UNITED STATES
PATENT AND TRADEMARK OFFICE

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ACKNOWLEDGEMENT OF LOSS OF ENTITLEMENT TO ENTITY STATUS DISCOUNT

APPLICATION #	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET #	REQUEST ID
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	477597

The entity status change request below filed through Patent Center on 09/22/2025 has been accepted.

Certifications

APPLICANT CHANGING TO REGULAR UNDISCOUNTED FEE STATUS

Signature

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

Signature	Name	Registration #
/Farshad Farjami/	Farshad Farjami	41014

AMAZON-1002
(Part 1 of 3)
IPR2026-00471

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

106963 7590 04/23/2024
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
04/23/2024	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):

docketing@farjami.com
ffarjami@farjami.com
patent@headwaterllc.com

PTOL-90A (Rev. 04/07)

APPLICATION NO.	ISSUE DATE	PATENT NO.
17/867,585	23-Apr-2024	11966464

Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EGRANT NOTIFICATION

Your electronic patent grant (eGrant) is now available, which can be accessed via Patent Center at https://patentcenter.uspto.gov

The electronic patent grant is the official patent grant under 35 U.S.C. 153. For more information, please visit https://www.uspto.gov/electronicgrants

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	04/23/2024	11966464	RALEP025C1C1C1C1C1	5955

106963 7590 04/03/2024

Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

ISSUE NOTIFICATION

The projected patent number and issue date are specified above. The patent will issue electronically. The electronically issued patent is the official patent grant pursuant to 35 U.S.C. § 153. The patent may be accessed on or after the issue date through Patent Center at https://patentcenter.uspto.gov/. The patent will be available in both the public and the private sides of Patent Center. Further assistance in electronically accessing the patent, or about Patent Center, is available by calling the Patent Electronic Business Center at 1-888-217-9197.

The USPTO is implementing electronic patent issuance with a transition period, during which period the USPTO will mail a ceremonial paper copy of the electronic patent grant to the correspondence address of record. Additional copies of the patent (i.e., certified and presentation copies) may be ordered for a fee from the USPTO's Certified Copy Center at https://certifiedcopycenter.uspto.gov/index.html. The Certified Copy Center may be reached at (800)972-6382.

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 Center (https://patentcenter.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 PATENT CENTER site https://patentcenter.uspto.gov for additional inventors):

Gregory G. Raleigh, Tyler, TX;

APPLICANT(s) (Please see PATENT CENTER site https://patentcenter.uspto.gov for additional applicants):

Headwater Research LLC, Tyler, TX;

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17867585
	Filing Date	2022-07-18
	First Named Inventor	RALEIGH, GREGORY
	Art Unit	
	Examiner Name	NOT YET ASSIGNED
	Attorney Docket Number	P025C1C1C1C1C1

	64	7068600		2006-06-27	CAIN, Joseph Bibb	
	65	7069248		2006-06-27	HUBER, Adriano	
	66	7082422	B1	2006-07-25	Zirngibl et al.	
	67	7084775	B1	2006-08-01	Smith, Michael R.	
	68	7092696		2006-08-15	HOSAIN et al.	
	69	7095754	B2	2006-08-22	Benveniste, Mathilde	
	70	7102620	B2	2006-09-05	Harries, Andrew Stanely Guy et al.	
	71	7110753	B2	2006-09-19	Campen, Kenneth Brian	
Change(s) applied	72	7113780	B2	2006-09-26	Mckenna Daniel et al.	
to document, /J.E.B./ 1/23/2024	73	7113997		09/2006 ~~2012-09-26~~	Jayapalan, Jay et al.	
	74	7120133	B1	2006-10-10	Joo et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	17867585
	Filing Date	2022-07-18
	First Named Inventor	RALEIGH, GREGORY
	Art Unit	
	Examiner Name	NOT YET ASSIGNED
	Attorney Docket Number	RALEP025C1C1C1C1C1

	196	8112435	B2	2012-02-07	Epstein et al.	
	197	8116223		2012-02-14	TIAN, Dan et al.	
	198	8116749		2012-02-14	Proctor Jr., James Arthur et al.	
	199	8116781	B2	2012-02-14	Chen, Xixian et al.	
	200	8122128		2012-02-21	Burke, II, Robert M. et al.	
	201	8122249		2012-02-21	Falk, Rainer et al.	
	202	8125897	B2	2012-02-28	Ray et al.	
	203	8126123		2012-02-28	Cai, Yigang et al.	
	204	8126396	B2	2012-02-28	Bennett, James D.	
	205	8126476	B2	2012-02-28	Vardi, Yosef et al.	
Change(s) applied to document, /J.E.B./ 1/23/2024	206	8126722		02/2012 ~~2010-02-23~~	ROBB, Terence Alan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	17867585
	Filing Date	2022-07-18
	First Named Inventor	RALEIGH, GREGORY
	Art Unit	
	Examiner Name	NOT ASSIGNED YET
	Attorney Docket Number	P025C1C1C1C1C1

	67	20040137890	A1	2004-07-15	Kalke, Catherine	
	68	20040165596	A1	2004-08-26	Garcia et al.	
	69	20040167958	A1	2004-08-26	Stewart et al.	
	70	20040168052		2004-08-26	CLISHAM et al.	
	71	20040170191	A	2004-09-02	Guo et al.	
Change(s) applied to document, /J.E.B./ 1/23/2024	72	20040176104	A	09/2004 ~~1041-09-12~~	Arcens	
	73	20040176104	A1	2004-09-09	Arcens	
	74	20040198331		2004-10-07	COWARD et al.	
	75	20040203755		2004-10-14	BRUNET, Jeffrey et al.	
	76	20040203833	A	2004-10-14	Rathunde, Dale F. et al.	
	77	20040225561	A1	2004-11-11	Hertzberg et al.	

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ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**03/12/2024 08:08:13 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Evan Gunderman
PATENT CENTER #	64658155	AUTHORIZED BY	Michael Farjami
CUSTOMER #	106963	FILING DATE	07/18/2022
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	Gregory G. Raleigh

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
CARD / 5006	**E20243BK09486023**	**Evan Gunderman**

PRE-AUTHORIZED ACCOUNT	PRE-AUTHORIZED CATEGORY
500731	**37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.21 (Miscellaneous fees and charges)**

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
2501	UTILITY ISSUE FEE	480.00	1	480.00
			TOTAL AMOUNT:	**$480.00**

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

FARJAMI & FARJAMI LLP
AN INTELLECTUAL PROPERTY LAW FIRM

www.farjami.com

26522 La Alameda Avenue, Suite 360
Mission Viejo, California 92691
tel: (949) 282-1000
fax: (949) 282-1002

ELECTRONIC TRANSMISSION COVER SHEET

Date: March 12, 2024

To: United States Patent and Trademark Office
Examiner: Kaplan, Benjamin A.; Art Unit: 2434

Re: **Application Serial No.: 17/867,585**
Filing Date: 7/18/2022; First-Named Inventor: Raleigh
Attorney Docket No.: RALEP025C1C1C1C1C1

From: Farjami & Farjami LLP

Number of pages including the cover sheet: 5

Message:

Enclosed, please find the Issue Fee.

Credit Card payment in the amount of **$480.00** as the required Issue fee is hereby included with this filing.

Authorization is hereby given to the Commissioner to charge any fees associated with this communication or credit any overpayment to Deposit Account No. **50-0731**.

The documents accompanying this electronic transmission contain PRIVILEGED AND CONFIDENTIAL information intended only for use of the individual or entity named above. If you are not the intended recipient, disclosure, copying, distribution or use of the contents of this electronic transmission information is prohibited. If you have received this electronic transmission in error, please immediately notify us by telephone and return the original electronic transmission to us at the above address via U.S. Postal Service. We will reimburse you for all expenses incurred.

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**03/12/2024 08:08:13 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Evan Gunderman
PATENT CENTER #	64658155	FILING DATE	07/18/2022
CUSTOMER #	106963	FIRST NAMED INVENTOR	Gregory G. Raleigh
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Michael Farjami

Documents

TOTAL DOCUMENTS: 2

DOCUMENT		PAGES	DESCRIPTION	SIZE (KB)
RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24.pdf		5	-	334 KB
RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24-TRAN.LET.pdf	(1-1)	1	Transmittal Letter	33 KB
RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24-IFEE.pdf	(2-5)	4	Issue Fee Payment (PTO-85B)	309 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)

RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24.pdf	B92A593CFAF189D4BB7477366CFD7B1AD3684130961AEA7ACA53AC68A22FC96ADA597A7F4FBD6970DFFC9A61D72FD3D8DD1536F791C3073216E138B6BC0912CD
RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24-TRAN.LET.pdf	BEECD41412BFC7C5EC2A118ABF5EBB96935D2C7275B3E47C4B6FF8A23617A6F28B33A29F2C0B451BBCCEE562BBA708C0D01C0691A3BF516E6107F4068139412B
RALEP025C1C1C1C1C1_Issue_Fee_Mar_12_24-IFEE.pdf	266146D1BC0AA9FD2F733AB906650690DE4E010E0CADD534E97237E84B7BD9849F7BD1776FDD85777ADA0978664C51C75D518849538B287D5A72287C40F2BF87

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): **Raleigh**	Group Art Unit: 2434
Application Serial No.: **17/867,585**	Examiner: Kaplan, Benjamin A.
Filed: **7/18/2022**	Notice of Allowance: January 19, 2024
Title: **Security Techniques for Device Assisted Services**	

ISSUE FEE

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

Dear Sir/Madam:

Enclosed, please find the completed "Issue Fee Transmittal" form and a "**Payment by Credit Card**" in the amount of **$480.00** to cover the issue fee. The drawings filed in the present application have been accepted as formal drawings by the Examiner.

COMMENTS ON STATEMENTS OF REASONS FOR ALLOWANCE

The Applicant recognizes that in accordance with M.P.E.P. § 1302.14, the reasons for allowance provided by the Examiner do not necessarily include all of the reasons why the claims are allowed. The Applicant does not concede that the stated reasons for allowance are the only grounds for patentability of the allowed claims or that any element excluded from the Examiner's Reasons for Allowance is taught or suggested by the art of record.

Further, the Applicant does not concede that all of the elements identified by the Examiner are required to distinguish the prior art of record or to satisfy the requirements of 35 U.S.C. § 112. In addition, the Examiner does not assert, and the Applicant would not agree, that the stated reasons for allowance have any bearing on the patentability of claims in any other applications.

Each dependent claim stands on its own and is allowable based on its own elements or in combination with one or more elements recited in its base claim(s). The combination of elements need not include all of the elements identified in the stated reasons for allowance.

The Commissioner is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number **50-0731**.

An early issuance of the present application is respectfully requested.

Respectfully submitted,
Farjami & Farjami LLP

By: */Farshad Farjami/*
Farshad Farjami, Esq.
Reg. No. 41,014

FARJAMI & FARJAMI LLP
26522 La Alameda Ave., Ste. 360
Mission Viejo, CA 92691
Tel: (949) 282-1000
Fax: (949) 282-1002

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being filed via EFS in United States Patent and Trademark Office, on the date stated below.

March 12, 2024
Date

Evan C. Gunderman
Name

/evan c. gunderman/
Signature

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via the USPTO patent electronic filing system.

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 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. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

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

106963 7590 01/19/2024
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

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 the USPTO patent electronic filing system or by facsimile to (571) 273-2885, on the date below.

Evan C. Gunderman	(Typed or printed name)
/Evan C. Gunderman/	(Signature)
March 12, 2024	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

TITLE OF INVENTION: Security Techniques for Device Assisted Services

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0.00	$0.00	$480	04/19/2024

EXAMINER	ART UNIT	CLASS-SUBCLASS
KAPLAN, BENJAMIN A	2434	726-001000

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

1 Farjami & Farjami LLP
2
3

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

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document 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: Headwater Research LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Tyler, TX

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)

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

☒ Electronic Payment via the USPTO patent electronic filing system ❑ 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. 50-0731

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

❑ Applicant certifying micro entity status. See 37 CFR 1.29

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

❑ Applicant asserting small entity status. See 37 CFR 1.27

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

❑ Applicant changing to regular undiscounted fee status.

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

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

Authorized Signature /Farshad Farjami/ Date March 12, 2024

Typed or printed name Farshad Farjami Registration No. 41014

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

106963 7590 02/14/2024
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
02/14/2024	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):

docketing@farjami.com
ffarjami@farjami.com
patent@headwaterllc.com

PTOL-90A (Rev. 04/07)

Response to Rule 312 Communication	Application No.	Applicant(s)	
	17/867,585	Raleigh, Gregory G.	
	Examiner	Art Unit	AIA (FITF) Status
	BENJAMIN A KAPLAN	2434	No

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

1. ☑ The amendment filed on 22 January 2024 under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

b) ☑ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

f) ☐ not entered because the supplemental or corrected Application Data sheet (ADS)

☐ was not accompanied by a petition to accept an unintentionally delayed claim under 37 CFR 1.55 or 27 CFR 1.78;

☐ did not identify the information being changed in accordance with 37 CFR 1.76(c)(2);

☐ was not properly signed in accordance with 37 CFR 1.76(e) (or 37 CFR 1.33(b) for applications filed prior to September 16, 2012).

/BENJAMIN A KAPLAN/
Examiner, Art Unit 2434

OK TO ENTER: /B.A.K/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Raleigh, Gregory G.** Application Serial No.: **17/867,585** Filed: **7/18/2022** Title: **Security Techniques for Device Assisted Services**	Group Art Unit: 2434 Examiner: Kaplan, Benjamin A.

AMENDMENT AFTER NOTICE OF ALLOWANCE UNDER 37 CFR § 1.312

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

Dear Sir/Madam:

This Amendment is pursuant to 37 CFR § 1.312 after Notice of Allowance, January 19, 2024, in the above-referenced patent application.

FARJAMI & FARJAMI LLP
AN INTELLECTUAL PROPERTY LAW FIRM

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26522 La Alameda Avenue, Suite 360
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ELECTRONIC TRANSMISSION COVER SHEET

Date: January 22, 2024

To: United States Patent and Trademark Office
Examiner: Kaplan, Benjamin A.; Art Unit: 2434

Re: **Application Serial No.: 17/867,585**
Filing Date: 7/18/2022; First-Named Inventor: Raleigh
Attorney Docket No.: RALEP025C1C1C1C1C1

From: Farjami & Farjami LLP

Number of pages including the cover sheet: 7

Message:

Enclosed, please find the Amendment After Notice of Allowance, dated January 19, 2024.

Authorization is hereby given to the Commissioner to charge any fees associated with this communication or credit any overpayment to Deposit Account **50-0731**.

Thank you.

The documents accompanying this electronic transmission contain PRIVILEGED AND CONFIDENTIAL information intended only for use of the individual or entity named above. If you are not the intended recipient, disclosure, copying, distribution or use of the contents of this electronic transmission information is prohibited. If you have received this electronic transmission in error, please immediately notify us by telephone and return the original electronic transmission to us at the above address via U.S. Postal Service. We will reimburse you for all expenses incurred.

UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**01/22/2024 02:13:46 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Evan Gunderman
PATENT CENTER #	64035875	FILING DATE	07/18/2022
CUSTOMER #	106963	FIRST NAMED INVENTOR	Gregory G. Raleigh
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Michael Farjami

Documents

TOTAL DOCUMENTS: 2

DOCUMENT		PAGES	DESCRIPTION	SIZE (KB)
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24.pdf		7	-	60 KB
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24-TRAN.LET.pdf	(1-1)	1	Transmittal Letter	30 KB
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24-A.NA.pdf	(2-7)	6	Amendment after Notice of Allowance (Rule 312)	39 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24.pdf	C210FE2B3D088B08537366BF4EC30CD061EFBD10BF76B6BC1B485B12901DDA5348D9B347DA555B82964878474052E5AA6B639F00797EF4CF5F195DDACC0FEAD8
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24-TRAN.LET.pdf	E09E3CD3B0ACADEDCBD040C894B7F493E5212EE6C8F7A2695385E983B3D99F5B4BED82A609F36A24E6E98525EF3B561CB9D9ED9003EE2E618D3A2E6EE40DE791
RALEP025C1C1C1C1C1_Amendment_after_NOA_Jan_22_24-A.NA.pdf	B874E0E2B1E3623BC168E22E6F591D8C68AB5ADFBA5C3CD15603126ACF3726821BA7793E824AFDC73D112C7D3C24EC9785313EC9C828A6D0D9BDA8965077FD9A

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Raleigh, Gregory G.** Application Serial No.: **17/867,585** Filed: **7/18/2022** Title: **Security Techniques for Device Assisted Services**	Group Art Unit: 2434 Examiner: Kaplan, Benjamin A.

AMENDMENT AFTER NOTICE OF ALLOWANCE UNDER 37 CFR § 1.312

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

Dear Sir/Madam:

This Amendment is pursuant to 37 CFR § 1.312 after Notice of Allowance, January 19, 2024, in the above-referenced patent application.

In the Claims:

Claim 1 (Cancelled)

Claim 2 (Currently Amended): A method of operating a wireless end-user device having a secure modem, a secure execution environment and a secure memory partition, the method comprising:

establishing a connection between **[[a]]** **the** secure modem and a wireless network;

establishing, through the connection, a secure control channel between **[[a]]** **the** secure execution environment and a network service controller;

receiving, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

storing the one or more settings in **[[a]]** **the** secure memory partition accessible only from the secure execution environment; and

controlling the wireless end-user device using the one or more settings.

Claim 3 (Currently Amended): The method of claim 2, wherein the one or more settings are associated with a service plan for using a service provided by the wireless **[[cellular]]** network.

