PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7284881

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CAPITAL ONE FINANCIAL CORPORATION	12/31/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14202356

CORRESPONDENCE DATA

Fax Number: (202)408-4400

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.

Phone: 2024084000

Email: faxserve@finnegan.com

Correspondent Name: FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Address Line 1: 901 NEW YORK AVENUE NW Address Line 4: WASHINGTON, D.C. 20001

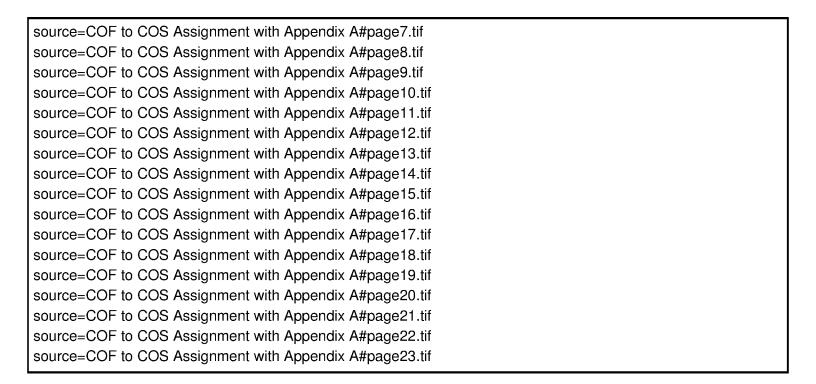
ATTORNEY DOCKET NUMBER:	05793.3285-00000
NAME OF SUBMITTER:	VIRGINIA MCNELIS-CLARK
SIGNATURE:	/VIRGINIA MCNELIS-CLARK/
DATE SIGNED:	04/18/2022

Total Attachments: 23

source=COF to COS Assignment with Appendix A#page1.tif source=COF to COS Assignment with Appendix A#page2.tif source=COF to COS Assignment with Appendix A#page3.tif source=COF to COS Assignment with Appendix A#page4.tif source=COF to COS Assignment with Appendix A#page5.tif source=COF to COS Assignment with Appendix A#page6.tif

> PATENT REEL: 059724 FRAME: 0891

507237962



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) and 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. By Tom Ful	Capital One Services, LLC By Timolly Golden CSSSAGASEON TO 1000
(Signature)	(Signature)
Name: Tom Feil	Name: Timothy Golden
(Please Print)	(Please Print)
Title: Treasurer	Title: Controller
Date: 12/31/17	Date: 12/31/17

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 into 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 reisque 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 notherize and request our agents, Flumon & Williams LLP, whose address is 2200 Pennsylvania Avenus, 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 presention of said Patens or in the preparation or prosecution of any continuing, substitute, divisional, renewal, recramination or reisans application or in any amendments, extensions, post-grant review, *there paries* review or derivation proceedings, supplemental examination on interference proceedings, or other applications for patents of any region or country, that may be recessary to secure to ASSIGNEE its interest and title in and to the Patents or any parts thereof;

AND ASSIGNOR hereby coverants for itself and its legal representatives, and agrees with said ASSIGNOR, 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 CORFORATION

Thomas A. Feil

Controller

Date: 11/18/14

:ZZUNTIW

Printed Names 10111 1111 44

Date: 11000000 18 . 62019

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

ASSIGNEE:

CAPITAL ONE SERVICES, LLC

R. Scott Blackley

Controller

Silve: 7101 19 . 2417

WITNESS

Emilia Nove Margaret Shaw Baskette, Wary Tubic

Date: 100/00/00/19,3014

PATENT

REEL: 059724 FRAME: 0897

APPENDIX A (TO BE ATTACHED SEPARATELY)

Appendix A

Granted and Pending Patent Applications (Accurate as of September 29, 2014)

Granted United States Patents

No.	Patent Title	Patent Number	Issue Date	Filing Date
	System for Establishing and Administering Funded and Post- Funded Charge Accounts	5,583,760	12/10/1996	08/03/1994
2	Method for Creating and Managing a Lease Agreement	6,049,784	04/11/2000	12/16/1997
3	Method for Creating and Managing a Lease Agreement	6,023,687	02/08/2000	12/16/1997
4	System and Method for Assigning a Line of Credit to a Credit Card Account	8,600,869	12/03/2013	08/31/1999
5	Systems and Method for Offering and Providing Secured Credit Cards Products	6,158,657	12/12/2000	09/03/1999
6	Method and System for Establishing Credit Limit	7,509,285	03/24/2009	08/31/2000
7	Solicitation to Web Marketing Loop Process (AMORE System)	7,650,304	01/19/2010	09/08/2000
8	System and Method for Providing a Credit Card with Multiple Credit Lines	7,406,442	07/29/2008	09/11/2000
9	System and Method for Performing Dynamic Web Marketing and Advertising	6,477,575	11/05/2002	09/12/2000
10	System and Method for Performing Web Based In-View Monitoring - US	7,567,916	07/28/2009	09/12/2000
11	Method and System for Managing Service Accounts	8,725,605	05/13/2014	10/11/2000
12	System and Method for Restricting Over Limit Accounts	7,313,544	12/25/2007	11/01/2000
13	System and Method for Providing Extra Lines of Credit	7,689,502	03/30/2010	02/12/2001
14	System and Method for Managing Consumer Information	6,947,897	09/20/2005	02/13/2001
15	Method and Apparatus for Monitoring Guaranteed Loans and Notifying Guarantors	7,340,434	03/04/2008	02/16/2001
16	Methods and Systems for Providing Debt Recovery Partnerships	7,685,061	03/23/2010	03/01/2001
17	Method for Administering a Credit Card with a Finance Charge Waiver Period	7,401,045	07/15/2008	03/05/2001

