

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT6674471

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BLAKE KONRARDY	01/20/2017
SCOTT T. CHRISTENSEN	01/13/2017
GREGORY HAYWARD	01/24/2017
SCOTT FARRIS	01/11/2017
<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>
Application Number:	16419352
<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>	intecas@faegredrinker.com
<b>Correspondent Name:</b>	FAEGRE DRINKER BIDDLE & REATH LLP
<b>Address Line 1:</b>	300 N. MERIDIAN STREET
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<b>Address Line 4:</b>	INDIANAPOLIS, INDIANA 46204
<b>ATTORNEY DOCKET NUMBER:</b>	SF-32060/50329L-CON1
<b>NAME OF SUBMITTER:</b>	CONSTANCE J. CONNER
<b>SIGNATURE:</b>	/constance j. conner/
<b>DATE SIGNED:</b>	04/24/2021
<b>Total Attachments: 9</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 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.

WITNESS Blake Konrardy with my hand this 20<sup>th</sup> day of January 2017.

State of \_\_\_\_\_  
County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Blake Konrardy, 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: \_\_\_\_\_

see Attached  
Notary Public Signature

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

**CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )

County of San Francisco )

On 1/20/2017 before me, Trevor Chan, Notary Public

Date

Here Insert Name and Title of the Officer

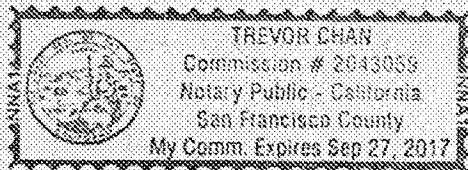
personally appeared Blake Konrad

Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature

Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: Patent assignment

Document Date: 1/20/2017

Number of Pages: 1

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: Blake Konrad

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

**PATENT**

**REEL: 056029 FRAME: 0608**

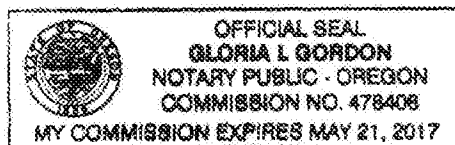
WITNESS Scott Christensen with my hand this 13 day of January, 2017.  
Scott T. Christensen


State of OREGON  
County of MARION

On this 13 day of January, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor Scott T. Christensen, 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: 5/21/2017

Gloria L. Gordon  
Notary Public Signature




WITNESS  with my hand this 24<sup>th</sup> day of January, 2017.  
**Gregory Hayward**

State of Illinois  
County of McLean

On this 24 day of January, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor **Gregory Hayward**, 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 April 17, 2019

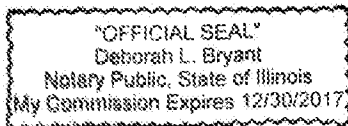
  
Notary Public Signature

WITNESS W Scott Farris with my hand this 11<sup>th</sup> day of January, 2017.  
Scott Farris

State of Illinois  
County of McLean

On this 11 day of January, 2017, before me, a Notary Public in and for the County and State aforesaid, appeared Assignor **Scott Farris**, 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: 12/30/17

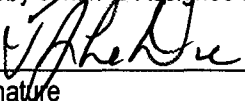


Deborah L Bryant  
Notary Public Signature



On behalf of the Assignee, Timothy Le Duc, Counsel, State Farm Mutual Automobile Insurance Company,  
Name Title

