

## 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>
FADI ADLY ANIS ESTEFANOUS	03/06/2013
SHENOUDA MEKHAEL	09/03/2013
NAEIM A. HENEIN	08/09/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WAYNE STATE UNIVERSITY
<b>Street Address:</b>	656 W. KIRBY
<b>City:</b>	DETROIT
<b>State/Country:</b>	MICHIGAN
<b>Postal Code:</b>	48202
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15918183
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(734)994-6331
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Email:</b>	skean@brinksgilson.com, annarbordocketing@brinksgilson.com
<b>Correspondent Name:</b>	BRINKS GILSON & LIONE
<b>Address Line 1:</b>	524 SOUTH MAIN STREET
<b>Address Line 2:</b>	SUITE 200
<b>Address Line 4:</b>	ANN ARBOR, MICHIGAN 48104
<b>ATTORNEY DOCKET NUMBER:</b>	10114-304
<b>NAME OF SUBMITTER:</b>	ROBERT K. FERGAN
<b>SIGNATURE:</b>	/Robert K. Fergan/
<b>DATE SIGNED:</b>	03/13/2018
<b>Total Attachments: 6</b>	
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**ASSIGNMENT**

WHEREAS, Fadi Adly Anis ESTEFANOUS, hereinafter called the "Assignor," have made the invention described in the United States provisional patent application entitled PREDICTIVE CORRECTION IN INTERNAL COMBUSTION ENGINES, for a full description of which reference is here made to an application for Letters Patent of the United States filed on March 11, 2013.

WHEREAS, Wayne State University, existing under the laws of the State of Michigan, having a place of business at 656 West Kirby, Detroit, Michigan, 48202, hereinafter called the "Assignee," desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignor hereby covenant and agree, for both the Assignor and the legal representatives, that the Assignor will assist the Assignee in the prosecution of the patent appli-

cation identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

Assignor hereby grants the attorney of record the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignor has executed this agreement.

Dated: 3/6/2013   
Fadi Adly Anis ESTEFANOUS

ASSIGNMENT

WHEREAS, Shenouda MEKHAEEL, hereinafter called the "Assignor," have made the invention described in the United States provisional patent application entitled PREDICTIVE CORRECTION IN INTERNAL COMBUSTION ENGINES, for a full description of which reference is here made to an application for Letters Patent of the United States filed on March 11, 2013 and assigned Application Serial No. 61/776,421.

WHEREAS, Wayne State University, existing under the laws of the State of Michigan, having a place of business at 656 West Kirby, Detroit, Michigan, 48202, hereinafter called the "Assignee," desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignor hereby covenant and agree, for both the Assignor and the legal representatives, that the Assignor will assist the Assignee in the prosecution of the patent appli-

cation identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

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IN TESTIMONY WHEREOF, the Assignor has executed this agreement.

Dated: 09/03/2013

Shenouda Mekhael  
Shenouda MEKHAEL

**ASSIGNMENT**

WHEREAS, Naeim A. HENEIN, hereinafter called the "Assignor," have made the invention described in the United States provisional patent application entitled PREDICTIVE CORRECTION IN INTERNAL COMBUSTION ENGINES, for a full description of which reference is here made to an application for Letters Patent of the United States filed on March 11, 2013 and assigned Application Serial No. 61/776,421.

WHEREAS, Wayne State University, existing under the laws of the State of Michigan, having a place of business at 656 West Kirby, Detroit, Michigan, 48202, hereinafter called the "Assignee," desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignor hereby covenant and agree, for both the Assignor and the legal representatives, that the Assignor will assist the Assignee in the prosecution of the patent appli-

cation identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

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The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignor has executed this agreement.

Dated: 08/09/2013



Naeim A. HENEIN