Capital One Confidential/Proprietary

40	Mothed and Contact for Official Science	7 550 547	07/44/0000	1 00/07/2007
18	Method and System for Offering Debt Products to a Customer	7,559,217	07/14/2009	03/21/2001
19	System and Method for Securely Copying a Cryptographic Key	7,178,027	02/13/2007	03/30/2001
20	System and Method for Providing Starter Credit Card Accounts	8,407,136	03/26/2013	06/15/2001
21	Method and System for Offering Financial Products Based on a Customer's Determined Life Status	8,108,275	01/31/2012	06/18/2001
22	System and Method for Identifying Applications Loaded in a Smart Card	6,745,944	06/08/2004	06/20/2001
23	Systems and Methods for Managing Credit Card Products with Adjustable Credit Limits	7,389,266	06/17/2008	06/29/2001
24	Systems and Methods for Processing Credit Card Transactions that Exceed a Credit Limit	7,383,224	06/03/2008	06/29/2001
25	Account Status System and Method	7,319,983	01/15/2008	07/23/2001
26	Systems and Methods for Providing Financial Account Information Over a Network	7,505,925	03/17/2009	08/09/2001
27	Menuing Method and System	6,819,748	11/16/2004	09/27/2001
28	Systems, Methods and Apparatus for Instant Issuance of a Credit Card	6,877,656	04/12/2005	10/24/2001
29	Systems and Methods for Table Driven Automation Testing of Software Programs	6,993,748	01/31/2006	10/26/2001
30	System and Methods for Monitoring an Application Processor	6,772,135	08/03/2004	11/21/2001
31	System and Methods for Marketing Financial Products and Services	7,689,451	03/30/2010	12/12/2001
32	Call Routing System and Method	7,039,167	05/02/2006	04/04/2002
33	Systems and Method for Providing Common Event Format Using Alert Index	7,139,938	11/21/2006	04/30/2002
34	Method and Systems for Managing Financial Accounts Having Adjustable Account Parameters	7,634,434	12/15/2009	05/29/2002
35	System and Method for Remote Tracking of Reboot Status	7,017,085	03/21/2006	05/30/2002
36	Systems and Methods for Tracking Assets	7,203,690	04/10/2007	05/31/2002
37	Automatic Payment System and Method	7,123,698	10/17/2006	06/26/2002
38	Methods and Systems for Controlling a Mailroom Environment	6,692,348	02/17/2004	08/12/2002
39	Providing a Customer One or More Options for Increasing a Line of Credit	7,409,369	08/05/2008	09/05/2002
40	Multiple Account Banking System and Method	6,786,400	09/07/2004	09/06/2002

		\		
41	Method and System for Automatically Collecting Payment for a Credit Card Account	8,762,262	06/24/2014	09/06/2002
42	Stealth Network	6,823,383	11/23/2004	09/10/2002
43	Methods, Systems and Articles of Manufacture For Managing Penalty Fees For Financial Accounts	7,386,501	06/10/2008	10/16/2002
44	Systems and Methods for Soliciting Customers Using Computer Readable Media	7,831,513	11/09/2010	11/21/2002
45	Method and System for Providing a Higher Credit Limit to a Customer	7,472,090	12/30/2008	12/31/2002
46	Data Card	D498,788	11/23/2004	04/03/2003
47	Data Card	D490,104	05/18/2004	04/03/2003
48	Data Card	D522,052	05/30/2006	04/03/2003
49	System and Method for Managing Fulfillment Data Associated with a Fulfillment System	7,249,143	07/24/2007	07/23/2003
50	System and Method for Managing Dedicated Use of a Credit Account	7,584,126	09/01/2009	08/18/2003
51	System and Method for Remotely Monitoring Wireless Networks	7,316,031	01/01/2008	09/04/2003
52	System and Method for Detecting Unauthorized Access Using a Voice Signature	7,224,786	05/29/2007	09/11/2003
53	Systems And Methods For Managing A Financial Investment Fund	8,799,120	08/05/2014	11/14/2003
54	System and Method for Redeeming Rewards and Incentives	7,090,138	08/15/2006	12/18/2003
55	Data Card - Design Patent #4	D511,543	11/15/2005	12/24/2003
56	System and Method of Using RFID Devices to Analyze Customer Traffic Patterns in Order to Improve a Merchants Layout	7,475,813	01/13/2009	02/06/2004
57	Systems and Methods for Automatically Distributing Gifts To Recipients on Behalf of Customers	7,270,263	09/18/2007	03/10/2004
58	Methods and Systems for Verifying the Accuracy of Reported Information	7,809,700	10/05/2010	04/09/2004
59	Transaction Cards and Methods of Manufacturing the Same	D537,080	02/20/2007	07/14/2004
60	Transaction Cards and Methods of Manufacturing the Same	D519,513	04/25/2006	07/14/2004
61	Transaction Cards and Methods of Manufacturing the Same	D516,564	03/07/2006	07/14/2004
62	Transaction Cards and Methods of Manufacturing the Same	D517,073	03/14/2006	07/14/2004
63	Methods and Systems for Providing a	7,303,122	12/04/2007	08/30/2004