Claim 4 (Previously Presented): The method of claim 2, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 5 (Previously Presented): The method of claim 4, wherein the modem agent comprises a service measurement point for use of a service.

Claim 6 (Currently Amended): The method of claim 5, further comprising:

communicating, by the modem agent through **the** another secure control channel, a first report of the use of the service to the network service controller.

Claim 7 (Previously Presented): The method of claim 6, further comprising:

communicating, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 8 (Previously Presented): The method of claim 2, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 9 (Previously Presented): The method of claim 2, wherein the one or more settings include a network setting or a device management communication setting.

Claim 10 (Previously Presented): The method of claim 2, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 11 (Previously Presented): The method of claim 2, wherein the secure execution environment is implemented at least in part in a virtual machine.

Claim 12 (Currently Amended): A wireless end-user device comprising:

a secure modem;

a secure execution environment;

a secure memory partition; and

a processor configured to:

establish a connection between **[[a]]** **the** secure modem and a wireless network;

establish, through the connection, a secure control channel between **[[a]]** **the** secure execution environment and a network service controller;

receive, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

store the one or more settings in **[[a]]** **<u>the</u>** secure memory partition accessible only from the secure execution environment; and

control the wireless end-user device using the one or more settings.

Claim 13 (Currently Amended): The wireless end-user device of claim 12, wherein the one or more settings are associated with a service plan for using a service provided by the wireless **[[cellular]]** network.

Claim 14 (Previously Presented): The wireless end-user device of claim 12, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 15 (Previously Presented): The wireless end-user device of claim 14, wherein the modem agent comprises a service measurement point for use of a service.

Claim 16 (Currently Amended): The wireless end-user device of claim 15, wherein the processor is further configured to:

communicate, by the modem agent through **<u>the</u>** another secure control channel, a first report of the use of the service to the network service controller.

Claim 17 (Previously Presented): The wireless end-user device of claim 16, wherein the processor is further configured to:

communicate, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 18 (Previously Presented): The wireless end-user device of claim 12, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 19 (Previously Presented): The wireless end-user device of claim 12, wherein the one or more settings include a network setting or a device management communication setting.

Claim 20 (Previously Presented): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 21 (Previously Presented): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part in a virtual machine.

REMARKS

By the present amendment, Applicant amends claims 2, 3, 6, 12, 13 and 16 to correct a few clerical errors. Applicant respectfully submits that no new matter is added.

Respectfully Submitted,
FARJAMI & FARJAMI LLP

/Farshad Farjami/
Farshad Farjami
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CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being filed via EFS in United States Patent and Trademark Office, on the date stated below.

January 22, 2024
Date

Evan C. Gunderman
Name

/evan c. gunderman/
Signature

UNITED STATES PATENT AND TRADEMARK OFFICE

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

106963 7590 01/19/2024
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 01/19/2024

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

TITLE OF INVENTION: Security Techniques for Device Assisted Services

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0.00	$0.00	$480	04/19/2024

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 40% the amount of undiscounted fees, and micro entity fees are 20% the amount of undiscounted 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 the USPTO patent electronic filing system.

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 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. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

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

106963 7590 01/19/2024
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

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 the USPTO patent electronic filing system 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.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

TITLE OF INVENTION: Security Techniques for Device Assisted Services

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0.00	$0.00	$480	04/19/2024

EXAMINER	ART UNIT	CLASS-SUBCLASS
KAPLAN, BENJAMIN A	2434	726-001000

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

1_____
2_____
3_____

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

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document 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)

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

❑ Electronic Payment via the USPTO patent electronic filing system ❑ 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

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

❑ Applicant asserting small entity status. See 37 CFR 1.27

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

❑ Applicant changing to regular undiscounted fee status.

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

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

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

106963 7590 01/19/2024
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Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 01/19/2024

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. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/ owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013).
https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf

Routine uses of the information in this record may include disclosure to:

1) law enforcement, in the event that the system of records indicates a violation or potential violation of law;
2) a federal, state, local, or international agency, in response to its request;
3) a contractor of the USPTO having need for the information in order to perform a contract;
4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record;
5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record;
6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations;
7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals;
8) 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));
9) the Office of Personnel Management (OPM) for personnel research purposes; and
10) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

Notice of Allowability	Application No. 17/867,585	Applicant(s) Raleigh, Gregory G.	
	Examiner BENJAMIN A KAPLAN	Art Unit 2434	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 communications filed 14 December 2023.
   ☐ 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 2-21 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

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

   Certified copies:

   a) ☐ All b) ☐ Some* c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

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

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

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

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

Attachment(s)

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

/BENJAMIN A KAPLAN/
Examiner, Art Unit 2434

Notice of Pre-AIA or AIA Status

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

Allowable Subject Matter

With regards to Double Patenting on 14 December 2023 an eTerminal Disclaimer was filed and approved the outstanding issues of double patenting have been resolved.

The standing claims are viewed as allowable similarly to as found in the now terminally disclaimed Parent Applications

Claims 2-21 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN A KAPLAN whose telephone number is (571)270-3170. The examiner can normally be reached 9:00 a.m. - 5:00 p.m..

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, Kambiz Zand can be reached on (571)272-3811. 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.

/BENJAMIN A KAPLAN/
Examiner, Art Unit 2434

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC - Searched*		
Symbol	**Date**	**Examiner**
G06F 21/53 21/55 15/177 2221/2101 2221/2149 2221/2115	01/03/2024	BK
H04L 63/0428 67/63 67/55 9/32 9/3247 12/14 41/0806 41/0893 41/5003 41/5054 47/20 47/2408 51/046 63/0236 63/04 63/08 63/0853 63/0892 63/10 63/20 67/145 67/306 63/145 67/564 41/0876 41/5025 67/34	01/03/2024	BK
H04W 12/088 4/50 12/037 4/02 4/12 4/18 4/20 4/24 8/18 8/20 12/00 12/02 12/06 12/08 24/08 28/02 28/0215 28/0268 28/12 48/14 48/16 72/0453 88/08 8/02 84/04 84/042 84/12 88/06	01/03/2024	BK
G06Q 40/12 10/06315 10/06375 20/102 20/20 20/40 30/0207 30/0241 30/0283 30/0284 30/04 30/0601 40/00	01/03/2024	BK
H04M 15/00 15/58 15/61 15/80 15/88 2215/0188	01/03/2024	BK
Y02P 90/80	01/03/2024	BK

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
726	1	11/16/2023	BK

* 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**
PE2E, Google, Inventor Search, Assignee Search	11/16/2023	BK
Google Search Terms: service device partition das policy	11/16/2023	BK

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
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G06F	21/53 21/55 15/177 2221/2101 2221/2149 2221/2115	01/03/2024	BK
H04L	63/0428 67/63 67/55 9/32 9/3247 12/14 41/0806 41/0893 41/5003 41/5054 47/20 47/2408 51/046 63/0236 63/04 63/08 63/0853 63/0892 63/10 63/20 67/145 67/306 63/145 67/564 41/0876 41/5025 67/34	01/03/2024	BK
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Y02P	90/80	01/03/2024	BK

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC						
Symbol					**Type**	**Version**
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H04L	/	47	/	2408	I	2013-01-01

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20231224

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC

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H04W	/	28	/	12	I	2013-01-01

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

U.S. Patent and Trademark Office

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	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC

Symbol					Type	Version
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CPC Combination Sets

Symbol					Type	Set	Ranking	Version
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NONE		Total Claims Allowed:	
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/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434	03 January 2024	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	2	1

U.S. Patent and Trademark Office

Part of Paper No.: 20231224

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

INTERNATIONAL CLASSIFICATION				
CLAIMED				
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H04L47/2408	/	47	/	2408
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H04L67/145	/	67	/	145

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

U.S. Patent and Trademark Office

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Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

INTERNATIONAL CLASSIFICATION				
CLAIMED				
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H04W4/02	/	4	/	02
H04W4/12	/	4	/	12
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H04W8/18	/	8	/	18
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H04W48/14	/	48	/	14
H04W48/16	/	48	/	16
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H04W88/08	/	88	/	08

NON-CLAIMED				
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H04L67/00	/	67	/	00
H04W8/02	/	8	/	02
H04W84/04	/	84	/	04
H04W84/12	/	84	/	12
H04W88/06	/	88	/	06

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20231224

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
726	1

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

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

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	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

☐ 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
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NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/BENJAMIN A KAPLAN/ Examiner, Art Unit 2434 (Primary Examiner)	03 January 2024 (Date)	O.G. Print Claim(s) 2	O.G. Print Figure 1

U.S. Patent and Trademark Office Part of Paper No.: 20231224

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	1	16/034,362.app.	(US-PGPUB; USPAT)	AND	OFF	OFF	2019/06/24 12:14 AM
L2	2	(("20060026679") or ("20080127304")).PN.	(US-PGPUB; USPAT; USOCR)	AND	OFF	OFF	2019/06/24 01:34 AM
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L18	478	(Raleigh Gregory G).in.	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 04:57 AM
L19	395690	(G06Q40/12 H04M15/00 H04L12/14 H04L41/5054 H04L47/20 H04M15/88 H04W12/0017 G06Q10/06315 G06Q30/0601 H04L67/145 H04W8/18 H04W72/0453 H04L9/3247 H04L63/08 H04W8/20 H04M15/58	(US-PGPUB; USPAT)	OR	OFF	OFF	2020/01/06 05:48 AM

		H04M15/61 H04W88/08 H04L9/32 H04L41/0893 H04L67/306 G06Q10/06375 H04L67/327 H04W4/50 H04W12/02 H04W24/08 H04W28/02 H04W4/02 H04W4/18 H04W28/0215 H04L67/26 H04W12/08 H04W48/14 G06Q40/00 H04L41/5003 H04L63/0892 H04W4/12 G06Q30/0283 H04M15/80 G06Q20/102 G06Q30/0241 H04L63/0853 H04W4/20 H04W28/12 H04W48/16 H04W12/00 G06F15/177 G06Q30/04 H04L63/0428 H04L47/2408 H04L63/0236 H04W12/06 H04W28/0268 G06Q20/20 H04L41/0806 H04L51/046 H04L63/04 H04W4/24 G06Q30/0207 G06Q30/0284 H04L63/10 H04L63/20 G06Q20/40 H04W84/04 H04L67/2819 H04W88/06 Y02P90/86 H04L41/0876 H04L67/34 H04W84/042 H04W8/02 H04L41/5025 H04M2215/0188 H04W84/12).cpc.					
L20	127192	L19 @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 05:48 AM
L21	8602	secure environment service profile modem control link @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 06:17 AM
L22	91	secure environment service profile modem adj control link @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 06:17 AM

L26	1	16/907,887.app.	(US-PGPUB; USPAT)	AND	OFF	OFF	2021/06/19 07:19 PM
L27	1399069	(G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:06 PM

		H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L28	11927	(726/1).CCLS.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	ON	ON	2021/06/19 08:06 PM
L29	1404578	L27 L28	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:07 PM
L30	8608	secure environment service profile modem control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:09 PM
L31	3387	L29 L30	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:09 PM
L32	2265	secure service measurement environment profile modem control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:10 PM
L33	2	16/034,362.app.	(US-PGPUB; USPAT)	AND	OFF	OFF	2021/06/19 08:13 PM
L34	88	(Headwater Research).as.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:18 PM
L35	1035	(Raleigh Gregory G).in.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:18 PM
L36	201	("10285025"|"10326800"|"10492102"|"10582375"|"20010048738"|"20010053694"|"20020013844"|"20020022472"|"20020022483"|"20020049074"|"20020099848"|"20020116338"|"20020120370"|"20020120540"|"20020131404"|"20020138599"|"20020138601"|"20020154751"|"20020161601"|"20020164983"|"20020176377"|"20020188732"|"20020191573"|"20020199001"|"200	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		30004937"|"200300051 12"|"20030013434"|"20 030018524"|"20030028 623"|"20030046396"|"2 0030050070"|"2003005 0837"|"20030084321"|" 20030088671"|"200301 33408"|"20030134650"| "20030159030"|"20030 161265"|"20030171112 "|"20030182420"|"2003 0182435"|"2003018479 3"|"20030188006"|"200 30188117"|"200302209 84"|"20030224781"|"20 030229900"|"20030233 332"|"20030236745"|"2 0040019539"|"2004001 9564"|"20040021697"|" 20040024756"|"200400 30705"|"20040039792"| "20040044623"|"20040 047358"|"20040054779 "|"20040073672"|"2004 0082346"|"2004009871 5"|"20040102182"|"200 40103193"|"200401073 60"|"20040116140"|"20 040127200"|"20040127 208"|"20040127256"|"2 0040132427"|"2004013 3668"|"20040137890"|" 20040165596"|"200401 67958"|"20040168052"| "20040170191"|"20040 176104"|"20040198331 "|"20040203755"|"2004 0203833"|"2004022556 1"|"20040225898"|"200 40236547"|"200402436 80"|"20040243992"|"20 040249918"|"20040255 145"|"20040259534"|"2 0040260766"|"2004026 7872"|"20050007993"|" 20050009499"|"200500 21995"|"20050041617"| "20050048950"|"20050 055291"|"20050055309 "|"20050055595"|"2005 0060266"|"2005006052 5"|"20050075115"|"200 50079863"|"200500915 05"|"20050096024"|"20 050097516"|"20050107 091"|"20050108075"|"2 0050111463"|"2005012 8967"|"20050135264"|"				

		20050163320"|"200501 66043"|"20050183143"| "20050186948"|"20050 198377"|"20050216421 "|"20050228985"|"2005 0238046"|"2005023944 7"|"20050245241"|"200 50246282"|"200502505 08"|"20050250536"|"20 050254435"|"20050266 825"|"20050266880"|"2 0060014519"|"2006001 9632"|"20060020787"|" 20060026679"|"200600 30306"|"20060034256"| "20060035631"|"20060 040642"|"20060045245 "|"20060048223"|"2006 0068796"|"2006007245 1"|"20060072550"|"200 60072646"|"200600755 06"|"20060085543"|"20 060095517"|"20060098 627"|"20060099970"|"2 0060101507"|"2006011 2016"|"20060114821"|" 20060114832"|"200601 26562"|"20060135144"| "20060136882"|"20060 143066"|"20060143098 "|"20060156398"|"2006 0160536"|"2006016506 0"|"20060168128"|"200 60173959"|"200601740 35"|"20060178917"|"20 060178918"|"20060182 137"|"20060183462"|"2 0060190314"|"2006019 0987"|"20060193280"|" 20060199608"|"200602 00663"|"20060206709"| "20060206904"|"20060 218395"|"20060233108 "|"20060233166"|"2006 0236095"|"2006024268 5"|"20060258341"|"200 60274706"|"200602775 90"|"20060291419"|"20 060291477"|"20070005 795"|"20070019670"|"2 0070022289"|"2007002 5301"|"20070033194"|" 20070033197"|"200700 35390"|"20070036312"| "20070055694"|"20070 060200"|"20070061243 "|"20070061800"|"2007 0061878"|"2007007389					

		9"|"20070076616"|"20070093243"|"20070100981"|"20070101426"|"20070104126"|"20070104169"|"20070109983").PN.					
L37	200	("20070111740"|"20070130283"|"20070130315"|"20070140113"|"20070140145"|"20070140275"|"20070143824"|"20070147317"|"20070147324"|"20070155365"|"20070165630"|"20070168499"|"20070171856"|"20070174490"|"20070191006"|"20070192460"|"20070198656"|"20070201502"|"20070213054"|"20070220251"|"20070226225"|"20070226775"|"20070234402"|"20070243862"|"20070248100"|"20070254646"|"20070254675"|"20070255769"|"20070255797"|"20070255848"|"20070257767"|"20070259656"|"20070259673"|"20070263558"|"20070266422"|"20070274327"|"20070280453"|"20070282896"|"20070293191"|"20070294395"|"20070294410"|"20070297378"|"20070298764"|"20070299965"|"20070300252"|"20080005285"|"20080005561"|"20080010379"|"20080010452"|"20080018494"|"20080022354"|"20080025230"|"20080032715"|"20080034063"|"20080034419"|"20080039102"|"20080049630"|"20080050715"|"20080051076"|"20080052387"|"20080056273"|"20080059474"|"20080059743"|"20080060066"|"20080062900"|"20080064367"|"20080066149"|"20080066150"|"20080066181"|"20080070550"|"20080077705"|"20080080457"|"20080081606"|"20080082643"|"20080083013"|"20080085707"|	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		"20080089295"|"20080 089303"|"20080095339 "|"20080096559"|"2008 0098062"|"2008010967 9"|"20080120129"|"200 80120668"|"200801206 88"|"20080125079"|"20 080126287"|"20080127 304"|"20080130534"|"2 0080130656"|"2008013 2201"|"20080132268"|" 20080134330"|"200801 39210"|"20080147454"| "20080160958"|"20080 162637"|"20080162704 "|"20080164304"|"2008 0166993"|"2008016702 7"|"20080167033"|"200 80168275"|"200801685 23"|"20080177998"|"20 080178300"|"20080181 117"|"20080183812"|"2 0080184127"|"2008018 9760"|"20080201266"|" 20080207167"|"200802 12470"|"20080212751"| "20080219268"|"20080 221951"|"20080222692 "|"20080225748"|"2008 0229385"|"2008022938 8"|"20080235511"|"200 80240373"|"200802500 53"|"20080256593"|"20 080259924"|"20080262 798"|"20080263348"|"2 0080268813"|"2008027 0212"|"20080279216"|" 20080282319"|"200802 91872"|"20080293395"| "20080298230"|"20080 305793"|"20080311885 "|"20080313315"|"2008 0313730"|"2008031692 3"|"20080318547"|"200 80318550"|"200803198 79"|"20080320497"|"20 090005000"|"20090005 005"|"20090006116"|"2 0090006200"|"2009000 6229"|"20090013157"|" 20090016310"|"200900 17809"|"20090036111"| "20090042536"|"20090 044185"|"20090046707 "|"20090046723"|"2009 0047989"|"2009004891 3"|"20090049156"|"200 90049518"|"200900540					

