

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5531291

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ARMANDO MENDEZ ABREGO	05/01/2019
JOSHUA SMITH	05/06/2019
RICK RAJAIE	05/01/2019
DEWASHISH KANTA PRASHAD	05/15/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NIO USA, INC.
<b>Street Address:</b>	3200 NORTH FIRST STREET
<b>City:</b>	SAN JOSE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95134
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15909281
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(303)863-0223
<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>Phone:</b>	303-863-9700
<b>Email:</b>	aduarte@sheridanross.com
<b>Correspondent Name:</b>	SHERIDAN ROSS P.C.
<b>Address Line 1:</b>	1560 BROADWAY
<b>Address Line 2:</b>	SUITE 1200
<b>Address Line 4:</b>	DENVER, COLORADO 80202
<b>ATTORNEY DOCKET NUMBER:</b>	8322-372
<b>NAME OF SUBMITTER:</b>	DOUGLAS W. SWARTZ
<b>SIGNATURE:</b>	/Douglas W. Swartz/
<b>DATE SIGNED:</b>	05/20/2019
<b>Total Attachments: 13</b>	
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### Worldwide Assignment

WHEREAS, I, **Armando Mendez Abrego** of 1000 Escalon Avenue, Apt. Q1129, Sunnyvale, California 94085, have invented certain new and useful inventions ("Inventions") described in whole or part in the United States Non-Provisional Applications identified in Exhibit "A" (hereinafter "Applications"); and

WHEREAS, **NIO USA, Inc.** ("ASSIGNEE"), a corporation duly registered in the State of California, whose postal address is 3200 North First Street, San Jose, California 95134, desires to acquire the entire right, title, and interest in and to the Inventions, the United States, international, and foreign applications filed or to be filed directed to the Inventions and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, be it known that for and in consideration of certain good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions for all territories in the world and any improvements and modifications thereto, the Applications, all applications claiming benefit of the Applications, including, but not limited to, all divisional, continuation, and continuation-in-part applications, and reissue and reexaminations thereof; all Letters Patent, Invention Registrations, Utility Models, Extension and other patent rights, that may be granted thereon in the United States or any other country; together with the right to claim priority under the International Convention in all member countries (collectively "Related Applications"); and all causes of action arising therefrom including the right to enforce and sue for past, present, and future infringements and to collect all proceeds thereof (including, but not limited to, all license royalties). I authorize and request the United States Patent and Trademark Office or foreign equivalent to issue all Letters Patent or similar legal protection for the Inventions to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

For, and in consideration of, the certain good and valuable consideration, I do further sell, assign, transfer, and set over to ASSIGNEE, the right to claim priority to the Applications for all Related Applications, including without limitation all applications pursuant to the Patent Cooperation Treaty and national and regional applications filed therefrom, all applications for the territory of the United States of America, and all continuation, divisional, continuation-in-part and reissue applications thereof, and all patent applications in foreign countries and the right to be granted a patent for any of the foregoing applications;

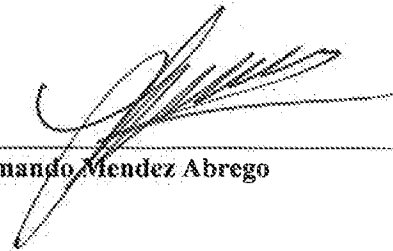
AND I covenant and agree that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

This Assignment may be executed in counterparts, and said counterparts being deemed as original Assignment documents collectively.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the date indicated hereunder.


Date: 5/1/2019

By:   
Armando Mendez Abrego

ASSIGNEE:

NIO USA, INC.

Date: 5/1/2019

By:   
Signature  
Julian Ong  
Printed Name  
VP, General Counsel  
Title

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**EXHIBIT "A"**

<b>SR File No.</b>	<b>Title</b>	<b>Serial No.</b>	<b>Filing Date</b>
8322-296	ELECTRIC VEHICLE RESILIENT THERMAL MANAGEMENT FOR COOLING SYSTEM DURING FAIL OPERATIONAL	15/686,513	8/25/2017
8322-372	THERMAL MANAGEMENT COOLANT VALVES AND PUMPS MODULAR COMBINATION	15/909,281	3/1/2018
8322-414	THERMAL SYSTEM TOPOLOGY OF CASCADED REFRIGERANT AND COOLANT CIRCUITS	15/983,289	5/18/2018
8322-439	THERMAL MANAGEMENT, HEAT TRANSFER IMPROVEMENT OF RADIATOR AND CONDENSER USING AC SYSTEM EVAPORATOR'S CONDENSATION	15/950,768	4/11/2018