***************************************	Financial Account Charging a Flat		: 1	
	Amount			
64	Method and System for Debt Recovery	7,756,789	07/13/2010	09/07/2004
65	Stealth Network	7,551,633	06/23/2009	11/16/2004
66	Systems, Methods, and Computer Readable Medium for Wireless Solicitations	8,775,253	07/08/2014	12/06/2004
67	Systems and Methods for Adjusting Account Terms Based on Purchase Transaction Information	7,890,423	02/15/2011	12/08/2004
68	Data Card	7,500,603	03/10/2009	02/22/2005
69	Systems, Methods and Apparatus for Instant Issuance of a Credit Card	7,131,583	11/07/2006	04/02/2005
70	System and Method for Performing Web Based In-View Monitoring	7,970,647	06/08/2011	04/15/2005
71	Process for Alerting Customers to an E-mail Phishing	7,841,003	11/23/2010	05/04/2005
72	Systems and Methods for Automatically Preventing Delinquency of Payment on Financial Accounts	7,753,261	07/13/2010	06/28/2005
73	System and Method for Transferring Funds Between Accounts	7,707,106	04/27/2010	06/29/2005
74	System and Method for Providing a Prepaid Account and Card	7,337,947	03/04/2008	06/30/2005
75	System And Method For Point Of Sale Cash Rebates	8,381,971	02/26/2013	06/30/2005
76	Systems and Methods for Decisioning Or Approving a Financial Credit Account Based on a Customer's Check-Writing Behavior	7,556,192	07/07/2009	08/04/2005
77	Software Development Tool Using A Structured Format To Generate Software Code	7,752,606	07/06/2010	08/10/2005
78	System and Method for Capturing Sales Tax Deduction Information from Monetary Card Transactions	7,584,884	09/08/2009	09/06/2005
79	Methods, Systems and Articles of Manufacture for A Financial Card Having Warning Features	7,503,484	03/17/2009	09/12/2005
80	Wireless Devices For Storing A Financial Account Card and Methods For Storing Card Data in a Wireless Device	7,997,476	08/16/2011	09/15/2005
81	System and Method for Redeeming Rewards and Incentives	7,597,255	10/06/2009	09/29/2005
82	Systems and Methods for Processing	8,346,638	01/01/2013	10/26/2005
	Transaction Data to Perform A Merchant Chargeback			

	Card			
84	System and Method for Managing Transactions	7,546,945	06/16/2009	12/09/2005
85	Systems and Methods for Providing Flexible Incentive Rewards	8,770,473	07/08/2014	03/17/2006
86	System and Method for Managing Statistical Models	7,881,535	02/01/2011	06/29/2006
87	System and Method for Redeeming Rewards and Incentives	7,370,811	05/13/2008	07/07/2006
88	Systems and Methods For Offering Wireless Financial Accounts	8,041,608	10/18/2011	07/14/2006
89	User selectable functionality facilitator	7,591,419	09/22/2009	08/01/2006
90	Real Time Product Matching	8,458,062	06/04/2013	08/11/2006
91	Systems, Methods and Apparatus for Instant Issuance of a Credit Card	7,302,719	12/04/2007	10/20/2006
92	Same-Day Settlement Of Financial Transactions	8,364,585	01/29/2013	11/01/2006
93	System and Method of Notifying User Near Point of Sale Location of Available Rewards at the Point of Sale Location (POS Rewards Real Time Interaction System)	7,934,639	05/03/2011	11/17/2006
94	System and Method for Providing Extra Lines of Credit	7,788,170	08/31/2010	12/06/2006
95	Systems and Methods for Providing Financial Account Information Over a Network	8,442,872	05/14/2013	12/06/2006
96	Systems and Methods for Providing Financial Account Information Over a Network	7,962,373	06/14/2011	12/06/2006
97	System and Method for Analyzing Web Paths	8,095,644	01/10/2012	12/07/2006
98	Systems And Methods For Providing A Reward	8,510,160	08/13/2013	12/21/2006
99	System and Method for Transferring Electronic Account Information	8,458,064	06/04/2013	01/23/2007
100	System and Method for Detecting Unauthorized Access Using a Voice Signature	7,430,287	09/30/2008	02/16/2007
101	System and Method for Implementing a Game for Financial Data Extraction	7,997,969	08/16/2011	03/15/2007
102	Reward Customer Investment Communities	8,131,590	03/06/2012	04/05/2007
103	System and Method of Analyzing and Monitoring a Customer's Financial Condition (Financial Health Meter)	8,341,057	12/25/2012	06/22/2007
104	Systems and Methods for Automatically Distributing Gifts To Recipients on Behalf of Customers	7,559,465	07/14/2009	08/14/2007