		30"|"20090065571"|"20 090067372"|"20090068 984"|"20090070379"|"2 0090077622"|"2009007 9699"|"20090113514"|" 20090125619"|"200901 32860"|"20090149154"| "20090157792"|"20090 163173"|"20090172077 "|"20090180391"|"2009 0181662"|"2009019758 5"|"20090197612"|"200 90203352"|"200902170 65"|"20090217364"|"20 090219170"|"20090248 883"|"20090254857"|"2 0090257379"|"2009026 2715"|"20090271514"|" 20090282127"|"200902 86507"|"20090287921"| "20090288140"|"20090 291665"|"20090299857 "|"20090307696"|"2009 0307746"|"2009031573 5"|"20090320110"|"201 00017506"|"201000208 22"|"20100027469").PN .					
L38	249	("20100027559"|"20100 030890"|"20100041364 "|"20100041365"|"2010 0041391"|"2010004267 5"|"20100043068"|"201 00069074"|"201000710 53"|"20100075666"|"20 100077035"|"20100080 202"|"20100082431"|"2 0100088387"|"2010010 3820"|"20100113020"|" 20100121744"|"201001 31584"|"20100142478"| "20100144310"|"20100 151866"|"20100153781 "|"20100167696"|"2010 0188975"|"2010018899 0"|"20100188992"|"201 00188994"|"201001904 69"|"20100191576"|"20 100191612"|"20100191 846"|"20100192170"|"2 0100192212"|"2010019 5503"|"20100197268"|" 20100198698"|"201001 98939"|"20100235329"| "20100241544"|"20100 248719"|"20100284327 "|"20100284388"|"2010 0287599"|"2010031140	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		2"|"20100325420"|"201 10004917"|"201100135 69"|"20110019574"|"20 110081881"|"20110082 790"|"20110110309"|"2 0110126141"|"2011014 5920"|"20110159818"|" 20110173678"|"201101 77811"|"20110182220"| "20110185202"|"20110 244837"|"20110249668 "|"20110264923"|"2011 0277019"|"2012002029 6"|"20120144025"|"201 20166364"|"201201966 44"|"20120238287"|"20 130029653"|"20130058 274"|"20130065555"|"2 0130072177"|"2013008 4835"|"20130144789"|" 20130225151"|"201303 26356"|"20140073291"| "20140241342"|"20150 181628"|"5131020"|"52 83904"|"5325532"|"557 2528"|"5577100"|"5594 777"|"5617539"|"56301 59"|"5633484"|"563386 8"|"5754953"|"5774532" |"5794142"|"5814798"|" 5889477"|"5892900"|"5 903845"|"5915008"|"59 15226"|"5933778"|"594 0472"|"5974439"|"5983 270"|"6035281"|"60384 52"|"6038540"|"604726 8"|"6058434"|"6061571" |"6064878"|"6078953"|" 6081591"|"6098878"|"6 104700"|"6115823"|"61 19933"|"6125391"|"614 1565"|"6141686"|"6148 336"|"6154738"|"61576 36"|"6185576"|"619891 5"|"6219786"|"6226277" |"6246870"|"6263055"|" 6292828"|"6317584"|"6 370139"|"6381316"|"63 93014"|"6397259"|"640 1113"|"6418147"|"6438 575"|"6445777"|"64494 79"|"6466984"|"647767 0"|"6502131"|"6505114" |"6510152"|"6522629"|" 6532235"|"6532579"|"6 535855"|"6535949"|"65 39082"|"6542500"|"654 2992"|"6546016"|"6563					

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		65040"|"7167078"|"717 4156"|"7174174"|"7177 919"|"7180855"|"71810 17"|"7191248"|"719732 1"|"7200112"|"7200551" |"7203169"|"7203721"|" 7203752"|"7212491"|"7 219123"|"7222190"|"72 22304"|"7224968"|"722 8354"|"7236780"|"7242 668"|"7242920"|"72459 01"|"7248570"|"725121 8"|"7260382"|"7266371" |"7269157"|"7271765"|" 7272660"|"7280816"|"7 280818"|"7283561"|"72 83963"|"7286834"|"728 6848"|"7289489"|"7290 283"|"7310424"|"73132 37"|"7315892"|"731769 9"|"7318111"|"7320029" |"7322044"|"7324447"|" 7325037"|"7336960"|"7 340772"|"7346410"|"73 49695"|"7353533"|"735 6011"|"7356337"|"7366 497"|"7366654"|"73669 34"|"7369848"|"736985 6"|"7373136"|"7373179" |"7379731"|"7388950"|" 7389412"|"7391724"|"7 395056"|"7395244"|"74 01338"|"7403763"|"740 9447"|"7409569"|"7411 930"|"7418253"|"74182 57"|"7421004"|"742397 1"|"7428750"|"7433362" |"7436816"|"7440433"|" 7444669"|"7450591"|"7 450927"|"7454191"|"74 57265"|"7457870"|"746 0837"|"7466652"|"7467 160"|"7472189"|"74784 20"|"7486185"|"748665 8"|"7493659"|"7496652" |"7499438"|"7499537"|" 7502672"|"7505756"|"7 505795"|"7508799"|"75 12128"|"7512131"|"751 5608"|"7515926"|"7516 219"|"7522549"|"75225 76"|"7526541"|"752920 4"|"7535880"|"7536695" |"7539132"|"7539862"|" 7540408"|"7545782"|"7 546460"|"7546629"|"75 48875"|"7548976"|"755 1921"|"7551922"|"7554					

		983"|"7555757"|"75618 99"|"7562213"|"756479 9"|"7565141"|"7574509" |"7574731"|"7577431"|" 7580356"|"7580857"|"7 583964"|"7584298"|"75 85217"|"7586871"|"759 3417"|"7593730"|"7596 373"|"7599288"|"75997 14"|"7602746"|"760691 8"|"7607041"|"7609650" |"7609700"|"7610047"|" 7610057"|"7610328"|"7 610396"|"7614051"|"76 16962"|"7617516"|"762 0041"|"7620065"|"7620 162"|"7620383"|"76273 14"|"7627600"|"762776 7"|"7627872"|"7633438" |"7634388"|"7636574"|" 7636626"|"7643411"|"7 644151"|"7644267"|"76 44414"|"7647047"|"765 0137"|"7653394"|"7656 271"|"7657920"|"76604 19"|"7661124"|"766449 4"|"7668176"|"7668612" |"7668903"|"7668966"|" 7676673"|"7680086"|"7 681226"|"7684370"|"76 85131"|"7685254"|"768 5530"|"7688792"|"7693 107"|"7693720"|"76975 40"|"7710932"|"771184 8"|"7719966"|"7720206" |"7720464"|"7720505"|" 7720960"|"7721296"|"7 724716"|"7725570"|"77 29326"|"7730123"|"773 4784"|"7742406"|"7746 854"|"7747240"|"77476 99"|"7747730"|"775233 0"|"7756056"|"7756534" |"7756757"|"7760137"|" 7760711"|"7760861"|"7 765294"|"7769397"|"77 70785"|"7774323"|"777 4412"|"7774456"|"7778 176"|"7778643"|"77922 57"|"7792538"|"779270 8"|"7797019"|"7797060" |"7797204"|"7797401"|" 7801523"|"7801783"|"7 801985"|"7802724"|"78 05140"|"7805522"|"780 5606"|"7809351"|"7809 372"|"7813746"|"78176 15"|"7817983"|"782283					

		7"|"7822849"|"7826427" |"7826607"|"7835275"|" 7843831"|"7843843"|"7 844034"|"7844728"|"78 48768"|"7849161").PN.					
L40	280	("7849170"|"7849477"|" 7853255"|"7853656"|"7 856226"|"7860088"|"78 65182"|"7865187"|"786 8778"|"7873001"|"7873 344"|"7873346"|"78735 40"|"7873705"|"787709 0"|"7881199"|"7881697" |"7882029"|"7882247"|" 7882560"|"7886047"|"7 889384"|"7890084"|"78 90111"|"7894431"|"789 9039"|"7899438"|"7903 553"|"7907970"|"79083 58"|"7911975"|"791202 5"|"7912056"|"7920529" |"7921463"|"7925740"|" 7925778"|"7929959"|"7 929960"|"7929973"|"79 30327"|"7930446"|"793 0553"|"7933274"|"7936 736"|"7937069"|"79374 50"|"7940685"|"794075 1"|"7941184"|"7944948" |"7945238"|"7945240"|" 7945945"|"7948952"|"7 948953"|"7948968"|"79 49529"|"7953808"|"795 3877"|"7957020"|"7957 381"|"7957511"|"79580 29"|"7962622"|"796598 3"|"7966405"|"7969950" |"7970350"|"7970426"|" 7974624"|"7975184"|"7 978627"|"7978686"|"79 79069"|"7979889"|"797 9896"|"7984130"|"7984 511"|"7986935"|"79874 96"|"7987510"|"799004 9"|"8000276"|"8000318" |"8005009"|"8005459"|" 8005726"|"8005913"|"8 005988"|"8010080"|"80 10081"|"8010082"|"801 0990"|"8015133"|"8015 234"|"8015249"|"80196 87"|"8019820"|"801984 6"|"8019868"|"8019886" |"8023425"|"8024397"|" 8024424"|"8027339"|"8 031601"|"8032168"|"80 32409"|"8032899"|"803 6387"|"8036600"|"8044	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		792"|"8045973"|"80464 49"|"8050275"|"805069 0"|"8050705"|"8059530" |"8060017"|"8060463"|" 8060603"|"8064418"|"8 064896"|"8065365"|"80 68824"|"8068829"|"807 3427"|"8073721"|"8078 140"|"8078163"|"80858 08"|"8086398"|"808649 7"|"8086791"|"8090359" |"8090361"|"8090616"|" 8091087"|"8094551"|"8 095112"|"8095124"|"80 95640"|"8095666"|"809 8579"|"8099077"|"8099 517"|"8102814"|"81032 85"|"8104080"|"810795 3"|"8108520"|"8108680" |"8112435"|"8116223"|" 8116749"|"8116781"|"8 122128"|"8122249"|"81 25897"|"8126123"|"812 6396"|"8126476"|"8126 722"|"8130793"|"81312 56"|"8131281"|"813184 0"|"8131858"|"8132256" |"8134954"|"8135388"|" 8135392"|"8135657"|"8 140690"|"8144591"|"81 45194"|"8146142"|"814 9748"|"8149823"|"8150 394"|"8150431"|"81512 05"|"8155155"|"815562 0"|"8155666"|"8155670" |"8156206"|"8159520"|" 8160015"|"8160056"|"8 160598"|"8165576"|"81 66040"|"8166554"|"817 0553"|"8174378"|"8174 970"|"8175574"|"81803 33"|"8180881"|"818088 6"|"8184530"|"8184590" |"8185088"|"8185093"|" 8185127"|"8185152"|"8 185158"|"8190087"|"81 90122"|"8190675"|"819 1106"|"8191116"|"8191 124"|"8194549"|"81945 53"|"8194572"|"819458 1"|"8195093"|"8195153" |"8195163"|"8195661"|" 8196199"|"8200163"|"8 200200"|"8200509"|"82 00775"|"8200818"|"820 4190"|"8204505"|"8208 788"|"8208919"|"82132 96"|"8213363"|"821453					

		6"|"8214890"|"8219134" |"8223655"|"8223741"|" 8224382"|"8224773"|"8 228818"|"8229394"|"82 29914"|"8233433"|"823 3883"|"8233895"|"8234 583"|"8238287"|"82389 13"|"8239520"|"824295 9"|"8244241"|"8249601" |"8254880"|"8254915"|" 8255515"|"8255534"|"8 255689"|"8259692"|"82 60252"|"8264965"|"826 5004"|"8266249"|"8266 681"|"8270955"|"82709 72"|"8271025"|"827104 5"|"8271049"|"8271992" |"8275415"|"8275830"|" 8279067"|"8279864"|"8 280354"|"8284740"|"82 85249"|"8285992").PN.					
L41	279	("8290820"|"8291238"|" 8291439"|"8296404"|"8 300575"|"8306518"|"83 06741"|"8307067"|"831 0943"|"8315198"|"8315 593"|"8315594"|"83157 18"|"8315999"|"832024 4"|"8320949"|"8325638" |"8325906"|"8326319"|" 8326828"|"8331223"|"8 331293"|"8332375"|"83 39991"|"8340625"|"834 0628"|"8340678"|"8340 718"|"8346210"|"83462 25"|"8346923"|"834710 4"|"8347362"|"8347378" |"8350700"|"8351592"|" 8351898"|"8352360"|"8 352980"|"8353001"|"83 55570"|"8355696"|"835 6336"|"8358638"|"8358 975"|"8363658"|"83637 99"|"8364089"|"836480 6"|"8369274"|"8370477" |"8370483"|"8374090"|" 8374592"|"8375128"|"8 375136"|"8380247"|"83 85199"|"8385896"|"838 5964"|"8385975"|"8386 386"|"8391262"|"83918 34"|"8392982"|"839645 8"|"8396929"|"8401968" |"8402165"|"8402540"|" 8406427"|"8406736"|"8 407763"|"8411587"|"84 11691"|"8412798"|"841 3245"|"8418168"|"8422	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		988"|"8423016"|"84294 03"|"8437734"|"844201 5"|"8446831"|"8447324" |"8447607"|"8447980"|" 8448015"|"8452858"|"8 457603"|"8461958"|"84 63194"|"8463232"|"846 8337"|"8472371"|"8477 778"|"8478840"|"84830 57"|"8483135"|"848369 4"|"8484327"|"8488597" |"8489110"|"8489720"|" 8494559"|"8495181"|"8 495207"|"8495227"|"84 95360"|"8495700"|"849 5743"|"8499087"|"8500 533"|"8503358"|"85034 55"|"8504032"|"850457 4"|"8504687"|"8504690" |"8504729"|"8505073"|" 8509082"|"8514927"|"8 516552"|"8520589"|"85 20595"|"8521110"|"852 1775"|"8522039"|"8522 249"|"8522337"|"85235 47"|"8526329"|"852635 0"|"8527013"|"8527410" |"8527662"|"8528068"|" 8531954"|"8531995"|"8 532610"|"8533775"|"85 35160"|"8538394"|"853 8421"|"8538458"|"8539 544"|"8543265"|"85438 14"|"8544105"|"854842 7"|"8549173"|"8554876" |"8559369"|"8561138"|" 8565746"|"8566236"|"8 571474"|"8571501"|"85 71598"|"8571993"|"857 2117"|"8572256"|"8583 499"|"8588240"|"85899 55"|"8594665"|"859518 6"|"8600895"|"8601125" |"8605691"|"8615507"|" 8619735"|"8620257"|"8 630925"|"8631428"|"86 34425"|"8635164"|"863 9215"|"8644702"|"8644 813"|"8645518"|"86553 57"|"8656472"|"866085 3"|"8666395"|"8667542" |"8670334"|"8675852"|" 8676682"|"8676925"|"8 693323"|"8694772"|"87 00729"|"8701015"|"870 5361"|"8706863"|"8713 535"|"8713641"|"87193 97"|"8719423"|"872448					

		6"|"8725899"|"8730842"|"8731519"|"8732808"|"8739035"|"8744339"|"8761711"|"8780857"|"8787249"|"8792857"|"8793304"|"8798610"|"8799440"|"8804695"|"8811338"|"8811991"|"8818394"|"8819253"|"8825109"|"8826411"|"8831561"|"8838752"|"8843849"|"8845415"|"8849297"|"8855620"|"8862751"|"8863111"|"8875042"|"8880047"|"8891483"|"8898748"|"8908516"|"8929374"|"8930238"|"8930551"|"8943551"|"8948726"|"8949382"|"8949597"|"8955038"|"8966018"|"8971912"|"8977284"|"8995952"|"9002342"|"9014973"|"9015331"|"9026100"|"9030934"|"9049010"|"9064275"|"9105031"|"9111088"|"9137286"|"9172553"|"9177455"|"9282460"|"9286469"|"9286604"|"9313708"|"9325737"|"9326173"|"9344557"|"9363285"|"9367680"|"9413546"|"9418381"|"9459767"|"9501803"|"9544397"|"9589117"|"9609459"|"9712476"|"9942796"|"9986413"|"RE44412").PN.					
L42	1489	L37 L38 L39 L40 L41 L36	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:21 PM
L43	91	secure environment service profile modem adj control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:35 PM
L44	4392	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 09:28 PM
L45	2037	L27 L44	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 09:28 PM
L46	97	(Headwater Research).as.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY,	AND	OFF	OFF	2022/03/11 05:12 PM

			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)				
L47	1424	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2022/03/11 05:12 PM
L48	2348063	(G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08	(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	OFF	OFF	2022/03/11 06:38 PM

		H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L49	137	secure environment service profile modem ADJ control link @ad<"20090213"	(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)	AND	OFF	OFF	2022/03/11 06:39 PM
L50	10163	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA,	AND	OFF	OFF	2022/03/11 06:39 PM

