

PATENT ASSIGNMENT

Electronic Version v1.1
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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>Alan W. Hayman</td> <td>03/18/2013</td> </tr> <tr> <td>Robert S McAlpine</td> <td>03/15/2013</td> </tr> </tbody> </table>		Name	Execution Date	Alan W. Hayman	03/18/2013	Robert S McAlpine	03/15/2013						
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Alan W. Hayman	03/18/2013												
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RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>GM GLOBAL TECHNOLOGY OPERATIONS LLC</td> </tr> <tr> <td>Street Address:</td> <td>P.O. Box 300</td> </tr> <tr> <td>Internal Address:</td> <td>Mail Code 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:	P.O. Box 300	Internal Address:	Mail Code 482-C23-B21	City:	Detroit	State/Country:	MICHIGAN	Postal Code:	48265-3000
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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>13848105</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13848105								
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CORRESPONDENCE DATA													
<p>Fax Number: 2483808968 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>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</p>													
ATTORNEY DOCKET NUMBER:	P022180-PTUS-RRM/GM3039												
NAME OF SUBMITTER:	Christopher W. Quinn												
<p>Total Attachments: 1 source=Assignment_P022180#page1.tif</p>													

CH \$40.00 13848105

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 P022180-PTUS-RRM entitled

CRANKSHAFT FOR VARIABLE DISPLACEMENT INTERNAL
COMBUSTION ENGINE

for which I executed a declaration. If the patent application has been filed, I authorize any practitioner associated with Customer No. 72823 to insert the application number and filing date of said application here in parentheses (13/848105 filed 21-MAR-2013) when known.

Inventor's signature



Date 18MAR, 2013

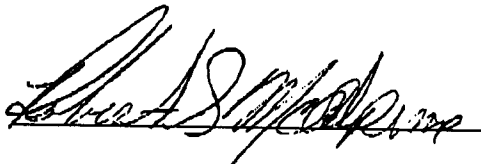
Full name :

ALAN W. HAYMAN

Residence :

ROMEO, MICHIGAN

Inventor's signature



Date 3-15-13

Full name :

ROBERT S MCALPINE

Residence :

LAKE ORION, MICHIGAN