

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TAMEEM K. ASSAF	10/06/2020
KRISTOPHER J. HEALEY	10/08/2020
CHAO F. DANIELS	10/09/2020
SHANSHAN L. PEER	10/08/2020
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<b>Internal Address:</b>	MAIL CODE 482-C23-B21
<b>City:</b>	DETROIT
<b>State/Country:</b>	MICHIGAN
<b>Postal Code:</b>	48265
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17066792
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<b>ATTORNEY DOCKET NUMBER:</b>	P051620-US-NP
<b>NAME OF SUBMITTER:</b>	CARLA M. BURNS
<b>SIGNATURE:</b>	/Carla M. Burns/
<b>DATE SIGNED:</b>	10/09/2020
<b>Total Attachments: 2</b>	

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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 P051620-US-NP entitled

ENGINE TORQUE ESTIMATION AND 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 ( 17/066,792 filed October 9, 2020 ) when known.

Inventor's signature  Date 10-06-2020

Full name : Tameem K. Assaf

Residence : Troy, Michigan

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

Full name : Kristopher J. Healey

Residence : Huntington Woods, Michigan

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

Full name : Chao F. Daniels

Residence : Superior Township, Michigan

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

Full name : Shanshan L. Peer

Residence : Ann Arbor, Michigan

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**ENGINE TORQUE ESTIMATION AND CONTROL SYSTEMS AND METHODS**

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

Full name : Tameem K. Assaf

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Inventor's signature  \_\_\_\_\_ Date 10/08/2020

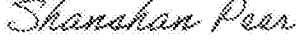
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