			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)				
L51	4775	L48 L50	(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)	AND	OFF	OFF	2022/03/11 06:39 PM
L54	5	("10021251" "8630630" "9204282" "20080120174" "20120011017").pn.	(US-PGPUB; USPAT)	OR	OFF	OFF	2022/03/11 06:41 PM
L55	2354126	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2022/03/11 06:49 PM

		H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L56	609350	secure environment @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:09 PM
L59	344	(secure ADJ memory) environment service	(US-PGPUB; USPAT; USOCR; FIT (AP, AT,	AND	OFF	OFF	2022/03/11 08:10 PM

		profile policy monitor @ad<"20090213"	AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L60	219	L48 l59	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:16 PM
L61	1076	(secure ADJ (memory OR storage)) environment service profile polic$3 monitor$3 @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:21 PM
L62	548	L48 L61	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE,	AND	OFF	OFF	2022/03/11 08:21 PM

			SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L63	2651431	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2023/06/03 07:56 AM

		H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L64	132	(Headwater Research).as.	(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)	AND	OFF	OFF	2023/06/03 07:56 AM
L65	1505	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2023/06/03 07:56 AM
L66	131	L64 L65	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN,	AND	OFF	OFF	2023/06/03 07:56 AM

			WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L67	4394	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/06/03 07:57 AM
L68	2714674	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2023/11/16 09:09 PM

		H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L69	139	(Headwater Research).as.	(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)	AND	OFF	OFF	2023/11/16 09:09 PM
L70	1516	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2023/11/16 09:09 PM
L71	4395	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/16 09:09 PM
L72	1081	(secure ADJ (memory OR storage)) environment service profile polic$3 monitor$3 @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB,	AND	OFF	OFF	2023/11/16 09:09 PM

			HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L73	10268	wireless cellular network secure control channel policy @ad<"20090213"	(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)	AND	OFF	OFF	2023/11/16 09:09 PM
L74	618839	secure environment @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/16 09:10 PM
L75	56201	L68 L74	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT;	AND	OFF	OFF	2023/11/16 09:10 PM

			IBM_TDB)				
L76	138	secure environment service profile modem ADJ control link @ad<"20090213"	(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)	AND	OFF	OFF	2023/11/16 09:11 PM
L78	2714674	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2023/11/18 01:17 PM

		H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L79	139	(Headwater Research).as.	(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)	AND	OFF	OFF	2023/11/18 01:17 PM
L80	1516	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2023/11/18 01:17 PM

L81	618839	secure environment @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/18 01:17 PM
L82	346	(secure ADJ memory) environment service profile policy monitor @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/18 01:17 PM
L83	220	L82 L78	(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)	AND	ON	ON	2023/11/18 01:17 PM
L84	140	(Headwater Research).as.	(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,	AND	OFF	OFF	2024/01/02 09:33 PM

			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)				
L85	1517	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2024/01/02 09:34 PM
L86	2740218	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2024/01/02 09:34 PM

		H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L87	6750	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2024/01/02 09:34 PM

		H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L88	7596	726/1.ccls. (G06F21/53 G06F21/55 G06F15/177 G06F2221/2101 G06F2221/2149 G06F2221/2115 H04L63/0428 H04L67/63 H04L67/55 H04L9/32 H04L9/3247 H04L12/14 H04L41/0806 H04L41/0893 H04L41/5003 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/08 H04L63/0853	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2024/01/03 06:30 AM

		H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/306 H04L63/145 H04L67/564 H04L41/0876 H04L41/5025 H04L67/34 H04W12/088 H04W4/50 H04W12/037 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W8/18 H04W8/20 H04W12/00 H04W12/02 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W48/14 H04W48/16 H04W72/0453 H04W88/08 H04W8/02 H04W84/04 H04W84/042 H04W84/12 H04W88/06 G06Q40/12 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 H04M15/00 H04M15/58 H04M15/61 H04M15/80 H04M15/88 H04M2215/0188 Y02P90/80).cpc.					
L89	2864130	726/1.ccls. (G06F21/53 G06F21/55 G06F15/177 G06F2221/2101 G06F2221/2149 G06F2221/2115 H04L63/0428 H04L67/63 H04L67/55 H04L9/32 H04L9/3247 H04L12/14	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL,	OR	OFF	OFF	2024/01/03 06:30 AM

		H04L41/0806 H04L41/0893 H04L41/5003 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/306 H04L63/145 H04L67/564 H04L41/0876 H04L41/5025 H04L67/34 H04W12/088 H04W4/50 H04W12/037 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W8/18 H04W8/20 H04W12/00 H04W12/02 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W48/14 H04W48/16 H04W72/0453 H04W88/08 H04W8/02 H04W84/04 H04W84/042 H04W84/12 H04W88/06 G06Q40/12 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 H04M15/00 H04M15/58 H04M15/61 H04M15/80 H04M15/88 H04M2215/0188 Y02P90/80).cpc.	PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N23	3076	(726/1).CCLS.	(USPAT)	AND	ON	ON	2020/01/06 05:55 AM
N24	163754	(G06Q40/12 H04M15/00 H04L12/14 H04L41/5054 H04L47/20 H04M15/88 H04W12/0017 G06Q10/06315 G06Q30/0601 H04L67/145 H04W8/18 H04W72/0453 H04L9/3247 H04L63/08 H04W8/20 H04M15/58 H04M15/61 H04W88/08 H04L9/32 H04L41/0893 H04L67/306 G06Q10/06375 H04L67/327 H04W4/50 H04W12/02 H04W24/08 H04W28/02 H04W4/02 H04W4/18 H04W28/0215 H04L67/26 H04W12/08 H04W48/14 G06Q40/00 H04L41/5003 H04L63/0892 H04W4/12 G06Q30/0283 H04M15/80 G06Q20/102 G06Q30/0241 H04L63/0853 H04W4/20 H04W28/12 H04W48/16 H04W12/00 G06F15/177 G06Q30/04 H04L63/0428 H04L47/2408 H04L63/0236 H04W12/06 H04W28/0268 G06Q20/20 H04L41/0806 H04L51/046 H04L63/04 H04W4/24 G06Q30/0207 G06Q30/0284 H04L63/10 H04L63/20 G06Q20/40 H04W84/04 H04L67/2819 H04W88/06 Y02P90/86	(USPAT)	OR	OFF	OFF	2020/01/06 05:55 AM

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Bibliographic Data

Application No: 17/867,585

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /BENJAMIN A KAPLAN/ (Examiner's Signature) [ ] (Initials)

Title: Security Techniques for Device Assisted Services

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
07/18/2022 **RULE**	726	2434	

APPLICANTS

Headwater Research LLC, Tyler, TX,

INVENTORS

Gregory G. Raleigh, Tyler, TX, UNITED STATES

CONTINUING DATA

This application is a CON of 16907887 06/22/2020 PAT 11405429

16907887 is a CON of 16034362 07/13/2018 PAT 10694385

16034362 is a CON of 14948065 11/20/2015 PAT 10028144

14948065 is a CON of 13737748 01/09/2013 PAT 9198042

13737748 is a CON of 12694445 01/27/2010 PAT 8391834

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12380780 has PRO of 61207739 02/13/2009

12380780 has PRO of 61207393 02/10/2009

12380780 has PRO of 61206944 02/04/2009

12380780 has PRO of 61206354 01/28/2009

FOREIGN APPLICATIONS

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07/27/2022

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Raleigh, Gregory G.** Application Serial No.: **17/867,585** Filed: **7/18/2022** Title: **Security Techniques for Device Assisted Services**	Group Art Unit: 2434 Examiner: Kaplan, Benjamin A.

RESPONSE TO *FINAL* OFFICE ACTION

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

Dear Sir/Madam:

This is in response to the *Final* Office Action, dated November 24, 2023, in the above-referenced patent application. Please enter and consider the following remarks.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731.

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ELECTRONIC TRANSMISSION COVER SHEET

Date: December 14, 2023

To: United States Patent and Trademark Office
Examiner: Kaplan, Benjamin A.; Art Unit: 2434

Re: **Application Serial No.: 17/867,585**
Filing Date: 7/18/2022; First-Named Inventor: Raleigh
Attorney Docket No.: RALEP025C1C1C1C1C1

From: Farjami & Farjami LLP

Number of pages including the cover sheet: 8

Message:

Enclosed, please find the Response to Final Office Action, dated November 24, 2023.

Authorization is hereby given to the Commissioner to charge any fees associated with this communication or credit any overpayment to Deposit Account **50-0731**.

Thank you.

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UNITED STATES
PATENT AND TRADEMARK OFFICE

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**12/14/2023 07:33:14 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Evan Gunderman
PATENT CENTER #	63624168	FILING DATE	07/18/2022
CUSTOMER #	106963	FIRST NAMED INVENTOR	Gregory G. Raleigh
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Michael Farjami

Documents

TOTAL DOCUMENTS: 2

DOCUMENT		PAGES	DESCRIPTION	SIZE (KB)
RALEP025C1C1C1C1C1_Resp_To_Final_OA_Dec_14_23.pdf		8	-	63 KB
RALEP025C1C1C1C1C1_Resp_To_Final_OA_Dec_14_23-TRAN.LET.pdf	(1-1)	1	Transmittal Letter	30 KB
RALEP025C1C1C1C1C1_Resp_To_Final_OA_Dec_14_23-A.NE.pdf	(2-8)	7	Response After Final Action	45 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
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RALEP025C1C1C1C1C1_Resp_To_Final_OA_Dec_14_23-TRAN.LET.pdf	967B05D64623A6AB141FD99E93460DD837A72A9BA2D568440BD8EB8EF1F8D313A216DCA0F57F96BDB6B2478E540F3EDE85CD59C9F206EB1E2F6F8AA85FF74805
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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 filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

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

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

New International Application Filed with the USPTO as a Receiving Office

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Raleigh, Gregory G.** Application Serial No.: **17/867,585** Filed: **7/18/2022** Title: **Security Techniques for Device Assisted Services**	Group Art Unit: 2434 Examiner: Kaplan, Benjamin A.

RESPONSE TO *FINAL* OFFICE ACTION

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

Dear Sir/Madam:

This is in response to the *Final* Office Action, dated November 24, 2023, in the above-referenced patent application. Please enter and consider the following remarks.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731.

In the Claims:

Claim 1 (Cancelled)

Claim 2 (Previously Presented): A method of operating a wireless end-user device having a secure modem, a secure execution environment and a secure memory partition, the method comprising:

establishing a connection between a secure modem and a wireless network;

establishing, through the connection, a secure control channel between a secure execution environment and a network service controller;

receiving, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

storing the one or more settings in a secure memory partition accessible only from the secure execution environment; and

controlling the wireless end-user device using the one or more settings.

Claim 3 (Previously Presented): The method of claim 2, wherein the one or more settings are associated with a service plan for using a service provided by the wireless cellular network.

Claim 4 (Previously Presented): The method of claim 2, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 5 (Previously Presented): The method of claim 4, wherein the modem agent comprises a service measurement point for use of a service.

Claim 6 (Previously Presented): The method of claim 5, further comprising:

communicating, by the modem agent through another secure control channel, a first report of the use of the service to the network service controller.

Claim 7 (Previously Presented): The method of claim 6, further comprising:

communicating, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 8 (Previously Presented): The method of claim 2, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 9 (Previously Presented): The method of claim 2, wherein the one or more settings include a network setting or a device management communication setting.

Claim 10 (Previously Presented): The method of claim 2, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 11 (Previously Presented): The method of claim 2, wherein the secure execution environment is implemented at least in part in a virtual machine.

Claim 12 (Previously Presented): A wireless end-user device comprising:

a secure modem;

a secure execution environment;

a secure memory partition; and

a processor configured to:

establish a connection between a secure modem and a wireless network;

establish, through the connection, a secure control channel between a secure execution environment and a network service controller;

receive, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

store the one or more settings in a secure memory partition accessible only from the secure execution environment; and

control the wireless end-user device using the one or more settings.

Claim 13 (Previously Presented): The wireless end-user device of claim 12, wherein the one or more settings are associated with a service plan for using a service provided by the wireless cellular network.

Claim 14 (Previously Presented): The wireless end-user device of claim 12, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 15 (Previously Presented): The wireless end-user device of claim 14, wherein the modem agent comprises a service measurement point for use of a service.

Claim 16 (Previously Presented): The wireless end-user device of claim 15, wherein the processor is further configured to:

communicate, by the modem agent through another secure control channel, a first report of the use of the service to the network service controller.

Claim 17 (Previously Presented): The wireless end-user device of claim 16, wherein the processor is further configured to:

communicate, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 18 (Previously Presented): The wireless end-user device of claim 12, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 19 (Previously Presented): The wireless end-user device of claim 12, wherein the one or more settings include a network setting or a device management communication setting.

Claim 20 (Previously Presented): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 21 (Previously Presented): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part in a virtual machine.

REMARKS

The *Final* Office Action, dated November 24, 2023 ("Office Action"), rejected claims 2-21. By the present response, no claims are amended. Thus, after the present response, claims 2-21 remain pending in the present application. Applicant respectfully requests allowance of claims 2-21 in view of the following remarks.

A. Non-Statutory Obviousness-Type Double Patenting

The Office Action rejected claims 2-21 of the present application, under non-statutory obviousness-type double patenting, as being unpatentable over claims 1-12 of U.S. Patent No. 11,405,429, and claims 1-12 of U.S. Patent No. 10,694,385. Without acquiescing to the propriety of the rejection and to advance prosecution, Applicant submitted a terminal disclaimer electronically, on December 14, 2023, to overcome the rejection of claims of the present application, under non-statutory obviousness-type double patenting, with respect to claims 1-12 of U.S. Patent No. 11,405,429, and claims 1-12 of U.S. Patent No. 10,694,385. The terminal disclaimer was approved. Applicant respectfully submits that the Office Action's rejection, under non-statutory obviousness-type double patenting, is overcome.

B. Conclusion

Based on the foregoing reasons, Applicant respectfully requests allowance of claims 2-21 pending in the present application.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731.

Respectfully Submitted,
FARJAMI & FARJAMI LLP

/Farshad Farjami/
Farshad Farjami
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CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being filed via EFS in United States Patent and Trademark Office, on the date stated below.

December 14, 2023
Date

Evan C. Gunderman
Name

/evan c. gunderman/
Signature

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ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	12/14/2023 07:20:01 PM Z ET	RALEP025C1C1C1C1C1

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Farshad Farjami
PATENT CENTER #	63624031	AUTHORIZED BY	-
CUSTOMER #	106963	FILING DATE	07/18/2022
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	Gregory G. Raleigh

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
CARD / 5006	E2023BDJ21215300	Farshad Farjami

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
2814	STATUTORY DISCLAIMER, INCLUDING TERMINAL DISCLAIMER	170.00	1	170.00
			TOTAL AMOUNT:	$170.00

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

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TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION

APPLICATION #	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET #
17867585	07/18/2022	Gregory Raleigh	RALEP025C1C1C1C1C1

Title of Invention

Security Techniques for Device Assisted Services

- [x] Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action
- [x] This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
Headwater Research LLC	100%
Total	100%

The owner(s) of percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending reference Application Number(s)

Application #	Filing Date

as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the reference application are commonly owned. This agreement runs with any patent granted on the

instant application and is binding upon the grantee, its successors or assigns.
In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term of any patent granted on said reference application, "as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application," in the event that any such patent granted on the pending reference application: 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 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

The owner(s) of percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

Patent #
11405429
10694385

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.
In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent 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 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

✔ Terminal disclaimer fee under 37 CFR 1.20(d) included with Electronic Terminal Disclaimer request.

Applicant claims the following entity status:
Small

I hereby declare that all statements made herein of my own knowledge are true and that all statemnts made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I certify, in accordance with 37 CFR 1.4(d)(4) that I am: An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application

Signature	Name	Registration #
/Farshad Farjami/	Farshad Farjami	41014

* Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP 324.

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**12/14/2023 07:20:01 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

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CUSTOMER #	106963	FIRST NAMED INVENTOR	Gregory G. Raleigh
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	-

Documents

TOTAL DOCUMENTS: 2

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
petition-request.pdf	3	Terminal Disclaimer-Filed (Electronic)	49 KB
grantLetter.pdf	1	Terminal Disclaimer-Electronic-Approved	19 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
petition-request.pdf	E0DBB375BB93EA880EEC429C7144F444CF0CE5BE374A288F64D3FCCBAC2F25FE7ABF4A92C4DCE3878155BE1CC99DF0918

	36855EA2D94E6C5D61D18D4206144FF
grantLetter.pdf	296026BF05F7DD3B970B4B696528190D4A27535EEE2BE2C06088BC13A61238A0B2E47A98B56094E13C00350BFD744486C3F4E7548729498FFF0FE6C91913B6DD

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New International Application Filed with the USPTO as a Receiving Office

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Commissioner for Patents
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APPROVAL LETTER

APPLICATION #	FILING DATE	APPLICANT/PATENT UNDER REEXAMINATION
17/867,585	07/18/2022	Gregory Raleigh

Title of Invention

Security Techniques for Device Assisted Services

Electronic terminal disclaimer filed on 12/14/2023

☑ Approved

This patent is subject to a Terminal Disclaimer

Approved / Disapproved by: Electronic Terminal Disclaimer automatically approved

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 17/867,585	Filing Date 07/18/2022	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $240 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

AMENDMENT	12/14/2023	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		x $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $192 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $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".	/TARA J WITCHER/
*** 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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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1

CONFIRMATION NO. 5955

POA ACCEPTANCE LETTER

OC000000065730686

106963
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

Date Mailed: 12/13/2023

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 12/07/2023.

