

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7194070

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
KAITLIN NEWMAN	03/19/2019
KIMBERLY HAYNES	03/18/2019
CHARLES NATHAN CRANK	03/21/2019
ANDREW COGSWELL	05/19/2019
COLIN HART	03/19/2019
JEFFREY RULE	03/19/2019
LARA MOSSLER	03/18/2019
LATIKA GULATI	03/21/2019
ABDELKADER BENKREIRA	03/19/2019
SARAH JANE CUNNINGHAM	03/19/2019
SOPHIE BERMUDEZ	03/19/2019
MICHAEL MOSSOBA	03/18/2019
WAYNE LUTZ	03/19/2019

**RECEIVING PARTY DATA**

<b>Name:</b>	CAPITAL ONE SERVICES, LLC
<b>Street Address:</b>	1680 CAPITAL ONE DRIVE
<b>City:</b>	MCLEAN
<b>State/Country:</b>	VIRGINIA
<b>Postal Code:</b>	22102

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	17680080

**CORRESPONDENCE DATA**

**Fax Number:** (202)778-2201

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

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**Email:** PATDCDOCKET@hunton.com

**Correspondent Name:** HUNTON ANDREWS KURTH LLP/CAPITAL ONE INT

**Address Line 1:** 2200 PENNSYLVANIA AVENUE, N.W.

**PATENT**

**Address Line 4:** WASHINGTON, UNITED STATES 20037

**ATTORNEY DOCKET NUMBER:** 067519.0003790

**NAME OF SUBMITTER:** ANDREW D. KASNEVICH

**SIGNATURE:** /Andrew D. Kasnevich/

**DATE SIGNED:** 02/24/2022

**Total Attachments: 18**

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**ASSIGNMENT AND DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION**

I am an inventor (referred to below as Assignor) of an invention entitled:

**SYSTEMS AND METHODS FOR CRYPTOGRAPHIC AUTHENTICATION OF CONTACTLESS CARDS**

filed herewith. Capital One Services, LLC, a corporation of Delaware whose post office address is 1680 Capital One Drive, McLean, VA 22102 (hereinafter referred to as Assignee), desires to obtain an assignment of this invention;

THEREFORE, for good and valuable consideration, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over to Assignee, its successors and assigns, my entire right, title, and interest in and to this invention, Patent Application No. 16/351,433, filed March 12, 2019, and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues and reexaminations thereof, and all rights to claim priority in any foreign country on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application in any foreign country, and all applications for Letters Patent which may become filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, reexaminations and reissues thereof; and I authorize and request the Director of the United States Patent and Trademark Office (USPTO) and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I further covenant and agree that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I authorize and request that the attorneys having Power of Attorney in this application, insert here in parentheses (Application No. 16/351,433, filed March 12, 2019) the filing date and application number of said application when known.


**DECLARATION:**

As a named inventor below, I declare that: (1) This declaration is directed to the above-identified application; (2) the above-identified application was made or authorized to be made by me; (3) my residence and mailing address are as stated below next to my name; and (4) I believe I am an original inventor or an original joint inventor of a claimed invention in the application. I acknowledge that any willful false statements made in this declaration are punishable by fine or imprisonment of not more than five (5) years, or both, under section 1001 of Title 18 of the United States Code.

As a below named inventor, I have reviewed and understand the contents of the application, including the claims, and am aware of the duty to disclose to the USPTO all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.

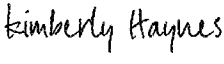
Assignor (Inventor) 1:

Name: Kaitlin NEWMAN  
Address: 1717 Lamont Street NW  
Washington, DC 20010

Signature:   
Date: 3/19/2019


Assignor (Inventor) 2:

Name: Kimberly HAYNES  
Address: 1539 Twisted Oak Drive  
Reston VA 20194

Signature:   
Date: 3/18/2019

Assignor (Inventor) 3:

Name: Charles Nathan CRANK  
Address: 2408 Colwyn Road  
Henrico, VA 23229

Signature:   
Date: 3/21/2019

Assignor (Inventor) 4:

