE (ELECTRONIC FILING)	4011	1	75	75
UTILITY SEARCH FEE	2111	1	330	330
UTILITY EXAMINATION FEE	2311	1	380	380
Pages:				
Claims:				
Miscellaneous-Filing:				
LATE FILING FEE FOR OATH OR DECLARATION	2051	1	80	80
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				865

Electronic Acknowledgement Receipt	
EFS ID:	40067227
Application Number:	16893237
International Application Number:	
Confirmation Number:	5805
Title of Invention:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
First Named Inventor/Applicant Name:	Bjorn Markus Jakobsson
Customer Number:	21912
Filer:	Yeu-Ting George Cheng/Elaine Nguyen
Filer Authorized By:	Yeu-Ting George Cheng
Attorney Docket Number:	MJAKP001C3
Receipt Date:	21-JUL-2020
Filing Date:	04-JUN-2020
Time Stamp:	19:47:36
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$865
RAM confirmation Number	E20207KJ48001560
Deposit Account	500685
Authorized User	Elaine Nguyen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.21 (Miscellaneous fees and charges) 37 CFR 1.20 (Post Issuance fees)	

37 CFR 1.19 (Document supply fees)
37 CFR 1.17 (Patent application and reexamination processing fees)
37 CFR 1.16 (National application filing, search, and examination fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Response to Pre-Exam Formalities Notice	MJAKP001C3_MP_Transmittal.pdf	106694	no	2
			2236a996a78ccee18fd5cbab0348dca930cb2b4e		
Warnings:					
Information:					
2	Oath or Declaration filed	MJAKP001C3_Executed_Dec.pdf	102889	no	1
			e2a967aba54268f24f8291fe880f6a3e5cedf24b		
Warnings:					
Information:					
3	Power of Attorney	MJAKP001C3_POA_AIA82A.pdf	168821	no	1
			17a4899aebb6c8b84482df8de403cdcb9297f42		
Warnings:					
Information:					
4	Power of Attorney	MJAK_Executed_POA_AIA82B_RightQuestionLLC.pdf	387899	no	1
			a756b6df61aa99188ddec71473eeefbe19a844b6f		
Warnings:					
Information:					
5	Preliminary Amendment	MJAKP001C3_AMD_A_PRE.pdf	113316	no	7
			72287b28cf3b371797f905cca34819e1cf876803		
Warnings:					
Information:					
6	Transmittal Letter	MJAKP001C3_IDS_01_Transmittal.pdf	77950	no	2
			5d569f27818dcf4def778225df347043fbf9572b		
Warnings:					
Information:					

7	Information Disclosure Statement (IDS) Form (SB08)	MJAKP001C3_IDS_01_SB08.pdf	1054338	no	6				
			59a6999a463628078288d6abb8c8c0b4d7791ff12						
Warnings:									
Information:									
8	Fee Worksheet (SB06)	fee-info.pdf	37468	no	2				
			52d92bd710fe40cdd2769dad20674a907b0a598a						
Warnings:									
Information:									
Total Files Size (in bytes):			2049375						
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.									

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Not Assigned
Filed:	June 04, 2020	Art Unit:	Not Assigned
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

PRELIMINARY AMENDMENT A

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

Dear Sir:

Prior to the examination of the application on the merits, please amend the application as follows:

Applicant(s) believe that no (additional) fees are required beyond any fees submitted herewith. If required fees are missing or any additional fees are required during the pendency of the subject application, please charge such fees or credit any overpayment to Deposit Account No. 50-0685 (MJAKP001C3).

IN THE CLAIMS

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

Listing of Claims:

1. (Cancelled)
2. (New) A system, comprising:
 - one or more processors configured to:
 - perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - cause the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, cause to be captured contextual information comprising location data associated with the user and a set of biometric information and;
 - cause to be rendered, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - complete the electronic transaction involving the account holder, wherein completing of the electronic transaction is based at least in part on the captured location data associated with the user and an analysis of the set of captured biometric information comprising: (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information, and (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information; and
 - a memory coupled to the one or more processors and configured to provide the processor with instructions.
3. (New) The system recited in claim 2 wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

4. (New) The system recited in claim 2 wherein the set of captured biometric information is associated with at least one of a fingerprint, an audio sample, and a photograph of the user.
5. (New) The system recited in claim 2 wherein the determination of whether the user is alive is based at least in part on a plurality of photographs.
6. (New) The system recited in claim 2 wherein the analysis of the set of captured biometric information comprises determining whether a currently supplied voice sample matches a previously recorded voice sample.
7. (New) The system recited in claim 2 wherein the icon represents a form of payment.
8. (New) The system recited in claim 2 wherein the image comprises at least one of a photograph and an avatar.
9. (New) The system recited in claim 2 wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.
10. (New) A method, comprising:
 - performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - causing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, causing to be captured contextual information comprising location data associated with the user and a set of biometric information and;
 - causing to be rendered, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - completing the electronic transaction involving the account holder, wherein completing of the electronic transaction is based at least in part on the captured location data associated with the user and an analysis of the set of captured biometric information comprising: (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information, and (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information.

11. (New) The method of claim 10 wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
12. (New) The method of claim 10 wherein the set of captured biometric information is associated with at least one of a fingerprint, an audio sample, and a photograph of the user.
13. (New) The method of claim 10 wherein the determination of whether the user is alive is based at least in part on a plurality of photographs.
14. (New) The method of claim 10 wherein the analysis of the set of captured biometric information comprises determining whether a currently supplied voice sample matches a previously recorded voice sample.
15. (New) The method of claim 10 wherein the icon represents a form of payment.
16. (New) The method of claim 10 wherein the image comprises at least one of a photograph and an avatar.
17. (New) The method of claim 10 wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.
18. (New) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:
 - performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - causing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, causing to be captured contextual information comprising location data associated with the user and a set of biometric information and;
 - causing to be rendered, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - completing the electronic transaction involving the account holder, wherein completing of the electronic transaction is based at least in part on the captured location

data associated with the user and an analysis of the set of captured biometric information comprising: (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information, and (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information.

REMARKS

Claim 1 has been cancelled. New Claims 2-18 have been added. Claims 2-18 are pending. No new matter has been added.

New Claims

Support for new Claims 2, 10, and 18 may be found, without limitation, in Paragraphs [0040]-[0041], [0049], [0057]-[0059], and [0073] of the Specification.

Support for new Claims 3 and 11 may be found, without limitation, in Paragraph [0028] of the Specification.

Support for new Claims 4 and 12 may be found, without limitation, in Paragraphs [0055] and [0057]-[0059] of the Specification.

Support for new Claims 5 and 13 may be found, without limitation, in Paragraph [0058] of the Specification.

Support for new Claims 6 and 14 may be found, without limitation, in Paragraph [0055] of the Specification.

Support for new Claims 7 and 15 may be found, without limitation, in Paragraphs [0068]-[0069] of the Specification.

Support for new Claims 8 and 16 may be found, without limitation, in Paragraph [0041] of the Specification.

Support for new Claims 9 and 17 may be found, without limitation, in Paragraphs [0026], [0031], and [0050] of the Specification.

The foregoing amendments are not to be taken as an admission of unpatentability of any of the claims prior to the amendments.

Reconsideration of the application and allowance of all claims are respectfully requested based on the preceding remarks. If at any time the Examiner believes that an interview would be helpful, please contact the undersigned.

Respectfully submitted,

Dated: July 21, 2020

/Yeu-Ting George Cheng/

Yeu-Ting George Cheng
Registration No. 69408
408-207-4765

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Fax 408-973-2595

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Not Assigned
Filed:	June 04, 2020	Art Unit:	Not Assigned
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

RESPONSE TO NOTICE TO FILE MISSING PARTS

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

Sir:

This is a Response to the Notice to File Missing Parts mailed June 15, 2020.

Application Elements:

- ☒ Declaration
- ☐ Newly executed (original or copy)
- ☒ Copy from a prior application (37 CFR 1.63(d) for a continuation or divisional).
The entire disclosure of the prior application from which a copy of the declaration is herein supplied is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
- ☐ Deletion of inventors Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

Accompanying Application Parts:

- ☒ Information Disclosure Statement with Form PTO/SB/08 ☐ Copies of IDS Citations
- ☒ Preliminary Amendment (*New claims numbered after highest original claim in prior application.*)
- ☒ Power of Attorney with ☒ Transmittal ☐ Statement Under 37 CFR 3.73
- ☐ Other:

Amendments

- ☐ Cancel in this application original claims _____ of the prior application before calculating the filing fee. (*At least one original independent claim must be retained.*)

Fee Calculation (37 CFR § 1.16)

				Small Entity		OR	Large Entity	
				Rate	Fee		Rate	Fee
Filing Fees				x \$75 = \$	75	OR	x \$300 = \$	
Search Fees				x \$330 = \$	330	OR	x \$660 = \$	
Examination Fees				x \$380 = \$	380	OR	x \$760 = \$	
CLAIMS	Filed.		Extra					
Total	17	Less 20	0	x \$50 = \$	0	OR	x \$100 = \$	
Independent	3	Less 3	0	x \$230 = \$	0	OR	x \$460 = \$	
Multiple Dependent Claims				x \$410 = \$	0	OR	x \$820 = \$	
Declaration and Surcharge Fee				X \$80 = \$	80	OR	X \$160 = \$	
Processing fee under Rule 1.17(i) to correct inventorship				X \$70 = \$			X \$140 = \$	
				TOTAL FILING FEE \$	865		TOTAL FILING FEE \$	

☐ Applicants petition for an extension of time to respond under 37 CFR § 1.136(a) as follows:

	SMALL ENTITY		OR	LARGE ENTITY	
	Rate	Add'l Fee		Rate	Add'l Fee
☐ Extension for Response within FIRST month	x \$100=\$		OR	x \$200= \$	
☐ Extension for Response within SECOND month	x \$300=\$		OR	x \$600=\$	
☐ Extension for Response within THIRD month	x \$700=\$		OR	x \$1400 = \$	
☐ Extension for Response within FOURTH month	x \$1100=\$		OR	x \$2200= \$	
☐ Extension for Response within FIFTH month	x \$1500=\$		OR	x \$3000 = \$	

☒ Please charge Deposit Account No. 50-0685 (MIAKP001C3) in the amount of \$865.00 to cover the filing fees, the additional claim fee, if any, and/or extension of time fees.

General Authorizations

☒ Applicants hereby make and generally authorize any Petitions for Extensions of Time as needed for this or any subsequent filings. The Commissioner is also authorized to charge any extension fees under 37 CFR §1.17 as needed to Deposit Account No. 50-0685 (Order No. MIAKP001C3).

☒ The Commissioner is given general authorization to charge any fees or to credit any overpayment during the pendency of this application to Deposit Account No. 50-0685 (Order No. MIAKP001C3).

☒ Please send correspondence to the following address:

Customer No. 21912
 VAN PELT, YI & JAMES LLP
 10050 N. Foothill Blvd., Suite 200
 Cupertino, CA 95014

Dated: July 21, 2020

/Yeu-Ting George Cheng/
 Yeu-Ting George Cheng
 Registration No. 69408

DECLARATION FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. MIAKP001C1

As a below-named inventor, I hereby declare that:

I believe that I am the original inventor (if only one name is listed below) or an original joint inventor (if plural names are listed below) of a claimed invention in the application entitled: **REDUCING FRAUD**, the specification of which,

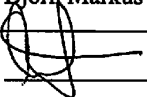
- (check one)
1. ☐ is attached hereto.
2. ☒ was filed on May 1, 2013 as
U.S. Application No. 13/875,245
and was amended on _____.
3. ☐ was filed on _____ as
International PCT Application No. _____
and was amended on _____.

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

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

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and I acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Full name of sole or first inventor	Bjorn Markus Jakobsson		
Signature of sole or first inventor		Date:	<u>Aug 2</u> , 2013

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

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

Application Number	16/893,237
Filing Date	June 04, 2020
First Named Inventor	Bjorn Markus Jakobsson
Title	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	MJAKP001C3

SIGNATURE of Applicant or Patent Practitioner

Signature	/Yeu-Ting George Cheng/	Date (Optional)	
Name	Yeu-Ting George Cheng	Registration Number	69408
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			

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



*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Doc Code: PA..

Document Description: Power of Attorney

PTO/AIA/82B (07-13)

Approved for use through 11/30/2014, OMB 0651-0051

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

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

POWER OF ATTORNEY BY APPLICANT

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

Application Number	Filing Date

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

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

21912

OR

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

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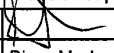
I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

RightQuestion, LLC

- ☐ Inventor or Joint Inventor (title not required below)
- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

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

Signature		Date (Optional)	
Name	Bjorn Markus Jakobsson		
Title	Manager		

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

☐ Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/893,237	
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		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	75		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	330		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	380		N/A	
TOTAL CLAIMS (37 CFR 1.16(j))	17	minus 20 = *	x 50 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *	x 230 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
			TOTAL	785		TOTAL	
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	OTHER THAN SMALL ENTITY	
	Total (37 CFR 1.16(i))	*	Minus **	=	x	OR	RATE(\$)
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x	OR	ADDITIONAL FEE(\$)
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
			TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	OTHER THAN SMALL ENTITY	
	Total (37 CFR 1.16(i))	*	Minus **	=	x	OR	RATE(\$)
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x	OR	ADDITIONAL FEE(\$)
	Application Size Fee (37 CFR 1.16(s))					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					OR	
			TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.							



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
16/893,237	06/04/2020		865	MJAKP001C3	17	3

CONFIRMATION NO. 5805

UPDATED FILING RECEIPT



0000000118648729

21912
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

Date Mailed: 07/23/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Bjorn Markus Jakobsson, Portola Valley, CA;

Applicant(s)

RightQuestion, LLC, Portola Valley, CA;

Power of Attorney: The patent practitioners associated with Customer Number 21912

Domestic Priority data as claimed by applicant

This application is a CON of 15/948,744 04/09/2018 PAT 10713656
which is a CON of 13/875,245 05/01/2013 PAT 9972010
which is a CON of 13/099,981 05/03/2011 PAT 8458041
which claims benefit of 61/332,140 05/06/2010

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 06/11/2020

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/893,237**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

**** SMALL ENTITY ****

Title

METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

Preliminary Class

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

page 2 of 4

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

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Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3

CONFIRMATION NO. 5805

POA ACCEPTANCE LETTER

21912
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014



OC000000118646577

Date Mailed: 07/23/2020

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/21/2020.

