

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

EPAS ID: PAT6565135

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CLINTON J. TARPLEY	04/06/2016
JON H. HAYEN	03/30/2016
VIVEK M. THATTE	03/30/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY
<b>Street Address:</b>	ONE STATE FARM PLAZA, A-3
<b>City:</b>	BLOOMINGTON
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61710
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17079254
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(317)237-1000
<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>Email:</b>	int eas@faegredrinker.com
<b>Correspondent Name:</b>	FAEGRE DRINKER BIDDLE & REATH LLP
<b>Address Line 1:</b>	300 N. MERIDIAN STREET
<b>Address Line 2:</b>	STE. 2500
<b>Address Line 4:</b>	INDIANAPOLIS, INDIANA 46204
<b>ATTORNEY DOCKET NUMBER:</b>	SF-47826-US-CNT4
<b>NAME OF SUBMITTER:</b>	CONSTANCE J. CONNER
<b>SIGNATURE:</b>	/constance j. conner/
<b>DATE SIGNED:</b>	02/23/2021
<b>Total Attachments: 10</b>	
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<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5748650

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

**CONVEYING PARTY DATA**

Name	Execution Date
CLINTON J. TARPLEY	04/06/2016
JON H. HAYEN	03/30/2016
VIVEK M. THATTE	03/30/2016

**RECEIVING PARTY DATA**

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

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	16590032

**CORRESPONDENCE DATA**

**Fax Number:** (317)237-1000

*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:** 317-237-0300

**Email:** inteas@faegrebd.com

**Correspondent Name:** SHUAN ZHANG

**Address Line 1:** 300 NORTH MERIDIAN STREET, SUITE 2500

**Address Line 4:** INDIANAPOLIS, INDIANA 46204

<b>ATTORNEY DOCKET NUMBER:</b>	SF-47826-US-CNT3
<b>NAME OF SUBMITTER:</b>	SHUAN ZHANG
<b>SIGNATURE:</b>	/Shuan Zhang/
<b>DATE SIGNED:</b>	10/01/2019

**Total Attachments: 8**

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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4965817

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CLINTON J. TARPLEY	04/06/2016
JON H. HAYEN	03/30/2016
VIVEK M. THATTE	03/30/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY
<b>Street Address:</b>	ONE STATE FARM PLAZA
<b>City:</b>	BLOOMINGTON
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61710
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15982109
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(913)647-9057
<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>	913 647-9050
<b>Email:</b>	patdocketing.luebbering@hoveywilliams.com
<b>Correspondent Name:</b>	THOMAS B. LUEBBERING
<b>Address Line 1:</b>	10801 MASTIN BLVD., SUITE 1000
<b>Address Line 4:</b>	OVERLAND PARK, KANSAS 66210
<b>ATTORNEY DOCKET NUMBER:</b>	47826-US-CNT
<b>NAME OF SUBMITTER:</b>	THOMAS B. LUEBBERING
<b>SIGNATURE:</b>	/Thomas B. Luebbering/
<b>DATE SIGNED:</b>	05/17/2018
<b>Total Attachments: 6</b>	
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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 above-mentioned invention, applications for Letters Patent (including those listed in Schedule A attached), 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 the Provisional and Non-provisional Applications listed in the attached 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 date and application number 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 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.

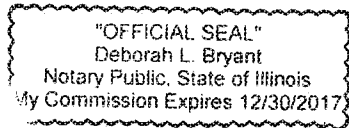
Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the reissue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration 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.

WITNESS Clinton J. Tarpley with my hand this 6 day of April, 2016.  
Clinton J. Tarpley

State of Illinois  
County of Mclean

On this 6 day of April, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Clinton J. Tarpley, 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/she executed said instrument as his/her 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: 12/30/17



Deborah L. Bryant  
Notary Public

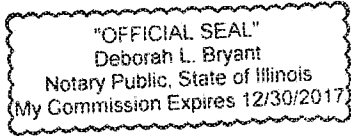


WITNESS Jon H. Hayen with my hand this 30 day of MARCH, 2016.

State of Illinois  
County of McLean

On this 30 day of March, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Jon H. Hayen, 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/she executed said instrument as his/her 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: 12/30/17



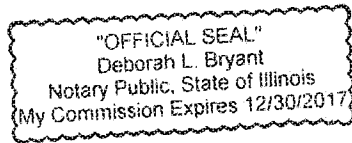
Deborah R. Bryant  
Notary Public

WITNESS Vivek M. Thatte with my hand this 30 day of March, 2016.

State of Illinois  
County of McLean

On this 30 day of March, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Vivek M. Thatte, 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/she executed said instrument as his/her 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: 12/30/17



Deborah L. Bryant  
Notary Public

On behalf of the Assignee, Timothy Le Duc, Counsel, Intellectual Property & Innovation, State Farm Mutual Automobile Insurance Company,

Name Title  
herby confirms Assignee's acceptance of all rights, privileges, titles and interests conveyed by this assignment.

Timothy Le Duc 4/18/2016  
Signature Date

ASSIGNMENT

SCHEDULE A

Application Number	Filing Date	Title	Docket Number
62/262,536	12/3/2015	TECHNICAL BUILDING BLOCK	47826-P1
		TECHNICAL BUILDING BLOCK	47826