105	Method and System For Performing A Financial Transaction Using a User Interface	7,792,748	09/07/2010	09/19/2007
106	System and Method for Providing Extra Lines of Credit	7,904,384	03/08/2011	10/22/2007
107	System and Method for Providing a Credit Card with Multiple Credit Lines	8,560,440	10/15/2013	11/30/2007
108	Method and Apparatus for Monitoring Guaranteed Loans and Notifying Guarantors	7,702,552	04/20/2010	02/06/2008
109	Method and System for Authorizing Credit Account Transactions by Geographic Location	7,857,212	12/28/2010	02/14/2008
110	Method and System For Collecting and Managing Feedback From Account Users Via Account Statements	8,332,294	12/11/2012	04/02/2008
111	Systems and Methods for Processing Credit Card Transactions that Exceed a Credit Limit	7,953,658	05/31/2011	04/15/2008
112	Methods, Systems and Articles of Manufacture For Managing Penalty Fees For Financial Accounts	7,752,097	07/06/2010	05/21/2008
113	Providing a Customer One or More Options for Increasing a Line of Credit	7,685,066	03/23/2010	06/26/2008
114	System and Method For Managing Related Accounts	8,788,413	07/22/2014	10/09/2008
115	Method and System for Providing Credit to a Customer Based on the Customer's Preliminary Use of an Account Funded by Another Party	8,335,739	12/18/2012	12/15/2008
116	System and Method for User Identification String Generation for Selection of Function (Optipay 1234 Generator)	8,162,208	04/24/2012	02/27/2009
117	User Selectable Functionality Facilitator	8,157,165	04/17/2012	07/10/2009
118	System and Method for Managing Dedicated Use of a Credit Account	7,788,153	08/31/2010	07/24/2009
119	System and Method for Capturing Sales Tax Deduction Information from Monetary Card Transactions	7,886,966	02/15/2011	08/03/2009
120	System And Methods For Providing A Transaction	8,423,453	04/16/2013	10/07/2009
121	Providing a Customer One or More Options for Increasing a Line of Credit	8,055,580	11/08/2011	03/15/2010
122	Method And System For Debt Recovery	8,538,880	09/17/2013	06/02/2010

123	System And Method For Providing Extra Lines Of Credit	8,370,255	02/05/2013	07/02/2010
124	System and Method for Securing Payment Instruments	8,626,656	01/07/2014	04/28/2010
125	Method for Securely Clearing Checks	8,626,662	01/07/2014	12/17/2010
126	Method for Authenticating Financial Transaction Requests Using a Website or Web Portal	8,744,967	06/03/2014	12/17/2010
127	Systems and Methods for Adjusting Account Terms Based on Purchase Transaction Information	8,224,748	07/17/2012	02/09/2011
128	System and Method for Implementing a Game for Financial Data Extraction	8,262,447	09/11/2012	07/11/2011
129	Wireless Devices For Storing A Financial Account Card And Methods For Storing Card Data In A Wireless Device	8,528,812	09/10/2013	07/21/2011
130	System and Method for Analyzing Web Paths	8,326,986	12/04/2012	01/06/2012
131	System and Methods for Purchase Reward Investment Communities	8,386,307	02/26/2013	01/25/2012
132	Same-Day Settlement of Financial Transactions	8,666,888	03/04/2014	01/28/2013
133	Systems and Methods for Providing Starter Credit Card Accounts	8.706,617	04/22/2014	03/25/2013
134	Systems and Methods for Providing a User Interface for Facilitating Personal Payment Transactions	8,762,269	06/24/2014	12/17/2013

Non-Provisional United States Patent Applications

No.	Patent Application Title	Application Number	Filing Date
1	System and Method for Providing Starter Credit Card Accounts	09/880,777	06/15/2001
2	System and Method for Encouraging Payments Greater than an Outstanding Balance	10/320,829	12/16/2002
3	Methods and Systems for Offering a Credit Card Account to a Consumer at a Point-of-Sale Location	10/729,997	12/09/2003
4	System and Method for Converting a Reward	10/781,313	02/17/2004
5	Enrollment System and Method	10/787,616	02/26/2004
6	Methods, Systems, and Articles of Manufacture for Providing Incentives for a Financial Account	10/787,208	02/27/2004
7	System And Method For Providing Personalized Customer Assistance Using A Financial Card Having An RFID Device	10/824,178	04/14/2004
8	Systems and Methods for Generating Product	10/830,398	04/23/2004