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

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

/ebekele/



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805
21912	7590	09/02/2021	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			ZIMMERMAN, MATTHEW E	
			ART UNIT	PAPER NUMBER
			3684	
			NOTIFICATION DATE	DELIVERY MODE
			09/02/2021	ELECTRONIC

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

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

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

usptocorrespondence@ip-patent.com

Notice of Pre-AIA or AIA Status

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

DETAILED ACTION

Status of Claims

Claim(s) 2-18 have been examined.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory

double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP § 2146 *et seq.* for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

Claims 2-18 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 9,972,010. Although the claims at issue are not identical, they are not patentably distinct from each other because they are both directed to the invention of processing a financial transaction and capturing biometric information and performing an alive check on the user based on the captured biometric information.

Claims 2-18 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 10,713,656. Although the claims at

issue are not identical, they are not patentably distinct from each other because they are both directed to the invention of processing a financial transaction and capturing biometric information and performing an alive check on the user based on the captured biometric information.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4, 12, 6 and 14 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for applications subject to pre-AIA 35 U.S.C. 112, the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim 4 states that the captured biometric information could include such things as an audio sample, fingerprints, and a photograph. Claims 2 and 10 then explain that his biometric information is used in the determination of whether the user is alive. However,

the specification teaches only that “taking multiple photographs in rapid succession” is used for confirming that the object being photographed is alive. Correction is required.

As for claims 6 and 14, the independent claims 2 and 10 recite that the biometric analysis is used for determining whether the user is alive, yet these claims 6 and 14 recite that the biometric information includes determining whether a currently supplied voice sample matches a previously recorded voice sample. But in the aliveness check as recited in the specification is constrained to “taking multiple photographs in rapid succession”. Correction is required.

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-18 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention. Specifically, claims 2, 10, and 18 each recite the term “cause” or “causing” multiple times:

- “cause the received image to be stored in a data store...”
- “cause to be captured contextual information comprising location data...”
- “cause to be rendered, in the one or more interfaces,...”

It is unclear to one of ordinary skill in the art what the term “cause” and “causing” entails. It does not necessarily require storing the received image, or capturing the contextual information. But then what is the scope of the claim? What is actually being

performed or claimed in these instances? The term “cause” and “causing” are essentially relative timers which render the claims indefinite. The specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Correction is required.

For purposes of examination, the claims will be interpreted as:

- “storing the received image in a data store...”
- “capturing the contextual information comprising location data...”
- “rendering, in the one or more interfaces, the virtual likeness...”

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 2-18 are rejected under 35 U.S.C. 101 because the claims recite a judicial exception which is not integrated into a practical application and the claims lack an inventive concept.

Step 1 is the first inquiry into eligibility analysis and asks whether the claims are directed to a statutory category. In this instance, the answer must be in the affirmative because they are directed to a method, a system, and a computer readable medium.

Step 2A prong 1 is the next step in the eligibility analyses and asks whether the claimed invention is directed to a judicial exception. In this instance, the claims recite the following limitations which comprise the abstract idea:

- perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
- cause the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
- subsequent to an interaction by a user with an icon rendered in one or more interfaces, cause to be captured contextual information comprising location data associated with the user and a set of biometric information and;
- cause to be rendered, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
- complete the electronic transaction involving the account holder, wherein completing of the electronic transaction is based at least in part on the captured location data associated with the user and an analysis of the set of captured biometric information comprising: (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information, and (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information;

This is an abstract idea because it is a certain method of organizing human activity because it involves commercial interactions such as sales and marketing behaviors and interactions.

Step 2A prong 2 is the next step in the eligibility analyses and looks at whether the abstract idea is integrated into a practical application. This requires an additional element or combination of additional elements in the claims to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the exception.

In this instance, the claims recite the additional elements such as:

- one or more processors configured to:
- a memory coupled to the one or more processors and configured to provide the processor with instructions.

However, these elements do not amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

In addition, the recitations of the additional limitations are recited at a high level of generality and also do not amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

The dependent claims also fail to recite elements which amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. For example, claim 3-9 are directed to the abstract idea and do not constitute additional limitations. In addition, even if they did constitute additional imitations, they do not amount to an integration according to any one of the considerations above.

Step 2B is the next step in the eligibility analyses and evaluates whether the claims recite additional elements that amount to an inventive concept (i.e., “significantly more”) than the recited judicial exception. According to Office procedure, revised Step 2A overlaps with Step 2B, and thus, many of the considerations need not be re-evaluated in Step 2B because the answer will be the same.

In Step 2A, several additional elements were identified as additional limitations:

- one or more processors configured to:
- a memory coupled to the one or more processors and configured to provide the processor with instructions.

These additional limitations, including the limitations in the dependent claims, do not amount to an inventive concept because they were already analyzed under Step 2A and did not amount to a practical application of the abstract idea.

Furthermore, it has been held that generic computing components, receiving or transmitting data over a network, performing repetitive calculations, electronic

recordkeeping, storing and receiving information in memory, are well-understood, routine, and conventional activities (see MPEP 2106.05(d)). Therefore, the claims lack one or more limitations which amount to an inventive concept in the claims.

For these reasons, the claims are rejected under 35 U.S.C. 101.

Response to Arguments

The claims are not in condition for allowance because they are rejected under 35 U.S.C. 101 and 112 and subject to a double patenting rejection. The closest prior art of record is Hertel (US 2009/0288012).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW E ZIMMERMAN whose telephone number is (571)270-5278. The examiner can normally be reached on 8:30-5:30.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Dunham can be reached on (571) 272-8109. 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

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/MATTHEW E ZIMMERMAN/
Primary Examiner, Art Unit 3684

<i>Notice of References Cited</i>	Application/Control No. 16/893,237		Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus	
	Examiner MATTHEW E ZIMMERMAN		Art Unit 3684	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20090288012-A1	11-2009	Hertel; Philipp Frank Hermann Udo	G06Q20/326	715/738
	B					
	C					
	D					
	E					
	F					
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	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

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

NON-PATENT DOCUMENTS

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

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

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20210828

<i>Search Notes</i> 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

CPC - Searched*		
Symbol	Date	Examiner
G06Q20/4014,40145	08/28/2021	MZ
G06Q30/06,0641-0643	08/28/2021	MZ

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

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

Search Notes		
Search Notes	Date	Examiner
Searched EAST and performed an inventor and assignee search. See attachment.	08/28/2021	MZ

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
G06Q30	06,0641-0643	08/28/2021	MZ
G06Q20	4014,40145	08/28/2021	MZ

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
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EAST Search History**EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2	"20050187883" and (location GPS!)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 11:40
L3	1	"20090288012" and (biometric alive living breathing) and (GPS location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 11:55
L4	91	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	US-PGPUB; USPAT	OR	ON	2021/08/28 11:57
L5	2,111	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing! fake))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 11:58
L6	597,400	(likeness! picture photograph image photo) near2 (user consumer shopper buyer customer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 11:58
L7	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	US-PGPUB; USPAT	OR	ON	2021/08/28 11:59
L9	108,218	fraud\$6	US-PGPUB; USPAT	OR	ON	2021/08/28 11:59
L10	0	5 and 6 and 7 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2021/08/28 11:59

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L16	98	5 and 6 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 12:00
L17	1,019,450	GPS!	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 12:06
L18	56	5 and 6 and 9 and 17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/28 12:06
S56	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S57	48	rightquestion.as. (jacobsson near2 bjorn).in. (jacobsson near2 markus).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S58	108,335	G06Q20/4014,40145.cpc. G06Q30/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2021/08/27 22:21

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S60	1	(alive living breathing) and S59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S61	100	fraud same (alive! living! breathing!) same biometric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S62	140,475	G06Q30/0601-0643.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S63	7	(S58 S62) and S61	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S64	3	13/099981 and alive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S65	15	fraud\$6 with (alive! living! breathing!) with video!	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2021/08/27 22:21

			DERWENT; IBM_TDB			
S66	21	fraud\$6 same ((alive! living! breathing!) with video!)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S67	15	fraud\$6 same ((alive! living! breathing!) with images!)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S68	39	fraud\$6 same ((alive! living! breathing!) with (images! video))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
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S70	0	S68 and S69	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
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S74	37	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and G06Q20/4016.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S75	1,227	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S76	572	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc.	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S77	258	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and (compar\$5 with (face! image photograph picture))	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S78	264	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((fraud\$3 compar\$5) with (face! image photograph picture))	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S79	109	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and checkout and (website (web adj site) web adj page)	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S80	407	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21

		(online website (web adj site) web adj page))				
S81	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S82	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S83	115	S82 and cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S84	2,419	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and ((image picture photo photograph) near2 (customer user shopper buyer))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S85	1,598	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and ((image picture photo photograph) near (customer user shopper buyer))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
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S87	123	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and (((picture photo photograph) near (customer user shopper buyer)) with display\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2021/08/27 22:21

			DERWENT; IBM_TDB			
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S89	277,882	15/948744 biometric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S90	2	13/875245 and biometric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S91	2	13/875245 and alive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S92	3	(13/875245 13/099981) and alive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S93	52	G06Q30/0601-0643.cpc. and (add\$4 near4 cart) and (((picture photo photograph) near (customer user shopper buyer))) with display\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:21
S94	392	G06Q20/40145.cpc. and G06Q20/4016.cpc.	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S95	17	G06Q20/40145.cpc. and G06Q20/4016.cpc. and G06Q30/0601-0643.cpc.	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21

S96	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S97	110	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S98	15	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 same biometric same (location GPS!))	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S99	620	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S100	239	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
S101	91	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	US-PGPUB; USPAT	OR	ON	2021/08/27 22:21
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S107	1	"20090288012" and (location same fraud\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:22
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			DERWENT; IBM_TDB			
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S114	0	S109 not S111 not S110 not S113	US-PGPUB; USPAT	OR	ON	2021/08/27 22:22
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S116	11	S115 not S71 not S59 not S113	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:35
S117	5	(US-20010026632-\$ or US- 20050187883-\$ or US-20050197922- \$ or US-20110112931-\$ or US- 20090288012-\$).did.	US-PGPUB	OR	ON	2021/08/27 22:35
S118	5	(US-20010026632-\$ or US- 20050187883-\$ or US-20050197922- \$ or US-20110112931-\$ or US- 20090288012-\$).did.	US-PGPUB	OR	ON	2021/08/27 22:35
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S121	0	16/893237	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:40
S122	1	15/948744	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:40
S123	1	15/948744 and alive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/08/27 22:40

8/28/2021 12:08:44 PM

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Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)

Approved for use through 11/30/2020. OMB 0651-0031

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

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16893237
	Filing Date	2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson
	Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	MJAKP001C3

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
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	2	6091835		2000-07-18	SMITHIES CHRISTOPHER P K	
	3	6208659		2001-03-27	GOVINDARAJAN RANGAPRASAD	
	4	6851094		2005-02-01	ROBERTSON WILLIAM H	
	5	7930220		2011-04-19	GAW DEREK	
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20010026632		2001-10-04	TAMAI SEIICHIRO	

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

Application Number		16893237
Filing Date		2020-06-04
First Named Inventor	Bjorn Markus Jakobsson	
Art Unit	N/A	
Examiner Name	N/A	
Attorney Docket Number	MJAKP001C3	

2	20010042042	2001-11-15	STOKES CHRISTOPHER JOHN
3	20020046055	2002-04-18	MARTINO RICHARD
4	20020116293	2002-08-22	LAO GUILLERMO
5	20020152137	2002-10-17	LINDQUIST WESLEY
6	20040254855	2004-12-16	SHAH DARSHATKUMAR
7	20050049981	2005-03-03	MIXON STEPHEN RANDALL
8	20050187883	2005-08-25	BISHOP FRED
9	20050197922	2005-09-08	PEZARIS PETER
10	20070233614	2007-10-04	MCNELLEY JULIE
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12	20090013359	2009-01-08	BUTLER JON

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		16893237
	Filing Date		2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson	
	Art Unit	N/A	
	Examiner Name	N/A	
	Attorney Docket Number	MJAKP001C3	

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	14	20090288012		2009-11-19	HERTEL PHILIPP FRANK HERMANN UDO	
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	16	20110112931		2011-05-12	HU TIE	
	17	20120110341		2012-05-03	BEIGI HOMAYOON	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

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

If you wish to add additional Foreign Patent Document citation information please click the Add button.

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Art Explosion, Nova Development 2002	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	16893237
	Filing Date	2020-06-04
	First Named Inventor	Bjorn Markus Jakobsson
	Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	MJAKP001C3

2	BOUKHONINE et al., Future Security Approaches and Biometrics, Communications of the Association for Information Systems, December 2005, Pages 937-966, Volume 16
3	Mittapelli, Chaitanya Reddy. Online shopping. Diss. Kansas State University, 2008.
4	Sengottuvelan, P. and A. Wahi. "Analysis of Living and Dead Finger Impression Identification for Biometric Application." Conference on Computational Intelligence and Multimedia Applications, 2007. International Conference on Vol. 2. IEEE, 2007.

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/MATTHEW E ZIMMERMAN/	Date Considered	08/28/2021
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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

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

Application Number	16893237
Filing Date	2020-06-04
First Named Inventor	Bjorn Markus Jakobsson
Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	MJAKP001C3

CERTIFICATION STATEMENT

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

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

OR

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

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Yeu-Ting George Cheng/	Date (YYYY-MM-DD)	2020-07-21
Name/Print	Yeu-Ting George Cheng	Registration Number	69408

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

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

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

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



UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Automated Interview Request (AIR)

Nov 19 2021

This paper requesting to schedule and/or conduct an interview is appropriate because:

This submission is requested to be accepted as an authorization for this interview to communicate via the internet. Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with the undersigned concerning scheduling of the interview via video conference, instant messaging, or electronic mail, and to conduct the interview in accordance with office practice including video conferencing.

