

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7823193

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
CAPITAL ONE FINANCIAL CORPORATION		11/18/2014
<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>	18177074	
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(206)359-9000	
<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>	2063598000	
<b>Email:</b>	Patentprocurement@perkinscoie.com	
<b>Correspondent Name:</b>	PERKINS COIE LLP - CAPITAL ONE	
<b>Address Line 1:</b>	P.O. BOX 1247	
<b>Address Line 4:</b>	SEATTLE, WASHINGTON 98111-1247	
<b>ATTORNEY DOCKET NUMBER:</b>	144310.8039.US03	
<b>NAME OF SUBMITTER:</b>	MIRIAM NELSEN AWAN	
<b>SIGNATURE:</b>	/Miriam Nelsen Awan/	
<b>DATE SIGNED:</b>	03/01/2023	
<b>Total Attachments: 6</b>		
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## PATENT ASSIGNMENT AGREEMENT

WHEREAS, CAPITAL ONE FINANCIAL CORPORATION, a Delaware corporation having a place of business at 1680 Capital One Drive, McLean, VA 22102 ("ASSIGNOR") is the sole and exclusive owner of the entire right, title, and interest in the patents and patent applications listed in Appendix A attached hereto, and the inventions described therein (hereinafter the "Patents"); and

WHEREAS, CAPITAL ONE SERVICES, LLC, a Delaware corporation having a place of business at 1680 Capital One Drive, McLean, VA 22102 ("ASSIGNEE"), is desirous of acquiring all of ASSIGNOR's right, title and interest in the Patents.

NOW, THEREFORE, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, ASSIGNOR's entire right, title and interest in and throughout the United States of America (including its territories, possessions, and dependencies) and all countries foreign thereto in and to the Patents, any other United States applications, including provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on the Patents, any foreign applications, including international and regional applications, based in whole or in part on any of the Patents, and in and to any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the Patents or any parts thereof;

AND WE hereby authorize and request our agents, Hunton & Williams LLP, whose address is 2200 Pennsylvania Avenue, N.W., Washington, DC 20037-1701, to insert hereon any identification necessary or desirable for recordation of this document.


AND ASSIGNOR hereby agrees for itself and its successors, assigns, and legal representatives, to execute without further consideration any further documents and instruments which may be necessary, lawful and proper in the prosecution of said Patents or in the preparation or prosecution of any continuing, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extensions, post-grant review, *inter partes* review or derivation proceedings, supplemental examination or interference proceedings, or other applications for patents of any region or country, that may be necessary to secure to ASSIGNEE its interest and title in and to the Patents or any parts thereof;

AND ASSIGNOR hereby covenants for itself and its legal representatives, and agrees with said ASSIGNEE, its successors and assigns, that ASSIGNOR has granted no right or license to make, use, sell or offer to sell the Patents, to anyone except said ASSIGNEE, that prior to the execution of this deed, ASSIGNOR's right, title and interest in the Patents had not been otherwise encumbered, and that ASSIGNOR has not and will not execute any instrument in conflict therewith;

AND ASSIGNOR does hereby authorize and request the Director of the United States Patent and Trademark Office to issue any and all letters patent which may be granted upon said Patents, or any parts thereof when granted, to said ASSIGNEE.

IN WITNESS WHEREOF, the ASSIGNOR has executed this Assignment on the date indicated below:

**ASSIGNOR:**  
**CAPITAL ONE FINANCIAL CORPORATION**

  
\_\_\_\_\_  
Thomas A. Feil  
Controller

Date: 11/18/14

**WITNESS:**

Printed Name: Terrie Ann Cashman

Signature: 

Date: November 18, 2014



IN WITNESS WHEREOF, the ASSIGNEE has executed this Assignment on the date indicated below:

ASSIGNEE:  
CAPITAL ONE SERVICES, LLC

*R. Scott Blackley*  
R. Scott Blackley  
Controller  
Date: *Nov. 13, 2014*

WITNESS:  
Printed Name: *Margaret Shaw Baskette, Notary Public*  
Signature: *Margaret Shaw Baskette*  
Date: *November 13, 2014*