Capital One Confidential/Proprietary

	Design Requirements and for Determining		
	Impact of Advertising Using Purchase Records	44/054 004	44/00/0004
9	System And Method For Developing And Utilizing A Contactability Profile	11/251,331	11/09/2004
10	Systems, Methods, and Computer-Readable Media for Managing Loyalty Programs	11/169,672	06/30/2005
11	Systems And Method For Redeeming A Reward	11/232,257	09/21/2005
12	System and Method for Transferring Information	11/232,408	09/21/2005
1.77	Between Financial Accounts	, , , , , , , , , , , , , , , , , , , ,	00/21/2000
13	System and Method for Qualification-Based Intelligent Call Routing	11/258,938	10/25/2005
14	System and Method for Automatically Activating an Electronic Device	11/259,973	10/26/2005
15	Methods and Systems for Providing a Vehicle Service Management Service	11/500,404	08/08/2006
16	Methods and Systems for Verifying the Accuracy of Reported Information	11/634,307	12/06/2006
17	Credit Card Offer Comparison Interfaces and Associated Methods	11/614,043	12/07/2006
18	Systems And Methods For Geo-Coded Financial Account Statement Visualization	11/698,859	01/23/2007
19	System and Method of Implementing a User- Initiated Upgrade	11/686,532	03/15/2007
20	System and Method of Providing Customers with Offers from a Plurality of Financial Institutions	11/742,967	05/01/2007
21	System And Method Of Providing A Customer With Method Of Making a Payment To A Third Party Using a Remote Dispensing Machine	11/857,861	09/19/2007
22	Methods and Systems for Dual Decision Asset Based Lending (Dual Decision)	11/875,476	10/19/2007
23	Method and System For Redirecting A Financial Transaction	11/954/471	12/12/2007
24	Method and System for a Payroll Card with an Associated Deposit Account	11/956,844	12/14/2007
25	Computer Based Aggregated Securities Investment Service	11/966,712	12/28/2007
26	System and Method for Mobile Social Networking Within a Target Area	12/039.057	02/28/2008
27	System and Method for Providing a Financial Product Using Customer Product Criteria	12/099,249	04/08/2008
28	Systems and Methods For Performing a Purchase Transaction Using Rewards Points	12/106,074	04/18/2008
29	Systems and Methods for Processing a Transaction Using Linked Accounts (Mobile Decoupled Debit)	12/575,234	10/07/2009
30	System and Method for Providing Limited Access to Data	12/778,380	05/12/2010
31	Method and System For Performing A Financial Transaction Using a User Interface	12/875,318	09/03/2010
32	System and Method for Monitoring and Tracking	12/951,752	11/22/2010

	User Activities	T	
33	System and Method for Capturing Sales Tax Deduction Information from Monetary Card Transactions	13/017,948	01/31/2011
34	System And Method Of Notifying User Near Point Of Sale Location Of Available Rewards At The Point Of Sale Location	13/069,785	03/23/2011
35	Systems and Methods for Performing Financial Transactions Using Active Authentication	13/085,754	04/13/2011
36	Systems and Methods for Performing ATM Fund Transfer Using Active Authentication	13/101,759	05/05/2011
37	Method and System for Matching Purchase Transaction History to Real-time Location Information	13/103,855	05/09/2011
38	Systems and Methods for Performing Person-to- Person Transactions Using Active Authentication	13/117,516	05/27/2011
39	A System and Method for Providing Pre-Qualified and Guaranteed Financial Products	13/207,066	08/10/2011
40	Method and System for Offering Financial Products Based on a Customer's Determined Life Status	13/352,813	01/18/2012
41	Systems and Methods for Providing Customers with Matching Rewards	13/408,659	02/29/2012
42	Method and System for Providing Contactless Payment with a Near Field Communications Attachment (NFC)	13/441,505	04/06/2012
43	System and Method for Providing Contactless Payment with a Near Field Communications Attachment	13/469,363	05/11/2012
44	Method and System for Providing Contactless Payment with a Near Field Communications Attachment (NFC)	13/538,468	06/29/2012
45	System and Method for Providing Controlled Application Programming Interface Security	13/611,993	09/12/2012
46	System And Method For Providing Balance Transfers (Mobile Balance Transfer)	13/623,531	09/20/2012
47	System and Method for Opening an Account Using a Mobile Device	13/624,206	09/21/2012
48	System and Method for Intelligently Interfacing with Financial Information	13/633,342	10/02/2012
49	A System and Method for Providing Software- Based Contactless Payment	13/653,759	10/17/2012
50	Method and System for Authorizing Credit Account Transactions by Geographic Location	12/977,661	11/02/2012
51	Methods and Systems for Dynamically Providing Content	13/705,719	12/05/2012
52	Systems and Methods for Issuing, Evaluating, and Monitoring Card-Linked Offers	13/717,239	12/17/2012
53	System and Method for Providing Extra Lines of Credit	13/759,880	02/05/2013