Name(s) :

Yeu-Ting George Cheng

S-signature:

/YeuTing George Cheng/

Registration Number:

69408

U.S. Application Number:

16893237

Confirmation Number:

5805

E-mail Address:

gcheng@ip-patent.com

Phone Number:

+1 4082074765

Proposed Time of Interview:

11-29-2021 1:00 PM ET

Alternative Proposed Time(s) of Interview:

11-29-2021 1:30 PM ET

Preferred Interview Type:

Telephonic

I am the applicant or applicant's representative for this application.

Topic for Discussion:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Matthew E. Zimmerman
Filed:	June 04, 2020	Art Unit:	3684
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

AMENDMENT B

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

Dear Sir:

This is in response to the Office Action mailed September 02, 2021. The following amendment and remarks are respectfully submitted.

Applicant(s) believe that no (additional) fees are required beyond any fees submitted herewith. If required fees are missing or any additional fees are required during the pendency of the subject application, please charge such fees or credit any overpayment to Deposit Account No. 50-0685 (MJAKP001C3).

IN THE CLAIMS

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

Listing of Claims:

1. (Cancelled)
2. (Currently amended) A system, comprising:
 - one or more processors configured to:
 - perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - ~~[[cause]]~~ store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, ~~cause to be captured~~ capture contextual information comprising location data associated with the user and a set of biometric information and;
 - ~~cause to be rendered~~ render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - determine whether to allow completion of ~~complete~~ the electronic transaction involving the account holder, ~~wherein completing of the electronic transaction is based at least in part on:~~
 - the captured location data associated with the user; and
 - an analysis of the set of captured biometric information comprising:
 - (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information~~[[,]]~~; and
 - (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information; and
 - a memory coupled to the one or more processors and configured to provide the processor with instructions.

3. (Previously Presented) The system recited in claim 2 wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
4. (Currently amended) The system recited in claim 2 wherein the first portion of the set of captured biometric information comprises ~~is associated with~~ at least one of a fingerprint[[,]] and an audio sample, and wherein the second portion of the set of captured biometric information comprises one or more photographs ~~a photograph~~ of the user.
5. (Cancelled)
6. (Currently amended) The system recited in claim 2 wherein the determination of whether the first portion of the set of captured biometric information matches against previously stored biometric information ~~analysis of the set of captured biometric information~~ comprises determining whether a currently supplied voice sample matches a previously recorded voice sample.
7. (Previously Presented) The system recited in claim 2 wherein the icon represents a form of payment.
8. (Previously Presented) The system recited in claim 2 wherein the image comprises at least one of a photograph and an avatar.
9. (Previously Presented) The system recited in claim 2 wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.
10. (Currently amended) A method, comprising:
performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
storing ~~causing~~ the received image ~~to be stored~~ in a data store, wherein the received image is associated with an account of the account holder;
subsequent to an interaction by a user with an icon rendered in one or more interfaces, capturing ~~causing to be captured~~ contextual information comprising location data associated with the user and a set of biometric information and;

~~rendering causing to be rendered~~, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and

determining whether to allow completion of ~~completing~~ the electronic transaction involving the account holder, ~~wherein completing of the electronic transaction is based at least in part on:~~

the captured location data associated with the user; and

an analysis of the set of captured biometric information comprising:

(1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information[[]]; and

(2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information.

11. (Previously Presented) The method of claim 10 wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

12. (Currently amended) The method of claim 10 wherein the first portion of the set of captured biometric information comprises ~~is associated with~~ at least one of a fingerprint[[]] and an audio sample, and wherein the second portion of the set of captured biometric information comprises one or more photographs ~~a photograph~~ of the user.

13. (Cancelled)

14. (Currently amended) The method of claim 10 wherein the determination of whether the first portion of the set of captured biometric information matches against previously stored biometric information ~~analysis of the set of captured biometric information~~ comprises determining whether a currently supplied voice sample matches a previously recorded voice sample.

15. (Previously Presented) The method of claim 10 wherein the icon represents a form of payment.

16. (Previously Presented) The method of claim 10 wherein the image comprises at least one of a photograph and an avatar.
17. (Previously Presented) The method of claim 10 wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.
18. (Currently amended) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:
- performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - ~~storing causing~~ the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, ~~capturing causing to be captured~~ contextual information comprising location data associated with the user and a set of biometric information and;
 - ~~rendering causing to be rendered~~, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - ~~determining where to allow completion of completing~~ the electronic transaction involving the account holder, ~~wherein completing of the electronic transaction is based at least in part on:~~
 - the captured location data associated with the user; and
 - an analysis of the set of captured biometric information comprising:
 - (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information[[.]]; and
 - (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information.

INTERVIEW SUMMARY

A telephonic interview in the above-referenced case was conducted on November 30, 2021 between the Examiner and the Applicants' undersigned representative. The Office Action mailed on September 02, 2021 was discussed. Specifically, the rejections of Claims 2, 10, and 18 under 35 U.S.C. §101 and the proposed amendments set forth herein were discussed with the intent to place the claims in better condition for allowance or appeal.

The Applicants thank the Examiner for the interview.

REMARKS

Claims 5 and 13 have been cancelled. Claims 2, 4, 6, 10, 12, 14, and 18 have been amended to clarify the subject matter regarded as the invention. Claims 2-4, 6-12, and 14-18 are pending.

Support for the amendments may be found, without limitation, in Paragraph [0055] of the Specification.

Double Patenting

Claims 2-4, 6-12, and 14-18 have been rejected under the judicially created doctrine of obviousness-type double patenting. It is believed that the Terminal Disclaimer filed herewith is sufficient to overcome the double patenting rejection.

Claim Rejections – 35 U.S.C. §101

Applicants respectfully maintain that independent Claims 2, 10, and 18 and their dependent claims are believed to be non-abstract because they are not directed to fundamental economic practices, methods of organizing human activities, ideas themselves, or mathematical relationships/formulas.

If the Examiner were to maintain that the claims are directed to an abstract idea, Applicants respectfully further submit that amended independent Claims 2, 10, and 18 include additional elements that are significantly more than the judicial exception. Specifically, Applicants respectfully submit that the claims are directed to a solution necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks, and provide improvements to any other technology or technical field.

In particular, the independent claims have been amended to recite “determin[ing] whether to allow completion of the electronic transaction involving the account holder based at least in part on” “the captured location data associated with the user” and “an analysis of the set of captured biometric information comprising: (1) a determination of whether a first portion of the

set of captured biometric information matches against previously stored biometric information; and (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information.”

Applicants respectfully submit that the amended independent claims are directed to a solution necessarily rooted in computer technology in order to prevent electronic fraud, and provide improvements to electronic fraud prevention by preventing electronic fraud in cases where traditional protections against fraudulent activities are either disabled or rendered moot, as well as with devices and services that are not protected by passwords, or where passwords are commonly shared.

For example, by determining whether to allow completion of an electronic transaction based on captured location data associated with a user and an analysis of captured biometric information that includes a determination of whether a first portion of the captured biometric information matches against previously stored biometric information and a determination of whether the user is alive based on a second portion of the captured biometric information in the manner recited in the amended independent claims, electronic fraud is prevented in cases where “traditional protections against fraudulent activities are either disabled (e.g., by a given site not requiring a password due to a stored cookie, or the password being supplied automatically by a browser) or rendered moot (e.g., by a given user sharing a password with another user)” (Paragraph [0025], Specification). That the claims are directed to such improved prevention of electronic fraud in cases where traditional protections against fraudulent activities are either disabled or rendered moot is further bolstered by Paragraph [0024] of the Specification, which describes that “[t]he techniques described herein can be used with devices and services that are not protected by passwords, or where passwords are commonly shared.”

As such, independent Claims 2, 10, and 18 and their dependent claims are believed to be directed to statutory subject matter under 35 U.S.C. §101.

Claim Rejections – 35 U.S.C. §112

Claims 2, 4, 6, 10, 12, 14, and 18 have been amended in a manner that is believed to overcome the rejection under 35 U.S.C. §112.

The foregoing amendments are not to be taken as an admission of unpatentability of any of the claims prior to the amendments.

Reconsideration of the application and allowance of all claims are respectfully requested based on the preceding remarks. If at any time the Examiner believes that an interview would be helpful, please contact the undersigned.

Respectfully submitted,

Dated: December 2, 2021

/Yeu-Ting George Cheng/

Yeu-Ting George Cheng
Registration No. 69408
408-207-4765

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Fax 408-973-2595

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Matthew E. Zimmerman
Filed:	June 04, 2020	Art Unit:	3684
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

TERMINAL DISCLAIMER UNDER 37 C.F.R. § 1.321
TO OBVIATE AN OBVIOUSNESS-TYPE
DOUBLE PATENTING REJECTION

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

Dear Sir:

Applicant(s), Bjorn Markus Jakobsson RightQuestion, LLC, the owner(s) of the entire interest in the above-identified application hereby disclaim(s), except as provided below, the terminal part of the statutory term of any patent granted on the above-identified application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 and 173 of prior United States Patent No. 9,972,010 and of prior United States Patent No. 10,713,656 (hereafter "prior patents"), as presently shortened by any terminal disclaimer. The applicant(s)/owner(s) hereby agree(s) that any patent so granted on the above-identified application shall be enforceable only for and during such period that it and the prior patents are commonly owned. This agreement runs with any patent granted on the above-identified application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the applicant(s)/owner(s) do(es) not disclaim the terminal part of any patent granted on the above-identified application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of the prior patents, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent

jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. 1.321, has all claims canceled by a reexamination certificate, is reissued or is in any matter terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned is an agent or attorney of record.

Please charge Deposit Account No. 50-0685 (MJAKP001C3) in the amount of \$170.00 to cover the fee. If the required fees are missing or any additional fees are required during the pendency of the subject application, please charge such fees or credit any overpayment to Deposit Account No. 50-0685 (Order No. MJAKP001C3).

Respectfully submitted,

Dated: December 2, 2021

/Yeu-Ting George Cheng/

Yeu-Ting George Cheng

Registration No. 69408

408-207-4765

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Fax 408-973-2595

Electronic Patent Application Fee Transmittal				
Application Number:		16893237		
Filing Date:		04-Jun-2020		
Title of Invention:		METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
First Named Inventor/Applicant Name:		Bjorn Markus Jakobsson		
Filer:		Yeu-Ting George Cheng/Elaine Nguyen		
Attorney Docket Number:		MJAKP001C3		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
STATUTORY OR TERMINAL DISCLAIMER	2814	1	170	170
Total in USD (\$)				170

Electronic Acknowledgement Receipt	
EFS ID:	44422358
Application Number:	16893237
International Application Number:	
Confirmation Number:	5805
Title of Invention:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
First Named Inventor/Applicant Name:	Bjorn Markus Jakobsson
Customer Number:	21912
Filer:	Yeu-Ting George Cheng/Elaine Nguyen
Filer Authorized By:	Yeu-Ting George Cheng
Attorney Docket Number:	MJAKP001C3
Receipt Date:	02-DEC-2021
Filing Date:	04-JUN-2020
Time Stamp:	16:41:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$170
RAM confirmation Number	E2021B2G41484283
Deposit Account	500685
Authorized User	Elaine Nguyen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)
 37 CFR 1.20 (Post Issuance fees)
 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	MJAKP001C3_AMD_B.pdf	128136	no	9
			662f3354c9f262f8c982edabce8e82ccf1759199		

Warnings:

Information:

2	Terminal Disclaimer Filed	MJAKP001C3_TD_9972010_and_10713656.pdf	78901	no	2
			87b3fe3d80255d657656697c18deff7e223b1c0a		

Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	38144	no	2
			b25a5d9c5039468d975833a0158046c45a5b2a5e		

Warnings:

Information:

Total Files Size (in bytes): 245181

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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



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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.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805
21912	7590	12/03/2021	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			ZIMMERMAN, MATTHEW E	
			ART UNIT	PAPER NUMBER
			3684	
			NOTIFICATION DATE	DELIVERY MODE
			12/03/2021	ELECTRONIC

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

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

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

usptocorrespondence@ip-patent.com

<i>Applicant-Initiated Interview Summary</i>	Application No. 16/893,237	Applicant(s) Jakobsson, Bjorn Markus		
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684	AIA (First Inventor to File) Status No	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
MATTHEW E ZIMMERMAN	Primary Examiner	Telephonic
GEORGE CHENG	Attorney of Record	

Date of Interview: 30 November 2021

Issues Discussed:

35 U.S.C. 101

The examiner discussed the 101 rejection and suggested bringing in elements from the parent application directed towards the concept of fraud detection on the images to determine if the user is alive . If the applicant did not want to go down that route, the examiner suggested finding elements in the spec to bring into the claims that improved a technology, a computer, applied the judicial exception in another meaningful way beyond a general linking to a particular tech. environment, or adding one or more elements which are additional elements and are not well understood, routine, or conventional. No agreement was reached.