Name: Drew COGSWELL  
Address: 3208 Crossings Way  
Midlothian VA 23113

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 5:

Name: Colin HART  
Address: 2604 S Adams Street  
Arlington, VA 22206

Signature: Colin Hart  
Date: 3/19/2019

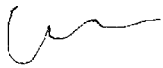
Assignor (Inventor) 6:

Name: Jeffrey RULE  
Address: 3906 Laird Place  
Chevy Chase, MD 20815

Signature: Jeff Rule  
Date: 3/19/2019

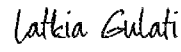
Assignor (Inventor) 7:

Name: Lara MOSSLER  
Address: 113 Appomattox Street  
Farmville, VA 23901

Signature:   
Date: 3/18/2019

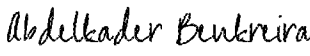
Assignor (Inventor) 8:

Name: Latika GULATI  
Address: 3208 Crossings Way  
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Signature:   
Date: 3/26/2019

Assignor (Inventor) 9:

Name: Abdelkader BENKREIRA  
Address: 4413 Harrison St NW  
Washington, DC 20015

Signature:   
Date: 3/19/2019

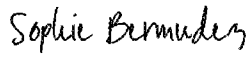
Assignor (Inventor) 10:

Name: Sarah James CUNNINGHAM  
Address: 3901 6th Street N  
Arlington, VA 22203

Signature:   
Date: 3/19/2019


Assignor (Inventor) 11:

Name: Sophie BERMUDEZ  
Address: 1301 M Street NW  
Washington, DC 20005

Signature:   
Date: 3/19/2019

Assignor (Inventor) 12:

Name: Michael MOSSOBA  
Address: 1919 Clarendon Blvd, Apt. 422  
Arlington, VA 22201

Signature:   
Date: 3/18/2019

Assignor (Inventor) 13:

Name: Wayne LUTZ

Address: 902 Lira Drive  
Fort Washington, MD 20744

Signature: Wayne Lutz

Date: 3/19/2019



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THEREFORE, for good and valuable consideration, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over to Assignee, its successors and assigns, my entire right, title, and interest in and to this invention, Patent Application No. 16/351,433, filed March 12, 2019, and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues and reexaminations thereof, and all rights to claim priority in any foreign country on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application in any foreign country, and all applications for Letters Patent which may become filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, reexaminations and reissues thereof; and I authorize and request the Director of the United States Patent and Trademark Office (USPTO) and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

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Name: Kaitlin NEWMAN  
Address: 1717 Lamont Street NW  
Washington, DC 20010

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 2:

Name: Kimberly HAYNES  
Address: 1539 Twisted Oak Drive  
Reston VA 20194

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 3:

Name: Charles Nathan CRANK  
Address: 2408 Colwyn Road  
Henrico, VA 23229

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 4:

Name: Drew COGSWELL  
Address: 3208 Crossings Way  
Midlothian VA 23113  
\_\_\_\_\_

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 5:

Name: Colin HART  
Address: 2604 S Adams Street  
Arlington, VA 22206  
\_\_\_\_\_

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 6:

Name: Jeffrey RULE  
Address: 3906 Laird Place  
Chevy Chase, MD 20815  
\_\_\_\_\_

Signature: \_\_\_\_\_  
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Assignor (Inventor) 7:

Name: Lara MOSSLER  
Address: 113 Appomattox Street  
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Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Assignor (Inventor) 8:

Name: Latika GULATI  
Address: 2651 Park Tower Drive  
Apt 101  
Vienna VA 22180

Signature: *Latika Gulati*  
Date: 3/21/2019

Assignor (Inventor) 9:

Name: Abdelkader BENKREIRA  
Address: 4413 Harrison St NW  
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Signature: \_\_\_\_\_  
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Assignor (Inventor) 10:

Name: Sarah James CUNNINGHAM  
Address: 3901 6th Street N  
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Assignor (Inventor) 12:

Name: Michael MOSSOBA  
Address: 1919 Clarendon Blvd, Apt. 422  
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