

PATENT ASSIGNMENT

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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>Ricardo Vincenzi</td> <td>05/30/2012</td> </tr> <tr> <td>Bruce F. Hunter</td> <td>04/27/2012</td> </tr> <tr> <td>Joshua D. Cowgill</td> <td>04/30/2012</td> </tr> <tr> <td>Craig D. Marriott</td> <td>04/19/2012</td> </tr> <tr> <td>Claudio Engler Pinto</td> <td>05/02/2012</td> </tr> </tbody> </table>		Name	Execution Date	Ricardo Vincenzi	05/30/2012	Bruce F. Hunter	04/27/2012	Joshua D. Cowgill	04/30/2012	Craig D. Marriott	04/19/2012	Claudio Engler Pinto	05/02/2012
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Craig D. Marriott	04/19/2012												
Claudio Engler Pinto	05/02/2012												
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													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13464164</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13464164								
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Application Number:	13464164												
CORRESPONDENCE DATA													
Fax Number:	(248)641-0270												
Phone:	(248) 641-1600												
Email:	madams@hdp.com												
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name:	Harness, Dickey & Pierce, P.L.C.												
Address Line 1:	P.O. Box 828												
Address Line 4:	Bloomfield Hills, MICHIGAN 48303												
ATTORNEY DOCKET NUMBER:	P018916-PTUS-CD												

CH \$40.00 13464164

NAME OF SUBMITTER:

Michael D. Wiggins

Total Attachments: 5

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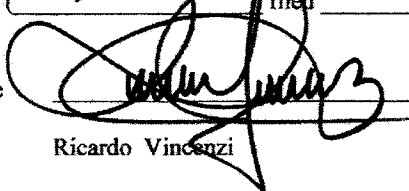
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ASSIGNMENT

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 P018916-PTUS-CD entitled

COLD START ENGINE CONTROL SYSTEMS AND METHODS

for which I executed a declaration. If the patent application has been filed, I authorize any practitioner associated with Customer No. 74175 to insert the application number and filing date of said application here in parentheses (_____ filed _____) when known.

Inventor's signature  _____ Date 30 MAY. 2012
Full name : Ricardo Vincenzi
Residence : São Caetano Do Sul, São Paulo
BRAZIL

Inventor's signature _____ Date _____
Full name : Bruce F. Hunter
Residence : Okemos, Michigan

Inventor's signature _____ Date _____
Full name : Joshua Cowgill
Residence : Hartland, Michigan

Inventor's signature _____ Date _____
Full name : Craig D. Marriott
Residence : Clawson, Michigan

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Full name : Claudio Engler Pinto
Residence : Indaiatuba, São Paulo
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Full name : Ricardo Vincenzi

Residence : São Caetano Do Sul, São Paulo
BRAZIL

Inventor's signature B. A. H. Date 4/27/12

Full name : Bruce F. Hunter

Residence : Okemos, Michigan

Inventor's signature _____ Date _____

Full name : Joshua Cowgill

Residence : Hartland, Michigan

Inventor's signature _____ Date _____

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BRAZIL

Inventor's signature _____ Date _____

Full name : Bruce F. Hunter

Residence : Okemos, Michigan

Inventor's signature  _____ Date 4/30/12

Full name : ~~Joshua Cowgill~~ Joshua D. Cowgill

Residence : Hartland, Michigan JDC

Inventor's signature _____ Date _____

Full name : Craig D. Marriott

Residence : Clawson, Michigan

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BRAZIL

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Full name : Bruce F. Hunter

Residence : Okemos, Michigan

Inventor's signature _____ Date _____

Full name : Joshua Cowgill

Residence : Hartland, Michigan

Inventor's signature  Date 19 APR 12

Full name : Craig D. Marriott

Residence : Clawson, Michigan

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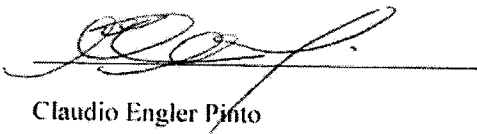
Full name : Joshua Cowgill

Residence : Hartland, Michigan

Inventor's signature _____ Date _____

Full name : Craig D. Marriott

Residence : Clawson, Michigan

Inventor's signature  Date 02/May/2012

Full name : Claudio Engler Pinto

Residence : Indaiatuba, São Paulo
BRAZIL