☒ Attachment

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04 Please further see: MPEP 713.04 Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing	

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

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

Applicant Initiated Interview Request Form

Application No.: 16/893,237 First Named Applicant: Bjorn Markus Jakobsson
 Examiner: Matthew E. Zimmerman Art Unit: 3684 Status of Application: Pending

Tentative Participants:

(1) Examiner Matthew E. Zimmerman (2) Yeu-Ting George Cheng

(3) _____ (4) _____

Proposed Date of Interview: Mon 11/29 Proposed Time: 1:p ET (AM/PM)

Type of Interview Requested:

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

Exhibit To Be Shown or Demonstrated: ☐ YES ☐ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rej. 112</u>	<u>2</u>	_____	☐	☐	☐
(2) <u>Rej. 101</u>	<u>2</u>	_____	☐	☐	☐
(3) _____	_____	_____	☐	☐	☐
(4) _____	_____	_____	☐	☐	☐

☐ Continuation Sheet Attached ☐ Proposed Amendment or Arguments Attached

Brief Description of Arguments to be Presented: Applicants would like to discuss the 112 and 101 rejections of Claim 2

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

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

/Yeu-Ting George Cheng/

Applicant/Applicant's Representative Signature

Yeu-Ting George Cheng

Typed/Printed Name of Applicant or Representative

69,408

Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 24 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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

Application Number * 16/893,237 *	Application/Control No. 16/893,237	Applicant(s)/Patent under Reexamination Jakobsson, Bjorn Markus	
	Examiner ZIMMERMAN, MATTHEW E	Art Unit 3684	
Document Code - DISQ		Internal Document - DO NOT MAIL	

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed: <u>02 December 2021</u>	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
/PAMELA A YOUNG/ Technology Center: <u>OPLC</u> Telephone: <u>(571)272-3622</u> _____

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/893,237		Filing Date 06/04/2020		☐ To be Mailed	
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO									
APPLICATION AS FILED - PART I									
	(Column 1)	(Column 2)							
FOR	NUMBER FILED	NUMBER EXTRA			RATE (\$)			FEE (\$)	
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*			x \$50 =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*			x \$230 =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.							TOTAL		
APPLICATION AS AMENDED - PART II									
	(Column 1)	(Column 2)	(Column 3)						
AMENDMENT	12/02/2021	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(j))	* 15	Minus	** 20	= 0		x \$50 =	0	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x \$240 =	0	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE	0		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(j))	*	Minus	**	=		x \$0 =		
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x \$0 =		
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.						LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".						/CRYSTAL QUEEN/			
*** 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 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805
21912	7590	01/21/2022	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			ZIMMERMAN, MATTHEW E	
			ART UNIT	PAPER NUMBER
			3684	
			NOTIFICATION DATE	DELIVERY MODE
			01/21/2022	ELECTRONIC

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usptocorrespondence@ip-patent.com

Office Action Summary	Application No. 16/893,237	Applicant(s) Jakobsson, Bjorn Markus	
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684	AIA (FITF) Status No

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

Period for Reply

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

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

Status

1) ☒ Responsive to communication(s) filed on 12/10/2021.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

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

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

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

Disposition of Claims*

5) ☒ Claim(s) 2-4,6-12 and 14-18 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☒ Claim(s) 2-4,6-12 and 14-18 is/are rejected.

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

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

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

Application Papers

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

11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Certified copies:
a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

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

Attachment(s)

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

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.

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

4) ☐ Other: ____.

Notice of Pre-AIA or AIA Status

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

DETAILED ACTION

Status of Claims

Claim(s) 2-4, 6-12, 14-18 have been examined.

Terminal Disclaimer

The terminal disclaimer filed on 12/2/2021 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 9,972,010 and 10,713,656 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 2-4, 6-12, 14-18 are rejected under 35 U.S.C. 101 because the claims recite a judicial exception which is not integrated into a practical application and the claims lack an inventive concept.

Step 1 is the first inquiry into eligibility analysis and asks whether the claims are directed to a statutory category. In this instance, the answer must be in the affirmative because they are directed to a method, a system, and a computer readable medium.

Step 2A prong 1 is the next step in the eligibility analyses and asks whether the claimed invention is directed to a judicial exception. In this instance, the claims recite the following limitations which comprise the abstract idea:

- determine whether to allow completion of the electronic transaction involving the account holder based at least in part on the captured location data associated with the user and an analysis of the set of captured biometric information comprising a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information, and a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information;

This is an abstract idea because it is a mental process that can be performed in the human mind and pen and paper.

Step 2A prong 2 is the next step in the eligibility analyses and looks at whether the abstract idea is integrated into a practical application. This requires an additional element or combination of additional elements in the claims to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the exception.

In this instance, the claims recite the additional elements such as:

- one or more processors configured to:

- perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
- store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
- subsequent to an interaction by a user with an icon rendered in one or more interfaces, capture contextual information comprising location data associated with the user and a set of biometric information and;
- render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
- a memory coupled to the one or more processors and configured to provide the processor with instructions.

However, these elements do not amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

In addition, the recitations of the additional limitations are recited at a high level of generality and also do not amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful

way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

The dependent claims also fail to recite elements which amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. For example, claim 3-4 and 6-9 are directed to the abstract idea and do not constitute additional limitations. In addition, even if they did constitute additional imitations, they do not amount to an integration according to any one of the considerations above.

Step 2B is the next step in the eligibility analyses and evaluates whether the claims recite additional elements that amount to an inventive concept (i.e., “significantly more”) than the recited judicial exception. According to Office procedure, revised Step 2A overlaps with Step 2B, and thus, many of the considerations need not be re-evaluated in Step 2B because the answer will be the same.

In Step 2A, several additional elements were identified as additional limitations:

- one or more processors configured to:
- perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;

- store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
- subsequent to an interaction by a user with an icon rendered in one or more interfaces, capture contextual information comprising location data associated with the user and a set of biometric information and;
- render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
- a memory coupled to the one or more processors and configured to provide the processor with instructions.

These additional limitations, including the limitations in the dependent claims, do not amount to an inventive concept because they were already analyzed under Step 2A and did not amount to a practical application of the abstract idea.

Furthermore, it has been held that generic computing components, receiving or transmitting data over a network, performing repetitive calculations, electronic recordkeeping, storing and receiving information in memory, presenting offers, restricting public access, gathering statistics, and eliminating less restrictive pricing information are well-understood, routine, and conventional activities (see MPEP 2106.05(d)).

In addition, courts have held computer-implemented processes not to be significantly more than the abstract idea (and thus ineligible) where the claim as a whole amounts to nothing more than generic computer functions merely used to implement an

abstract idea, such that an idea that could be done by a human analog (i.e., by hand or merely thinking) (see MPEP 2106.05(d)).

In this instance, the additional limitations recited above are at least one of well-understood, routine, and conventional according to the list in MPEP 2106.05(d) or merely generic computer functions merely used to implement an abstract idea, such that an idea that could be done by a human analog.

Therefore, the claims lack one or more limitations which amount to an inventive concept in the claims.

For these reasons, the claims are rejected under 35 U.S.C. 101.

Response to Arguments

The claims are not in condition for allowance because they are rejected under 35 U.S.C. 101. The closest prior art of record is Hertel (US 2009/0288012).

The applicant respectfully argues in regards to the rejection under 35 U.S.C. 101 that the claims are necessarily rooted in computer technology in order to prevent electronic fraud and provide improvements to electronic fraud prevention by preventing electronic fraud in cases where traditional protections against fraudulent activities are either disabled or rendered moot.

The examiner respectfully disagrees. The claims recite nothing about fraud or fraud analysis and prevention. In addition, as currently claimed, the step of determining whether to allow completion of the electronic transaction is part of the abstract idea itself and not an additional element. It can also be performed mentally or using pen and paper and therefore the solution is not necessarily rooted in computer technology.

For these reasons, the applicant's arguments are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW E ZIMMERMAN whose telephone number is (571)270-5278. The examiner can normally be reached 8:30-5:30.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Dunham can be reached on (571) 272-8109. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MATTHEW E ZIMMERMAN/
Primary Examiner, Art Unit 3684

<i>Search Notes</i> 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

CPC - Searched*		
Symbol	Date	Examiner
G06Q20/4014,40145	08/28/2021	MZ
G06Q30/06,0641-0643	08/28/2021	MZ

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

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

Search Notes		
Search Notes	Date	Examiner
Searched EAST and performed an inventor and assignee search. See attachment.	08/28/2021	MZ
Updated search. See attachment.	01/15/2022	MZ

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
G06Q30	06,0641-0643	08/28/2021	MZ
G06Q20	4014,40145	08/28/2021	MZ

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L56	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L57	48	rightquestion.as. (jacobsson near2 bjorn).in. (jacobsson near2 markus).in.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L58	108335	G06Q20/4014,40145.cpc. c. G06Q30/06.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L59	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L60	1	(alive living breathing) and L59	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L61	100	fraud same (alive! living! breathing!) same biometric	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L62	140475	G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L63	7	(L58 L62) and L61	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L64	3	13/099981 and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L65	15	fraud\$6 with (alive! living! breathing!) with video!	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L66	21	fraud\$6 same ((alive! living! breathing!) with video!)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	ON	2021/08/27 10:21 PM

			IBM_TDB)				
L67	15	fraud\$6 same ((alive! living! breathing!) with images!))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L68	39	fraud\$6 same ((alive! living! breathing!) with (images! video))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L69	52	("20090288015" "6851094" "20020152137" "6091835" "7930220" "5428734" "20050187883" "20020046055" "20050049981" "20020116293" "20090013359" "7930220" "6208659" "20050049981" "20050187883" "20070233614" "6091835" "20080040426" "20090171810" "20090288012" "20010042042" "20040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L70	0	L68 and L69	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L71	52	("20090288015" "6851094" "20020152137" "6091835" "7930220" "5428734" "20050187883" "20020046055" "20050049981" "20020116293" "20090013359" "7930220" "6208659" "20050049981" "20050187883" "20070233614" "6091835" "20080040426" "20090171810" "20090288012" "20010042042" "20040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L72	17540	G06Q20/40145.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L73	1227	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L74	37	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and G06Q20/4016.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L75	1227	G06Q20/40145.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM

		and G06Q30/0601-0643.cpc.	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)				10:21 PM
L76	572	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L77	258	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and (compar\$5 with (face! image photograph picture))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L78	264	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((fraud\$3 compar\$5) with (face! image photograph picture))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L79	109	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and checkout and (website (web adj site) web adj page)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L80	407	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L81	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L82	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L83	115	L82 and cart	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L84	2419	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM

		and ((image picture photo photograph) near2 (customer user shopper buyer))					
L85	1598	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and ((image picture photo photograph) near (customer user shopper buyer))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L86	561	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and (((image picture photo photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L87	123	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and (((picture photo photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L88	1	15/948744	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L89	277882	15/948744 biometric	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L90	2	13/875245 and biometric	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L91	2	13/875245 and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L92	3	(13/875245 13/099981) and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM

L93	52	G06Q30/0601-0643.cpc. and (add\$4 near4 cart) and (((picture photo photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L94	392	G06Q20/40145.cpc. and G06Q20/4016.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L95	17	G06Q20/40145.cpc. and G06Q20/4016.cpc. and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L96	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L97	110	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L98	15	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 same biometric same (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L99	620	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L100	239	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L101	91	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L102	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L103	52	("20090288015" "6851094" "20020152137" "6091835" "7930220" "5428734" "20050187883" "20020046055" "20050049981" "20020116293"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM

		"20090013359" "7930220" "6208659" "20050049981" "20050187883" "20070233614" "6091835" "20080040426" "20090171810" "20090288012" "20010042042" "20040254855").PN.					
L104	9	(L103 L102) and fraud\$6	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L105	2	"20090288012" and location	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L106	2	"20090288012" and location	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L107	1	"20090288012" and (location same fraud\$6)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L108	7	"20120110341"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L109	18	(US-20010042042-\$ US-20020046055-\$ US-20040254855-\$ US-20070233614-\$ US-20090013359-\$ US-20090171810-\$ US-20090288012-\$ US-20090288015-\$ US-20020152137-\$ US-20020116293-\$ US-20050049981-\$ US-20050187883-\$ US-20080040426-\$ US-5428734-\$ US-6091835-\$ US-6208659-\$ US-6851094-\$ US-7930220-\$).DID.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L110	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L111	12	(US-20090171810-\$ or US-20040254855-\$ or	(US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	ON	2021/08/27 10:22 PM

		US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$.did. or (US-7930220-\$.did.	JPO; DERWENT; IBM_TDB)				
L112	12	L109 not L111 not L110	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L113	52	("20090288015" "68510 94" "20020152137" "60 91835" "7930220" "542 8734" "20050187883" " 20020046055" "200500 49981" "20020116293" " "20090013359" "79302 20" "6208659" "200500 49981" "20050187883" " "20070233614" "60918 35" "20080040426" "20 090171810" "20090288 012" "20010042042" "2 0040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L114	0	L109 not L111 not L110 not L113	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L115	63	("20010026632" "20010 042042" "20020046055 " "20020116293" "2002 0152137" "2004025485 5" "20050049981" "200 50187883" "200501979 22" "20070233614" "20 080040426" "20090013 359" "20090171810" "2 0090288012" "2009028 8015" "20110112931" " 20120110341" "542873 4" "6091835" "6208659" "6851094" "7930220"). PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:34 PM
L116	11	L115 not L71 not L59 not L113	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:35 PM
L117	5	(US-20010026632-\$ or US-20050187883-\$ or US-20050197922-\$ or US-20110112931-\$ or US-20090288012-\$.did.	(US-PGPUB)	OR	ON	ON	2021/08/27 10:35 PM
L118	5	(US-20010026632-\$ or US-20050187883-\$ or US-20050197922-\$ or US-20110112931-\$ or US-20090288012-\$.did.	(US-PGPUB)	OR	ON	ON	2021/08/27 10:35 PM
L119	8	L115 not L71 not L59	(US-PGPUB; USPAT;	OR	ON	ON	2021/08/27

		not L113 not L117 not L118	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)				10:35 PM
L120	1	"20090288012" and (alive living biometric)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:39 PM
L121	0	16/893237	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L122	1	15/948744	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L123	1	15/948744 and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L128	2	"20050187883" and (location GPS!)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:40 AM
L129	1	"20090288012" and (biometric alive living breathing) and (GPS location)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:55 AM
L130	91	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:57 AM
L131	2111	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing! fake))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:58 AM
L132	597400	(likeness! picture photograph image photo) near2 (user consumer shopper buyer customer)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:58 AM
L133	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
L135	108218	fraud\$6	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
L136	0	L131 and L132 and L133 and L135	(US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	ON	2021/08/28 11:59 AM

			JPO; DERWENT; IBM_TDB)				
L137	1	L131 and L132 and L133	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:59 AM
L138	98	L131 and L132 and L135	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:00 PM
L139	1019450	GPS!	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:06 PM
L140	56	L131 and L132 and L135 and L139	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:06 PM
L141	66	L131 and L132 and L135 and L139	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM
L142	1	L131 and L132 and L133	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM
L144	11	L115 not L71 not L59 not L113	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N124	20	rightquestion.as. (jacobsson near2 bjorn).in. (jacobsson near2 markus).in.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N125	37762	G06Q20/4014,40145.cp c. G06Q30/06.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N126	407	G06Q20/40145.cpc. and G06Q30/0601- 0643.cpc. and (((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N127	17	G06Q20/40145.cpc. and G06Q20/4016.cpc. and G06Q30/0601- 0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
N141	962	(G06Q20/40145.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28

		G06Q20/4016.cpc.) and G06Q30/0601- 0643.cpc.					11:59 AM
N142	436130	(likeness! picture photograph image photo) near2 (user consumer shopper buyer customer)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
N143	1781	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing! fake))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
N144	108218	fraud\$6	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM



UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Automated Interview Request (AIR)

Apr 15 2022

This paper requesting to schedule and/or conduct an interview is appropriate because:

This submission is requested to be accepted as an authorization for this interview to communicate via the internet. Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with the undersigned concerning scheduling of the interview via video conference, instant messaging, or electronic mail, and to conduct the interview in accordance with office practice including video conferencing.