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**.

/qnguyen/

FARJAMI & FARJAMI LLP
AN INTELLECTUAL PROPERTY LAW FIRM

www.farjami.com

26522 La Alameda Avenue, Suite 360
Mission Viejo, California 92691
tel: (949) 282-1000
fax: (949) 282-1002

ELECTRONIC TRANSMISSION COVER SHEET

Date: December 7, 2023

To: United States Patent and Trademark Office
Examiner: Kaplan, Benjamin A.; Art Unit: 2434

Re: **Application Serial No.: 17/867,585**
Filing Date: 7/18/2022; First-Named Inventor: Raleigh
Attorney Docket No.: RALEP025C1C1C1C1C1

From: Farjami & Farjami LLP

Number of pages including the cover sheet: 3

Message:

Enclosed, please find:

1. Transmittal for Power of Attorney (Form PTO/SB/80); and
2. Power of Attorney Document (Form PTO/AIA/82A).

Authorization is hereby given to the Commissioner to charge any fees associated with this communication or credit any overpayment to Deposit Account **50-0731**.

Thank you.

The documents accompanying this electronic transmission contain PRIVILEGED AND CONFIDENTIAL information intended only for use of the individual or entity named above. If you are not the intended recipient, disclosure, copying, distribution or use of the contents of this electronic transmission information is prohibited. If you have received this electronic transmission in error, please immediately notify us by telephone and return the original electronic transmission to us at the above address via U.S. Postal Service. We will reimburse you for all expenses incurred.

PTO/SB/80 (11-08)
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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

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

I hereby appoint:

☑ Practitioners associated with the Customer Number: 106963

OR

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

Name	Registration Number	Name	Registration Number

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

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

☑ The address associated with Customer Number: 106963

OR

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

Assignee Name and Address:

Headwater Research LLC
110 North College Avenue, Suite 1116
Tyler, TX 75702

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

SIGNATURE of Assignee of Record

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

Signature		Date	May 20, 2022
Name	Gregory G. Raleigh	Telephone	(650) 740-4781
Title	Lead Director, Headwater Research LLC		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

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

PTO/AIA/82A (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

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

Application Number	17/867,585
Filing Date	7/18/2022
First Named Inventor	Raleigh
Title	Security Techniques for Device Assisted Services
Art Unit	2434
Examiner Name	Kaplan, Benjamin A.
Attorney Docket Number	RALEP025C1C1C1C1C1

SIGNATURE of Applicant or Patent Practitioner

Signature	/Farshad Farjami/	Date (Optional)	12/7/2023
Name	Farshad Farjami	Registration Number	41014
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 _____ 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.**

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UNITED STATES
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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
17/867,585	**12/07/2023 01:56:15 PM Z ET**	**RALEP025C1C1C1C1C1**

Title of Invention

Security Techniques for Device Assisted Services

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	5955	FILED BY	Evan Gunderman
PATENT CENTER #	63528052	FILING DATE	07/18/2022
CUSTOMER #	106963	FIRST NAMED INVENTOR	Gregory G. Raleigh
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	Michael Farjami

Documents

TOTAL DOCUMENTS: 2

DOCUMENT		PAGES	DESCRIPTION	SIZE (KB)
RALEP025C1C1C1C1C1_POA_Dec_7_23.pdf		3	-	897 KB
RALEP025C1C1C1C1C1_POA_Dec_7_23-TRAN.LET.pdf	(1-1)	1	Transmittal Letter	28 KB
RALEP025C1C1C1C1C1_POA_Dec_7_23-PA...pdf	(2-3)	2	Power of Attorney	864 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)

RALEP025C1C1C1C1C1_POA_Dec_7_23.pdf	4E199A4D9C9F7814982383437F2AF44253170785160941E16623AD069F92CA24A8710A98EC413D394A079617729B357FA6418797AC752CC6C38486D412AC0E25
RALEP025C1C1C1C1C1_POA_Dec_7_23-TRAN.LET.pdf	904071D88A4AF8086DDA7199806182FCED0F240AD36914466008AE112DA9F41545E19247B82761586381356BCF1C28FB00C058E77769799AA16FE87D622E2704
RALEP025C1C1C1C1C1_POA_Dec_7_23-PA...pdf	D7506E598D11C97DE1AB9CA23F73DF1FDDACFE61B9AD6B60C338DF190B684EBA60DACA4B3F8A1CB946DF059A2BAEE1161BA168C74F02D0A8FD21C4CEC6654F53

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UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

106963 7590 11/24/2023
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
11/24/2023	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):

docketing@farjami.com
ffarjami@farjami.com
patent@headwaterllc.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 17/867,585	Applicant(s) Raleigh, Gregory G.	
	Examiner BENJAMIN A KAPLAN	Art Unit 2434	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 09 August 2023.

☐ 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) 2-21 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) 2-21 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 18 July 2022 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.

Response to Arguments and Amendments

Cancelation of claim 1 does render the standing rejections moot.

Examiner does agree with Applicant's arguments that core elements of allowability have been presented from parent Application 16/907,887 (now U.S. Patent No. 11,405,429) in the new claims.

Considering the nature of the claims Examiner does not see any issue of restriction by original presentation. However, this does still present issues of double patenting with U.S. Patent No. 10,694,385 and U.S. Patent No. 11,405,429 focusing on the allowable elements of those cases.

In viewing the focus of the new claims double patenting with U.S. Patent No. 8,391,834 is not seen as applicable to the new claims.

The claims are focused on allowable elements of the listed parent applications and viewed as allowable outside of the remaining issues of Double Patenting.

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 §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/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 2-21 is rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 11,405,429; and claims 1-12 of U.S. Patent No. 10,694,385. The presently claimed invention is focusing on allowable elements of the issued U.S. Patent No. 11,405,429 and U.S. Patent No. 10,694,385.

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 BENJAMIN A KAPLAN whose telephone number is (571)270-3170. The examiner can normally be reached on 9:00 a.m. - 5:00 p.m..

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, Kambiz Zand can be reached on (571)272-3811. 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.

/BENJAMIN A KAPLAN/
Examiner, Art Unit 2434

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

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

CLAIMS

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

CLAIM		DATE								
Final	Original	06/03/2023	11/18/2023							
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	2		✓							
	3		✓							
	4		✓							
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	21		✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC - Searched*		
Symbol	**Date**	**Examiner**
G06Q 10/06375	11/16/2023	BK
H04W 12/0017	11/16/2023	BK
G06Q 20/20	11/16/2023	BK
G06Q 20/40	11/16/2023	BK
G06Q 30/0207	11/16/2023	BK
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G06Q 30/0601	11/16/2023	BK
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H04M 15/58	11/16/2023	BK
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G06Q 30/0241	11/16/2023	BK
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

H04W 48/14	11/16/2023	BK
H04M 15/88	11/16/2023	BK
H04W 28/0268	11/16/2023	BK
H04W 88/08	11/16/2023	BK
H04M 15/61	11/16/2023	BK
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
726	1	11/16/2023	BK

* 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**
PE2E, Google, Inventor Search, Assignee Search	11/16/2023	BK
Google Search Terms: service device partition das policy	11/16/2023	BK

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

PE2E SEARCH - Search History (Prior Art)

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L18	478	(Raleigh Gregory G).in.	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 04:57 AM
L19	395690	(G06Q40/12 H04M15/00 H04L12/14 H04L41/5054 H04L47/20 H04M15/88 H04W12/0017 G06Q10/06315 G06Q30/0601 H04L67/145 H04W8/18 H04W72/0453 H04L9/3247 H04L63/08 H04W8/20 H04M15/58	(US-PGPUB; USPAT)	OR	OFF	OFF	2020/01/06 05:48 AM

		H04M15/61 H04W88/08 H04L9/32 H04L41/0893 H04L67/306 G06Q10/06375 H04L67/327 H04W4/50 H04W12/02 H04W24/08 H04W28/02 H04W4/02 H04W4/18 H04W28/0215 H04L67/26 H04W12/08 H04W48/14 G06Q40/00 H04L41/5003 H04L63/0892 H04W4/12 G06Q30/0283 H04M15/80 G06Q20/102 G06Q30/0241 H04L63/0853 H04W4/20 H04W28/12 H04W48/16 H04W12/00 G06F15/177 G06Q30/04 H04L63/0428 H04L47/2408 H04L63/0236 H04W12/06 H04W28/0268 G06Q20/20 H04L41/0806 H04L51/046 H04L63/04 H04W4/24 G06Q30/0207 G06Q30/0284 H04L63/10 H04L63/20 G06Q20/40 H04W84/04 H04L67/2819 H04W88/06 Y02P90/86 H04L41/0876 H04L67/34 H04W84/042 H04W8/02 H04L41/5025 H04M2215/0188 H04W84/12).cpc.					
L20	127192	L19 @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 05:48 AM
L21	8602	secure environment service profile modem control link @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 06:17 AM
L22	91	secure environment service profile modem adj control link @ad<"20090213"	(US-PGPUB; USPAT)	AND	OFF	OFF	2020/01/06 06:17 AM

L26	1	16/907,887.app.	(US-PGPUB; USPAT)	AND	OFF	OFF	2021/06/19 07:19 PM
L27	1399069	(G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:06 PM

		H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L28	11927	(726/1).CCLS.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	ON	ON	2021/06/19 08:06 PM
L29	1404578	L27 L28	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:07 PM
L30	8608	secure environment service profile modem control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:09 PM
L31	3387	L29 L30	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:09 PM
L32	2265	secure service measurement environment profile modem control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:10 PM
L33	2	16/034,362.app.	(US-PGPUB; USPAT)	AND	OFF	OFF	2021/06/19 08:13 PM
L34	88	(Headwater Research).as.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:18 PM
L35	1035	(Raleigh Gregory G).in.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:18 PM
L36	201	("10285025"|"10326800"|"10492102"|"10582375"|"20010048738"|"20010053694"|"20020013844"|"20020022472"|"20020022483"|"20020049074"|"20020099848"|"20020116338"|"20020120370"|"20020120540"|"20020131404"|"20020138599"|"20020138601"|"20020154751"|"20020161601"|"20020164983"|"20020176377"|"20020188732"|"20020191573"|"20020199001"|"200	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		30004937"|"200300051 12"|"20030013434"|"20 030018524"|"20030028 623"|"20030046396"|"2 0030050070"|"2003005 0837"|"20030084321"|" 20030088671"|"200301 33408"|"20030134650"| "20030159030"|"20030 161265"|"20030171112 "|"20030182420"|"2003 0182435"|"2003018479 3"|"20030188006"|"200 30188117"|"200302209 84"|"20030224781"|"20 030229900"|"20030233 332"|"20030236745"|"2 0040019539"|"2004001 9564"|"20040021697"|" 20040024756"|"200400 30705"|"20040039792"| "20040044623"|"20040 047358"|"20040054779 "|"20040073672"|"2004 0082346"|"2004009871 5"|"20040102182"|"200 40103193"|"200401073 60"|"20040116140"|"20 040127200"|"20040127 208"|"20040127256"|"2 0040132427"|"2004013 3668"|"20040137890"|" 20040165596"|"200401 67958"|"20040168052"| "20040170191"|"20040 176104"|"20040198331 "|"20040203755"|"2004 0203833"|"2004022556 1"|"20040225898"|"200 40236547"|"200402436 80"|"20040243992"|"20 040249918"|"20040255 145"|"20040259534"|"2 0040260766"|"2004026 7872"|"20050007993"|" 20050009499"|"200500 21995"|"20050041617"| "20050048950"|"20050 055291"|"20050055309 "|"20050055595"|"2005 0060266"|"2005006052 5"|"20050075115"|"200 50079863"|"200500915 05"|"20050096024"|"20 050097516"|"20050107 091"|"20050108075"|"2 0050111463"|"2005012 8967"|"20050135264"|"				

		20050163320"|"200501 66043"|"20050183143"| "20050186948"|"20050 198377"|"20050216421 "|"20050228985"|"2005 0238046"|"2005023944 7"|"20050245241"|"200 50246282"|"200502505 08"|"20050250536"|"20 050254435"|"20050266 825"|"20050266880"|"2 0060014519"|"2006001 9632"|"20060020787"|" 20060026679"|"200600 30306"|"20060034256"| "20060035631"|"20060 040642"|"20060045245 "|"20060048223"|"2006 0068796"|"2006007245 1"|"20060072550"|"200 60072646"|"200600755 06"|"20060085543"|"20 060095517"|"20060098 627"|"20060099970"|"2 0060101507"|"2006011 2016"|"20060114821"|" 20060114832"|"200601 26562"|"20060135144"| "20060136882"|"20060 143066"|"20060143098 "|"20060156398"|"2006 0160536"|"2006016506 0"|"20060168128"|"200 60173959"|"200601740 35"|"20060178917"|"20 060178918"|"20060182 137"|"20060183462"|"2 0060190314"|"2006019 0987"|"20060193280"|" 20060199608"|"200602 00663"|"20060206709"| "20060206904"|"20060 218395"|"20060233108 "|"20060233166"|"2006 0236095"|"2006024268 5"|"20060258341"|"200 60274706"|"200602775 90"|"20060291419"|"20 060291477"|"20070005 795"|"20070019670"|"2 0070022289"|"2007002 5301"|"20070033194"|" 20070033197"|"200700 35390"|"20070036312"| "20070055694"|"20070 060200"|"20070061243 "|"20070061800"|"2007 0061878"|"2007007389					

		9"|"20070076616"|"20070093243"|"20070100981"|"20070101426"|"20070104126"|"20070104169"|"20070109983").PN.					
L37	200	("20070111740"|"20070130283"|"20070130315"|"20070140113"|"20070140145"|"20070140275"|"20070143824"|"20070147317"|"20070147324"|"20070155365"|"20070165630"|"20070168499"|"20070171856"|"20070174490"|"20070191006"|"20070192460"|"20070198656"|"20070201502"|"20070213054"|"20070220251"|"20070226225"|"20070226775"|"20070234402"|"20070243862"|"20070248100"|"20070254646"|"20070254675"|"20070255769"|"20070255797"|"20070255848"|"20070257767"|"20070259656"|"20070259673"|"20070263558"|"20070266422"|"20070274327"|"20070280453"|"20070282896"|"20070293191"|"20070294395"|"20070294410"|"20070297378"|"20070298764"|"20070299965"|"20070300252"|"20080005285"|"20080005561"|"20080010379"|"20080010452"|"20080018494"|"20080022354"|"20080025230"|"20080032715"|"20080034063"|"20080034419"|"20080039102"|"20080049630"|"20080050715"|"20080051076"|"20080052387"|"20080056273"|"20080059474"|"20080059743"|"20080060066"|"20080062900"|"20080064367"|"20080066149"|"20080066150"|"20080066181"|"20080070550"|"20080077705"|"20080080457"|"20080081606"|"20080082643"|"20080083013"|"20080085707"|	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		"20080089295"|"20080 089303"|"20080095339 "|"20080096559"|"2008 0098062"|"2008010967 9"|"20080120129"|"200 80120668"|"200801206 88"|"20080125079"|"20 080126287"|"20080127 304"|"20080130534"|"2 0080130656"|"2008013 2201"|"20080132268"|" 20080134330"|"200801 39210"|"20080147454"| "20080160958"|"20080 162637"|"20080162704 "|"20080164304"|"2008 0166993"|"2008016702 7"|"20080167033"|"200 80168275"|"200801685 23"|"20080177998"|"20 080178300"|"20080181 117"|"20080183812"|"2 0080184127"|"2008018 9760"|"20080201266"|" 20080207167"|"200802 12470"|"20080212751"| "20080219268"|"20080 221951"|"20080222692 "|"20080225748"|"2008 0229385"|"2008022938 8"|"20080235511"|"200 80240373"|"200802500 53"|"20080256593"|"20 080259924"|"20080262 798"|"20080263348"|"2 0080268813"|"2008027 0212"|"20080279216"|" 20080282319"|"200802 91872"|"20080293395"| "20080298230"|"20080 305793"|"20080311885 "|"20080313315"|"2008 0313730"|"2008031692 3"|"20080318547"|"200 80318550"|"200803198 79"|"20080320497"|"20 090005000"|"20090005 005"|"20090006116"|"2 0090006200"|"2009000 6229"|"20090013157"|" 20090016310"|"200900 17809"|"20090036111"| "20090042536"|"20090 044185"|"20090046707 "|"20090046723"|"2009 0047989"|"2009004891 3"|"20090049156"|"200 90049518"|"200900540					

