507004153 12/01/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT7050991

Stylesheet Version v1.2

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| TIMOTHY HARRIS | 11/24/2021 |
| STUART C. SALTER | 11/18/2021 |
| RYAN O'GORMAN | 11/20/2021 |
| PETER PHUNG | 11/18/2021 |
| KATHERINE HOWARD-CONE | 12/01/2021 |

RECEIVING PARTY DATA

| Name: | FORD GLOBAL TECHNOLOGIES, LLC | |
|-----------------|-------------------------------|--|
| Street Address: | 1 AMERICAN ROAD FL4 | |
| City: | DEARBORN | |
| State/Country: | MICHIGAN | |
| Postal Code: | 48126 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17539535 |

CORRESPONDENCE DATA

Fax Number: (248)358-3351

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: 2483584400

Email: glorenzen@brookskushman.com

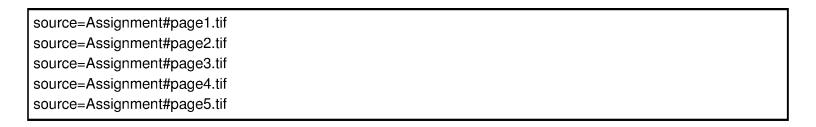
BROOKS KUSHMAN P.C. **Correspondent Name:** Address Line 1: 1000 TOWN CENTER Address Line 2:

TWENTY-SECOND FLOOR

SOUTHFIELD, MICHIGAN 48075-1238 Address Line 4:

| ATTORNEY DOCKET NUMBER: 84393186 | |
|----------------------------------|---------------------|
| NAME OF SUBMITTER: | BENJAMIN C. STASA |
| SIGNATURE: | /Benjamin C. Stasa/ |
| DATE SIGNED: | 12/01/2021 |
| | |

Total Attachments: 5



| Attorney Docket Number | l ocomerce | 24 |
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| litle of Invention | AUXILLARY BATTERY FOR BIDIRE | | |
|---|--|--|----------------------|
| This declaration is direct | This declaration is directed to: | | |
| X The attached application, or United States application or PCT international application number filed on | | | ion filing date and |
| The above-identified app | lication was made or authorized to be mad | le by me. | |
| I hereby state that I have including the claims. | re reviewed and understand the contents | of the specification in the above-ide | ntified application, |
| I believe that I am the ori | ginal inventor or an original joint inventor | of a claimed invention in the applicat | ion. |
| continuation-in-part app | o disclose information which is material to lications, material information which be nal or PCT international filing date of the c | ecame available between the filing | |
| 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 law 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 Paten 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 17/539535 , Filing Date December 1, 2021), 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 intergovernmenta | | | |
| 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. | | LS.C. 1001 by fine | |
| LEGAL NAME OF INV | | Deta: 11/24/2021 | |
| Inventor: <u>Timothy</u> /Timothy | | Date: | |
| Signature: / I IIIO II Iy | Frantis/ | | |
| | a Sheet (PTO/SB/14 or equivalent), including | naming the entire inventive entity, must a | eccompany this form. |

| Attornev Docket Number | 84393186 |
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| 2 total and a content time of the | 1 2 12.7 2 2 3 4 |

| little of Invention | | RECTIONAL POWER TRANSFER INVERTER |
|---|--|--|
| This declaration is directed to: | | |
| X The attached application, or United States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date and number into this form when they become known.) | | |
| The above-identified app | lication was made or authorized to be m | ade by me. |
| I hereby state that I have including the claims. | e reviewed and understand the content | ts of the specification in the above-identified application, |
| I believe that I am the or | ginal inventor or an original joint invent | tor of a claimed invention in the application. |
| continuation-in-part app | | to patentability as defined in 37 C.F.R. 1.56, including for became available between the filing date of the prior 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. 17/539535, Filing DateDecember 1, 2021), 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 INV | ENTOR | Deta: 11/18/21 |
| Inventor: Stuart C. | | Date: |
| Signature: /Stuart C. Salter/ | | |
| | a Sheet (PTO/SB/14 or equivalent), including form for each additional inventor | ng naming the entire inventive entity, must accompany this form. |

| Attorney Docket Number | 84393186 |
|------------------------|----------|

| I ttle of Invention | AUXILLARY BATTERY FOR BIDIRECTIONAL POWER TRANSFER INVERTER | |
|---|---|--|
| This declaration is directed to: | | |
| X The attached application, or United States application or PCT international application number filed on (I hereby authorize the insertion of the application filing date an number into this form when they become known.) | | |
| The above-identified app | lication was made or authorized to be made by me. | |
| I hereby state that I have 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 sufor the inventions and diname or names, or in my insert the serial/applicated 17/539535 ASSIGNEE, its success applications, in and to the including all application reexaminations and reissed And I hereby agree for recluding applications for organizations, and to per | 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 is, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, in 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 scoveries in any and all countries, entities and intergovernmental organizations, in its or their own name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to tion number and filing date of the application to receive Letters Patent herein: Serial No. , Filing Date | |
| 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 INV | | |
| Inventor: Ryan O'G | <u>orman</u> Date: | |
| Signature: /Ryan O | 'Gorman/ | |
| | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. | |
| Use an additional declaratio | n form for each additional inventor. | |

| Attorney Docket Number | 84393186 |
|------------------------|----------|

| Title of Invention | AUXILLARY BATTERY FOR BIDIRECTIONAL POWER TRANSFER INVERTER | |
|--|---|--|
| This declaration is directed to: | | |
| | ached application, or States application or PCT international application number filed on | |
| 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 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. 17/539535, 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 INVI | | |
| Signature: Peter | Phung | |
| | | |
| | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. In form for each additional inventor. | |

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| Attorney Docket Number | 1 84393186 |
| CARROTHEY LANDENCE LIGHTINGS | { 0 TJ > J 1 Q Q |
| | |

| Title of Invention | TEMPERATURE AND STATE OF CHARGE BASED CONTROL OF DARK START AUXILLARY BATTERY FOR BIDIRECTIONAL POWER TRANSFER INVERTER |
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| This declaration is directe | ed to: |
| | ached application, or States application or PCT international application number filed on |
| The above-identified app | lication was made or authorized to be made by me. |
| I hereby state that I havincluding 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 TECHTOR of the State of Delaward hereinafter referred to as interest, domestic and for of the ASSIGNEE, its state for the inventions and diname or names, or in my insert the serial/application 17/539535 ASSIGNEE, its success applications, in and to the including all application reexaminations and reisson | 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 e, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, is 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 scoveries 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 don number and filing date of the application to receive Letters Patent herein: Serial No. ——————————————————————————————————— |
| including applications for organizations, and to per | 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 a | nd warrant that I have not granted any rights inconsistent with the rights granted herein. |
| or imprisonment of not n | at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine tore than five (5) years or both. |
| LEGAL NAME OF INV | |
| Signature: KAK | Howater |
| Note: An Application Data Use an additional declaration | a Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. In form for each additional inventor. |

PATENT RECORDED: 12/01/2021 REEL: 058260 FRAME: 0881