**APPENDIX A**  
**(TO BE ATTACHED SEPARATELY)**

## **CONFIRMATORY ASSIGNMENT**

This Confirmatory Assignment Agreement ("Confirmatory Assignment") is made and entered into by and between Capital One Financial Corporation, a Delaware corporation having a place of business at 1680 Capital One Drive, McLean, VA 22102 ("Assignor") and Capital One Services, LLC, a Delaware corporation having a place of business at 1680 Capital One Drive, McLean, VA 22102 ("Assignee").

WHEREAS, on November 18, 2014, pursuant to a Patent Assignment Agreement ("Original Assignment"), Assignor assigned to Assignee all right, title, and interest in and throughout the United States of America (including its territories, possessions, and dependencies) and all countries foreign thereto in (a) the patents and patent applications listed in Appendix A attached hereto, and the inventions described therein; (b) any other United States applications, including provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on the patents and patent applications in (a); (c) any foreign applications, including international and regional applications, based in whole or in part on any of the patents and patent application in (a); and (d) any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the patents or patent applications in (a) or any parts thereof (collectively the "Patents");

WHEREAS, pursuant to the Original Assignment, Assignor also assigned to Assignee all causes of action, rights, and remedies under the Patents for infringement occurring prior to, on, or after the date of such assignment;

WHEREAS, in exchange for the assignments in the Original Assignment, Assignee provided to Assignor good and valuable consideration, the receipt and sufficiency of which was acknowledged by Assignor; and

WHEREAS, the Assignor and Assignee now wish to confirm the validity and intent of the Original Assignment and the assignments contained therein and the receipt and sufficiency of the good and valuable consideration received by Assignor for such assignment;

NOW, THEREFORE, in consideration for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Assignor from Assignee, the parties agree as follows:

1. Assignor hereby confirms the assignment of the entire right, title, and interest in and to the Patents to the Assignee including all causes of action, rights, and remedies under the Patents for infringement occurring prior to, on, or after the date of such assignment pursuant to the Original Assignment and, for the avoidance of doubt, hereby sells, assigns, and transfers to Assignee the entire right, title, and interest in the Patents and all causes of action, rights, and remedies under the Patents for infringement occurring prior to, on, or after the date of the assignment in the Original Assignment.

2. Assignor hereby confirms the receipt and sufficiency of good and valuable consideration from Assignee for the assignments contained in the Original Assignment, and, for the avoidance of doubt, hereby acknowledges the receipt and sufficiency of good and valuable consideration from Assignee for the assignments contained in this Confirmatory Assignment.

3. Assignor hereby agrees to execute, without further consideration, any further documents and instruments which may be necessary, lawful and proper in the prosecution, maintenance, enforcement, or defense of the Patents that may be necessary to secure to Assignee its interest and title in and to the Patents.

4. Assignor hereby covenants for itself and its legal representatives, and agrees with Assignee that Assignor has granted no right or license under the Patents either before, on or after the Original Assignment, to anyone except Assignee, that prior to the execution of the Original Assignment, Assignor's right, title and interest in the Patents had not been otherwise encumbered, and that Assignee has not and will not execute any instrument in conflict therewith.

IN WITNESS WHEREOF the parties have caused this Confirmatory Assignment to be executed by their duly authorized officers on the respective dates and at the respective places hereinafter set forth.

**Capital One Financial Corp.**

DocuSigned by:  
By Tom Feil  
8CD880B17A1140C...

(Signature)

Name: Tom Feil

(Please Print)

Title: Treasurer

Date: 12/31/17

**Capital One Services, LLC**

DocuSigned by:  
By Timothy Golden  
C5DA3AE087D14DD...

(Signature)

Name: Timothy Golden

(Please Print)

Title: Controller

Date: 12/31/17