		30"|"20090065571"|"20090067372"|"20090068984"|"20090070379"|"20090077622"|"20090079699"|"20090113514"|"20090125619"|"20090132860"|"20090149154"|"20090157792"|"20090163173"|"20090172077"|"20090180391"|"20090181662"|"20090197585"|"20090197612"|"20090203352"|"20090217065"|"20090217364"|"20090219170"|"20090248883"|"20090254857"|"20090257379"|"20090262715"|"20090271514"|"20090282127"|"20090286507"|"20090287921"|"20090288140"|"20090291665"|"20090299857"|"20090307696"|"20090307746"|"20090315735"|"20090320110"|"20100017506"|"20100020822"|"20100027469").PN.					
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		2"|"20100325420"|"201 10004917"|"201100135 69"|"20110019574"|"20 110081881"|"20110082 790"|"20110110309"|"2 0110126141"|"2011014 5920"|"20110159818"|" 20110173678"|"201101 77811"|"20110182220"| "20110185202"|"20110 244837"|"20110249668 "|"20110264923"|"2011 0277019"|"2012002029 6"|"20120144025"|"201 20166364"|"201201966 44"|"20120238287"|"20 130029653"|"20130058 274"|"20130065555"|"2 0130072177"|"2013008 4835"|"20130144789"|" 20130225151"|"201303 26356"|"20140073291"| "20140241342"|"20150 181628"|"5131020"|"52 83904"|"5325532"|"557 2528"|"5577100"|"5594 777"|"5617539"|"56301 59"|"5633484"|"563386 8"|"5754953"|"5774532" |"5794142"|"5814798"|" 5889477"|"5892900"|"5 903845"|"5915008"|"59 15226"|"5933778"|"594 0472"|"5974439"|"5983 270"|"6035281"|"60384 52"|"6038540"|"604726 8"|"6058434"|"6061571" |"6064878"|"6078953"|" 6081591"|"6098878"|"6 104700"|"6115823"|"61 19933"|"6125391"|"614 1565"|"6141686"|"6148 336"|"6154738"|"61576 36"|"6185576"|"619891 5"|"6219786"|"6226277" |"6246870"|"6263055"|" 6292828"|"6317584"|"6 370139"|"6381316"|"63 93014"|"6397259"|"640 1113"|"6418147"|"6438 575"|"6445777"|"64494 79"|"6466984"|"647767 0"|"6502131"|"6505114" |"6510152"|"6522629"|" 6532235"|"6532579"|"6 535855"|"6535949"|"65 39082"|"6542500"|"654 2992"|"6546016"|"6563					

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		65040"|"7167078"|"717 4156"|"7174174"|"7177 919"|"7180855"|"71810 17"|"7191248"|"719732 1"|"7200112"|"7200551" |"7203169"|"7203721"|" 7203752"|"7212491"|"7 219123"|"7222190"|"72 22304"|"7224968"|"722 8354"|"7236780"|"7242 668"|"7242920"|"72459 01"|"7248570"|"725121 8"|"7260382"|"7266371" |"7269157"|"7271765"|" 7272660"|"7280816"|"7 280818"|"7283561"|"72 83963"|"7286834"|"728 6848"|"7289489"|"7290 283"|"7310424"|"73132 37"|"7315892"|"731769 9"|"7318111"|"7320029" |"7322044"|"7324447"|" 7325037"|"7336960"|"7 340772"|"7346410"|"73 49695"|"7353533"|"735 6011"|"7356337"|"7366 497"|"7366654"|"73669 34"|"7369848"|"736985 6"|"7373136"|"7373179" |"7379731"|"7388950"|" 7389412"|"7391724"|"7 395056"|"7395244"|"74 01338"|"7403763"|"740 9447"|"7409569"|"7411 930"|"7418253"|"74182 57"|"7421004"|"742397 1"|"7428750"|"7433362" |"7436816"|"7440433"|" 7444669"|"7450591"|"7 450927"|"7454191"|"74 57265"|"7457870"|"746 0837"|"7466652"|"7467 160"|"7472189"|"74784 20"|"7486185"|"748665 8"|"7493659"|"7496652" |"7499438"|"7499537"|" 7502672"|"7505756"|"7 505795"|"7508799"|"75 12128"|"7512131"|"751 5608"|"7515926"|"7516 219"|"7522549"|"75225 76"|"7526541"|"752920 4"|"7535880"|"7536695" |"7539132"|"7539862"|" 7540408"|"7545782"|"7 546460"|"7546629"|"75 48875"|"7548976"|"755 1921"|"7551922"|"7554					

		983"|"7555757"|"75618 99"|"7562213"|"756479 9"|"7565141"|"7574509" |"7574731"|"7577431"|" 7580356"|"7580857"|"7 583964"|"7584298"|"75 85217"|"7586871"|"759 3417"|"7593730"|"7596 373"|"7599288"|"75997 14"|"7602746"|"760691 8"|"7607041"|"7609650" |"7609700"|"7610047"|" 7610057"|"7610328"|"7 610396"|"7614051"|"76 16962"|"7617516"|"762 0041"|"7620065"|"7620 162"|"7620383"|"76273 14"|"7627600"|"762776 7"|"7627872"|"7633438" |"7634388"|"7636574"|" 7636626"|"7643411"|"7 644151"|"7644267"|"76 44414"|"7647047"|"765 0137"|"7653394"|"7656 271"|"7657920"|"76604 19"|"7661124"|"766449 4"|"7668176"|"7668612" |"7668903"|"7668966"|" 7676673"|"7680086"|"7 681226"|"7684370"|"76 85131"|"7685254"|"768 5530"|"7688792"|"7693 107"|"7693720"|"76975 40"|"7710932"|"771184 8"|"7719966"|"7720206" |"7720464"|"7720505"|" 7720960"|"7721296"|"7 724716"|"7725570"|"77 29326"|"7730123"|"773 4784"|"7742406"|"7746 854"|"7747240"|"77476 99"|"7747730"|"775233 0"|"7756056"|"7756534" |"7756757"|"7760137"|" 7760711"|"7760861"|"7 765294"|"7769397"|"77 70785"|"7774323"|"777 4412"|"7774456"|"7778 176"|"7778643"|"77922 57"|"7792538"|"779270 8"|"7797019"|"7797060" |"7797204"|"7797401"|" 7801523"|"7801783"|"7 801985"|"7802724"|"78 05140"|"7805522"|"780 5606"|"7809351"|"7809 372"|"7813746"|"78176 15"|"7817983"|"782283					

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		792"|"8045973"|"80464 49"|"8050275"|"805069 0"|"8050705"|"8059530" |"8060017"|"8060463"|" 8060603"|"8064418"|"8 064896"|"8065365"|"80 68824"|"8068829"|"807 3427"|"8073721"|"8078 140"|"8078163"|"80858 08"|"8086398"|"808649 7"|"8086791"|"8090359" |"8090361"|"8090616"|" 8091087"|"8094551"|"8 095112"|"8095124"|"80 95640"|"8095666"|"809 8579"|"8099077"|"8099 517"|"8102814"|"81032 85"|"8104080"|"810795 3"|"8108520"|"8108680" |"8112435"|"8116223"|" 8116749"|"8116781"|"8 122128"|"8122249"|"81 25897"|"8126123"|"812 6396"|"8126476"|"8126 722"|"8130793"|"81312 56"|"8131281"|"813184 0"|"8131858"|"8132256" |"8134954"|"8135388"|" 8135392"|"8135657"|"8 140690"|"8144591"|"81 45194"|"8146142"|"814 9748"|"8149823"|"8150 394"|"8150431"|"81512 05"|"8155155"|"815562 0"|"8155666"|"8155670" |"8156206"|"8159520"|" 8160015"|"8160056"|"8 160598"|"8165576"|"81 66040"|"8166554"|"817 0553"|"8174378"|"8174 970"|"8175574"|"81803 33"|"8180881"|"818088 6"|"8184530"|"8184590" |"8185088"|"8185093"|" 8185127"|"8185152"|"8 185158"|"8190087"|"81 90122"|"8190675"|"819 1106"|"8191116"|"8191 124"|"8194549"|"81945 53"|"8194572"|"819458 1"|"8195093"|"8195153" |"8195163"|"8195661"|" 8196199"|"8200163"|"8 200200"|"8200509"|"82 00775"|"8200818"|"820 4190"|"8204505"|"8208 788"|"8208919"|"82132 96"|"8213363"|"821453					

		6"|"8214890"|"8219134" |"8223655"|"8223741"|" 8224382"|"8224773"|"8 228818"|"8229394"|"82 29914"|"8233433"|"823 3883"|"8233895"|"8234 583"|"8238287"|"82389 13"|"8239520"|"824295 9"|"8244241"|"8249601" |"8254880"|"8254915"|" 8255515"|"8255534"|"8 255689"|"8259692"|"82 60252"|"8264965"|"826 5004"|"8266249"|"8266 681"|"8270955"|"82709 72"|"8271025"|"827104 5"|"8271049"|"8271992" |"8275415"|"8275830"|" 8279067"|"8279864"|"8 280354"|"8284740"|"82 85249"|"8285992").PN.					
L41	279	("8290820"|"8291238"|" 8291439"|"8296404"|"8 300575"|"8306518"|"83 06741"|"8307067"|"831 0943"|"8315198"|"8315 593"|"8315594"|"83157 18"|"8315999"|"832024 4"|"8320949"|"8325638" |"8325906"|"8326319"|" 8326828"|"8331223"|"8 331293"|"8332375"|"83 39991"|"8340625"|"834 0628"|"8340678"|"8340 718"|"8346210"|"83462 25"|"8346923"|"834710 4"|"8347362"|"8347378" |"8350700"|"8351592"|" 8351898"|"8352360"|"8 352980"|"8353001"|"83 55570"|"8355696"|"835 6336"|"8358638"|"8358 975"|"8363658"|"83637 99"|"8364089"|"836480 6"|"8369274"|"8370477" |"8370483"|"8374090"|" 8374592"|"8375128"|"8 375136"|"8380247"|"83 85199"|"8385896"|"838 5964"|"8385975"|"8386 386"|"8391262"|"83918 34"|"8392982"|"839645 8"|"8396929"|"8401968" |"8402165"|"8402540"|" 8406427"|"8406736"|"8 407763"|"8411587"|"84 11691"|"8412798"|"841 3245"|"8418168"|"8422	(US-PGPUB; USPAT)	AND	ON	ON	2021/06/19 08:20 PM

		988"|"8423016"|"84294 03"|"8437734"|"844201 5"|"8446831"|"8447324" |"8447607"|"8447980"|" 8448015"|"8452858"|"8 457603"|"8461958"|"84 63194"|"8463232"|"846 8337"|"8472371"|"8477 778"|"8478840"|"84830 57"|"8483135"|"848369 4"|"8484327"|"8488597" |"8489110"|"8489720"|" 8494559"|"8495181"|"8 495207"|"8495227"|"84 95360"|"8495700"|"849 5743"|"8499087"|"8500 533"|"8503358"|"85034 55"|"8504032"|"850457 4"|"8504687"|"8504690" |"8504729"|"8505073"|" 8509082"|"8514927"|"8 516552"|"8520589"|"85 20595"|"8521110"|"852 1775"|"8522039"|"8522 249"|"8522337"|"85235 47"|"8526329"|"852635 0"|"8527013"|"8527410" |"8527662"|"8528068"|" 8531954"|"8531995"|"8 532610"|"8533775"|"85 35160"|"8538394"|"853 8421"|"8538458"|"8539 544"|"8543265"|"85438 14"|"8544105"|"854842 7"|"8549173"|"8554876" |"8559369"|"8561138"|" 8565746"|"8566236"|"8 571474"|"8571501"|"85 71598"|"8571993"|"857 2117"|"8572256"|"8583 499"|"8588240"|"85899 55"|"8594665"|"859518 6"|"8600895"|"8601125" |"8605691"|"8615507"|" 8619735"|"8620257"|"8 630925"|"8631428"|"86 34425"|"8635164"|"863 9215"|"8644702"|"8644 813"|"8645518"|"86553 57"|"8656472"|"866085 3"|"8666395"|"8667542" |"8670334"|"8675852"|" 8676682"|"8676925"|"8 693323"|"8694772"|"87 00729"|"8701015"|"870 5361"|"8706863"|"8713 535"|"8713641"|"87193 97"|"8719423"|"872448					

		6"|"8725899"|"8730842"|"8731519"|"8732808"|"8739035"|"8744339"|"8761711"|"8780857"|"8787249"|"8792857"|"8793304"|"8798610"|"8799440"|"8804695"|"8811338"|"8811991"|"8818394"|"8819253"|"8825109"|"8826411"|"8831561"|"8838752"|"8843849"|"8845415"|"8849297"|"8855620"|"8862751"|"8863111"|"8875042"|"8880047"|"8891483"|"8898748"|"8908516"|"8929374"|"8930238"|"8930551"|"8943551"|"8948726"|"8949382"|"8949597"|"8955038"|"8966018"|"8971912"|"8977284"|"8995952"|"9002342"|"9014973"|"9015331"|"9026100"|"9030934"|"9049010"|"9064275"|"9105031"|"9111088"|"9137286"|"9172553"|"9177455"|"9282460"|"9286469"|"9286604"|"9313708"|"9325737"|"9326173"|"9344557"|"9363285"|"9367680"|"9413546"|"9418381"|"9459767"|"9501803"|"9544397"|"9589117"|"9609459"|"9712476"|"9942796"|"9986413"|"RE44412").PN.					
L42	1489	L37 L38 L39 L40 L41 L36	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2021/06/19 08:21 PM
L43	91	secure environment service profile modem adj control link @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 08:35 PM
L44	4392	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 09:28 PM
L45	2037	L27 L44	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2021/06/19 09:28 PM
L46	97	(Headwater Research).as.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY,	AND	OFF	OFF	2022/03/11 05:12 PM

			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)				
L47	1424	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2022/03/11 05:12 PM
L48	2348063	(G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08	(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	OFF	OFF	2022/03/11 06:38 PM

		H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L49	137	secure environment service profile modem ADJ control link @ad<"20090213"	(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)	AND	OFF	OFF	2022/03/11 06:39 PM
L50	10163	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA,	AND	OFF	OFF	2022/03/11 06:39 PM

			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)				
L51	4775	L48 L50	(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)	AND	OFF	OFF	2022/03/11 06:39 PM
L54	5	("10021251" "8630630" "9204282" "20080120174" "20120011017").pn.	(US-PGPUB; USPAT)	OR	OFF	OFF	2022/03/11 06:41 PM
L55	2354126	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2022/03/11 06:49 PM

		H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L56	609350	secure environment @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:09 PM
L59	344	(secure ADJ memory) environment service	(US-PGPUB; USPAT; USOCR; FIT (AP, AT,	AND	OFF	OFF	2022/03/11 08:10 PM

		profile policy monitor @ad<"20090213"	AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L60	219	L48 l59	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:16 PM
L61	1076	(secure ADJ (memory OR storage)) environment service profile polic$3 monitor$3 @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2022/03/11 08:21 PM
L62	548	L48 L61	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE,	AND	OFF	OFF	2022/03/11 08:21 PM

			SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L63	2651431	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02 H04W28/0215 H04W28/0268 H04W28/12 H04W4/02	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2023/06/03 07:56 AM

		H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L64	132	(Headwater Research).as.	(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)	AND	OFF	OFF	2023/06/03 07:56 AM
L65	1505	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2023/06/03 07:56 AM
L66	131	L64 L65	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN,	AND	OFF	OFF	2023/06/03 07:56 AM

			WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L67	4394	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/06/03 07:57 AM
L68	2714674	726/1.ccls. (G06F15/177 G06Q10/06315 G06Q10/06375 G06Q20/102 G06Q20/20 G06Q20/32 G06Q20/40 G06Q30/0207 G06Q30/0241 G06Q30/0283 G06Q30/0284 G06Q30/04 G06Q30/0601 G06Q40/00 G06Q40/12 H04L12/14 H04L12/1407 H04L41/0806 H04L41/0876 H04L41/0893 H04L41/5003 H04L41/5025 H04L41/5054 H04L47/20 H04L47/2408 H04L51/046 H04L63/0236 H04L63/04 H04L63/0428 H04L63/08 H04L63/0853 H04L63/0892 H04L63/10 H04L63/20 H04L67/145 H04L67/26 H04L67/2819 H04L67/306 H04L67/327 H04L67/34 H04L9/32 H04L9/3247 H04M15/00 H04M15/49 H04M15/58 H04M15/61 H04M15/66 H04M15/80 H04M15/8055 H04M15/88 H04M2215/0188 H04W12/00 H04W12/02 H04W12/037 H04W12/06 H04W12/08 H04W24/08 H04W28/02	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	OFF	OFF	2023/11/16 09:09 PM

		H04W28/0215 H04W28/0268 H04W28/12 H04W4/02 H04W4/12 H04W4/18 H04W4/20 H04W4/24 H04W4/50 H04W48/14 H04W48/16 H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
L69	139	(Headwater Research).as.	(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)	AND	OFF	OFF	2023/11/16 09:09 PM
L70	1516	(Raleigh Gregory G).in.	(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)	AND	OFF	OFF	2023/11/16 09:09 PM
L71	4395	wireless cellular network secure control channel policy @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/16 09:09 PM
L72	1081	(secure ADJ (memory OR storage)) environment service profile polic$3 monitor$3 @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB,	AND	OFF	OFF	2023/11/16 09:09 PM

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L74	618839	secure environment @ad<"20090213"	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	AND	OFF	OFF	2023/11/16 09:10 PM
L75	56201	L68 L74	(US-PGPUB; USPAT; USOCR; FIT (AP, AT, AU, 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, MC, MD, MY, NL, NO, NZ, OA, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, SU, TH, TN, TR, TW, UA, VN, WO); FPRS; EPO; JPO; DERWENT;	AND	OFF	OFF	2023/11/16 09:10 PM

			IBM_TDB)				
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L83	220	L82 L78	(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)	AND	ON	ON	2023/11/18 01:17 PM

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N23	3076	(726/1).CCLS.	(USPAT)	AND	ON	ON	2020/01/06 05:55 AM
N24	163754	(G06Q40/12	(USPAT)	OR	OFF	OFF	2020/01/06

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N25	0	(secure environment	(USPAT)	AND	OFF	OFF	2020/01/06

		service profile modem control link).clm.					06:17 AM
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		H04W72/0453 H04W8/02 H04W8/18 H04W8/20 H04W84/04 H04W84/042 H04W84/12 H04W88/06 H04W88/08 Y02P90/80).cpc.					
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N28	21	(secure memory environment service profile policy).clm.	(US-PGPUB; USPAT)	AND	OFF	OFF	2022/03/11 08:19 PM