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

 1/24/2017  
Signature Date

# ASSIGNMENT

## SCHEDULE A

Application No.	Filing Date	Title	Docket Number
15/409,143	1/18/2017	AUTONOMOUS OPERATION SUITABILITY ASSESSMENT AND MAPPING	32060/50329A
15/409,146	1/18/2017	AUTONOMOUS VEHICLE ROUTING	32060/50329B
15/409,149	1/18/2017	AUTONOMOUS VEHICLE ROUTING DURING EMERGENCIES	32060/50329C
15/409,159	1/18/2017	AUTONOMOUS VEHICLE TRIP ROUTING	32060/50329D
15/409,163	1/18/2017	AUTONOMOUS VEHICLE PARKING	32060/50329E
15/409,167	1/18/2017	AUTONOMOUS VEHICLE RETRIEVAL	32060/50329F
15/409,092	1/18/2017	AUTONOMOUS VEHICLE ACTION COMMUNICATIONS	32060/50329G
15/409,099	1/18/2017	AUTONOMOUS VEHICLE PATH COORDINATION	32060/50329H
15/409,107	1/18/2017	AUTONOMOUS VEHICLE SIGNAL CONTROL	32060/50329I
15/409,115	1/18/2017	AUTONOMOUS VEHICLE APPLICATION	32060/50329J
15/409,136	1/18/2017	METHOD AND SYSTEM FOR ENHANCING THE FUNCTIONALITY OF A VEHICLE	32060/50329K
15/409,180	1/18/2017	METHOD AND SYSTEM FOR REPAIRING A MALFUNCTIONING AUTONOMOUS VEHICLE	32060/50329L
15/409,148	1/18/2017	SYSTEM AND METHOD FOR AUTONOMOUS VEHICLE SHARING USING FACIAL RECOGNITION	32060/50329M
15/409,198	1/18/2017	SYSTEM AND METHOD FOR AUTONOMOUS VEHICLE RIDE SHARING USING FACIAL RECOGNITION	32060/50329N
15/409,215	1/18/2017	AUTONOMOUS VEHICLE SENSOR MALFUNCTION DETECTION	32060/50329O1
15/409,248	1/18/2017	SENSOR MALFUNCTION DETECTION	32060/50329O2
15/409,271	1/18/2017	AUTONOMOUS VEHICLE COMPONENT MALFUNCTION IMPACT ASSESSMENT	32060/50329Q1
15/409,305	1/18/2017	COMPONENT MALFUNCTION IMPACT ASSESSMENT	32060/50329Q2
15/409,318	1/18/2017	AUTOMATIC REPAIR OF AUTONOMOUS VEHICLES	32060/50329R1
15/409,336	1/18/2017	AUTOMATIC REPAIR OF AUTONOMOUS COMPONENTS	32060/50329R2
15/409,340	1/18/2017	AUTONOMOUS VEHICLE DAMAGE AND SALVAGE ASSESSMENT	32060/50329S1

15/409,349	1/18/2017	COMPONENT DAMAGE AND SALVAGE ASSESSMENT	32060/50329S2
15/409,359	1/18/2017	DETECTING AND RESPONDING TO AUTONOMOUS VEHICLE COLLISIONS	32060/50329T1
15/409,371	1/18/2017	DETECTING AND RESPONDING TO AUTONOMOUS ENVIRONMENT INCIDENTS	32060/50329T2
15/409,445	1/18/2017	VIRTUAL TESTING OF AUTONOMOUS VEHICLE CONTROL SYSTEM	32060/50329U1
15/409,473	1/18/2017	VIRTUAL TESTING OF AUTONOMOUS ENVIRONMENT CONTROL SYSTEM	32060/50329U2
15/409,220	1/18/2017	AUTONOMOUS ELECTRIC VEHICLE CHARGING	32060/50329V
15/409,213	1/18/2017	COORDINATED AUTONOMOUS VEHICLE AUTOMATIC AREA SCANNING	32060/50329W
15/409,228	1/18/2017	OPERATOR-SPECIFIC CONFIGURATION OF AUTONOMOUS VEHICLE OPERATION	32060/50329X
15/409,236	1/18/2017	AUTONOMOUS VEHICLE OPERATION ADJUSTMENT BASED UPON ROUTE	32060/50329Y
15/409,239	1/18/2017	AUTONOMOUS VEHICLE COMPONENT MAINTENANCE AND REPAIR	32060/50329Z
15/409,243	1/18/2017	ANOMALOUS CONDITION DETECTION AND RESPONSE FOR AUTONOMOUS VEHICLES	32060/50329AA