Name(s) :

Yeu-Ting George Cheng

S-signature:

/YeuTing George Cheng/

Registration Number:

69408

U.S. Application Number:

16893237

Confirmation Number:

5805

E-mail Address:

gcheng@ip-patent.com

Phone Number:

+1 4082074765

Proposed Time of Interview:

4-20-2022 1:00 PM ET

Alternative Proposed Time(s) of Interview:

4-20-2022 1:30 PM ET

Preferred Interview Type:

Telephonic

I am the applicant or applicant's representative for this application.

Topic for Discussion:



UNITED STATES
PATENT AND TRADEMARK OFFICE



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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805
21912 7590 04/25/2022 VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			EXAMINER ZIMMERMAN, MATTHEW E	
			ART UNIT 3684	PAPER NUMBER
			NOTIFICATION DATE 04/25/2022	DELIVERY MODE ELECTRONIC

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

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

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

usptocorrespondence@ip-patent.com

<i>Applicant-Initiated Interview Summary</i>	Application No. 16/893,237	Applicant(s) Jakobsson, Bjorn Markus		
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684	AIA (First Inventor to File) Status No	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
MATTHEW E ZIMMERMAN	Primary Examiner	Telephonic
GEORGE CHENG	Attorney of Record	

Date of Interview: 20 April 2022

Issues Discussed:

35 U.S.C. 101

The attorney of record discussed amending the claims to recite something to the effect of capturing, using a camera, one or more images of a user. The attorney of record inquired whether this would overcome the rejection. The examiner stated that it was unlikely that this would overcome the rejection and suggested focusing on amending the claims to recite computer specific rules such as those found in McRo. No agreement was reached. This concluded the interview.

☒ Attachment

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04 Please further see: MPEP 713.04 Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing	

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

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

MJAKP001C3 Applicant Initiated Interview Request Form

Continuation Sheet

Application No. 16/893,237

PROPOSED AMENDMENT:

1. (Currently amended) A system, comprising:
 - one or more processors configured to:
 - perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces, capture contextual information comprising location data associated with the user and a set of biometric information and;
 - render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction;
 - and
 - ~~determine whether to allow completion of~~ the electronic transaction involving the account holder to proceed based at least in part on:
 - the captured location data associated with the user; and
 - an analysis of the set of captured biometric information comprising:
 - (1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information; and
 - (2) a determination of whether the user is alive based at least in part on a second portion of the set of captured biometric information; and
 - a memory coupled to the one or more processors and configured to provide the processor with instructions.

Support for the amendments may be found, without limitation, in Paragraphs [0055]-

[0059] of the Specification.

The foregoing amendments are not to be taken as an admission of unpatentability of any of the claims prior to the amendments.

Applicant Initiated Interview Request Form

Application No.: 16/893,237 First Named Applicant: Bjorn Markus Jakobsson
 Examiner: Matthew E. Zimmerman Art Unit: 3684 Status of Application: Pending

Tentative Participants:

(1) Examiner Matthew E. Zimmerman (2) Yeu-Ting George Cheng
 (3) _____ (4) _____

Proposed Date of Interview: Wed 4/20 Proposed Time: 1p ET (AM/PM)

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rej. 101</u>	<u>2</u>	_____	☐	☐	☐
(2) _____	_____	_____	☐	☐	☐
(3) _____	_____	_____	☐	☐	☐
(4) _____	_____	_____	☐	☐	☐

☐ Continuation Sheet Attached ☒ Proposed Amendment or Arguments Attached

Brief Description of Arguments to be Presented: Please see attached.

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

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

/Yeu-Ting George Cheng/

Applicant/Applicant's Representative Signature

Yeu-Ting George Cheng

Typed/Printed Name of Applicant or Representative

69,408

Registration Number, if applicable

Examiner/SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 24 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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

Zimmerman, Matthew

From: George Cheng <gcheng@ip-patent.com>
Sent: Tuesday, April 19, 2022 2:27 PM
To: Zimmerman, Matthew
Subject: MJAKP001C3 (App. No.: 16/893,237) Agenda for 4/20/2022 Interview
Attachments: MJAKP001C3 Interview Request Form - 2022.04.19.pdf; MJAKP001C3 Interview Request Form - Continuation Sheet - 2022.04.19.docx

CAUTION: This email has originated from a source outside of USPTO. PLEASE CONSIDER THE SOURCE before responding, clicking on links, or opening attachments.

Examiner Zimmerman

Please find attached an agenda and proposed amendments for the 4/20/2022 interview for Application No. 16/893,237. Applicant authorizes communication of this attached interview agenda and these proposed claim amendments by this email. Please continue to send official correspondence via the email address associated with customer number 21912.

Regards,
George

George Cheng

Van Pelt, Yi & James LLP
Intellectual Property Law
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
V: 408-207-4765
F: 408-973-2595
gcheng@ip-patent.com

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Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-14)

Approved for use through 07/31/2016. OMB 0651-0031

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

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

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

Application Number	16/893,237	Filing Date	2020-06-04	Docket Number (if applicable)	MJAKP001C3	Art Unit	3684
First Named Inventor	Bjorn Markus Jakobsson			Examiner Name	Matthew E. Zimmerman		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

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

SUBMISSION REQUIRED UNDER 37 CFR 1.114

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

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

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

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

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

☐ Other _____

FEES

☒ The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
 The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to
 Deposit Account No 500685

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature
 Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-14)

Approved for use through 07/31/2016. OMB 0651-0031

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

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

Signature of Registered U.S. Patent Practitioner			
Signature	Yeu-Ting George Cheng/	Date (YYYY-MM-DD)	2022-05-23
Name	Yeu-Ting George Cheng	Registration Number	69408

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

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

Privacy Act Statement

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

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

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

Electronic Patent Application Fee Transmittal				
Application Number:		16893237		
Filing Date:		04-Jun-2020		
Title of Invention:		METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
First Named Inventor/Applicant Name:		Bjorn Markus Jakobsson		
Filer:		Yeu-Ting George Cheng/Elaine Nguyen		
Attorney Docket Number:		MJAKP001C3		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 1 month with \$0 paid	2251	1	110	110
Miscellaneous:				
RCE- 1ST REQUEST	2801	1	680	680
Total in USD (\$)				790

Electronic Acknowledgement Receipt	
EFS ID:	45780227
Application Number:	16893237
International Application Number:	
Confirmation Number:	5805
Title of Invention:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
First Named Inventor/Applicant Name:	Bjorn Markus Jakobsson
Customer Number:	21912
Filer:	Yeu-Ting George Cheng/Elaine Nguyen
Filer Authorized By:	Yeu-Ting George Cheng
Attorney Docket Number:	MJAKP001C3
Receipt Date:	23-MAY-2022
Filing Date:	04-JUN-2020
Time Stamp:	16:42:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$790
RAM confirmation Number	E20225MG42552070
Deposit Account	500685
Authorized User	Elaine Nguyen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)
 37 CFR 1.20 (Post Issuance fees)
 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	MJAKP001C3_AMD_C_RCE.pdf	1322679	no	3
			c03a9bf0561a82700171d9efb1bd59dc1a4b4e93		

Warnings:

Information:

2	Amendment Submitted/Entered with Filing of Continued Prosecution Application (CPA)/Request for Continued Examination(RCE)	MJAKP001C3_AMD_C.pdf	129778	no	11
			0cfb0c50774a0d385998850cf58e979a762c3d54		

Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	41084	no	2
			872362763dfdcb9e6be9683a14834bfd55bf03		

Warnings:

Information:

Total Files Size (in bytes): 1493541

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	16/893,237	Examiner:	Matthew E. Zimmerman
Filed:	June 04, 2020	Art Unit:	3684
Confirmation No.:	5805	Docket No.:	MJAKP001C3
First Inventor:	Bjorn Markus Jakobsson		
Title:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		

AMENDMENT C

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

Dear Sir:

This is in response to the Office Action mailed January 21, 2022. The following amendment and remarks are respectfully submitted.

Applicant(s) believe that no (additional) fees are required beyond any fees submitted herewith. If required fees are missing or any additional fees are required during the pendency of the subject application, please charge such fees or credit any overpayment to Deposit Account No. 50-0685 (MJAKP001C3).

IN THE CLAIMS

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

Listing of Claims:

1. (Cancelled)
2. (Currently amended) A system, comprising:
 - one or more processors configured to:
 - perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
 - store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;
 - subsequent to an interaction by a user with an icon rendered in one or more interfaces[[,]]:
 - capture contextual information comprising location data usable to determine a physical location associated with the user; and
 - capture a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images [[and]];
 - render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and
 - determine whether to allow ~~completion of~~ the electronic transaction involving the account holder to proceed based at least in part on:
 - the physical location associated with the user determined using the captured location data ~~associated with the user~~; and
 - an analysis of the set of captured biometric information comprising:
 - ~~(1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information; and~~

(2) a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera ~~a second portion of the set of captured biometric information~~; and
a memory coupled to the one or more processors and configured to provide the processor with instructions.

3. (Currently amended) The system recited in claim 2, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently amended) The system recited in claim 2, wherein the icon represents a form of payment.

8. (Currently amended) The system recited in claim 2, wherein the image comprises at least one of a photograph and an avatar.

9. (Currently amended) The system recited in claim 2, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.

10. (Currently amended) A method, comprising:
performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;
storing the received image in a data store, wherein the received image is associated with an account of the account holder;
subsequent to an interaction by a user with an icon rendered in one or more interfaces[.];

capturing contextual information comprising location data usable to determine a physical location associated with the user; and

capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images [[and]];

rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and

determining whether to allow ~~completion of~~ the electronic transaction involving the account holder to proceed based at least in part on:

the physical location associated with the user determined using the captured location data ~~associated with the user~~; and

an analysis of the set of captured biometric information comprising:

~~(1) a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information;~~
and

~~(2) a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera~~ a second portion of the set of captured biometric information.

11. (Currently amended) The method of claim 10, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently amended) The method of claim 10, wherein the icon represents a form of payment.

16. (Currently amended) The method of claim 10, wherein the image comprises at least one of a photograph and an avatar.

17. (Currently amended) The method of claim 10, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, and a laptop.

18. (Currently amended) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:

performing an enrollment comprising receiving an image from an account holder,
the image comprising a virtual likeness of a face selected by the account holder;

storing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;

subsequent to an interaction by a user with an icon rendered in one or more interfaces[[,]];:

capturing contextual information comprising location data usable to determine a physical location associated with the user; and

capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images[[and]];

rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and

determining where to allow ~~completion of~~ the electronic transaction involving the account holder to proceed based at least in part on:

the physical location associated with the user determined using the captured location data ~~associated with the user~~; and

an analysis of the set of captured biometric information comprising:

(1) ~~a determination of whether a first portion of the set of captured biometric information matches against previously stored biometric information; and~~

(2) a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera ~~a second portion of the set of captured biometric information.~~

19. (New) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

20. (New) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

21. (New) The system recited in claim 2, wherein the set of images comprises a plurality of images successively captured using the camera.
22. (New) The system recited in claim 2, wherein the set of captured biometric information further comprises an audio sample.
23. (New) The system recited in claim 22, wherein the determination of whether the electronic transaction involving the account holder is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.
24. (New) The system recited in claim 23, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

INTERVIEW SUMMARY

A telephonic interview in the above-referenced case was conducted on April 20, 2022 between the Examiner and the Applicants' undersigned representative. The Office Action mailed on January 21, 2022 was discussed. Specifically, the rejections of Claims 2, 10, and 18 under 35 U.S.C. §101 and the proposed amendments set forth herein were discussed with the intent to place the claims in better condition for allowance or appeal.

The Applicants thank the Examiner for the interview.

REMARKS

Claims 4, 6, 12, and 14 have been cancelled. Claims 2-3, 7-11, and 15-18 have been amended to clarify the subject matter regarded as the invention. New Claims 19-24 have been added. Claims 2-3, 7-11, and 15-24 are pending. No new matter has been added.

As amended, independent Claims 2, 10, and 18 each recite, in part, “subsequent to an interaction by a user with an icon rendered in one or more interfaces: captur[ing] contextual information comprising location data usable to determine a physical location associated with the user; and captur[ing] a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images.” Independent Claims 2, 10, and 18 have each been further amended to recite, in part, “determin[ing] whether to allow the electronic transaction involving the account holder to proceed based at least in part on: the physical location associated with the user determined using the captured location data; and a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.” Support for the amendments may be found, without limitation, in Paragraphs [0058]-[0060] of the Specification.

Claim Rejections – 35 U.S.C. §101

The Examiner has rejected Claims 2-3, 7-11, and 15-18 under 35 U.S.C. §101.