Bibliographic Data

Application No: 17/867,585

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /BENJAMIN A KAPLAN/ (Examiner's Signature) [ ] (Initials)

Title: Security Techniques for Device Assisted Services

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
07/18/2022	726	2434	
RULE			

APPLICANTS

Headwater Research LLC, Tyler, TX,

INVENTORS

Gregory G. Raleigh, Tyler, TX, UNITED STATES

CONTINUING DATA

This application is a CON of 16907887 06/22/2020 PAT 11405429

16907887 is a CON of 16034362 07/13/2018 PAT 10694385

16034362 is a CON of 14948065 11/20/2015 PAT 10028144

14948065 is a CON of 13737748 01/09/2013 PAT 9198042

13737748 is a CON of 12694445 01/27/2010 PAT 8391834

12694445 has PRO of 61252151 10/15/2009

12694445 is a CIP of 12380780 03/02/2009 PAT 8839388

12380780 has PRO of 61207739 02/13/2009

12380780 has PRO of 61207393 02/10/2009

12380780 has PRO of 61206944 02/04/2009

12380780 has PRO of 61206354 01/28/2009

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

07/27/2022

**** SMALL ENTITY ****

STATE OR COUNTRY

UNITED STATES

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Electronic Acknowledgement Receipt

EFS ID:	48420245
Application Number:	17867585
International Application Number:	
Confirmation Number:	5955
Title of Invention:	Security Techniques for Device Assisted Services
First Named Inventor/Applicant Name:	Gregory G. Raleigh
Customer Number:	106963
Filer:	Michael Farjami/Evan Gunderman
Filer Authorized By:	Michael Farjami
Attorney Docket Number:	RALEP025C1C1C1C1C1
Receipt Date:	09-AUG-2023
Filing Date:	18-JUL-2022
Time Stamp:	20:22:50
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		RALEP025C1C1C1C1C1_Resp_to_Non_Final_OA_Aug_9_23.pdf	68312 fd7837c84fa5ed4ac85cf957798e8b7cf2310376	yes	9

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	1
	Amendment/Request for Reconsideration-After Non-Final Rejection	2	9
Warnings:			
Information:			
	Total Files Size (in bytes):	68312	

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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ELECTRONIC TRANSMISSION COVER SHEET

Date: August 9, 2023

To: United States Patent and Trademark Office
Examiner: Kaplan, Benjamin A.; Art Unit: 2434

Re: **Application Serial No.: 17/867,585**
Filing Date: 7/18/2022; First-Named Inventor: Raleigh
Attorney Docket No.: RALEP025C1C1C1C1C1

From: Farjami & Farjami LLP

Number of pages including the cover sheet: 9

Message:

Enclosed, please find the Amendment and Response to Non-Final Office Action, dated June 8, 2023.

Authorization is hereby given to the Commissioner to charge any fees associated with this communication or credit any overpayment to Deposit Account **50-0731**.

Thank you.

The documents accompanying this electronic transmission contain PRIVILEGED AND CONFIDENTIAL information intended only for use of the individual or entity named above. If you are not the intended recipient, disclosure, copying, distribution or use of the contents of this electronic transmission information is prohibited. If you have received this electronic transmission in error, please immediately notify us by telephone and return the original electronic transmission to us at the above address via U.S. Postal Service. We will reimburse you for all expenses incurred.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Raleigh, Gregory G.** Application Serial No.: **17/867,585** Filed: **7/18/2022** Title: **Security Techniques for Device Assisted Services**	Group Art Unit: 2434 Examiner: Kaplan, Benjamin A.

AMENDMENT AND RESPONSE TO *NON-FINAL* OFFICE ACTION

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

Dear Sir/Madam:

This is in response to the *Non-Final* Office Action, dated June 8, 2023, in the above-referenced patent application. Please enter and consider the following amendments and remarks.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731.

In the Claims:

Claim 1 (Cancelled)

Claim 2 (New): A method of operating a wireless end-user device having a secure modem, a secure execution environment and a secure memory partition, the method comprising:

establishing a connection between a secure modem and a wireless network;

establishing, through the connection, a secure control channel between a secure execution environment and a network service controller;

receiving, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

storing the one or more settings in a secure memory partition accessible only from the secure execution environment; and

controlling the wireless end-user device using the one or more settings.

Claim 3 (New): The method of claim 2, wherein the one or more settings are associated with a service plan for using a service provided by the wireless cellular network.

Claim 4 (New): The method of claim 2, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 5 (New): The method of claim 4, wherein the modem agent comprises a service measurement point for use of a service.

Claim 6 (New): The method of claim 5, further comprising:

communicating, by the modem agent through another secure control channel, a first report of the use of the service to the network service controller.

Claim 7 (New): The method of claim 6, further comprising:

communicating, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 8 (New): The method of claim 2, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 9 (New): The method of claim 2, wherein the one or more settings include a network setting or a device management communication setting.

Claim 10 (New): The method of claim 2, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 11 (New): The method of claim 2, wherein the secure execution environment is implemented at least in part in a virtual machine.

Claim 12 (New): A wireless end-user device comprising:

a secure modem;

a secure execution environment;

a secure memory partition; and

a processor configured to:

establish a connection between a secure modem and a wireless network;

establish, through the connection, a secure control channel between a secure execution environment and a network service controller;

receive, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;

store the one or more settings in a secure memory partition accessible only from the secure execution environment; and

control the wireless end-user device using the one or more settings.

Claim 13 (New): The wireless end-user device of claim 12, wherein the one or more settings are associated with a service plan for using a service provided by the wireless cellular network.

Claim 14 (New): The wireless end-user device of claim 12, wherein the secure modem further comprises a modem agent accessible only by the network service controller through another secure control channel.

Claim 15 (New): The wireless end-user device of claim 14, wherein the modem agent comprises a service measurement point for use of a service.

Claim 16 (New): The wireless end-user device of claim 15, wherein the processor is further configured to:

communicate, by the modem agent through another secure control channel, a first report of the use of the service to the network service controller.

Claim 17 (New): The wireless end-user device of claim 16, wherein the processor is further configured to:

communicate, using the secure execution environment through the secure control channel, a second report of the use of the service.

Claim 18 (New): The wireless end-user device of claim 12, wherein the one or more settings include at least one of an access control setting, a traffic control setting, or an admission control setting.

Claim 19 (New): The wireless end-user device of claim 12, wherein the one or more settings include a network setting or a device management communication setting.

Claim 20 (New): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part as a hardware partition or a software partition.

Claim 21 (New): The wireless end-user device of claim 12, wherein the secure execution environment is implemented at least in part in a virtual machine.

REMARKS

The *Non-Final* Office Action, dated June 8, 2023 ("Office Action"), rejected claim 1. By the present response, Applicant cancels claim 1, and adds new claims 2-21. Thus, after the present response, claims 2-21 remain pending in the present application. Applicant respectfully requests allowance of claims 2-21 in view of the following remarks.

A. Nonstatutory Obviousness-Type Double Patenting

The Office Action rejected claim 1 of the present application under nonstatutory obviousness-type double patenting. By the present amendment, Applicant has cancelled claim 1. Therefore, the rejection of claim 1 is rendered moot.

B. 35 U.S.C. § 102

The Office Action rejected claim 1, under 35 U.S.C. § 102, as being anticipated by Zakas (U.S. Publication No. 2006/0026679) ("Zakas"). By the present amendment, Applicant has cancelled claim 1. Therefore, the rejection of claim 1 is rendered moot.

C. New Claims 2-21

By the present amendment, Applicant has added new independent claim 2, which recites "A method of operating a wireless end-user device having a secure modem, a secure execution environment and a secure memory partition," where the method comprises:

> establishing a connection between a secure modem and a wireless network;
>
> establishing, through the connection, a secure control channel between a secure execution environment and a network service controller;

> receiving, at the secure execution environment, via the secure control channel, one or more messages from the network service controller, the one or more messages comprising one or more settings;
>
> storing the one or more settings in a secure memory partition accessible only from the secure execution environment; and
>
> controlling the wireless end-user device using the one or more settings.

Applicant respectfully submits that new independent claim 2 should be allowed at least for one or more reasons the Examiner found claims of parent application serial no, 16/907,887, now patent no. 11,405,429, allowable. More specifically, the Notice of Allowance, dated March 21, 2002, in parent application serial no, 16/907,887, now patent no. 11,405,429, stated:

> The prior art of record does not teach the secure modem subsystem connecting to the secure execution environment, the secure memory partition accessible only from the secure execution environment, and the modem control link to connect securely to the network service controller through a second control channel. (See page 2 of the Notice of Allowance.)

Accordingly, new independent claim 2 is patentably distinguishable over Zakas, and should be allowed. Further, new independent claim 12 includes limitations similar to those of new independent claim 2, and should also be allowed. As such, claims 3-11 and 13-21 depending from independent claims 2 and 12, respectively, should also be allowed.

D. Conclusion

Based on the foregoing reasons, Applicant respectfully requests allowance of claims 2-21 pending in the present application.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731.

Respectfully Submitted,
FARJAMI & FARJAMI LLP

/Farshad Farjami/
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CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence is being filed via EFS in United States Patent and Trademark Office, on the date stated below.

August 9, 2023
Date

Evan C. Gunderman — Name
/evan c. gunderman/ — Signature

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 17/867,585	Filing Date 07/18/2022	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $240 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

AMENDMENT		(Column 1)		(Column 2)	(Column 3)			
	08/09/2023	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		x $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $192 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

AMENDMENT		(Column 1)		(Column 2)	(Column 3)			
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	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.	HSLIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/DEREK A SAUNDERS/
*** 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.
17/867,585	07/18/2022	Gregory G. Raleigh	RALEP025C1C1C1C1C1	5955

106963 7590 06/08/2023
Headwater Research LLC
C/O Farjami & Farjami LLP
26522 La Alameda Ave., Suite 360
Mission Viejo, CA 92691

EXAMINER
KAPLAN, BENJAMIN A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
06/08/2023	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):

docketing@farjami.com
ffarjami@farjami.com
patent@headwaterllc.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 17/867,585	Applicant(s) Raleigh, Gregory G.	
	Examiner BENJAMIN A KAPLAN	Art Unit 2434	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 18 July 2022.

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

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

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

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

Disposition of Claims*

5) ☑ Claim(s) 1 is/are pending in the application.

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

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1 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 18 July 2022 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 01/09/2023 x6 01/16/2023 02/10/2023.

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.

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

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 §§ 706.02(l)(1) - 706.02(l)(3) for applications

not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/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.

Claim 1 is rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,391,834; claim 1 of U.S. Patent No. 10,694,385; and claim 1 of U.S. Patent No. 11,405,429. Although the claims at issue are not identical, they are not patentably distinct from each other because the current claim is the unamended root claim the listed patents.

Claim Rejections - 35 USC § 102

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

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

Claim(s) 1 is/are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by United States Patent Application Publication No.: US 2006/0026679 A1 (Zakas).

<u>As Per Claim 1:</u> Zakas teaches: **A system, comprising:**

- a processor of a communications device configured to:

- implement a service profile executed at least in part in a secure execution environment for assisting control of the communications device use of a service

- on a wireless network,

(Zakas, Paragraph [0030], "The description illustrates the invention by way of example and not by way of limitation. To achieve these and other objects the invention provides methods, systems, and computer program products for improving information security and network management. FIG. 1 shows an embodiment of the invention that employs a central manger 2 linked to a plurality of traffic sensors 8. Although, FIG. 1 depicts only two traffic sensors linked to the central manager it is understood that all traffic sensors communicate with a central manager. The traffic sensors 8 employ an RTA sensor that may be placed at various locations throughout one or more networks (e.g., corporate network(s), private network(s), and/or other network(s)) in order to provide true identification and control over network usage at any network segment. Traffic sensors may be implemented as computer program embedded within equipment having a programmed digital computer or processor anywhere within the flow of traffic. Types of equipment may include, but are not limited to, client machines (e.g., network interfaces, I/O ports), routers, switches, firewalls, proxy servers, gateways, and/or a standalone sensor. Traffic sensors may be positioned within key network traffic junctions, in order to most effectively manage and observe traffic.").

(Zakas, Paragraph [0031], "FIG. 1 illustrates some examples of where the equipment may reside on a network in two configurations: inline and out-of-band. This system allows a coordinated view of traffic passing into, out of and throughout a network. The activity picked up by each traffic sensor 8 is transmitted back to a central manager 2 which offers an administrator 6 a real time view of network traffic, and a centralized point from which to instruct each traffic sensor 8 how to handle certain types of incidents in real-time. Like the traffic sensors 8 the centralized manger 2 may be embedded anywhere

convenient to the administrator 6 of the network. Although FIG. 1 shows a the central manager 2 located at a server network, it is understood that the central manager may be implemented anywhere within the network (e.g. client machines, routers, switches, firewalls, proxy servers, gateways, and/or a standalone device). More than one central manager may exist for respective networks. Optionally, an integrated sensor and management console (not shown) may be used to manage a limited number of traffic sensors.”).

(Zakas, Paragraph [0032], “Traffic may be monitored at any vantage point between a source and destination. A strategic point in the network allows each traffic sensor to enforce security policies and block the flow of malicious traffic before it reaches servers, users, networked appliances, or any network resource. Types of traffic may include, application traffic (e.g., handshake, session messages, control messages), text, imagery, voice, data, video, audio, sensor output, network information, network packet headers, electronic impulses and/or other traffic. Transmissions may be in the form of data packet or signals, or portions of both data packets and signals transmitted between a variety of network assets including, but not limited to, personal computers (e.g. laptop), servers, hosts, hand held devices and/or other devices.”).

(Zakas, Paragraph [0037], “At external networks like VPN or Extranets, where network administrators do not have control over devices and users connected to the external networks, the traffic sensors ensure that traffic passed through VPN's is limited to intended application traffic, users, server traffic and authorized data sharing in order to protect the network from threats of abuse that can be introduced to the network through remote endpoints that are not under the network administrator's control. Different levels of trust may be established for individual VPN connections so that some users are allowed more permissions than others.”).

- wherein the service profile includes a plurality of service policy settings, and wherein the service profile is associated with a service plan that provides for access to the service on the wireless network;

(Zakas, Paragraph [0040], "As a high performance management console, the central manager 2 may comprise, a master directory 22, analysis tool 24, rules creation and distribution tool 26, and/or control component 28 to enable the central manager 2 to dynamically monitor and control the functions of each traffic sensor. The master directory 22 is used to manage user accounts and network permissions for known and unknown users and assets of a network. The master directory component 22 stores data including user profiles (e.g., functional role, directory group membership, machine addresses, IP address), user credentials (e.g., attributes, role based controls), watch list objects, predefined actions to be taken and various rules (e.g., security, Quality of Service, bandwidth, VLAN, traffic). Various types of network directory protocols including a Lightweight Directory Access Protocol (LDAP) may be implemented without deviating from the present invention. Types of directories implementing directory protocol may include, but are not limited to, Active Directory, offered as part of the Microsoft.RTM. Windows 2003 system, Novell.RTM. E-directory, offered by the Novell, or Sun.TM. ONE directory server offered by Sun.TM. Microsystems. Authentication systems such as Radius servers or the access control systems embedded in firewalls, routers, VPN concentrators, server operating systems and workstations include user information which may also be considered a source of directory information.").

(Zakas, Paragraph [0043], "The control component 28 instantiates master directory 22 information and translates the information into exception policies to be sent to traffic sensors 8. Directory information can be translated into policies that will be enforced by the traffic sensors 8. The control component 28 may create policies in real-time according to the information held within the master directory 22. For example, when a user is recognized as having logged in, his or her user credentials are pulled from the master directory 22 and policies can be generated that are enforced on the network. User credentials are translated into policies which are passed down to a specified traffic sensor or sensors used

to enforce the policies against the newly logged in user. Policies may include role-based controls, discussed further below, which determine what user can an cannot do on the network. Other policy information may include actions to be taken for detected user or detected traffic such as, blocking traffic, adjusting QoS policies for a specific connection, logging the traffic, creating a temporary VLAN for the duration of a specific connection, and/or adopting security measures as necessary (tag packets, block connection, block port on a switch, reroute traffic, etc). The control component 28 may also periodically output activity events describing an incident in progress or share audit information with external network entities (databases, traffic sensors, clients, etc.) either automatically or through predefined traps set by authorized clients in the master directory. Mechanisms for outputting this information to the external network entities may include, real-time messages, e-mail, telephone call, text message, etc.”).

- monitor use of the service based on the service profile; and

(Zakas, Paragraph [0014], “The invention addresses these and other drawbacks of known systems. For example, one aspect of the invention relates to a system and method for monitoring and regulating the flow of network traffic over a network to increase the security of the information residing on a target system or server. The present invention monitors and dynamically manages all user traffic not only at point of log-in but through out a user's network experience. Rules may be enforced based on observed traffic of users at and after log-in and up until log off. Another aspects relates to automatically detecting network traffic and responding to potential attacks with extremely high speed and efficiency. Rich Traffic Analysis (RTA) offers greater network traffic characterization accuracy, detection speed, network management options and intrusion prevention capabilities than systems which do not include RTA technology. The present invention has the ability to view all network traffic in the full context of users, applications, data and system access which offers strong, verifiable and accurate protection of networked assets. Yet another aspect of the invention employs traffic sensor devices communicating with a central

manager device enabling the high-speed characterization of each network packets traversing the network. This provides a more solid basis for legitimately taking action and enforcing rules on the observed traffic. Also, in order to prevent attacks a zero-day analysis mechanism is employed to create signatures or traffic profiles for potential attacks characterized by repetitive handshake or packet traffic. Unusual traffic patterns are observed in order immediately block such types of traffic and any future observances of such traffic. These and other aspects of the invention improve information security and dynamically make real-time network adjustments in response to traffic attempting to traverse the network.").

