504287058 03/23/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4333739

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA	·	
	Name	Execution Date
TIMOTHY KRAMME		03/20/2017
ELIZABETH FLOWERS		03/14/2017
REENA BATRA		03/20/2017
MIRIAM VALERO		03/14/2017
PUNEIT DUA		03/08/2017
SHANNA L. PHILLIPS		03/08/2017
RUSSELL RUESTMAN		03/08/2017
BRADLEY A. CRAIG		03/17/2017

RECEIVING PARTY DATA

Name:	STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY
Street Address:	ONE STATE FARM PLAZA
City:	BLOOMINGTON
State/Country:	ILLINOIS
Postal Code:	61710

PROPERTY NUMBERS Total: 21

Property Type	Number
Application Number:	62313196
Application Number:	62318423
Application Number:	62331530
Application Number:	62365699
Application Number:	15465821
Application Number:	15465827
Application Number:	15465832
Application Number:	15465838
Application Number:	15465842
Application Number:	15465856
Application Number:	15465858
Application Number:	15465863
Application Number:	15465874

Bronorty Typo		Number		
Property Type	1540			
Application Number:	1546			
Application Number:	1546			
Application Number:	1546	5880		
Application Number:	1546	5977		
Application Number:	1546	5981		
Application Number:	1546	6002		
Application Number:	1546	6009		
Application Number:	1546	6014		
CORRESPONDENCE DATA				
Fax Number:				
Correspondence will be sent using a fax number, if provide				
Email:		et@marshallip.com		
Correspondent Name:		MARSHALL, GERSTEIN & BORUN LLP		
Address Line 1:		SOUTH WACKER		
Address Line 2:	SUIT	E 6300		
Address Line 4:	CHIC	AGO, ILLINOIS 60606		
ATTORNEY DOCKET NUMBER	:	32060/50557		
NAME OF SUBMITTER:		ANDREW W. BATEMAI	N	
SIGNATURE:		/Andrew W. Bateman #6	64,050/	
DATE SIGNED:		03/23/2017		
Total Attachments: 10				
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ASSIGNMENT

NOW, THEREFORE, for good, valuable and legally sufficient consideration for each Assignor, the receipt of which is hereby acknowledged by all Assignors, said Assignors have sold, assigned, transferred and set over, and as demonstrated by this Assignment do sell, assign, transfer and set over unto STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY, One State Farm Plaza, Bloomington, Illinois 61710 and its successors and assigns ("Assignee"), the entire right, title and interest in and to the inventions of such undersigned disclosed in the applications listed in Schedule A, applications for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor or thereon, and in and to any and all related provisionals, nonprovisionals, divisionals, continuations and continuation-in-parts, etc. of any such application, or reissues, reexaminations, renewals and extensions of said Letters Patent or Patents; and the full right to claim for any such applications all benefits and priority rights under any applicable convention, treaty or legislation, and the right of Assignee to sue and obtain relief, including damages, profits and an injunction, for any infringement occurring before or after issuance of said Letters Patent or Patents; the same to be held and enjoyed for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors had this Assignment not been made.

Each of the undersigned states that each of the applications listed in Schedule A is or was made or authorized to be made by it. Each of the undersigned authorizes the attorneys of record in the applications listed in Schedule A to insert in this assignment the filing dates and application numbers of the applications listed in Schedule A when officially known. Each of the undersigned believes it to be the original inventor or a joint inventor with another undersigned of a claimed invention in each of the applications listed in Schedule A. The undersigned acknowledges that any willful false statement made by it in this paragraph is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five years, or both.

Except in favor of Assignee, each of the undersigned warrants that: (i) it is the owner of all its rights, titles and interests herein assigned and has the right to make this unconditional and irrevocable assignment to Assignee without obtaining any approval or permission of a third party; and (ii) there are no outstanding encumbrances, liens, prior assignments, licenses, or other obligations or restrictions on the rights, titles and interests herein assigned. The undersigned authorized the applications listed in Schedule A to be made.

Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the reissue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration or affidavit relating thereto that said Assignee may deem necessary or expedient, and to cooperate to the best of the ability of the undersigned with and perform any and all affirmative acts requested by Assignee to prepare, file, prosecute, maintain, defend, enforce and vest in Assignee the rights, titles and interests assigned herein, including without limitation, preparing and executing statements and giving and producing evidence in support thereof, whereby said rights, titles and interests will be held and enjoyed by said Assignee to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

MARSHALL, GERSTEIN & BORUN LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, Illinois 60606-6357

32060/50557A

	WITNESS	Ji	ham	ρ	with my hand this	90	_day of _	March	2017.
		Timothy	Kramme	C	·		. •		
State of	exa	5					2		
County r	of Col	lin							

On this <u>Acc</u> day of <u>March</u>, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Timothy Kramme, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

2

WITNESS my hand and seal the same day and year last above given. My contingsion expires: 6-10-20

ARTIE STONE My Notary ID # 7846995 Expires June 10, 2020

Notary Public Signature

tom

32060/50557A

hday of March 2017. WITNESS Elizabeth Flowers

TII State of 1003 County of _ Mrl £ 4

On this $\underline{\mathcal{M}}_{avch}$ day of $\underline{\mathcal{M}}_{avch}$, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Elizabeth Flowers, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given. My commission expires: 11/

Notary Public Signature

OFFICIAL SEAL NATHAN VERMILLION NOTARY PUBLIC - STATE OF ILLINOIS My Commission Expires Aoril 17, 2019

32060/50557A

3

WITNESS REEAR	w
Reena Batra	
State of Georgia	
County of <u>Causinshett</u>	

rith my hand this 20 day of March, 2017.

