504566718 09/26/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4613429

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------|----------------|
| ANDREAS KUSKE | 08/28/2017 |
| CHRISTIAN WINGE VIGILD | 08/29/2017 |
| FRANZ ARND SOMMERHOFF | 08/28/2017 |
| JOERG KEMMERLING | 08/28/2017 |
| VANCO SMILJANOVSKI | 08/29/2017 |
| HELMUT MATTHIAS KINDL | 08/28/2017 |
| HANNO FRIEDERICHS | 09/25/2017 |

RECEIVING PARTY DATA

| Name: | FORD GLOBAL TECHNOLOGIES, LLC |
|-------------------|---------------------------------|
| 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: | 15684821 |

CORRESPONDENCE DATA

Fax Number: (971)271-8021

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: 971-271-8020

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Correspondent Name: MCCOY RUSSELL LLP

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| ATTORNEY DOCKET NUMBER: | 83858468 |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | ASHLEY R. TAPIA |
| SIGNATURE: | /Ashley R. Tapia/ |

| DATE SIGNED: | 09/26/2017 |
|---|-------------|
| Total Attachments: 7 | |
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| Attorney Docket Number | 07050460 |
|--------------------------|------------|
| Anulinev Docker number (| 0.30.20400 |
| | |

| i tile of invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- | |
|--|---|--|
| This declaration is directed | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP ed to: | |
| ☐ The att | tached application, or | |
| <u>15/6</u> | States application or PCT international application number 84,821 filed on August 23, 2017 (I hereby authorize the insertion of the application filing | |
| | s 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. | re 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. | |
| 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. 15/684,821 , Filing Date | | |
| may deem necessary to se | 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. | |
| I hereby acknowledge the | 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 | | |
| Inventor: Andreas | Kuske Date: | |
| Signature: | | |
| | | |
| | 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 | 83858468 |

| Title of Invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- | |
|--|---|--|
| | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP | |
| This declaration is direct | ed to: | |
| The attached application, or United States application or PCT international application number 15/684,821 filed on August 23, 2017 (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 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 hal 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. 15/684.821 , Filing Date August 23, 2017 , which claims priority to German Patent Application No. 102016215880.5, filed August 24, 2016), 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 the or imprisonment of not m | at any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or than five (5) years or both. | |
| LEGAL NAME OF INV | ENTOR OR A POST | |
| Inventor: Christian | Winge Vigild Date: 29. Aug. 2017 | |
| Signature: | Mistian Vigill | |
| | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. | |

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| Attorney Docket Number | · 02050460 | |
| Autorney Docket Numbe | E し もきもうも4わる | |
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| Title of Invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- |
|---|--|
| | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP |
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| The above-identified app | elication was made or authorized to be made by me. |
| I hereby state that I have including the claims. | re reviewed and understand the contents of the specification in the above-identified application, |
| I believe that I am the ori | iginal inventor or an original joint inventor of a claimed invention in the application. |
| continuation-in-part app | o 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. |
| of the State of Delaware 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/applicated 15/684,821 No. 102016215880.5, fill assigns or other legal repand discoveries in any a benefit of the filling date had I hereby agree for a including 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 e, having its principal place of business at Dearborn, County of Wayne, and State of Michigan, as 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 ——August 23, 2017 —, which claims priority to German Patent Application ed August 24, 2016), and I hereby sell, assign and set over to the ASSIGNEE, its successors, presentatives, all rights of priority, including any provisional applications, in and to the inventions and all countries, entities and intergovernmental organizations including all applications claiming thereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications. In the provisional applications are applications and all papers, or 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. |
| may deem necessary to se | nd warrant that I have not granted any rights inconsistent with the rights granted herein. |
| I hereby acknowledge the or imprisonment of not m | 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 INVI | |
| | d Sommerhoff Date: Date: |
| Signature: | |
| Note: An Application Data Use an additional declaration | 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 | 83858468 |
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| Title of Invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- |
|--|---|
| | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP |
| This declaration is directed | ed to: |
| The attached application, or United States application or PCT international application number 15/684.821 filed on August 23, 2017 (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 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 hal 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. 15/684.821 , Filing Date August 23, 2017 , which claims priority to German Patent Application No. 102016215880.5, filed August 24, 2016), 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 INVI | INPOD |
| Inventor: <u>Joerg Ker</u> | nmerling Date: 28.8.17 |
| Signature: | J. Free |
| Note: An Application Data | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |

| Attorney Docket Number | 83858468 | i |
|------------------------|------------|---|
| ALIOTHEY DOCKEL NUMBER | 0.00000400 | |
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| Title of Invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- |
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| continuation-in-part app | o 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 di- name or names, or in my insert the serial/applicat 15/684,821 No. 102016215880.5, fil- assigns or other legal rep and discoveries in any a benefit of the filling date I And I hereby agree for r including applications fo | 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, as 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 the number and filing date of the application to receive Letters Patent herein: Serial No. —, Filing Date ——————————————————————————————————— |
| 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. | |
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| 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 INVI | ENTOR niljanovski Date: 79 44 44 |
| Signature: Valido Si | |
| Note: An Application Post | Shoot (PTO/SP/14 and all |
| Use an additional declaration | 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 | |
|------------------------|--|

| Title of Invention | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- |
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| | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP |
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| The attached application, or United States application or PCT international application number | |
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| I hereby state that I have including the claims. | re 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 Delaward hereinafter referred to as interest, domestic and for of the ASSIGNEE, its su for the inventions and di- name or names, or in my insert the serial/applicat 15/684,821 No. 102016215880.5, fil assigns or other legal rep- and discoveries in any a benefit of the filling date I And I hereby agree for r including applications fo 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 control of the 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 name, at its or their election (and I hereby authorize the ASSIGNEE or ASSIGNEE's attorney to the number and filing date of the application to receive Letters Patent herein: Serial No. Filing Date August 23, 2017, which claims priority to German Patent Application ed August 24, 2016), and I hereby sell, assign and set over to the ASSIGNEE, its successors, presentatives, all rights of priority, including any provisional applications, in and to the inventions and all countries, entities and intergovernmental organizations including all applications claiming hereof, continuations, continuations—in-part, divisionals, reexaminations and reissue applications. The provided Hereby Sell, assign or other legal representatives to execute any and all papers, or 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 accure 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 | r5 (2 °) 1 ++++ |
| Inventor: Helmut M | fatthias Kindl Date: 28.8.12 |
| Signature: | |
| Note: An Application Data | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |
| | n form for each additional inventor. |

RECORDED: 09/26/2017

| *************************************** | |
|---|-------|
| Attorney Docket Number 838 | 58468 |

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 | INTERNAL COMBUSTION ENGINE WITH COMPRESSOR, EXHAUST- |
|---|---|
| | GAS RECIRCULATION ARRANGEMENT AND PIVOTABLE FLAP |
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| The attached application, or United States application or PCT international application number 15/684.821 filed on August 23, 2017 (I hereby authorize the insertion of the application filing date and number into this form when they become known.) | |
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| 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. 15/684.821 , Filing Date August 23, 2017 , which claims priority to German Patent Application No. 102016215880.5, filed August 24, 2016), 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. 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. | |
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| LEGAL NAME OF INVI | |
| Inventor: Hanno Fr | |
| Signature: 2 E | rether |
| Note: An Application Data Use an additional declaration | Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. a form for each additional inventor. |