Applicants respectfully maintain that independent Claims 2, 10, and 18 and their dependent claims are believed to be non-abstract because they are not directed to fundamental economic practices, methods of organizing human activities, ideas themselves, mathematical relationships/formulas, or mental processes.

For example, Applicants respectfully submit that the claims are not directed to mental processes because the claims include non-mental process limitations. For example, the claims recite the limitations of “captur[ing] a set of biometric information,” and that “capturing the set of biometric information comprises capturing, using a camera, a set of images.” Further, the claims recite “determin[ing] whether to allow the electronic transaction involving the account

holder to proceed based at least in part on: the physical location associated with the user determined using the captured location; and a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.”

If the Examiner were to maintain that the claims are directed to an abstract idea, Applicants respectfully further submit that amended independent Claims 2, 10, and 18 include additional elements that are significantly more than the judicial exception. Specifically, Applicants respectfully submit that the claims are directed to a solution necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks, and provide improvements to any other technology or technical field.

In particular, the independent claims have been amended to recite “subsequent to an interaction by a user with an icon rendered in one or more interfaces: captur[ing] contextual information comprising location data usable to determine a physical location associated with the user; and captur[ing] a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images.” Independent Claims 2, 10, and 18 have each been further amended to recite, in part, “determin[ing] whether to allow the electronic transaction involving the account holder to proceed based at least in part on: the physical location associated with the user determined using the captured location data; and a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.”

Applicants respectfully submit that the amended independent claims are directed to a solution necessarily rooted in computer technology in order to prevent electronic fraud, and provide improvements to electronic fraud prevention by preventing electronic fraud in cases where traditional protections against fraudulent activities are either disabled or rendered moot, as well as with devices and services that are not protected by passwords, or where passwords are commonly shared.

For example, by capturing contextual information comprising location data usable to determine a physical location associated with the user, capturing a set of images using a camera, and determining whether to allow an electronic transaction to proceed based at least in part on:

the physical location associated with the user determined using the captured location; and a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera in the manner recited in the amended independent claims, electronic fraud is prevented in cases where “traditional protections against fraudulent activities are either disabled (e.g., by a given site not requiring a password due to a stored cookie, or the password being supplied automatically by a browser) or rendered moot (e.g., by a given user sharing a password with another user)” (Paragraph [0025], Specification). That the claims are directed to such improved prevention of electronic fraud in cases where traditional protections against fraudulent activities are either disabled or rendered moot is further bolstered by Paragraph [0024] of the Specification, which describes that “[t]he techniques described herein can be used with devices and services that are not protected by passwords, or where passwords are commonly shared.”

As such, independent Claims 2, 10, and 18 and their dependent claims are believed to be directed to statutory subject matter under 35 U.S.C. §101.

New Claims

Support for new Claims 19-21 may be found, without limitation, in Paragraph [0058] of the Specification. New Claims 19-21 depend from independent Claim 2, and are therefore also believed to be allowable for the same reasons described above.

Support for new Claims 22-24 may be found, without limitation, in Paragraph [0055] of the Specification. New Claims 22-24 depend, either directly or indirectly, from independent Claim 2, and are therefore also believed to be allowable for the same reasons described above.

The foregoing amendments are not to be taken as an admission of unpatentability of any of the claims prior to the amendments.

Reconsideration of the application and allowance of all claims are respectfully requested based on the preceding remarks. If at any time the Examiner believes that an interview would be helpful, please contact the undersigned.

Respectfully submitted,

Dated: May 23, 2022

/Yeu-Ting George Cheng/

Yeu-Ting George Cheng
Registration No. 69408
408-207-4765

VAN PELT, YI & JAMES LLP
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
Fax 408-973-2595

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/893,237		Filing Date 06/04/2020		☐ To be Mailed	
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO									
APPLICATION AS FILED - PART I									
	(Column 1)	(Column 2)							
FOR	NUMBER FILED	NUMBER EXTRA			RATE (\$)			FEE (\$)	
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*			x \$50 =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*			x \$230 =				
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.					TOTAL				
APPLICATION AS AMENDED - PART II									
	(Column 1)		(Column 2)	(Column 3)					
AMENDMENT	05/23/2022	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	* 17	Minus	** 20	= 0			x \$50 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0			x \$240 =	0
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	0
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	*	Minus	**	=			x \$0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								SLIE	
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/FELICIA R FARMER/	
*** 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 1450, Alexandria, VA 22313-1450.**

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



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www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

21912 7590 08/22/2022
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

EXAMINER

ZIMMERMAN, MATTHEW E

ART UNIT

PAPER NUMBER

3684

DATE MAILED: 08/22/2022

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805

TITLE OF INVENTION: METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	11/22/2022

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

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

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

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

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (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)

21912 7590 08/22/2022
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805

TITLE OF INVENTION: METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	11/22/2022

EXAMINER	ART UNIT	CLASS-SUBCLASS
ZIMMERMAN, MATTHEW E	3684	705-026820

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/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or 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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). 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. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

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

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

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

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

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

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

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

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

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____



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UNITED STATES DEPARTMENT OF COMMERCE
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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805
21912 7590 08/22/2022 VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			EXAMINER ZIMMERMAN, MATTHEW E	
			ART UNIT 3684	PAPER NUMBER
DATE MAILED: 08/22/2022				

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

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

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

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

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

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

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 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 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.** Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

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

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

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

Notice of Allowability	Application No. 16/893,237	Applicant(s) Jakobsson, Bjorn Markus	
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684	AIA (FITF) Status No

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

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

1. ☒ This communication is responsive to 5/23/22.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3. ☒ The allowed claim(s) is/are 2-3,7-11 and 15-30. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov**.

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

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

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

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

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
--	--

DETAILED ACTION

Examiner's Amendment

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

The claims have been amended in accordance with an interview with the attorney of record as follows and the attorney has authorized any fees to be charged for added claims (see attached appendix):

1. (Cancelled)
2. (Currently Amended) A system, comprising:
one or more processors configured to:
~~perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
~~store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
render, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;

subsequent to an interaction by a user with an icon rendered in the one or more interfaces:

capture contextual information comprising location data usable to determine a physical location associated with the user; and

capture a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and

~~render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and~~

facilitate a fraud detection analysis to determine whether to allow an [[the]] electronic transaction associated with the account holder ~~involving the account holder~~ to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera; and

a memory coupled to the one or more processors and configured to provide the processor with instructions.

3. (Previously presented) The system recited in claim 2, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Previously presented) The system recited in claim 2, wherein the icon represents a form of payment.
8. (Currently Amended) The system recited in claim 2, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
9. (Currently Amended) The system recited in claim 2, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
10. (Currently Amended) A method, comprising:
 - ~~performing an enrollment comprising receiving an image from an account holder,~~
 - ~~the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image in a data store, wherein the received image is~~
 - ~~associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with
 - an account holder, wherein the virtual likeness of the face was selected by the account
 - holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capturing contextual information comprising location data usable to
 - determine a physical location associated with the user; and

capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and ~~rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and~~

facilitating a fraud detection analysis to determine ~~determining~~ whether to allow an [[the]] electronic transaction associated with the account holder ~~involving the account holder~~ to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.

11. (Previously presented) The method of claim 10, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The method of claim 10, wherein the icon represents a form of payment.

16. (Currently Amended) The method of claim 10, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
17. (Currently Amended) The method of claim 10, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
18. (Currently Amended) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:
- ~~performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capturing contextual information comprising location data usable to determine a physical location associated with the user; and
 - capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and

~~rendering, in the one or more interfaces, the virtual likeness of the face
selected by the account holder, wherein the account holder is involved in an
electronic transaction; and~~

~~facilitating a fraud detection analysis to determine whether determining
where to allow [[the]] an electronic transaction associated with the account holder
involving the account holder to proceed based at least in part on:~~

~~the physical location associated with the user determined using the
captured location data; and~~

~~an analysis of the set of captured biometric information comprising
a determination of whether the user is alive based at least in part on an
analysis of the set of images captured using the camera.~~

19. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

20. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

21. (Previously presented) The system recited in claim 2, wherein the set of images comprises a plurality of images successively captured using the camera.

22. (Previously presented) The system recited in claim 2, wherein the set of captured biometric information further comprises an audio sample.

23. (Currently Amended) The system recited in claim 22, wherein facilitating the fraud detection analysis to determine ~~the determination of whether the electronic transaction associated with the account holder involving the account holder~~ is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

24. (Previously presented) The system recited in claim 23, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

25. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

26. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

27. (New) The method of claim 10, wherein the set of images comprises a plurality of images successively captured using the camera.

28. (New) The method of claim 10, wherein the set of captured biometric information further comprises an audio sample.

29. (New) The method of claim 28, wherein facilitating the fraud detection analysis to determine whether the electronic transaction associated with the account holder is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

30. (New) The method of claim 29, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

References Cited

In the present application, claims 2-3, 7-11, 15-30 are allowed.

The most related prior art patent of record is Hayakawa (US 20020130764) and the most related non-patent literature of record is Reference U (see PTO-892).

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

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW E ZIMMERMAN whose telephone number is (571)270-5278. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Smith can be reached on (571) 272-6763. 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.

/MATTHEW E ZIMMERMAN/
Primary Examiner, Art Unit 3684

<i>Examiner-Initiated Interview Summary</i>	Application No. 16/893,237	Applicant(s) Jakobsson, Bjorn Markus		
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684	AIA (First Inventor to File) Status No	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
MATTHEW E ZIMMERMAN	Primary Examiner	Telephonic
GEORGE CHENG	Attorney of Record	

Date of Interview: 12 August 2022

Issues Discussed:

35 U.S.C. 101

The examiner proposed an amendment to place the application in condition for allowance. The attorney made a counter proposal. After some negotiation, a final agreement was reached. This concluded the interview.

☒ Attachment

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04 Please further see: MPEP 713.04 Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing	

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

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

<i>Notice of References Cited</i>	Application/Control No. 16/893,237		Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus	
	Examiner MATTHEW E ZIMMERMAN		Art Unit 3684	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20020130764-A1	09-2002	Hayakawa, Shoji	G06F21/32	340/5.82
*	B	US-20030037264-A1	02-2003	Ezaki, Tadashi	G06F21/32	726/21
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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
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	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Reddy, P. Venkata, et al. "A new antispooofing approach for biometric devices." IEEE transactions on biomedical circuits and systems 2.4 (2008): 328-337. (Year: 2008)
	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.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20220812

Issue Classification 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

CPC						
Symbol					Type	Version
G06Q	/	20	/	4014	F	2013-01-01
G06Q	/	20	/	40145	I	2013-01-01
G06Q	/	30	/	06	I	2013-01-01

CPC Combination Sets					
Symbol				Type	Version
/		/			

NONE (Assistant Examiner)		Total Claims Allowed: 23	
(Date)		12 August 2022	
/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684 (Primary Examiner)		O.G. Print Claim(s) 1	O.G. Print Figure 7
(Date)		(Date)	

U.S. Patent and Trademark Office

Part of Paper No.: 20220812

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	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

INTERNATIONAL CLASSIFICATION			
CLAIMED			
G06Q		30	00

NON-CLAIMED			

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	23	
/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	12 August 2022	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	7

U.S. Patent and Trademark Office

Part of Paper No.: 20220812

Issue Classification 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1	6	10	12	19	21	28								
1	2	7	11	13	20	22	29								
2	3		12	14	21	23	30								
	4		13	15	22										
	5		14	16	23										
	6	8	15	17	24										
3	7	9	16	18	25										
4	8	10	17	19	26										
5	9	11	18	20	27										

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 23	
/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684 (Primary Examiner) _____ (Date) 12 August 2022		O.G. Print Claim(s) 1	O.G. Print Figure 7

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<i>Search Notes</i> 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

CPC - Searched*		
Symbol	Date	Examiner
G06Q20/4014,40145	08/28/2021	MZ
G06Q30/06,0641-0643	08/28/2021	MZ

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

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

Search Notes		
Search Notes	Date	Examiner
Searched EAST and performed an inventor and assignee search. See attachment.	08/28/2021	MZ
Updated search. See attachment.	01/15/2022	MZ
Updated search. See attachment.	08/12/2022	MZ
Searched Google Scholar for NPL. See attachment.	08/12/2022	MZ

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
G06Q30	06,0641-0643	08/28/2021	MZ
G06Q20	4014,40145	08/28/2021	MZ

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
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<i>Search Notes</i> 	Application/Control No. 16/893,237	Applicant(s)/Patent Under Reexamination Jakobsson, Bjorn Markus
	Examiner MATTHEW E ZIMMERMAN	Art Unit 3684

/MATTHEW E ZIMMERMAN/ Primary Examiner, Art Unit 3684	
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MJAKP001C3 PROPOSED EXAMINER'S AMENDMENT – 2022.08.12

1. (Cancelled)
2. (Proposed) A system, comprising:
 - one or more processors configured to:
 - ~~perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
 - render, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capture contextual information comprising location data usable to determine a physical location associated with the user; and
 - capture a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and
 - ~~render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction;~~
 - and
 - facilitate a fraud detection analysis to determine whether to allow an [[the]]
 - electronic transaction associated with the account holder ~~involving the account holder to~~ proceed based at least in part on:
 - the physical location associated with the user determined using the captured location data; and
 - an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera; and
 - a memory coupled to the one or more processors and configured to provide the processor with instructions.

3. (Previously presented) The system recited in claim 2, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Previously presented) The system recited in claim 2, wherein the icon represents a form of payment.
8. (Proposed) The system recited in claim 2, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
9. (Proposed) The system recited in claim 2, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
10. (Proposed) A method, comprising:
 - ~~performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image in a data store, wherein the received image is associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capturing contextual information comprising location data usable to determine a physical location associated with the user; and
 - capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and
 - ~~rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and~~

~~facilitating a fraud detection analysis to determine~~ determining whether to allow an ~~[[the]]~~ electronic transaction associated with the account holder ~~involving the account holder~~ to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.