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### Worldwide Assignment

WHEREAS, I, **Joshua Smith** of 645 San Benito Avenue #2, Los Gatos, California 95030, have invented certain new and useful inventions ("Inventions") described in whole or part in the United States Non-Provisional Applications identified in Exhibit "A" (hereinafter "Applications"); and

WHEREAS, **NIO USA, Inc.** ("ASSIGNEE"), a corporation duly registered in the State of California, whose postal address is 3200 North First Street, San Jose, California 95134, desires to acquire the entire right, title, and interest in and to the Inventions, the United States, international, and foreign applications filed or to be filed directed to the Inventions and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, be it known that for and in consideration of certain good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions for all territories in the world and any improvements and modifications thereto, the Applications, all applications claiming benefit of the Applications, including, but not limited to, all divisional, continuation, and continuation-in-part applications, and reissue and reexaminations thereof; all Letters Patent, Invention Registrations, Utility Models, Extension and other patent rights, that may be granted thereon in the United States or any other country; together with the right to claim priority under the International Convention in all member countries (collectively "Related Applications"); and all causes of action arising therefrom including the right to enforce and sue for past, present, and future infringements and to collect all proceeds thereof (including, but not limited to, all license royalties). I authorize and request the United States Patent and Trademark Office or foreign equivalent to issue all Letters Patent or similar legal protection for the Inventions to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

For, and in consideration of, the certain good and valuable consideration, I do further sell, assign, transfer, and set over to ASSIGNEE, the right to claim priority to the Applications for all Related Applications, including without limitation all applications pursuant to the Patent Cooperation Treaty and national and regional applications filed therefrom, all applications for the territory of the United States of America, and all continuation, divisional, continuation-in-part and reissue applications thereof, and all patent applications in foreign countries and the right to be granted a patent for any of the foregoing applications;

AND I covenant and agree that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

This Assignment may be executed in counterparts, and said counterparts being deemed as original Assignment documents collectively.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the date indicated hereunder.

Date: 05/06/2019

By:  Joshua Smith

**ASSIGNEE:**

NIO USA, INC.

Date: 5/7/2019

By: Yu Chen  
Signature

~~Julian Ong~~ Yu CHEN  
Printed Name

~~VP, General Counsel~~ Registered In-House Counsel  
Title

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**EXHIBIT "A"**

<b>SR File No.</b>	<b>Title</b>	<b>Serial No.</b>	<b>Filing Date</b>
8322-296	Electric Vehicle Resilient Thermal Management for Cooling System During Fail Operational	15/686,513	8/25/2017
8322-365	Use of an Inside Condenser to Maximize Total Thermal System Performance	15/983,285	5/18/2018
8322-372	Thermal Management Coolant Valves and Pumps Modular Combination	15/909,281	3/1/2018
8322-414	Thermal System Topology of Cascaded Refrigerant and Coolant Circuits	15/983,289	5/18/2018
8322-439	Thermal Management, Heat Transfer Improvement of Radiator and Condenser Using AC System Evaporator's Condensation	15/950,768	4/11/2018

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Worldwide Assignment

WHEREAS, I, **Rick Rajaie** of 645 1763 Quincy Drive, Rochester Hills, Michigan 48306, have invented certain new and useful inventions ("Inventions") described in whole or part in the United States Non-Provisional Applications identified in Exhibit "A" (hereinafter "Applications"); and

WHEREAS, **NIO USA, Inc.** ("ASSIGNEE"), a corporation duly registered in the State of California, whose postal address is 3200 North First Street, San Jose, California 95134, desires to acquire the entire right, title, and interest in and to the Inventions, the United States, international, and foreign applications filed or to be filed directed to the Inventions and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, be it known that for and in consideration of certain good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions for all territories in the world and any improvements and modifications thereto, the Applications, all applications claiming benefit of the Applications, including, but not limited to, all divisional, continuation, and continuation-in-part applications, and reissue and reexaminations thereof; all Letters Patent, Invention Registrations, Utility Models, Extension and other patent rights, that may be granted thereon in the United States or any other country; together with the right to claim priority under the International Convention in all member countries (collectively "Related Applications"); and all causes of action arising therefrom including the right to enforce and sue for past, present, and future infringements and to collect all proceeds thereof (including, but not limited to, all license royalties). I authorize and request the United States Patent and Trademark Office or foreign equivalent to issue all Letters Patent or similar legal protection for the Inventions to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

For, and in consideration of, the certain good and valuable consideration, I do further sell, assign, transfer, and set over to ASSIGNEE, the right to claim priority to the Applications for all Related Applications, including without limitation all applications pursuant to the Patent Cooperation Treaty and national and regional applications filed therefrom, all applications for the territory of the United States of America, and all continuation, divisional, continuation-in-part and reissue applications thereof, and all patent applications in foreign countries and the right to be granted a patent for any of the foregoing applications;


AND I covenant and agree that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

This Assignment may be executed in counterparts, and said counterparts being deemed as original Assignment documents collectively.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the date indicated hereunder.

