

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>Christopher D S Ballnik</td> <td>11/26/2012</td> </tr> <tr> <td>Xiaowen Luo</td> <td>11/26/2012</td> </tr> <tr> <td>Keith D. Buford</td> <td>11/26/2012</td> </tr> </tbody> </table>		Name	Execution Date	Christopher D S Ballnik	11/26/2012	Xiaowen Luo	11/26/2012	Keith D. Buford	11/26/2012				
Name	Execution Date												
Christopher D S Ballnik	11/26/2012												
Xiaowen Luo	11/26/2012												
Keith D. Buford	11/26/2012												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>GM GLOBAL TECHNOLOGY OPERATIONS LLC</td> </tr> <tr> <td>Street Address:</td> <td>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
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>13688297</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13688297								
Property Type	Number												
Application Number:	13688297												
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:	P020684-GMVE-RRM/GM2814												
NAME OF SUBMITTER:	Christopher W. Quinn												
<p>Total Attachments: 1 source=Assignment_P020684#page1.tif</p>													

CH \$40.00 13688297

PATENT

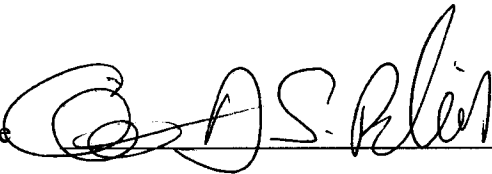
ASSIGNMENT

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 P020684-GMVE-RRM entitled

HYBRID THERMAL SYSTEM WITH DEVICE-SPECIFIC CONTROL LOGIC

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 (13/688297 filed 29-NOV-2012) when known.

Inventor's signature



Date

11/26/12

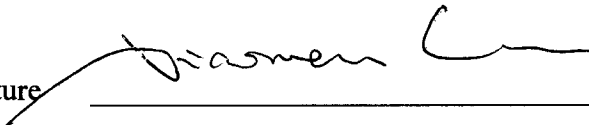
Full name :

CHRISTOPHER D S BALLNIK

Residence :

MILFORD, MICHIGAN

Inventor's signature



Date

11/26/12

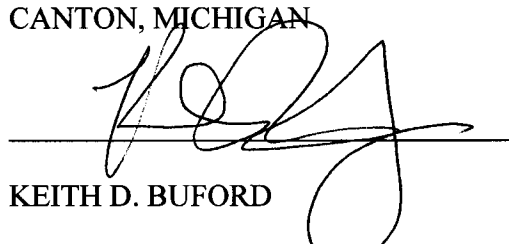
Full name :

XIAOWEN LUO

Residence :

CANTON, MICHIGAN

Inventor's signature



Date

11/26/12

Full name :

KEITH D. BUFORD

Residence :

SOUTHFIELD, MICHIGAN