504983896 06/29/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5030642

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------------------|----------------|
| CODRIN CIONCA | 06/28/2018 |
| HELEN ELIZABETH KOUROUS-HARRIGAN | 06/27/2018 |
| JEFFREY THOMAS REMILLARD | 06/27/2018 |
| ANKIT GIRISH VORA | 06/28/2018 |
| LU XU | 06/27/2018 |
| LINJUN ZHANG | 06/27/2018 |

RECEIVING PARTY DATA

| Name: | FORD GLOBAL TECHNOLOGIES, LLC |
|-------------------|-------------------------------|
| Street Address: | 330 TOWN CENTER DRIVE |
| Internal Address: | SUITE 800 |
| City: | DEARBORN |
| State/Country: | MICHIGAN |
| Postal Code: | 48126 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16023016 |

CORRESPONDENCE DATA

Fax Number:

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: 313-528-4882

Email: docket@b2iplaw.com

Correspondent Name: BEJIN BIENEMAN PLC FORD GLOBAL TECHNOLOG

Address Line 1: 2000 TOWN CENTER

Address Line 2: SUITE 800

Address Line 4: SOUTHFIELD, MICHIGAN 48075

| ATTORNEY DOCKET NUMBER: | 84030460(65080-2943) |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | REZA SAHBA |
| SIGNATURE: | /Reza Sahba/ |
| DATE SIGNED: | 06/29/2018 |

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6

source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page1.tif source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page2.tif source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page3.tif source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page4.tif source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page5.tif source=84030460-Signed-Combined-Declaration-and-Assignment--all-6-inventors with filing info#page6.tif

| Attorney Docket Number | 84030460(65080-2943) |
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ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

STREET LIGHT WITH INFRARED ILLUMINATION

| This declaration is directed to: |
|---|
| The attached application, or United States application or PCT international application number 16/023,016 filed on June 29, 2018. (I hereby authorize the insertion of the application filing date and number into this form when they become known.) |
| The above-identified application was made or authorized to be made by me. |
| hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims. |
| believe that I am the original inventor or an original joint inventor of a claimed invention in the application. |
| am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. |
| Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 16/023,016, Filing Date |
| may deem necessary to secure thereto the rights herein sold, assigned and set over. |
| And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein. |
| hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both. |
| LEGAL NAME OF INVENTOR nventor: Codrin Cionca Date: 06/28/2018 |
| Code in Ciona a |
| Signature: Coarin Concu |
| Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor. |

| Attorney Docket Number | 84030460(65080-2943) |
|------------------------|----------------------|
|------------------------|----------------------|

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

STREET LIGHT WITH INFRARED ILLUMINATION

| This declaration is directed to: |
|--|
| The attached application, or United States application or PCT international application number 16/023,016 filed on June 29, 2018. (I hereby authorize the insertion of the application filing date and number into this form when they become known.) |
| The above-identified application was made or authorized to be made by me. |
| I hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims. |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. |
| I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. |
| Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 16/023,016 , Filing Date June 29,2018), and I hereby sell, assign and set over to the ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications. |
| And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over. |
| And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein. |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both. |
| LEGAL NAME OF INVENTOR |
| Inventor: Helen Elizabeth Kourous-Harrigan Date: 06/27/2018 |
| Signature: Helen E. Kourous-Harrigan |
| Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |
| Use an additional declaration form for each additional inventor |

Attorney Docket Number 84030460(65080-2943)

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

STREET LIGHT WITH INFRARED ILLUMINATION

| This declaration is directed to: |
|---|
| And decimalism to different to: |
| The attached application, or United States application or PCT international application number 16/023,016 filed on June 29, 2018 (I hereby authorize the insertion of the application filing date and |
| number into this form when they become known.) |
| The above-identified application was made or authorized to be made by me. |
| I hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims. |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. |
| I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. |
| Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 16/023,016 , Filing Date June 29, 2018), and I hereby sell, assign and set over to the |
| ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications. |
| And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over. |
| And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein. |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both. |
| LEGAL NAME OF INVENTOR Inventor: Jeffrey Thomas Remillard Date: 6/27/20(8) |
| Inventor: Jeffrey Thomas Remillard Date: 6/21/2018 |
| Signature: //////////////////////////////////// |
| Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |
| Use an additional declaration form for each additional inventor. |
| DATENT |

| | Attorney Docket Number | 840304600 | (65080-2943) | |
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|--|------------------------|-----------|--------------|--|