54	System And Method For Auctioning A First-In- Wallet Payment Account Status	14/205,955	03/12/2013
55	Systems and Methods for Providing Financial Account Information Over a Network	13/894,303	05/14/2013
56	Wireless Devices For Storing A Financial Account Card And Methods For Storing Card Data In A Wireless Device	13/965,769	08/13/2013
57	Systems And Computer-Implemented Processes For Analyzing And Determining The Value Of Switching Accounts	13/969,891	08/19/2013
58	Systems And Computer-Implemented Processes For Switching Accounts	13/969,883	08/19/2013
59	System and Method for Providing a Credit Card with Multiple Credit Lines	13/969,755	08/19/2013
60	System and Methods for Providing Near Field Communications	14/025,197	09/12/2013
61	Unsecured to Secured Loan Conversion in Automobile Finance	14/042,379	09/30/2013
62	Systems And Methods For Providing Seller- Initiated Financing In Private Sales	14/042,333	09/30/2013
63	Methods And System For Warranty Registration And Processing	14/043,451	10/01/2013
64	Method and System for Providing Contactless Payment with a Near Field Communications Attachment (NFC)	14/049,901	10/09/2013
65	Systems and Methods for Providing a Digital Blank Check	14/052,715	10/12/2013
66	Systems and Methods for Providing Searchable Customer Call Indexes	14/062,240	10/24/2013
67	System And Method For Providing Advertiser Auctions Based On Segmentation Informed By Purchase Data	14/076,410	11/11/2013
68	Systems and Methods for Assisting and Incentivizing Consumers	14/078,965	11/13/2013
69	System and Method for Assigning a Line of Credit to a Credit Card Account	14/085,083	11/20/2013
70	Systems and Methods for Providing Social Discovery Relationships	14/089,218	11/25/2013
71	Systems and Methods for Analyzing Financial Accounts and Business Efforts Based on Lender Information	14/089,251	11/25/2013
72	Systems and Methods for Aggregating and Managing Financial Service Accounts	14/089,180	11/25/2013
73	Systems And Methods For Analyzing Financial Accounts And Business Efforts Based On Lender Information	14/089,251	11/25/2013
74	Systems and Methods For Providing Credit To Financial Service	14/094,483	12/02/2013

75	Systems and Computer-Implemented Processes for Occupational Risk Assessment	14/093,647	12/02/2013
76	Systems And Methods For Social Media Referrals Based Rewards	14/097,914	12/05/2013
77	Social Media Influence Based Rewards	14/097,894	12/05/2013
78	Systems And Methods For Social Media Referrals Based Rewards	14/097,914	12/05/2013
79	Systems and Methods for Performing Socio- Graphic Consumer Segmentation for Targeted Advertising	14/097,421	12/05/2013
80	Systems And Methods For Measuring Advertising Value	14/097,443	12/05/2013
81	Systems and Methods for Determining Consumer Purchasing Behavior	14/097,464	12/05/2013
82	Systems And Methods For Marking Individuals With An Identifying Substance	14/100,372	12/09/2013
83	System and Method for Providing a Multilateral Transaction Data Mart	14/100,406	12/09/2013
84	Systems and Methods for Splitting a Bill Associated with a Receipt	14/103,743	12/11/2013
85	Systems and Methods for Effecting Application Programming Interfaces for Personal Payment Transactions	14/108,808	12/17/2013
86	Systems And Methods For Effecting Personal Payment Transactions	14/108,926	12/17/2013
87	A System And Method For Token-Based Payments	14/132,508	12/18/2013
88	Methods And Systems For Determining Consumer Shopping Corridors	14/132,995	12/18/2013
89	Systems And Methods For Authenticating Potentially Fraudulent Transactions Using Voice Print Recognition	14/132,900	12/18/2013
90	System And Method For Triggering Mobile Device Functionality Using A Payment Card	14/133,762	12/19/2013
91	Systems And Methods For Processing Customer Purchase Transactions Using Biometric Data	14/137,143	12/20/2013
92	Systems And Methods For Providing Advertising Services	14/142,989	12/30/2013
93	Systems And Computer-Implemented Processes For Delivering Personalized Deals To Customers	14/145,582	12/31/2013
94	Systems And Methods For Managing A Loan Application	14/144,995	12/31/2013
95	Method And System For Providing Contactless Payment With A Near Field Communications Attachment (NFC)	14/156,941	01/16/2014
96	A System And Method For Providing SMART Statements	14/158,449	01/17/2014
97	Systems And Methods For Extracting Information From A Transaction Description	14/162,850	01/24/2014
98	A System And Method For Providing Purchase	14/168,107	01/30/2014

