

## PATENT ASSIGNMENT COVER SHEET

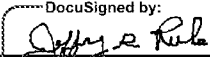
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EPAS ID: PAT5772948

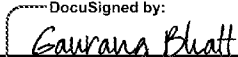
<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JEFFREY RULE	07/16/2019
GAURANG BHATT	07/15/2019
LUKIIH CUAN	07/18/2019
ROCKY GUO	07/15/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CAPITAL ONE SERVICES, LLC
<b>Street Address:</b>	1680 CAPITAL ONE DRIVE
<b>City:</b>	MCLEAN
<b>State/Country:</b>	VIRGINIA
<b>Postal Code:</b>	22102
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16654818
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)824-3001
<i>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.</i>	
<b>Phone:</b>	(202) 824-3000
<b>Email:</b>	bwptopat@bannerwitcoff.com, mseasay@bannerwitcoff.com
<b>Correspondent Name:</b>	BANNER & WITCOFF, LTD.
<b>Address Line 1:</b>	1100 13TH ST. NW
<b>Address Line 2:</b>	STE 1200
<b>Address Line 4:</b>	WASHINGTON, D.C. 20005
<b>ATTORNEY DOCKET NUMBER:</b>	009033.00015\US
<b>NAME OF SUBMITTER:</b>	KIRK A. SIGMON
<b>SIGNATURE:</b>	/KIRK A. SIGMON/
<b>DATE SIGNED:</b>	10/16/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 4</b>	

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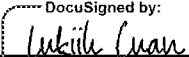
**COMBINED PATENT DECLARATION AND ASSIGNMENT**

<b>TITLE OF INVENTION:</b>	MESSAGE AUTHENTICATED COMMUNICATION SESSIONS
<b>DECLARATION</b>	
As the below named inventor, I hereby declare that:	
<ul style="list-style-type: none"> <li>• This declaration is directed to:           <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The attached application, or</li> <li><input type="checkbox"/> United States application or PCT international application number _____ filed on _____.</li> </ul> </li> <li>• The above-identified application was made or authorized to be made by me.</li> <li>• I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</li> <li>• I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.</li> </ul>	
<b>ASSIGNMENT</b>	
<b>WHEREAS</b> , I, the below named Inventor/Assignor, have invented the above invention, having the following application number and filing date:	
U.S. Application No. <u>16/516,641</u> , filed <u>July 19, 2019</u> .	
If the above lines are blank, I hereby authorize the attorneys for Assignee to insert the filing date and application number immediately above after they become known and prior to recording this document.	
<b>WHEREAS</b> , Capital One Services, LLC ("Assignee"), a Corporation having offices and a place of business at 1680 Capital One Drive, McLean, Virginia 22102, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:	
<b>NOW, THEREFORE, TO WHOM IT MAY CONCERN</b> , be it known that, for good and valuable consideration, including salary and/or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions.	
I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment.	
I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.	
<b>INVENTOR/ASSIGNOR:</b>	
Legal Name: <u>Jeffrey Rule</u>	
Address: <u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u>	
Signature: 	Date: <u>7/16/2019</u>
<small>902F8C3CB0C648C...</small>	

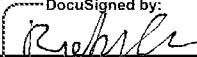
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<b>INVENTOR/ASSIGNOR:</b>	
Legal Name:	<u>Gaurang Bhatt</u>
Address:	<u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u>
Signature:	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <small>DocuSigned by:</small>    <small>86BC87CFE596465...</small> </div>
Date:	<u>7/15/2019</u>

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<b>INVENTOR/ASSIGNOR:</b>	
Legal Name:	<u>Lukiih Cuan</u>
Address:	<u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u>
Signature:	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> <small>DocuSigned by:</small>    <small>97A6CF3DBFB64DB...</small> </div> Date: <u>7/18/2019</u>

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<b>INVENTOR/ASSIGNOR:</b>	
Legal Name: <u>Rocky Guo</u>	
Address: <u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u>	
Signature: 	Date: <u>7/15/2019</u>

DocuSigned by:  
Rocky Guo  
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