502829896 05/29/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2876492

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------|----------------|
| DENNIS SEUNG-MAN YANG | 05/12/2014 |
| AED M DUDAR | 05/08/2014 |
| RUSSELL RANDALL PEARCE | 05/20/2014 |
| SHAHID AHMED SIDDIQUI | 05/16/2014 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14290565 |

CORRESPONDENCE DATA

Fax Number: (503)459-4142

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.

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| ATTORNEY DOCKET NUMBER: | 83435300 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | JIBEK ENABNIT |
| SIGNATURE: | /Jibek Enabnit/ |
| DATE SIGNED: | 05/29/2014 |

Total Attachments: 4

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| 1 | Attorney Docket Number | 83435300 | |
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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 | SYSTEM AND METHODS FOR MANAGING FUEL VAPOR CANISTER TEMPERATURE | | | |
|--|--|--|--|--|
| This declaration is directed to: | | | | |
| ∑ The at ☐ United | The attached application, or United 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 have including the claims. | ve reviewed and understand the contents of the specification in the above-identified application, | | | |
| I believe that I am the or | iginal inventor or an original joint inventor of a claimed invention in the application. | | | |
| continuation-in-part app | 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. 14/290, 565 , Filing Date May 29, 2014), 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: Dennis S | eung-Man Yang Date: 5//2//4 | | | |
| Signature: 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. | | | | |

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| Attorney Docket Number | 84443488 |
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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 | SYSTEM AND METHODS FOR MANAGING FUEL VAPOR CANISTER TEMPERATURE | | |
|--|---|--|--|
| This declaration is directed to: | | | |
| | ttached application, or d States application or PCT international application number filed on | | |
| The above-identified ap | plication was made or authorized to be made by me. | | |
| I hereby state that I hat including the claims. | ve reviewed and understand the contents of the specification in the above-identified application, | | |
| I believe that I am the o | riginal 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. 14/290,565, Filing Date May 29, 2014, 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 IN | & 2303 6 M 2 3 3 | | |
| Inventor: Aed M J | Date: 3/1/20/4 | | |
| 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. | | | |

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| Attorney Docket Number | 83435300 | ; |
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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 Inventio | n SYSTEM AND METHODS FOR MANAGING FUEL VAPOR CANISTER TEMPERATURE | |
|--|---|--|
| This declaration is | directed to: | |
| | The attached application, or United States application or PCT international application number filed on | |
| The above-identific | ed application was made or authorized to be made by me. | |
| I hereby state that including the claim | I have reviewed and understand the contents of the specification in the above-identified application, is. | |
| 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. | | |
| FORD GLOBAL of the State of De hereinafter referred interest, domestic of the ASSIGNEE for the inventions name or names, or insert the serial/a 14/290, 56 ASSIGNEE, its sapplications, in an including all applications and And I hereby agree including applications and including applications. | reployment agreement heretofore made or by contractual obligation, I do sell, assign and set over unto FECHNOLOGIES, LLC, a Ford Motor Company subsidiary, organized and existing by virtue of the laws alaware, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, do as the ASSIGNEE, its successors, assigns or other legal representatives, the entire right, title and and foreign, in and to the inventions and discoveries in the above-identified invention including the right, its successors, assigns or other legal representatives to make applications and to receive Letters Patent and discoveries in any and all countries, entities and intergovernmental organizations, in its or their own in my name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to pplication number and filing date of the application to receive Letters Patent herein: Serial No. 5, Filing Date May 29, 2014, and I hereby sell, assign and set over to the successors, assigns or other legal representatives, all rights of priority, including any provisional d to the inventions and discoveries in any and all countries, entities and intergovernmental organizations dreissue applications. The formyself, my heirs, successors, assigns or other legal representatives to execute any and all papers, ions for Letters Patent of any and all kinds and in any and all countries, entities and intergovernmental 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/O | F INVENTOR | |
| | | |
| Signature: Jakel Signature: | | |
| | on Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. | |

RECORDED: 05/29/2014

| J | Attorney Docket Number | 83435300 |
|---|------------------------|----------|

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 Inver | ntion SYSTEM AND METHODS FOR MANAGING FUEL VAPOR CANISTEE TEMPERATURE |
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| This declaration | on is directed to: |
| | The attached application, or United States application or PCT international application number filed on |
| The above-ider | ntified application was made or authorized to be made by me. |
| | that I have reviewed and understand the contents of the specification in the above-identified applicationalisms. |
| I believe that I | am the original inventor or an original joint inventor of a claimed invention in the application. |
| continuation-in | the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for nepart applications, material information which became available between the filing date of the prid the national or PCT international filing date of the continuation-in-part application. |
| of the State of hereinafter referencest, domes of the ASSIGN for the inventioname or names insert the series 14/290, ASSIGNEE, i applications, in including all assignments. | and to the inventions and discoveries in any and filing date of the application to receive Letters Patent herein: Serial No. 565, Filing Date May 29, 2014, and I hereby sell, assigns or other legal representations and set over to the applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisional stand reissue applications. |
| including appliorganizations, | agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all paper lications for Letters Patent of any and all kinds and in any and all countries, entities and intergovernment and to perform any and all acts which the ASSIGNEE, its successors, assigns or other legal representatives essary to secure thereto the rights herein sold, assigned and set over. |
| And I hereby to | represent and warrant that I have not granted any rights inconsistent with the rights granted herein. |
| | owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fuent of not more than five (5) years or both. |
| LEGAL NAM | Spahid Ahmed Siddigni Date: 5/6/2014 |
| Inventor: | Shahid Ahmed Siddiqui Date: 3/16/2019 |
| Signature: | - Shaly |
| | |
| | lication Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this for all declaration form for each additional inventor. |