	Reporting	<u> </u>	7
122	A System And Method For Social Home Buying	14/211,281	03/14/2014
123	Systems And Methods For Providing Payment	14/212,926	03/14/2014
	Options	1-11212,020	00, 11-1/2011
124	A System For And Method For Determining Overdraft Protection	14/217,813	03/18/2014
125	System And Method For Providing Starter Credit Card Accounts	14/223,412	03/24/2014
126	Systems and Methods for Providing a User Interface for Facilitating Personal Payment Transactions	14/109,017	05/01/2014
127	Systems and Methods for Representing Consumer Behavior	14/288,985	05/28/2014
128	Enhanced Near Field Communications Attachment	14/290,347	05/29/2014
129	System and Method For Managing Related Accounts	14/301,761	06/11/2014
130	Systems and Methods for Recommending Merchants to a Consumer	14/305,294	06/16/2014
131	Systems And Methods For Managing A Financial Investment Fund	14/307,240	06/17/2014
132	System And Method For Fraud Control	14/322,954	07/03/2014
133	Systems And Methods For Providing Mobile Proving Ground	14/324,639	07/07/2014
134	Systems And Methods For Switching Credit Card Accounts	14/324,899	07/07/2014
135	Systems And Methods For Processing Mobile Images To Identify And Extract Content From Forms	14/325,651	07/08/2014
136	Wireless Devices For Storing A Financial Account Card And Methods For Storing Card Data In A Wireless Device	14/327,281	07/09/2014
137	Wireless Devices For Storing A Financial Account Card And Methods For Storing Card Data In A Wireless Device	14/327,294	07/09/2014
138	Systems And Methods For A Merchant Payment Card Marketing Laboratory	14/330,116	07/14/2014
139	Systems and Methods for Providing Manufacturer-Based Financial Service Accounts	14/330,506	07/14/2014
140	Systems and Methods for Enrolling Merchants Using Card Data	14/336,476	07/21/2014
141	A System And Method For Exchanging Data With Smart Cards	14/338,423	07/23/2014
142	Systems And Methods For Providing User- Controlled Automobile Financing	14/445,519	07/29/2014
143	System And Method For Providing Mobile Coupons For Redemption	14/455,008	08/08/2014
144	Systems, Methods, And Articles Of Manufacture For Targeted Marketing Via Improved Card Embossing	14/458,940	08/13/2014

••••••			
145	Systems And Methods For Instant Funding Of Financial Service Product	14/416,615	08/18/2014
146	A System And Method For Combing Coupons With Financial Accounts	14/462,846	08/19/2014
147	Systems And Methods For Rewards Calculation	14/464,782	08/21/2014
148	Systems And Methods For Suggesting Financial Account Cards Stored On A Wireless Device "Spark Pay Rewards"	14/467,482	08/25/2014
149	Systems And Methods For Point Of Sale Deposits	14/472,641	08/29/2014
150	Systems And Methods For A Refinancing Savings Widget	14/474,648	09/02/2014
151	Entropic Link Filter For Automatic Network Generation	14/476,024	09/02/2014
153	A System And Method For Automatically Authenticating A Caller	14/480,842	09/09/2014
154	Systems And Methods for Providing Offers Using A Mobile Device	14/492,883	09/22/2014
155	Systems and Methods for Providing a Customer Service	14/499,979	09/29/2014

Non-Expired United States Provisional Applications

No.	Patent Application Title	Application Number	Filing Date
1	System And Method For Generating And Transforming Data Presentation	61/889,796	10/11/2013
2	Systems and Methods for Providing Enhanced Loan Qualification Information	61/899,948	11/05/2013
3	Systems and Methods for Device-to-Device Transactions	61/900,730	11/06/2013
4	Shared Expense Management	61/906,601	11/20/2013
5	Systems and Methods for Searching Financial Data	61/907,722	11/22/2013
6	System and Method for Review Aggregation and Analysis	61/909,196	11/26/2013
7	Systems And Methods For Managing A Customer Account Switch	61/909,008	11/26/2013
8	System And Method For Financial Transfers From A Financial Account Using Social Media	61/914,719	12/11/2013
9	Systems and Methods for Mobile Payments Using Biometric Data	61/915,334	12/12/2013
10	Systems and Methods for Automatic Reward Redemption	61/922,147	12/31/2013
11	A System And Method For Providing Person To Person Cash Dispensing	61/924,392	01/07/2014
12	System And Method For Fraud Detection Using Social Media	61/924,727	01/08/2014