On this 20 day of <u>Nav ch</u>, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Reena Batra, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given. My commission expires:

4

Notary Public Signature



32060/50557A

WITNESS	the
	Miriam Val

Mc

State of County of

14 with my hand this day of

03 / MARCH+ , 2017.

erc

On this <u>14</u> day of <u>March</u>, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Miriam Valero, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given. My commission expires: 4/11

5

Notary Public Signature

OFFICIAL SEAL NATHAN VERMILLION NOTARY PUBLIC - STATE OF ILLINOIS My Commission Expires Acril 17, 2019

32060/50557A

WITNESS	Herr Dul	with my hand this _	8	_day of _	March	, 2017.
Puneit D	Dua					
State of <u></u> County of						
County of McLean						

On this <u>b</u> day of <u>March</u>, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Puneit Dua, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

6

WITNESS my hand and seal the same day and year last above given. My commission expires:

Notary Public Signature

OFFICIAL SEAL NATHAN VERMILLION NOTARY PUBLIC - STATE OF ILLINOIS My Commission Expires Aoril 17, 2019

WITNESS Stanna & Phillips with my hand this 8th day of March, 2017. Shanna L. Phillips State of 10

On this $\underline{\mathscr{S}}$ day of $\underline{\mathscr{Novc}/}$, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Shanna L. Phillips, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given. My commission expires

7

Notary Public Signature

OFFICIAL SEAL NATHAN VERMILLIGN NOTARY PUBLIC - STATE OF HUNGIS My Commission Basings April 17, 244

County of

32060/50557A

March 2017. day of with my hand this _ WITNESS Russeli Ruestman Illinois State of County of McLean

On this <u>S</u> day of <u>March</u>, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Russell Ruestman, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given. My commission expires: 9/1/1/

lout Notary Public Signature

OFFICIAL SEAL NATHAN VERMILLION NOTARY PUBLIC - STATE OF ILLINOIS My Commission Expires Acril 17, 2019

32060/50557A

8

WITNESS <u>Bradley A. Craig</u> with my hand this <u>17</u> day of <u>MARCH</u> , 2017. State of <u>Illinois</u>
County of McLenn
On this <u>17</u> day of <u>March</u> , 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Bradley A. Craig, known to me personally or proved to me on the basis of satisfactory evidence to be the same person who appeared before me, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.
WITNESS my hand and seal the same day and year last above given. My commission expires: 4/17/19
OFFICIAL SEAL NATHAN VERMILLION NOTARY PUBLIC - STATE OF ILLINOIS My Commission Expires Aoril 17, 2019
On behalf of the Assignee, <u>Timothy Le Duc, Counsel, State Farm Mutual Automobile Insurance Company</u> , Name Title
hereby confirms Assignee's acceptance of all rights, privileges, titles and interests conveyed by this assignment.
4/ALeDuc 3/21/2017
Signature Date

32060/50557A

PATENT REEL: 041707 FRAME: 0050

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ASSIGNMENT

SCHEDULE A

Application No.	Filing Date	Title	Docket Number
62/313,196	March 25, 2016	Reducing Financial Fraud Using Machine Learning and Other Techniques	32060/50557P
62/318,423	April 5, 2016	Reducing Financial Fraud Using Machine Learning and Other Techniques	32060/50557P2
62/331,530	May 4, 2016	Reducing Financial Fraud Using Machine Learning and Other Techniques	32060/50557P3
62/365,699	July 22, 2016	Reducing Financial Fraud Using Machine Learning and Other Techniques	32060/50557P4
15/465,821	March 22, 2017	Reducing False Positives Based Upon Customer Online Activity	32060/50557A
15/465,827	March 22, 2017	Reducing False Positives Using Customer Data and Machine Learning	32060/50557B
15/465,832	March 22, 2017	Reducing False Positives using Customer Feedback and Machine Learning	32060/50557C
15/465,838	March 22, 2017	Detecting Financial Fraud Using Spending Pattern Data for Individual Cardholders	32060/50557D
15/465,842	March 22, 2017	Automated Fraud Classification Using Machine Learning	32060/50557E
15/465,856	March 22, 2017	Identifying Potential Chargeback Scenarios Using Machine Learning	32060/50557F
15/465,858	March 22, 2017	Identifying Chargeback Scenarios Based Upon Non-Compliant Merchant Computer Terminals	32060/50557G
15/465,863	March 22, 2017	Identifying Application-Related Fraud	32060/50557H
15/465,874	March 22, 2017	Identifying Fraudulent Online Applications	32060/505571
15/465,868	March 22, 2017	Facilitating Fraud Dispute Resolution Using Machine Learning	32060/50557J
15/465,871	March 22, 2017	Preempting or Resolving Fraud Disputes Relating to Billing Aliases	32060/50557K
15/465,880	March 22, 2017	Preempting or Resolving Fraud Disputes Relating to Introductory Offer Expirations	32060/50557L
15/465,977	March 22, 2017	Document-Based Fraud Detection	32060/50557M
15/465,981	March 22, 2017	Identifying Fraudulent Instruments and Identification	32060/50557N
15/466,002	March 22, 2017	Reducing False Positive Fraud Alerts for Card-Present Financial Transactions	32060/50557O
15/466,009	March 22, 2017	Reducing False Positive Fraud Alerts for Online Financial Transactions	32060/50557Q
15/466,014	March 22, 2017	Identifying False Positive Geolocation-Based Fraud Alerts	32060/50557R