Date: 05/01/2019

By:   
Rick Rajala

**ASSIGNEE:**

NIO USA, INC.

Date: 5/1/2019

By:   
Signature

Julian Ong  
Printed Name

VP, General Counsel  
Title

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**EXHIBIT "A"**

<b>SR File No.</b>	<b>Title</b>	<b>Serial No.</b>	<b>Filing Date</b>
8322-365	USE OF AN INSIDE CONDENSER TO MAXIMIZE TOTAL THERMAL SYSTEM PERFORMANCE	15/983,285	5/18/2018
8322-372	THERMAL MANAGEMENT COOLANT VALVES AND PUMPS MODULAR COMBINATION	15/909,281	3/1/2018
8322-400	SYSTEMS AND METHODS OF BATTERY THERMAL MANAGEMENT	15/954,286	4/16/2018
8322-414	THERMAL SYSTEM TOPOLOGY OF CASCADED REFRIGERANT AND COOLANT CIRCUITS	15/983,289	5/18/2018
8322-417	METHODS AND DEVICES FOR THERMAL CONTROL DURING CHARGING OF ELECTRIC VEHICLES	15/940,638	3/29/2018
8322-453	METHOD AND SYSTEM FOR JOINING CELLS TO A BATTERY COLDPLATE	16/210,150	12/5/2018

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### Worldwide Assignment

WHEREAS, I, **Dewashish Kanta Prashad** of 1204 Elm Lake Court, San Jose, California 95131, have invented certain new and useful inventions ("Inventions") described in whole or part in the United States Non-Provisional Applications identified in Exhibit "A" (hereinafter "Applications"); and

WHEREAS, **NIO USA, Inc.** ("ASSIGNEE"), a corporation duly registered in the State of California, whose postal address is 3200 North First Street, San Jose, California 95134, desires to acquire the entire right, title, and interest in and to the Inventions, the United States, international, and foreign applications filed or to be filed directed to the Inventions and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, be it known that for and in consideration of certain good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions for all territories in the world and any improvements and modifications thereto, the Applications, all applications claiming benefit of the Applications, including, but not limited to, all divisional, continuation, and continuation-in-part applications, and reissue and reexaminations thereof; all Letters Patent, Invention Registrations, Utility Models, Extension and other patent rights, that may be granted thereon in the United States or any other country; together with the right to claim priority under the International Convention in all member countries (collectively "Related Applications"); and all causes of action arising therefrom including the right to enforce and sue for past, present, and future infringements and to collect all proceeds thereof (including, but not limited to, all license royalties). I authorize and request the United States Patent and Trademark Office or foreign equivalent to issue all Letters Patent or similar legal protection for the Inventions to ASSIGNEE, its successors, legal representatives, and assigns in accordance with the terms of this Assignment;

For, and in consideration of, the certain good and valuable consideration, I do further sell, assign, transfer, and set over to ASSIGNEE, the right to claim priority to the Applications for all Related Applications, including without limitation all applications pursuant to the Patent Cooperation Treaty and national and regional applications filed therefrom, all applications for the territory of the United States of America, and all continuation, divisional, continuation-in-part and reissue applications thereof, and all patent applications in foreign countries and the right to be granted a patent for any of the foregoing applications;

AND I covenant and agree that I have the full right to convey the entire right, title, and interest herein assigned and that I have not executed and will not execute any assignment or other instrument in conflict with this Assignment;

AND I further covenant and agree that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, I will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

This Assignment may be executed in counterparts, and said counterparts being deemed as original Assignment documents collectively.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the date indicated hereunder.

Date: 5/15/2019

By:   
Dewashish Kanta Prashad

**ASSIGNEE:**

NIO USA, INC.

Date: 5/15/2019

By: Yu Chen  
Signature  
Yu Chen  
Printed Name  
Registered In-House Counsel  
Title

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**EXHIBIT "A"**

<b>SR File No.</b>	<b>Title</b>	<b>Serial No.</b>	<b>Filing Date</b>
8322-372	THERMAL MANAGEMENT COOLANT VALVES AND PUMPS MODULAR COMBINATION	15/909,281	3/1/2018
8322-414	THERMAL SYSTEM TOPOLOGY OF CASCADED REFRIGERANT AND COOLANT CIRCUITS	15/983,289	5/18/2018

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**RECORDED: 05/20/2019**

**PATENT**  
**REEL: 049231 FRAME: 0264**