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

| Title of Invention | STREET LIGHT WITH INFRARED ILLUMINATION |
|---|--|
| This declaration is directed | ed to: |
| X United | sached application, or States application or PCT international application number 3,016 filed on June 29, 2018 (I hereby authorize the insertion of the application filing date and then they become known.) |
| The above-identified app | lication was made or authorized to be made by me. |
| I hereby state that I hav including the claims. | e reviewed and understand the contents of the specification in the above-identified application, |
| I believe that I am the ori | ginal inventor or an original joint inventor of a claimed invention in the application. |
| continuation-in-part app | disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for lications, material information which became available between the filing date of the prior nal or PCT international filing date of the continuation-in-part application. |
| FORD GLOBAL TECHI of the State of Delaware hereinafter referred to as interest, domestic and for of the ASSIGNEE, its su for the inventions and dis name or names, or in my insert the serial/applicat | nent agreement heretofore made or by contractual obligation, I do sell, assign and set over unto NOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws and having its principal place of business at Dearborn, County of Wayne, and State of Michigan, the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and reign, in and to the inventions and discoveries in the above-identified invention including the right accessors, assigns or other legal representatives to make applications and to receive Letters Patent accoveries in any and all countries, entities and intergovernmental organizations, in its or their own mame, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to ion number and filing date of the application to receive Letters Patent herein: Serial No. |
| ASSIGNEE, its success applications, in and to the | ors, assigns or other legal representatives, all rights of priority, including any provisional e inventions and discoveries in any and all countries, entities and intergovernmental organizations as claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, |
| including applications fo organizations, and to per | nyself, my heirs, successors, assigns or other legal representatives to execute any and all papers, r Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental form any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives ecure thereto the rights herein sold, assigned and set over. |
| And I hereby represent ar | nd warrant that I have not granted any rights inconsistent with the rights granted herein. |
| or imprisonment of not m | at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine nore than five (5) years or both. |
| LEGAL NAME OF INV. Inventor: Ankit Gir | ~ 100 |
| | Grush Vora |
| Digitaturo | |
| | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. In form for each additional inventor. |

| Attorney Docket Number | 84030460(65080-2943) |
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ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

STREET LIGHT WITH INFRARED ILLUMINATION

| This declaration is directed to: | | |
|---|--|--|
| The attached application, or United States application or PCT international application number 16/023,016 filed on June 29, 2018. (I hereby authorize the insertion of the application filing date and number into this form when they become known.) | | |
| number into this form when they become known.) | | |
| The above-identified application was made or authorized to be made by me. | | |
| I hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims. | | |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. | | |
| I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. | | |
| Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 16/023,016 7. Filing Date June 29, 2018 7. And I hereby sell, assign and set over to the ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to the inventions and discoveries in any and all countries, entities and intergovernmental organizations including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications. | | |
| And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over. | | |
| And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein. | | |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both. | | |
| LEGAL NAME OF INVENTOR Inventor: Lu Xu Date: 06/27/2018 | | |
| Inventor: <u>Lu Xu</u> Date: <u>06/27/2</u> 018 | | |
| Signature: | | |
| Note: An Application Date Chart (DTO/SD/14 or agriculant) including a spirit and the action investigation and the section and | | |
| Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor. | | |
| | | |

RECORDED: 06/29/2018

| 84030460(65080-2943) |
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ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY, PROVISIONAL OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

| Title of Invention STREET LIGHT WITH INFRARED ILLUMINATION | |
|---|--|
| This declaration is directed to: | |
| The attached application, or United States application or PCT international application number 16/023,016 filed on June 29, 2018. (I hereby authorize the insertion of the application filing date and number into this form when they become known.) | |
| The above-identified application was made or authorized to be made by me. | |
| I hereby state that I have reviewed and understand the contents of the specification in the above-identified application, including the claims. | |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. | |
| I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. | |
| Pursuant to my employment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FORD GLOBAL TECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws of the State of Delaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified invention including the right of the ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for the inventions and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own name or names, or in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to insert the serial/application number and filing date of the application to receive Letters Patent herein: Serial No. 16/023,016, Filing Date | |
| And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental organizations, and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein sold, assigned and set over. | |
| And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein. | |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both. | |
| LEGAL NAME OF INVENTOR Inventor: Linjun Zhang Date: 06/27/2018 | |
| Signature: | |
| | |
| Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional declaration form for each additional inventor. | |