PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------|----------------|
| Chang H. Kim | 06/19/2013 |
| Steven J. Schmieg | 06/19/2013 |
| Eugene V. Gonze | 06/19/2013 |
| Michael J. Paratore Jr | 06/20/2013 |

RECEIVING PARTY DATA

| Name: | GM GLOBAL TECHNOLOGY OPERATIONS LLC |
|-------------------|-------------------------------------|
| Street Address: | P.O. Box 300 |
| Internal Address: | Mail Code 482-C23-B21 |
| City: | Detroit |
| State/Country: | MICHIGAN |
| Postal Code: | 48265-3000 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13929899 |

CORRESPONDENCE DATA

Fax Number: 2483808968

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 248-380-9300

Email: amb@quinnlawgroup.com

Correspondent Name: Quinn Law Group

Address Line 1: 39555 Orchard Hill Pl., Ste 520

Address Line 4: Novi, MICHIGAN 48375

| Signature: | /Christopher W. Quinn/ | |
|-------------------------|------------------------|--|
| NAME OF SUBMITTER: | Christopher W. Quinn | |
| ATTORNEY DOCKET NUMBER: | P021857-RD-SDJ/GM3070 | |

502402284 REEL: 030707 FRAME: 0299

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| Date: | 06/28/2013 |
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| Total Attachments: 2 source=Assignment_P021857#page1.tif source=Assignment_P021857#page2.tif | |

PATENT REEL: 030707 FRAME: 0300

ASSIGNMENT

Pursuant to an agreement with my employer, I formally assign to GM GLOBAL TECHNOLOGY OPERATIONS LLC, the entire right, title and interest, in all countries and application types, in the improvements set forth in the United States patent application P021857-RD-SDJ entitled

VEHICLE AND METHOD OF TREATING AN EXHAUST GAS

| practitioner associate | ed with Customer No. 72823 to insert the appere in parentheses (13/929899 filed | plication number and filing date |
|---------------------------------|--|----------------------------------|
| Inventor's signature | <u>(h.o.</u> | Date 6-/9-/3 |
| Full name: | CHANG H. KIM | |
| Residence: | ROCHESTER, MICHIGAN | |
| Inventor's signature Full name: | Steven J. SCHMIEG | Date 6/19/13 |
| Residence: | TROY, MICHIGAN | |
| Inventor's signature | | Date |
| Full name: | EUGENE V. GONZE | |
| Residence: | PINCKNEY, MICHIGAN | |
| Inventor's signature | | Date |
| Full name: | MICHAEL J. PARATORE JR. | |
| Residence: | HOWELL, MICHIGAN | |

PATENT REEL: 030707 FRAME: 0301

ASSIGNMENT

Pursuant to an agreement with my employer, I formally assign to GM GLOBAL TECHNOLOGY OPERATIONS LLC, the entire right, title and interest, in all countries and application types, in the improvements set forth in the United States patent application P021857-RD-SDJ entitled

VEHICLE AND METHOD OF TREATING AN EXHAUST GAS

| practitioner associate | a declaration. If the patent application has led with Customer No. 72823 to insert the appear in parentheses (13/929899filed | plication number and filing date |
|---------------------------------|--|----------------------------------|
| Inventor's signature | ····· | Date |
| Full name : | CHANG H. KIM | |
| Residence: | ROCHESTER, MICHIGAN | |
| Inventor's signature | | Date |
| Full name: | STEVEN J. SCHMIEG | |
| Residence: | TROY, MICHIGAN | |
| Inventor's signature Full name: | EUGENE V. GONZE | Date_6-19-2013 |
| Residence: | PINCKNEY, MICHIGAN | |
| Inventor's signature | Muhulfinaliof) | Date 6-20-2013 |
| Full name: | MCHAEL J. PARATORE JR. | |
| Residence: | HOWELL, MICHIGAN | |

PATENT REEL: 030707 FRAME: 0302

RECORDED: 06/28/2013