Capital One Confidential/Proprietary

	y		***************************************
13	A System And Method For Generating Real-Time	61/924,921	01/08/2014
4.4	Customer Surveys Based On Trigger Events	04/005.000	0.4/0.0/0.004
14	Risk-Based Interchange Pricing Methods and Systems	61/925,300	01/09/2014
	Systems		
15	Method and System for Providing Alert Messages	61/925,458	01/09/2014
A SANTA	Related to Suspicious Transactions		
16	Voice Recognition to Authenticate a Mobile Payment	61/925,281	01/09/2014
17	Systems And Methods For Providing Financial	61/925,816	01/10/2014
	Services For Dimensional Manufacturing		
18	Systems And Methods For Providing A Logo Clearing	61/925,842	01/10/2014
	House		
19	Systems and Methods for Applying Sensor Analysis	61/927,205	01/14/2014
	to Financial Underwriting		
20	Systems and Methods for Enabling Financial	61/927,576	01/15/2014
	Assistance		
21	Systems And Methods For Providing A Financial	61/928,819	01/17/2014
<u></u>	Discount Or Reward		
22	Systems and Methods for Exporting Auto Finance	61/928,804	01/20/2014
~~	Information		
23	System And Method For Account Obligation And	61/929,608	01/21/2014
~~~	Balance Prediction		
24	Systems And Methods For Providing Payment	61/931,888	01/27/2014
~~	Tokens For Mobile Devices	04/000 044	04/00/0044
25	ATM Skimmer Detection Based Upon Incidental RF	61/932,311	01/28/2014
ാട	Emissions Systems and Methods for Populating Online	64/000 406	04/00/0044
26	Systems and Methods for Populating Online	61/933,136	01/29/2014
27	Applications Using Third Party Platforms Systems And Methods For Providing Dynamic	61/941,649	02/19/2014
21	Control Code To Alter User Experience	01/941,049	02/19/2014
28	Systems and Methods for Providing Context to	61/944,837	02/26/2014
20	Customer Activity Through A Visual Representation	01/344,03/	02/20/2014
29	Systems And Methods For Managing Gift Cards	61/946,121	02/28/2014
30	Systems And Computer-Implemented Processes For	61/951,600	03/12/2014
	Interchange Negotiation For Credit Decisioning	01/001,000	00/12/2014
31	System and Method for Malware Detection Using	61/976,722	04/08/2014
	Hashing Techniques	0.11.01.0,7.22	0 // 00/2011
32	Systems and Methods for Authenticating Financial	61/976,703	04/08/2014
	Transactions		
33	Systems And Methods For Authenticating A Financial	61/976,659	04/08/2014
	Transaction		
34	Systems And Methods For An Attribute Generator	61/976,611	04/08/2014
	Tool Workflow		
35	Systems and Computer-Implemented Processes for	61/977,379	04/09/2014
	Providing Account Balance Notifications		
36	System and Method for Real Time Transfers Between	61/977,676	04/10/2014
	Accounts	*	1
37	Systems and Methods for Managing Gift Cards	61/979,181	04/14/2014
********		<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	~ <del>_</del>
38	System and Method for Inter-Bank and Intra-Bank	61/979,637	04/15/2014

39	Detection Of Unauthorized Devices On ATMs	61/982,991	04/23/2014
40	Systems and Methods for Conducting a Transaction	61/994,535	05/16/2014
	with a Multi-Account Card		
41	A System and Method for Providing Social Cash	62/000,666	05/20/2014
42	System and Method for Using Account Rewards for Charity	62/001,821	05/22/2014
43	Systems and Methods for Communicating with a Unique Identifier	62/002,419	05/23/2014
44	System and Method for Purchase Analysis	62/002,394	05/23/2014
45	A System and Method for Providing Enhanced	62/003,171	05/27/2014
	Financial Services Based on Social Signals		
46	A System and Method for Customer Engagement and	62/005,038	05/30/2014
	Retention		
47	Systems and Methods for Point of Sale Deposits	62/007,612	06/04/2014
48	System And Methods for Transaction Pre-	62/017,486	06/26/2014
	Authentication	8	
49	System and Methods for Providing an Interactive	62/022,738	07/10/2014
	Community Through Device Communication		
50	Systems and Methods for Switching Financial	62/021,311	07/11/2014
00000444.505	Accounts Using a Self-Service Device		
51	A System and Method for Classifying Users Based on	62/025,062	07/16/2014
	Social Empathy Data		
52	A System and Method for Providing Enhanced	62/026,723	07/21/2014
	Rewards to Customers		
53	Systems And Methods For Product Placement	62/029,789	07/28/2014
	Optimization By Sensing Customer Traffic In Stores		
54	Method And System For Providing Alert Messages	62/032,838	08/04/2014
**********	Related to Suspicious Transactions	}	
55	Systems And Methods For Cost Reduction Through	62/036,153	08/12/2014
	Real-Time Alerts With Concessions		
56	A System And Method For Providing A Group	62/036,313	08/12/2014
	Account		
57	System and Methods for Digital Authentication for	62/037,710	08/15/2014
	Call Centers		
58	System And Method For Financial Transfers From A	62/037,715	08/15/2014
	Financial Account Using Social Media		<b></b>
59	Systems And Computer-Implemented Processes For	62/038,479	08/18/2014
	Depositing, Withdrawing, And Reusing Currency For		
	Purchase Transactions	~~~	50/00/0044
60	Systems And Methods For Displaying Account	62/041,864	08/26/2014
	Information	60/040 567	00/00/0044
61	System And Method For Double Blind Authentication	62/043,567	08/29/2014
62	Augmented Reality Card Activation	62/042,498	08/27/2014
63	Systems And Methods For Providing A Separate	62/048,099	09/09/2014
64	Interest Rate For An Individual Transaction	60/050.050	00/45/0044
64	A System And Method For Providing A Portable ATM	62/050,353	09/15/2014
65	A System And Method For Providing A Spend	62/051,398	09/17/2014
	Memory Card	60/050 700	100/00/00/4
66	Accessible Date Picker Widget	62/053,739	09/22/2014

## **Pending Foreign Patent Applications**

Patent Application Title	Jurisdiction	Application Number	Filing Date
Systems and Methods for Marking	Patent	PCT/US13/7	12/10/2013
Individuals with an Identifying	Cooperative	4077	
Substance	Treaty		

Capital One Confidential/Proprietary

RECORDED: 06/19/2019 RECORDED: 04/18/2022