

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:   | NEW ASSIGNMENT                        |               |                |                     |            |                |            |               |            |                     |            |
|--|---------------------------------------|---------------|----------------|---------------------|------------|----------------|------------|---------------|------------|---------------------|------------|
| NATURE OF CONVEYANCE:  | ASSIGNMENT                            |               |                |                     |            |                |            |               |            |                     |            |
| <b>CONVEYING PARTY DATA</b>  |                                       |               |                |                     |            |                |            |               |            |                     |            |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Vijay Ramappan</td> <td>08/24/2009</td> </tr> <tr> <td>Peter Kafarnik</td> <td>08/12/2009</td> </tr> <tr> <td>Allen B. Rayl</td> <td>08/24/2009</td> </tr> <tr> <td>Jonathan T. Shibata</td> <td>08/24/2009</td> </tr> </tbody> </table> |                                       | Name          | Execution Date | Vijay Ramappan      | 08/24/2009 | Peter Kafarnik | 08/12/2009 | Allen B. Rayl | 08/24/2009 | Jonathan T. Shibata | 08/24/2009 |
| Name   | Execution Date                        |               |                |                     |            |                |            |               |            |                     |            |
| Vijay Ramappan   | 08/24/2009                            |               |                |                     |            |                |            |               |            |                     |            |
| Peter Kafarnik   | 08/12/2009                            |               |                |                     |            |                |            |               |            |                     |            |
| Allen B. Rayl  | 08/24/2009                            |               |                |                     |            |                |            |               |            |                     |            |
| Jonathan T. Shibata  | 08/24/2009                            |               |                |                     |            |                |            |               |            |                     |            |
| <b>RECEIVING PARTY DATA</b>  |                                       |               |                |                     |            |                |            |               |            |                     |            |
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| Postal Code:   | 48265-3000                            |               |                |                     |            |                |            |               |            |                     |            |
| <b>PROPERTY NUMBERS Total: 1</b>   |                                       |               |                |                     |            |                |            |               |            |                     |            |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12576585</td> </tr> </tbody> </table>  |                                       | Property Type | Number         | Application Number: | 12576585   |                |            |               |            |                     |            |
| Property Type  | Number                                |               |                |                     |            |                |            |               |            |                     |            |
| Application Number:  | 12576585                              |               |                |                     |            |                |            |               |            |                     |            |
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| ATTORNEY DOCKET NUMBER:  | P007298-PTE-CD                        |               |                |                     |            |                |            |               |            |                     |            |
| NAME OF SUBMITTER:   | Michael D. Wiggins                    |               |                |                     |            |                |            |               |            |                     |            |

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**PATENT  
 REEL: 023384 FRAME: 0701**

Total Attachments: 2

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**ASSIGNMENT**

Pursuant to an agreement with my employer, I formally assign to GM GLOBAL TECHNOLOGY OPERATIONS, INC., the entire right, title and interest, in all countries and application types, in the improvements set forth in the United States patent application P007298-PTE-CD entitled

**SYSTEM AND METHOD FOR CONTROLLING TRANSIENT SWITCHING BETWEEN HCCI MODE AND SI MODE OF AN ENGINE**

for which I executed a declaration dated as indicated below. If the patent application has been filed, I authorize any patent practitioner associated with Customer Number 74175 to insert the application number and filing date of said application here in parentheses (12/576585 filed Oct. 9, 2009) when known.

If the patent application has been filed provisionally, the application number and filing date of said provisional application(s) assigned herein are as follows:

US Provisional Serial No      Filed  
61/174211                      30-APR-2009

Inventor's signature      Vijay Ramappan                      Date 8-24-09  
Full name :                      VIJAY RAMAPPAN                      Declaration dated :  
Residence :                      NOVI, MICHIGAN                      8-24-09

Inventor's signature      \_\_\_\_\_                      Date \_\_\_\_\_  
Full name :                      PETER KAFARNIK                      Declaration dated :  
Residence :                      ELTVILLE-ERBACH, GERMANY                      \_\_\_\_\_

Inventor's signature      Allen B. Rayl                      Date 8-24-09  
Full name :                      ALLEN B. RAYL                      Declaration dated :  
Residence :                      WATERFORD, MICHIGAN                      8-24-09

Inventor's signature      Jonathan T. Shibata                      Date 8/24/2009  
Full name :                      JONATHAN T. SHIBATA                      Declaration dated :  
Residence :                      WHITMORE LAKE, MICHIGAN                      8/24/2009

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Full name : VIJAY RAMAPPAN                      Declaration dated :

Residence : NOVI, MICHIGAN                      \_\_\_\_\_

Inventor's signature Peter Kafarnik                      Date 08/12/2009

Full name : PETER KAFARNIK                      Declaration dated :

Residence : ELTVILLE-ERBACH, GERMANY                      08/12/2009

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

Full name : ALLEN B. RAYL                      Declaration dated :

Residence : WATERFORD, MICHIGAN                      \_\_\_\_\_

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

Full name : JONATHAN T. SHIBATA                      Declaration dated :

Residence : WHITMORE LAKE, MICHIGAN                      \_\_\_\_\_