11. (Previously presented) The method of claim 10, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Previously presented) The method of claim 10, wherein the icon represents a form of payment.
16. (Proposed) The method of claim 10, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
17. (Proposed) The method of claim 10, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
18. (Proposed) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:
 - ~~performing an enrollment comprising receiving an image from an account holder;~~
 - ~~the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;

subsequent to an interaction by a user with an icon rendered in the one or more interfaces:

capturing contextual information comprising location data usable to determine a physical location associated with the user; and

capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and

facilitating a fraud detection analysis to determine whether ~~determining where to~~ allow ~~[[the]]~~ an electronic transaction associated with the account holder involving the account holder to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.

19. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

20. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

21. (Previously presented) The system recited in claim 2, wherein the set of images comprises a plurality of images successively captured using the camera.

22. (Previously presented) The system recited in claim 2, wherein the set of captured biometric information further comprises an audio sample.

23. (Proposed) The system recited in claim 22, wherein facilitating the fraud detection analysis to determine ~~the determination of whether the electronic transaction~~ associated with the

account holder ~~involving the account holder~~ is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

24. (Previously presented) The system recited in claim 23, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

25. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

26. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

27. (New) The method of claim 10, wherein the set of images comprises a plurality of images successively captured using the camera.

28. (New) The method of claim 10, wherein the set of captured biometric information further comprises an audio sample.

29. (New) The method of claim 28, wherein facilitating the fraud detection analysis to determine whether the electronic transaction associated with the account holder is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

30. (New) The method of claim 29, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

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G Goudelis, A Tefas, I Pitas - Journal on Multimodal User Interfaces, 2008 - Springer
... Such an approach that examines spectroscopy as **aliveness** detection solution for **biometric** ... such a modality could be used to **check** whether the **user** matches the profile of the owner. It
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A Human Classification System for Biometric Parameters
R Volner, P Ercel - Elektronika ir Elektrotechnika, 2005 - eajournal.ktu.lt
... 2). • to initiate a task in another module and to **check** the ... Then, the system proceeds to compare the model **in alive** with the ... purpose of **biometric** systems is finding the identity of the **user** ...
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Body check
L Thielheim, J Kriesler, PM Ziegler - translated by Robert W. Smith, http://... - see chalmers.se
... a **user** is prevented from accessing a system despite his or her access authority for the system, the reason usually being that the **biometric** features of the **user** ... an object **alive** and as the ...
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Biometrics for network security
P Pold - 2004 - books.google.com
... **user** should really have an easy time thinking of a password that can be remembered, especially if the **user** ... prudent to use a finger **biometric** to **check** the identities of everyone passing ...
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Development of biometric DNA ink for authentication security
M Hashiyada - The Yonoku journal of experimental medicine, 2004 - jstage.jst.go.jp
... unchangeable while the person is **alive**, and even after his/... the slit and **check** bits, which serve not only as **check** bits but ... as in the verification of a **user** logging in at a computer terminal ...
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Y Mayyas, Z Rida - 2010 International Conference on Computer ..., 2010 - ieeexplore.ieee.org
... when we relate the **user** directly to his/her **biometric** data. ... the quality **check** the better result we get during the **biometric** ... to verify that she is indeed **alive** when she could use a plastic ...
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A new method for fingerprint antispoofing using pulse oximetry
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... whether the **biometric** sample presented is **alive** or not ... also **check** that the presented **biometric** sample belongs to the ... Many **users** believe that the current **biometric** systems can
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J Blomné - 2003 - diva-portal.org
... **users** of **biometric** systems cannot change their **biometric** data... results made public so that **users** can have a full understand... this kind of attack is to **check** if the finger is **alive** or synthetic, a ...
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Face recognition applications
L Huang, Z Xiong, Z Zhang - Handbook of Face Recognition, 2008 - Springer
... The security advantages of using **biometrics** to **check** identification are as follows. It ... to select face **images** he considers to be similar to the requested one from a given **set of face images**
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Examined [biometrics]
L Collins - IEEE Review, 2005 - IET
... to a **set of images** of human ears, deriving a **set** of convergence ... Real-world **biometric** data is likely to be much less consistent ... Any **biometric check** on people boarding planes needs to ...
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J Li, B Jin, B Jin - 2009 Biometrics symposium, 2009 - IEEE Xplore
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A video-based biometric authentication for e-Learning web applications
BE, Poulas, AN, Magana - International Conference on Enterprise ..., 2009 - Springer
... he and (3) identification, which attempts to **check** if the user is enrolled and whose sample is ... most varying **images** inside a **set of images**. Figure 1b shows the selected **images** for one of ...
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... binds a secret key and **biometric** information to provide template ... insecure to store raw fingerprint **images** for the alignment. In ... Secondly we propose a new Hierarchical Structure Check (...
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... eye image quality to find out bad quality **images** such as occlusion, eyelash interference and ... algorithm of eye image **check**, we can select the qualified image between both iris **images**
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C Soutar, D Ruberg, A Stolarov ..., Optical Pattern ..., 1996 - spiedigitallibrary.org
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Role of statistical dependence between classifier scores in determining the best decision fusion rule for improved **biometric verification**
K Venkatesan, S V K Kumar - International Workshop on Multimedia ... 2008 - Springer
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L Thalheim, J Kriesler, PM Ziegler - translated by Robert W. Smith, http://www.chalmers.se
... to show the various **images** to the webcam via the former's display. The result was that after
only two **images** of the digital camera we had put FaceVACS's **biometric** protective measures ...
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... This is done to **check** whether the test image correspond to any known ... **images**. This mean
is subtracted from the original **images** found in the training **set** to obtain a new **set** of **images**. ...
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Biometric face recognition with different training and testing databases
J Fierrez, M Fierrez, Zary - Verbal and Nonverbal Features of Human ... 2008 - Springer
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wide range of problems present in face **images** ... We have trained the classifier to **check** if two ...
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... credit card holders from constantly evolving online fraud attacks. The main objective of this paper is to construct an efficient fraud detection ... DS is the similarity measures with the fraud ...
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... of card issuers, card users and online merchants, giving very little time for technology to catch-up and prevent online fraud ... its degree of similarity with the genuine or fraudulent sets is ...
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... The inclusion of a photograph of the legal card holder would ... partly dependent on the similarity of the images encountered ... considerably lower level of fraud protection than is suggested
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... The online group processes user queries in real time and returns search results. The offline ... when similarities are 'too high' or 'too low'. In this paper, we focus on anomaly detection for ...
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Published in: IEEE Transactions on Neural Networks (Volume: 8 , Issue: 4, July 1997)

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... **detection** is also known under such names as **anomaly** ... Anyone with the password can claim to be a legitimate **account owner** ... 17 to name just a few all offer different benefits as **similarity** ...
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... Phishing is a form of **online fraud** that aims to steal a user's sensitive information, such as **online banking** passwords or credit **card** numbers. The victim is tricked into entering such ...
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Abstract

The anomaly-detection problem can be formulated as one of learning to characterize the behaviors of an individual, system, or network in terms of temporal sequences of discrete data. We present an approach on the basis of instance-based learning (IBL) techniques. To cast the anomaly-detection task in an IBL framework, we employ an approach that transforms temporal sequences of discrete, unordered observations into a metric space via a similarity measure that encodes intra-attribute dependencies. Classification boundaries are selected from an *a posteriori* characterization of valid user behaviors, coupled with a domain heuristic. An empirical evaluation of the approach on user command data demonstrates that we can accurately differentiate the profiled user from alternative users when the available features encode sufficient information. Furthermore, we demonstrate that the system detects anomalous conditions *quickly* — an important quality for reducing potential damage by a malicious user. We present several techniques for reducing data storage requirements of the user profile, including instance-selection methods and clustering. As empirical evaluation shows that a new greedy clustering algorithm reduces the size of the user model by 70%, with only a small loss in accuracy.

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Outline

Abstract

Keywords

1. Introduction

2. Methodology

3. Application to a specific problem: the case of B...

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Expert Systems with Applications

Volume 36, Issue 2, Part 2, March 2009, Pages 3630-3640

Association rules applied to credit card fraud detection

O. Sánchez ^{a,*, 1}, M.A. Vila ^{a, 1}, L. Cerdá ^{a, 1}, J.M. Serrano ^{a, 1}

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Abstract

Association rules are considered to be the best studied models for data mining. In this article, we propose their use in order to extract knowledge so that normal behavior patterns may be obtained in unlawful transactions from transactional credit card databases in order to detect and prevent fraud. The proposed methodology has been applied on data about credit card fraud in some of the most important retail companies in Chile.

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Keywords

Association rules; Data mining; Credit card fraud; Fraud detection; Fraud prevention

1. Introduction

Competitiveness in the retail industry is continuing and it is becoming increasingly aggressive as revealed by recent events in the sector and specialist studies such as (Zarufe, 2003). One of the leading businesses in this sphere is hire purchase and one of the main commercial strategies is the emission of department store credit cards to clients, as evident from the publications (Zarufe, 2003) which indicate that three companies lead the retail industry in the Latin American Southern Cone (Argentina,

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Foreign Priority claimed: ☐ Yes ☒ No

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APPLICANTS

RightQuestion, LLC, Portola Valley, CA, UNITED STATES

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L67	15	fraud\$6 same ((alive! living! breathing!) with images!))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L68	39	fraud\$6 same ((alive! living! breathing!) with (images! video))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L69	52	("20090288015" "68510 94" "20020152137" "60 91835" "7930220" "542 8734" "20050187883" " 20020046055" "200500 49981" "20020116293" " "20090013359" "79302 20" "6208659" "200500 49981" "20050187883" " "20070233614" "60918 35" "20080040426" "20 090171810" "20090288 012" "20010042042" "2 0040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L70	0	L68 and L69	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L71	52	("20090288015" "68510 94" "20020152137" "60 91835" "7930220" "542 8734" "20050187883" " 20020046055" "200500 49981" "20020116293" " "20090013359" "79302 20" "6208659" "200500 49981" "20050187883" " "20070233614" "60918 35" "20080040426" "20 090171810" "20090288 012" "20010042042" "2 0040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L72	17540	G06Q20/40145.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L73	1227	G06Q20/40145.cpc. and G06Q30/0601- 0643.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L74	37	G06Q20/40145.cpc. and G06Q30/0601- 0643.cpc. and G06Q20/4016.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L75	1227	G06Q20/40145.cpc. and G06Q30/0601- 0643.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	ON	2021/08/27 10:21 PM

L76	572	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc.	IBM_TDB) (US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L77	258	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and (compar\$5 with (face! image photograph picture))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L78	264	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((fraud\$3 compar\$5) with (face! image photograph picture))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L79	109	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and checkout and (website (web adj site) web adj page)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L80	407	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L81	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L82	450	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L83	115	L82 and cart	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L84	2419	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and ((image picture photo photograph) near2 (customer user	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM

L85	1598	shopper buyer)) G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and ((image picture photo photograph) near (customer user shopper buyer))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L86	561	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and (((image picture photo photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L87	123	G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page)) and cart and (((picture photo photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L88	1	15/948744	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L89	277882	15/948744 biometric	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L90	2	13/875245 and biometric	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L91	2	13/875245 and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L92	3	(13/875245 13/099981) and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L93	52	G06Q30/0601-0643.cpc. and (add\$4 near\$4 cart) and (((picture photo	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM

L94	392	photograph) near (customer user shopper buyer)) with display\$3)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L95	17	G06Q20/40145.cpc. and G06Q20/4016.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L96	962	G06Q20/40145.cpc. and G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L97	110	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L98	15	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc. and (fraud\$6 same biometric same (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L99	620	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L100	239	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L101	91	G06Q30/0601-0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
L102	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:21 PM
L103	52	("20090288015" "6851094" "20020152137" "6091835" "7930220" "5428734" "20050187883" "20020046055" "20050049981" "20020116293" "20090013359" "7930220" "6208659" "20050049981" "20050187883" "20070233614" "6091835" "20080040426" "20	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM

L104	9	090171810" "20090288012" "20010042042" "20040254855").PN. (L103 L102) and fraud\$6	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L105	2	"20090288012" and location	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L106	2	"20090288012" and location	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L107	1	"20090288012" and (location same fraud\$6)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L108	7	"20120110341"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L109	18	(US-20010042042-\$ US-20020046055-\$ US-20040254855-\$ US-20070233614-\$ US-20090013359-\$ US-20090171810-\$ US-20090288012-\$ US-20090288015-\$ US-20020152137-\$ US-20020116293-\$ US-20050049981-\$ US-20050187883-\$ US-20080040426-\$ US-5428734-\$ US-6091835-\$ US-6208659-\$ US-6851094-\$ US-7930220-\$).DID.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L110	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L111	12	(US-20090171810-\$ or US-20040254855-\$ or US-20090288012-\$ or US-20010042042-\$ or US-20020152137-\$).did. or (US-7930220-\$).did.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM

L112	12	L109 not L111 not L110	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L113	52	("20090288015" "6851094" "20020152137" "6091835" "7930220" "5428734" "20050187883" "20020046055" "20050049981" "20020116293" "20090013359" "7930220" "6208659" "20050049981" "20050187883" "20070233614" "6091835" "20080040426" "20090171810" "20090288012" "20010042042" "20040254855").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:22 PM
L114	0	L109 not L111 not L110 not L113	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
L115	63	("20010026632" "20010042042" "20020046055" "20020116293" "20020152137" "20040254855" "20050049981" "20050187883" "20050197922" "20070233614" "20080040426" "20090013359" "20090171810" "20090288012" "20090288015" "20110112931" "20120110341" "5428734" "6091835" "6208659" "6851094" "7930220").PN.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:34 PM
L116	11	L115 not L71 not L59 not L113	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:35 PM
L117	5	(US-20010026632-\$ or US-20050187883-\$ or US-20050197922-\$ or US-20110112931-\$ or US-20090288012-\$).did.	(US-PGPUB)	OR	ON	ON	2021/08/27 10:35 PM
L118	5	(US-20010026632-\$ or US-20050187883-\$ or US-20050197922-\$ or US-20110112931-\$ or US-20090288012-\$).did.	(US-PGPUB)	OR	ON	ON	2021/08/27 10:35 PM
L119	8	L115 not L71 not L59 not L113 not L117 not L118	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:35 PM
L120	1	"20090288012" and (alive living biometric)	(US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	ON	2021/08/27 10:39 PM

