

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:   | NEW ASSIGNMENT                      |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
|--|-------------------------------------|---------------|-------------------------------------|---------------------|------------------------|-------------------|-----------------|-------------------|------------|----------------|------------|--------------|------------|
| NATURE OF CONVEYANCE:  | ASSIGNMENT                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| CONVEYING PARTY DATA   |                                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Stephen B. Glover</td> <td>01/10/2012</td> </tr> <tr> <td>John R. Bucknell</td> <td>01/06/2012</td> </tr> <tr> <td>Norman K. Bucknor</td> <td>01/13/2012</td> </tr> <tr> <td>Dongsuk Kum</td> <td>01/13/2012</td> </tr> </tbody> </table>  |                                     | Name          | Execution Date                      | Stephen B. Glover   | 01/10/2012             | John R. Bucknell  | 01/06/2012      | Norman K. Bucknor | 01/13/2012 | Dongsuk Kum    | 01/13/2012 |              |            |
| Name   | Execution Date                      |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Stephen B. Glover  | 01/10/2012                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| John R. Bucknell   | 01/06/2012                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Norman K. Bucknor  | 01/13/2012                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Dongsuk Kum  | 01/13/2012                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| RECEIVING PARTY DATA   |                                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| <table border="1"> <tr> <td>Name:</td> <td>GM Global Technology Operations LLC</td> </tr> <tr> <td>Street Address:</td> <td>300 Renaissance Center</td> </tr> <tr> <td>Internal Address:</td> <td>M/C 482-C23-B21</td> </tr> <tr> <td>City:</td> <td>Detroit</td> </tr> <tr> <td>State/Country:</td> <td>MICHIGAN</td> </tr> <tr> <td>Postal Code:</td> <td>48265-3000</td> </tr> </table> |                                     | Name:         | GM Global Technology Operations LLC | Street Address:     | 300 Renaissance Center | Internal Address: | M/C 482-C23-B21 | City:             | Detroit    | State/Country: | MICHIGAN   | Postal Code: | 48265-3000 |
| Name:  | GM Global Technology Operations LLC |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Street Address:  | 300 Renaissance Center              |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Internal Address:  | M/C 482-C23-B21                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| City:  | Detroit                             |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| State/Country:   | MICHIGAN                            |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Postal Code:   | 48265-3000                          |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| PROPERTY NUMBERS Total: 1  |                                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13357202</td> </tr> </tbody> </table>  |                                     | Property Type | Number                              | Application Number: | 13357202               |                   |                 |                   |            |                |            |              |            |
| Property Type  | Number                              |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| Application Number:  | 13357202                            |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| CORRESPONDENCE DATA  |                                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| <p>Fax Number: (248)858-4201</p> <p>Phone: 2488584200</p> <p>Email: cardinale@milleripgroup.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: John A. Miller</p> <p>Address Line 1: 42690 Woodward Avenue, Ste. 200</p> <p>Address Line 4: Bloomfield Hills, MICHIGAN 48304</p>  |                                     |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| ATTORNEY DOCKET NUMBER:  | P016224-RD-SDJ                      |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |
| NAME OF SUBMITTER:   | John A. Miller                      |               |                                     |                     |                        |                   |                 |                   |            |                |            |              |            |

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Total Attachments: 4

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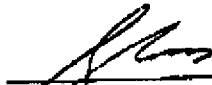
### ASSIGNMENT

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 P016224-RD-SDJ entitled

#### ADAPTIVE HEAT EXCHANGE ARCHITECTURE FOR OPTIMUM ENERGY RECOVERY IN A WASTE HEAT RECOVERY ARCHITECTURE

for which I executed a declaration. If the patent application has been filed, I authorize any practitioner associated with Customer No. 65798 to insert the application number and filing date of said application here in parentheses ( 13/357,202 filed January 24, 2012 ) when known.

Inventor's signature



Date 10 January 2010

Full name :

STEPHEN B GLOVER

Residence :

COUNTY DOWN,  
NORTHERN IRELAND

Inventor's signature



Date \_\_\_\_\_

Full name :

JOHN R BUCKNELL

Residence :

REDONDO BEACH, CALIFORNIA

Inventor's signature



Date \_\_\_\_\_

Full name :

NORMAN K. BUCKNOR

Residence :

TROY, MICHIGAN

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Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Full name : STEPHEN B GLOVER

Residence : COUNTY DOWN,  
NORTHERN IRELAND

Inventor's signature



Date 6-2-12

Full name : JOHN E. BUCKNELL

Residence : REDONDO BEACH, CALIFORNIA

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Full name : NORMAN K. BUCKNOR

Residence : TROY, MICHIGAN

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Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Full name : STEPHEN B GLOVER

Residence : COUNTY DOWN,  
NORTHERN IRELAND

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Full name : JOHN R BUCKNELL


Residence : REDONDO BEACH, CALIFORNIA

Inventor's signature : Norman Bucknor Date 1/13/2012

Full name : NORMAN K. BUCKNOR

Residence : TROY, MICHIGAN

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P016224-RD-SDJ  
(GMC-00721)  
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Inventor's signature 

Date 1/13/2012

Full name : DONGSUK KUM

Residence : ANN ARBOR, MICHIGAN