(Zakas, Paragraph [0016], "A directory may be used to manage user accounts and network permissions for users and assets of a network. Users may be assigned business roles in order to manage multiple user permissions in parallel. The control component receives network permissions from the directory component and converts them into primary policies and exception policies. Policies including, but not limited to, QoS levels, access rights, bandwidth utilization, secure transfer, and/or data encryption may be varied according to the role of a user within an organization. The control component monitors network activity observed by traffic sensors employing RTA in order to identify who is accessing the network, which resources are accessed, which applications are used to generate traffic and/or what data is being exchanged. Traffic sensors are installed at various places throughout the network for collecting and analyzing data as it flows across the network. They enforce various rules and policies stored in the main directory. Traffic sensors may receive instructions from the control component for the enforcement of rules and policies set forth in the main directory system.").

(Zakas, Paragraph [0045], "Each traffic sensor 8 may have a rules set 34, an analysis tool 36, enforcement component 38, and/or other components. From FIG. 1 it should be understood that each traffic sensor comprises the components of the exemplary traffic sensor 8 depicted in the figure. The rules set 34 stores rules that are to be enforced by the traffic sensor 8. Each traffic sensor may have a different set of rules stored within the respective rules set 34 to enforce. The rules, which may include policies, are

received from the central manager 2. The analysis tool 36 monitors and analyzes traffic against the rules set 36. Based on traffic observed passing through the traffic sensor the analysis tool may capture packet data which triggers the occurrence of a rule. The captured packet data is sent back to the central manager 2. Thus, the central manager is automatically receiving real-time reports about network activity. Rules within the rules set 36 are automatically enforced in real-time by the enforcement component 38. The enforcement component 38 executes the policies, for example, sending instructions to block traffic, adjusting QoS, block connection, block a port on a switch, reroute traffic and/or various other actions to be taken.”).

- verify the use of the service based on the monitored use of the service; a memory of the communications device coupled to the processor and configured to provide the processor with instructions.

(Zakas, Paragraph [0019], “In an additional embodiment, the system may use traffic profiles in order to determine whether observed traffic qualifies as a watch list match. Predefined confidence rating thresholds may be used to qualify traffic for corresponding policies or other action.”).

(Zakas, Paragraph [0047], “Application traffic may include all common network applications such as web, file transfer, email, instant messaging, remote access, file sharing applications, streaming and all of the major application used by enterprises. Application traffic may be detected independent of IP port number used by the traffic. Accurate identification of traffic that is encapsulated within other application protocols and communications is also possible. The central manager 2 may define how, where, and by whom applications may be used. This information may be passed down to the relevant traffic sensors 8 and their corresponding rules set 34 which enforce these acceptable use policies in real-time using the enforcement component 38. The traffic sensor identifies packets using a match by pattern process which employs RTA inspection of every network packet observed by a traffic sensor. Therefore, as an application,

user or data element of a network packet is identified while crossing the traffic sensor, a corresponding policy, if one exists for the identified application, user or data element may be matched and immediately enforced. The traffic sensor may have a default policy to deny all traffic wherein the administrator makes rules to allow traffic. Conversely, a default policy may allow all traffic and have rules to deny certain kinds of traffic. The benefits of these policies include assuring critical network services are continuously available, while simultaneously stopping unauthorized network traffic thus increasing the performance and security of the network and devices connected to the network. Accurate application traffic identification can be used to eliminate rogue application and malware traffic which violate policies and are potential sources of security vulnerabilities and other risks, and it improves network performance and bandwidth utilization. In addition, traffic sensors inspect network traffic bi-directionally offering the ability to enforce rules differently for inbound vs. outbound network traffic.").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN A KAPLAN whose telephone number is (571)270-3170. The examiner can normally be reached on 9:00 a.m. - 5:00 p.m..

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, Kambiz Zand can be reached on (571)272-3811. 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.

/BENJAMIN A KAPLAN/
Examiner, Art Unit 2434

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC - Searched*		
Symbol	**Date**	**Examiner**
G06Q 10/06375	06/03/2023	BK
H04W 12/0017	06/03/2023	BK
G06Q 20/20	06/03/2023	BK
G06Q 20/40	06/03/2023	BK
G06Q 30/0207	06/03/2023	BK
G06Q 30/0283	06/03/2023	BK
G06Q 30/0284	06/03/2023	BK
G06Q 30/04	06/03/2023	BK
G06Q 30/0601	06/03/2023	BK
G06Q 40/00	06/03/2023	BK
H04L 12/14	06/03/2023	BK
H04L 41/0893	06/03/2023	BK
H04L 41/5003	06/03/2023	BK
H04M 15/00	06/03/2023	BK
H04M 15/58	06/03/2023	BK
H04W 4/24	06/03/2023	BK
G06F 15/177	06/03/2023	BK
G06Q 30/0241	06/03/2023	BK
H04L 9/32	06/03/2023	BK
H04L 67/306	06/03/2023	BK
H04W 28/02	06/03/2023	BK
H04W 12/08	06/03/2023	BK
H04L 47/2408	06/03/2023	BK
G06Q 40/12	06/03/2023	BK
H04W 8/20	06/03/2023	BK
H04W 28/12	06/03/2023	BK

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

H04W 48/14	06/03/2023	BK
H04M 15/88	06/03/2023	BK
H04W 28/0268	06/03/2023	BK
H04W 88/08	06/03/2023	BK
H04M 15/61	06/03/2023	BK
H04W 24/08	06/03/2023	BK
H04L 63/0236	06/03/2023	BK
H04L 51/046	06/03/2023	BK
H04W 4/12	06/03/2023	BK
H04W 8/18	06/03/2023	BK
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G06Q 10/06315	06/03/2023	BK
H04L 41/0806	06/03/2023	BK
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H04M 15/80	06/03/2023	BK
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H04L 67/327	06/03/2023	BK
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H04L 67/26	06/03/2023	BK
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	17/867,585	Raleigh, Gregory G.
	Examiner	**Art Unit**
	BENJAMIN A KAPLAN	2434

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
726	1	06/03/2023	BK

* 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**
PE2E, Google, Inventor Search, Assignee Search	06/03/2023	BK
Google Search Terms: service device partition das policy	06/03/2023	BK

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

CLAIMS

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

CLAIM		DATE								
Final	Original	06/03/2023								
	1	✓								

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	Art Unit	
	Examiner Name	NOT YET ASSIGNED
	Attorney Docket Number	RALEP025C1C1C1C1C1

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Examiner Signature	/BENJAMIN A KAPLAN/	Date Considered	06/03/2023

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	Examiner Name	NOT YET ASSIGNED
	Attorney Docket Number	RALEP025C1C1C1C1C1

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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).

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☐ 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.

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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	/Farshad Farjami/	Date (YYYY-MM-DD)	2023-01-09
Name/Print	Farshad Farjami	Registration Number	41,014

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Bibliographic Data

Application No: 17/867,585

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /BENJAMIN A KAPLAN/ (Examiner's Signature) [ ] (Initials)

Title: Security Techniques for Device Assisted Services

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
07/18/2022 **RULE**	726	2434	RALEP025C1C1C1C1C1

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CONTINUING DATA

This application is a CON of 16907887 06/22/2020 PAT 11405429

16907887 is a CON of 16034362 07/13/2018 PAT 10694385

16034362 is a CON of 14948065 11/20/2015 PAT 10028144

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	49	20040024756	A1	2004-02-05	Rickard, John Terrell	
	50	20040030705		2004-02-12	BOWMAN-AMUAH, Michel K.	
	51	20040039792	A1	2004-02-26	Nakanishi, Tomoaki	
	52	20040044623		2004-03-04	WAKE et al.	
	53	20040047358		2004-03-11	CHEN et al.	
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	56	20040082346		2004-04-29	SKYTT et al.	
	57	20040098715		2004-05-20	AGHERA et al.	
	58	20040102182	A	2004-05-27	Reith, Lothar et al.	
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	62	20040127200		2004-07-01	SHAW et al.	
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	65	20040132427		2004-07-08	Lee, Wan-Yeon et al.	
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	68	20040165596	A1	2004-08-26	Garcia et al.	
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	72	20040176104	A	1841-03-12	Arcens	
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	74	20040198331		2004-10-07	COWARD et al.	
	75	20040203755		2004-10-14	BRUNET, Jeffrey et al.	
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	78	20040225898	A	2004-11-11	Frost, D. et al.	
	79	20040236547		2004-11-25	RAPPAPORT et al.	
	80	20040243680	A1	2004-12-02	Mayer, Georg	
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	83	20040255145	A	2004-12-16	Chow, Jerry	
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	87	20050007993		2005-01-13	Chambers, Mahdi et al.	
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	89	20050021995		2005-01-27	LAL et al.	
	90	20050041617	A1	2005-02-24	Huotari et al.	
	91	20050048950		2005-03-03	MORPER, Hans-Jochen	
	92	20050055291		2005-03-10	BEVENTE et al.	
	93	20050055309		2005-03-10	WILLIAMS et al.	
	94	20050055595	A	2005-03-10	Frazer et al.	
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	97	20050075115	A1	2005-04-07	Corneille et al.	
	98	20050079863	A	2005-04-14	Macaluso, Anthony G.	
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	100	20050096024	A1	2005-05-05	Bicker et al.	
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	102	20050107091		2005-05-19	VANNITHAMBY et al.	
	103	20050108075	A1	2005-05-19	Douglis et al.	
	104	20050111463	A1	2005-05-26	Leung et al.	
	105	20050128967		2005-06-16	SCOBBIE, Donald MacGregor	
	106	20050135264	A1	2005-06-23	Popoff et al.	
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	111	20050198377		2005-09-08	FERGUSON et al.	
	112	20050216421		2005-09-29	BARRY et al.	
	113	20050228985		2005-10-13	YLIKOSKI et al.	
	114	20050238046		2005-10-27	HASSAN et al.	
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	118	20050250508		2005-11-10	GUO et al.	
	119	20050250536	A1	2005-11-10	Deng et al.	
	120	20050254435		2005-11-17	MOAKLEY et al.	
	121	20050266825		2005-12-01	CLAYTON, Steve	

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	123	20060014519		2006-01-19	MARSH et al.	
	124	20060019632		2006-01-26	CUNNINGHAM et al.	
	125	20060020787	A1	2006-01-26	Choyi et al.	
	126	20060026679	A1	2006-02-02	Zakas	
	127	20060030306	A1	2006-02-09	Kuhn, Brian Gerald	
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	133	20060048223		2006-03-02	LEE et al.	
	134	20060068796	A	2006-03-30	Millen, Stephanie L. et al.	
	135	20060072451	A1	2006-04-06	Ross, Alan D.	
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	138	20060075506	A1	2006-04-06	Sanda et al.	
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	140	20060093107	A1	2006-05-04	Chien	
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	144	20060101507	A1	2006-05-11	Camenisch, Ja L.	
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	146	20060114821	A1	2006-06-01	Willey et al.	
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	148	20060126562	A1	2006-06-15	Liu, Huitao	
	149	20060135144	A	2006-06-22	Jothipragasam, Premkumar	
	150	20060136882	A1	2006-06-22	Noonan et al.	
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	152	20060143098		2006-06-29	LAZARIDIS, Mihal	
	153	20060156398	A	2006-07-13	Ross et al.	
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	155	20060165060		2006-07-27	DUA, Robin	
	156	20060168128	A	2006-07-27	Sistla et al.	
	157	20060173959	A	2006-08-03	Mckelvie et al.	
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	159	20060178917		2006-08-10	MERRIAM et al.	
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	161	20060182137	A1	2006-08-17	Zhou et al.	
	162	20060183462		2006-08-17	KOLEHMAINEN, Mikko	
	163	20060190314		2006-08-24	HERNANDEZ, Rick	
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	166	20060199608		2006-09-07	DUNN et al.	
	167	20060200663	A1	2006-09-07	Thornton, Andrew J.	
	168	20060206709	A1	2006-09-14	Labrou et al.	
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	170	20060218395		2006-09-28	MAES, Stephane H.	
	171	20060233108		2006-10-19	KRISHNAN, Murali R.	
	172	20060233166		2006-10-19	BOU-DIAB et al.	
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	179	20060291477		2006-12-28	CROAK et al.	
	180	20070005795	A1	2007-01-04	Gonzalez, Ruben	
	181	20070019670		2007-01-25	FALARDEAU, Eric	
	182	20070022289		2007-01-25	ALT et al.	
	183	20070025301	A	2007-02-01	Petersson et al.	
	184	20070033194	A	2007-02-08	Srinivas et al.	
	185	20070033197	A	2007-02-08	Scherzer, Shimon et al.	
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	188	20070055694		2007-03-08	RUGE et al.	
	189	20070060200	A1	2007-03-15	Boris et al.	
	190	20070061243	A1	2007-03-15	Ramer et al.	
	191	20070061800	A1	2007-03-15	Cheng et al.	
	192	20070061878		2007-03-15	HAGIU, Costin et al. et al.	
	193	20070073899	A1	2007-03-29	Judge et al.	
	194	20070076616		2007-04-05	NGO et al.	
	195	20070093243		2007-04-26	KAPADEKAR et al.	
	196	20070100981		2007-05-03	ADAMCZYK et al.	
	197	20070101426		2007-05-03	LEE et al.	
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	200	20070109983	A	2007-05-17	Shankar, Rohit et al.	
	201	20070111740	A1	2007-05-17	Wandel	
	202	20070130283	A1	2007-06-07	Klein et al.	
	203	20070130315	A1	2007-06-07	Friend et al.	
	204	20070140113	A1	2007-06-21	Gemelos	
	205	20070140145	A	2007-06-21	Kumar et al.	
	206	20070140275		2007-06-21	BOWMAN et al.	
	207	20070143824	A1	2007-06-21	Shahbazi, Majid	
	208	20070147317	A	2007-06-28	Smith et al.	
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	210	20070155365	A	2007-07-05	Kim, Sung-Jun et al.	
	211	20070165630	A1	2007-07-19	Rasanen et al.	
	212	20070168499	A	2007-07-19	Chu, Jing-Long	
	213	20070171856	A1	2007-07-26	Bruce et al.	
	214	20070174490	A1	2007-07-26	Choi et al.	
	215	20070191006	A1	2007-08-16	Carpenter	
	216	20070192460	A1	2007-08-16	Choi et al.	
	217	20070198656		2007-08-23	MAZZAFERRI et al.	
	218	20070201502	A1	2007-08-30	Abramson, Nathan	
	219	20070213054	A1	2007-09-13	Han, Seung-Wook	
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	221	20070226225		2007-09-27	YIU et al.	
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	223	20070234402	A1	2007-10-04	Khosravi et al.	
	224	20070243862		2007-10-18	COSKUN et al.	
	225	20070248100	A1	2007-10-25	Zuberi et al.	
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	227	20070254675		2007-11-01	ZORLU OZER et al.	
	228	20070255769	A1	2007-11-01	Agrawal et al.	
	229	20070255797	A1	2007-11-01	Dunn et al.	
	230	20070255848		2007-11-01	SEWALL et al.	
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	233	20070259673		2007-11-08	WILLARS et al.	
	234	20070263558		2007-11-15	SALOMONE, Leonardo	
	235	20070266422	A1	2007-11-15	Germano et al.	
	236	20070274327		2007-11-29	KAARELA et al.	
	237	20070280453		2007-12-06	Kelley, Sean S.	
	238	20070282896		2007-12-06	WYDROUG et al.	
	239	20070293191	A1	2007-12-20	Mir et al.	
	240	20070294395		2007-12-20	STRUB et al.	
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	245	20070300252		2007-12-27	Acharya, Swarup et al.	
	246	20080005285		2008-01-03	ROBINSON et al.	
	247	20080005561		2008-01-03	BROWN et al.	
	248	20080010379	A	2008-01-10	Zhao, Hang	
	249	20080010452		2008-01-10	HOLTZMAN et al.	
	250	20080018494	A1	2008-01-24	Waite et al.	
	251	20080020738	A1	2008-01-24	Ho et al.	
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	255	20080034063	A1	2008-02-07	Yee, Robert	
	256	20080034419	A	2008-02-07	Mullick et al.	
	257	20080039102		2008-02-14	SEWALL et al.	
	258	20080049630		2008-02-28	KOZISEK et al.	
	259	20080050715	A1	2008-02-28	Golczewski et al.	
	260	20080051076		2008-02-28	O'Shaughnessy, John et al.	
	261	20080052387		2008-02-28	HEINZ et al.	
	262	20080056273	A	2008-03-06	Pelletier et al.	
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	264	20080059743		2008-03-06	BYCHKOV et al.	

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	265	20080060066		2008-03-06	WYNN et al.	
	266	20080062900		2008-03-13	RAO, Bindu Rama	
	267	20080064367		2008-03-13	NATH et al.	
	268	20080066149		2008-03-13	LIM, Keng	
	269	20080066150		2008-03-13	LIM, Keng	
	270	20080066181	A1	2008-03-13	Haveson et al.	
	271	20080070550	A	2008-03-20	Hose, David Alan	
	272	20080077705	A1	2008-03-27	Li et al.	
	273	20080080457	A1	2008-04-03	Cole, Terry L.	
	274	20080081606		2008-04-03	COLE, Terry L.	
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