L121	0	16/893237	JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L122	1	15/948744	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L123	1	15/948744 and alive	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/27 10:40 PM
L128	2	"20050187883" and (location GPS!)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:40 AM
L129	1	"20090288012" and (biometric alive living breathing) and (GPS location)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:55 AM
L130	91	G06Q30/0601- 0643.cpc. and (fraud\$6 with (location GPS!)) and biometric and ((product add\$3 item) near2 cart)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:57 AM
L131	2111	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing! fake))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:58 AM
L132	597400	(likeness! picture photograph image photo) near2 (user consumer shopper buyer customer)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:58 AM
L133	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601- 0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
L135	108218	fraud\$6	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
L136	0	L131 and L132 and L133 and L135	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:59 AM
L137	1	L131 and L132 and L133	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 11:59 AM

L138	98	L131 and L132 and L135	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:00 PM
L139	1019450	GPS!	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:06 PM
L140	56	L131 and L132 and L135 and L139	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/08/28 12:06 PM
L141	66	L131 and L132 and L135 and L139	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM
L142	1	L131 and L132 and L133	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM
L144	11	L115 not L71 not L59 not L113	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/01/15 10:45 AM
L145	0	16/893237	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:52 PM
L146	1	15/948744	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:52 PM

L147	1	15/948744 AND (fraud\$6 SAME location SAME biometric)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:52 PM
L148	1	15/948744 AND (fraud\$6 ame biometric)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:53 PM
L149	1	15/948744 AND (fraud\$6 SAME biometric)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:53 PM
L150	1	15/948744 AND (fraud\$6 SAME biometric)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO,	OR	ON	ON	2022/08/08 03:53 PM

L151	1	15/948744 AND fraud\$6	MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:54 PM
L152	1	15/948744 AND (fraud\$6 same2 (biometric alive living))	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:55 PM
L153	1	15/948744 AND (fraud\$6 same2 location)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/08 03:55 PM
L154	11	L115 not L71 not L59 not L113	(US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	ON	2022/08/12 07:06 PM

L155	73	L131 and L132 and L135 and L139	JPO; DERWENT; IBM_TDB) (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/12 07:06 PM
L156	12	L109 not L111 not L110	(US-PGPUB; USPAT)	OR	ON	ON	2022/08/12 07:06 PM
L157	12	L109 not L111 not L110	(US-PGPUB; USPAT)	OR	ON	ON	2022/08/12 08:13 PM
L158	2365	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing! fake))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/08/12 08:13 PM

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N124	20	rightquestion.as. (jacobsson near2 bjorn).in. (jacobsson near2 markus).in.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N125	37762	G06Q20/4014,40145.cpc. c. G06Q30/06.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N126	407	G06Q20/40145.cpc. and G06Q30/0601-0643.cpc. and ((checkout purchas\$3 buy\$3) with (online website (web adj site) web adj page))	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:21 PM
N127	17	G06Q20/40145.cpc. and G06Q20/4016.cpc. and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/27 10:22 PM
N141	962	(G06Q20/40145.cpc. G06Q20/4016.cpc.) and G06Q30/0601-0643.cpc.	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
N142	436130	(likeness! picture photograph image photo) near2 (user customer shopper buyer customer)	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
N143	1781	(biometric (retina near2 scan\$3) photograph video) with ((user customer consumer shopper buyer) near4 (living! alive! breathing!	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM

N144	108218	fake)) fraud\$6	(US-PGPUB; USPAT)	OR	ON	ON	2021/08/28 11:59 AM
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MJAKP001C3 PROPOSED EXAMINER'S AMENDMENT – 2022.08.12

1. (Cancelled)
2. (Proposed) A system, comprising:
 - one or more processors configured to:
 - ~~perform an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~store the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
 - render, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capture contextual information comprising location data usable to determine a physical location associated with the user; and
 - capture a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and
 - ~~render, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction;~~
 - and
 - facilitate a fraud detection analysis to determine whether to allow an [[the]] electronic transaction associated with the account holder ~~involving the account holder to~~ proceed based at least in part on:
 - the physical location associated with the user determined using the captured location data; and
 - an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera; and
 - a memory coupled to the one or more processors and configured to provide the processor with instructions.

3. (Previously presented) The system recited in claim 2, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Previously presented) The system recited in claim 2, wherein the icon represents a form of payment.
8. (Proposed) The system recited in claim 2, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
9. (Proposed) The system recited in claim 2, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
10. (Proposed) A method, comprising:
 - ~~performing an enrollment comprising receiving an image from an account holder, the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image in a data store, wherein the received image is associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;
 - subsequent to an interaction by a user with an icon rendered in the one or more interfaces:
 - capturing contextual information comprising location data usable to determine a physical location associated with the user; and
 - capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and
 - ~~rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and~~

~~facilitating a fraud detection analysis to determine~~ determining whether to allow an ~~[[the]]~~ electronic transaction associated with the account holder ~~involving the account holder~~ to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.

11. (Previously presented) The method of claim 10, wherein the account holder comprises a recipient of the electronic transaction, and wherein the electronic transaction comprises a payment from the user to the account holder.
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Previously presented) The method of claim 10, wherein the icon represents a form of payment.
16. (Proposed) The method of claim 10, wherein the image comprises at least one of a photograph ~~[[and]]~~ or an avatar.
17. (Proposed) The method of claim 10, wherein the one or more interfaces are associated with at least one of a phone, a tablet device, ~~[[and]]~~ or a laptop.
18. (Proposed) A computer program product embodied in a non-transitory computer readable storage medium and comprising computer instructions for:
 - ~~performing an enrollment comprising receiving an image from an account holder;~~
 - ~~the image comprising a virtual likeness of a face selected by the account holder;~~
 - ~~storing the received image to be stored in a data store, wherein the received image is associated with an account of the account holder;~~
 - rendering, in one or more interfaces, a virtual likeness of a face associated with an account holder, wherein the virtual likeness of the face was selected by the account holder as part of an enrollment;

subsequent to an interaction by a user with an icon rendered in the one or more interfaces:

capturing contextual information comprising location data usable to determine a physical location associated with the user; and

capturing a set of biometric information, wherein capturing the set of biometric information comprises capturing, using a camera, a set of images; and rendering, in the one or more interfaces, the virtual likeness of the face selected by the account holder, wherein the account holder is involved in an electronic transaction; and

facilitating a fraud detection analysis to determine whether ~~determining where to~~ allow ~~[[the]]~~ an electronic transaction associated with the account holder involving the account holder to proceed based at least in part on:

the physical location associated with the user determined using the captured location data; and

an analysis of the set of captured biometric information comprising a determination of whether the user is alive based at least in part on an analysis of the set of images captured using the camera.

19. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

20. (Previously presented) The system recited in claim 2, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

21. (Previously presented) The system recited in claim 2, wherein the set of images comprises a plurality of images successively captured using the camera.

22. (Previously presented) The system recited in claim 2, wherein the set of captured biometric information further comprises an audio sample.

23. (Proposed) The system recited in claim 22, wherein facilitating the fraud detection analysis to determine ~~the determination of whether the electronic transaction~~ associated with the

account holder ~~involving the account holder~~ is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

24. (Previously presented) The system recited in claim 23, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

25. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a face is detected in the captured set of images.

26. (New) The method of claim 10, wherein the analysis of the set of images captured using the camera further comprises determining whether a threshold amount of flesh tone is present in the captured set of images.

27. (New) The method of claim 10, wherein the set of images comprises a plurality of images successively captured using the camera.

28. (New) The method of claim 10, wherein the set of captured biometric information further comprises an audio sample.

29. (New) The method of claim 28, wherein facilitating the fraud detection analysis to determine whether the electronic transaction associated with the account holder is allowed to proceed is further based at least in part on a determination of whether the audio sample matches a previously recorded voice sample.

30. (New) The method of claim 29, wherein the determination of whether the audio sample matches the previously recorded voice sample is based at least in part on performing a Fast Fourier Transform.

Zimmerman, Matthew

From: George Cheng <gcheng@ip-patent.com>
Sent: Friday, August 12, 2022 4:50 PM
To: Zimmerman, Matthew
Subject: RE: MIAKP001C3 (App. No.: 16/893,237) Proposed Examiner's Amendment
Attachments: MIAKP001C3 Proposed Examiner's Amendment.docx

CAUTION: This email has originated from a source outside of USPTO. PLEASE CONSIDER THE SOURCE before responding, clicking on links, or opening attachments.

Examiner Zimmerman,

Please find attached an updated proposed examiner's amendment for Application No. 16/893,237.

Regards,
George

George Cheng

Van Pelt, Yi & James LLP
Intellectual Property Law
10050 N. Foothill Blvd., Suite 200
Cupertino, CA 95014
V: 408-207-4765
F: 408-973-2595
gcheng@ip-patent.com

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From: George Cheng
Sent: Friday, August 12, 2022 11:12 AM
To: matthew.zimmerman@uspto.gov
Subject: MIAKP001C3 (App. No.: 16/893,237) Proposed Examiner's Amendment

Examiner Zimmerman,

Please find attached a proposed examiner's amendment for Application No. 16/893,237. Applicant authorizes communication of this attached proposed examiner's amendment by this email. Please continue to send official correspondence via the email address associated with customer number 21912.

Regards,
George

George Cheng

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (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)

21912 7590 08/22/2022
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

Elaine Nguyen	(Typed or printed name)
/Elaine Nguyen/	(Signature)
November 11, 2022	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	5805

TITLE OF INVENTION: METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	~~SMALL~~ UNDISCOUNTED	~~\$600~~ \$1200	\$0.00	\$0.00	~~\$600~~ \$1200	11/22/2022

EXAMINER	ART UNIT	CLASS-SUBCLASS
ZIMMERMAN, MATTHEW E	3684	705-026820

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/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or 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 Van Pelt, Yi & James LLP

(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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

RightQuestion, LLC

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

Portola Valley, CA

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

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

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

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 50-0685

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

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

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

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

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

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

Authorized Signature /Yeu-Ting George Cheng/

Date November 11, 2022

Typed or printed name Yeu-Ting George Cheng

Registration No. 69408

Electronic Patent Application Fee Transmittal				
Application Number:		16893237		
Filing Date:		04-Jun-2020		
Title of Invention:		METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD		
First Named Inventor/Applicant Name:		Bjorn Markus Jakobsson		
Filer:		Yeu-Ting George Cheng/Elaine Nguyen		
Attorney Docket Number:		MJAKP001C3		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	1200	1200

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1200

Electronic Acknowledgement Receipt	
EFS ID:	47010746
Application Number:	16893237
International Application Number:	
Confirmation Number:	5805
Title of Invention:	METHOD, MEDIUM, AND SYSTEM FOR REDUCING FRAUD
First Named Inventor/Applicant Name:	Bjorn Markus Jakobsson
Customer Number:	21912
Filer:	Yeu-Ting George Cheng/Elaine Nguyen
Filer Authorized By:	Yeu-Ting George Cheng
Attorney Docket Number:	MJAKP001C3
Receipt Date:	11-NOV-2022
Filing Date:	04-JUN-2020
Time Stamp:	17:56:51
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$1200
RAM confirmation Number	E2022AAH57344280
Deposit Account	500685
Authorized User	Elaine Nguyen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)
37 CFR 1.20 (Post Issuance fees)
37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	MJAKP001C3_IF_Transmittal.pdf	1513161	no	1
			2b832f76602b2be12dc9cc4ef32fc6b5fa67a4e6		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	38165	no	2
			3c57c9bf4a65fae6b86db44bdd64637ffdcd160a		

Warnings:

Information:

Total Files Size (in bytes):	1551326
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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



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www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/893,237	12/13/2022	11526886	MJAKP001C3	5805

21912 7590 11/22/2022
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

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

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

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

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

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

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

Bjorn Markus Jakobsson, Portola Valley, CA;

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

RightQuestion, LLC, Portola Valley, CA;

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



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UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY.DOCKET NO./TITLE	REQUEST ID
16/893,237	06/04/2020	Bjorn Markus Jakobsson	MJAKP001C3	181530

Acknowledgement of Loss of Entitlement to Entity Status Discount

The entity status change request below filed through Private PAIR on 01/06/2023 has been accepted.

CERTIFICATIONS:

Change of Entity Status:

☒ Applicant changing to regular undiscounted fee status.

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

This portion must be completed by the signatory or signatories making the entity status change in accordance with 37 CFR 1.4(d)(4).

Signature:	/Yeu-Ting George Cheng/
Name:	Yeu-Ting George Cheng
Registration Number:	69408

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
---	---

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

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

DOCKET NO. 1:23-cv-00324	DATE FILED 3/24/2023	U.S. DISTRICT COURT Western District of Texas, Austin Division
PLAINTIFF Carbyne Biometrics, LLC		DEFENDANT Apple Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 10,929,512	2/23/2021	Carbyne Biometrics, LLC
2 11,475,105	10/10/2022	Carbyne Biometrics, LLC
3 11,514,138	11/29/2022	Carbyne Biometrics, LLC
4 9,972,010	5/15/2018	Carbyne Biometrics, LLC
5 10,713,656	7/14/2020	Carbyne Biometrics, LLC

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

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

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

DECISION/JUDGEMENT

CLERK PHILIP J. DEVLIN	(BY) DEPUTY CLERK <i>Con R</i>	DATE 03/28/2023
---------------------------	-----------------------------------	--------------------

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

ATTACHMENT TO FORM AO-120
REPORT ON THE FILING OR DETERMINATION OF AN ACTION
REGARDING A PATENT OR TRADEMARK
(Carbyne Biometrics, LLC v. Apple Inc.)

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
6 US 11,526,886	12/13/2022	Carbyne Biometrics, LLC