

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7153750

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROHIT BARANWAL	09/09/2021
ZHE ZHANG	05/17/2021
LEWEI QIAN	05/16/2021
MIROSLAV HOREJS	05/14/2021
GUANGQI ZHU	05/13/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EATON INTELLIGENT POWER LIMITED
<b>Street Address:</b>	30 PEMBROKE ROAD
<b>City:</b>	DUBLIN
<b>State/Country:</b>	IRELAND
<b>Postal Code:</b>	4
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17632020
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	cjohnson@meimark.com
<b>Correspondent Name:</b>	MEI & MARK LLP
<b>Address Line 1:</b>	P.O. BOX 65981
<b>Address Line 4:</b>	WASHINGTON, D.C. 20035-5981
<b>ATTORNEY DOCKET NUMBER:</b>	20018.0274-US
<b>NAME OF SUBMITTER:</b>	CHRISTINA JOHNSON
<b>SIGNATURE:</b>	/CJ/
<b>DATE SIGNED:</b>	02/01/2022
<b>Total Attachments: 10</b>	
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source=19VGE743PROV3PCTZhuassignment200180274P3PCTsignedGZ#page2.tif

## ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

### METHODS AND DEVICES FOR WIDE VOLTAGE SWITCHING

for which I/We executed an Patent Cooperation Treaty on August 3, 2020 (Application No. PCT/EP2020/025355); and

WHEREAS, Eaton Intelligent Power Limited, whose address is 30 Pembroke Road Dublin 4, Ireland (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the applications for United States Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to these inventions, Patent Cooperation Treaty Application No. PCT/EP2020/025355 filed August 3, 2020, and all nonprovisional applications, divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of the above application, as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

AND, I HEREBY, in the case of a nonprovisional application, a Patent Cooperation Treaty application, a continuing application, a National Stage application, a divisional application or like patent filing, authorize Assignee, Assignee's representative, Applicant or Applicant's representative to insert the filing date and application number herein (February 1, 2022 17/632,020) of the application claiming priority to this application, once known;

AND, I/WE HEREBY declare that, as a below named inventor, that the above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in these declarations is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. I have read and understood the above-identified application, including any claims therein. I understand that I have a duty to disclose prior art to the US Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Name: Rohit Baranwal  
Address: 27735 Cordoba, Apt. 1208  
Farmington Hills, MI 48334  
United States of America  
Citizenship: India

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Zhe Zhang  
Address: 3080 Whisperwood Drive Apt. 469  
Ann Arbor, MI 48105  
United States of America  
Citizenship: China

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Lewei Qian  
Address: 50685 Calvert Isle Drive  
Novi, MI 48374  
United States of America  
Citizenship: China

By: \_\_\_\_\_  
Date: 05/16/2021

Witness  
Signature: \_\_\_\_\_

Name: Miroslav Horejs  
Address: Miskovice 137  
Miskovice, Czechia  
Citizenship: Czechia

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

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AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

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IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Name: Rohit Baranwal  
Address: 25516 Lincoln Terrace Drive Apt. 302  
Oak Park, MI 48237  
United States of America  
Citizenship: India  
By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Zhe Zhang  
Address: 3080 Whisperwood Drive Apt. 469  
Ann Arbor, MI 48105  
United States of America  
Citizenship: China  
By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Lewei Qian  
Address: 50685 Calvert Isle Drive  
Novi, MI 48374  
United States of America  
Citizenship: China  
By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Miroslav Horejs  
Address: Miskovice 137  
Miskovice, Czechia  
Citizenship: Czechia  
By: Miroslav Horejs  
Date: 05/14/2021

Witness  
Signature: \_\_\_\_\_

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
AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

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Name: Rohit Baranwal  
Address: 27735 Cordoba, Apt. 1208  
Farmington Hills, MI 48334  
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Citizenship: India  
By:   
Date: 09/09/2021

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Address: Miskovice 137  
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Citizenship: Czechia  
By: \_\_\_\_\_  
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Signature: \_\_\_\_\_



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AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

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SOLE/JOINT INVENTION  
(Worldwide Rights)  
Attorney Docket No. 20018.0274-PCT  
Eaton Docket 19VGE743PCT

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Name: Rohit Baranwal  
Address: 27735 Cordoba, Apt. 1208  
Farmington Hills, MI 48334  
United States of America  
Citizenship: India

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Zhe Zhang  
Address: 1340 Rio Falls Dr. Apt. 304  
Raleigh, NC 27614  
United States of America  
Citizenship: China

By: *Zhe Zhang*  
Date: 05/17/2021

Witness  
Signature: *Zhe Zhang*

Name: Lewei Qian  
Address: 50685 Calvert Isle Drive  
Novi, MI 48374  
United States of America  
Citizenship: China

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

Name: Miroslav Horejs  
Address: Miskovice 137  
Miskovice, Czechia  
Citizenship: Czechia

By: \_\_\_\_\_  
Date: \_\_\_\_\_

Witness  
Signature: \_\_\_\_\_

## ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

### **METHODS AND DEVICES FOR WIDE VOLTAGE SWITCHING**

for which I/We executed an Patent Cooperation Treaty on August 3, 2020 (Application No. PCT/EP2020/025355);  
and

### **INTEGRATED ON BOARD CHARGER AND DC/DC CONVERTER WITH CAPACITOR AND MAGNETICS REDUCTION**

for which I/We executed a United States provisional on December 6, 2019 (Application No. 62/944,808) and

WHEREAS, Eaton Intelligent Power Limited, whose address is 30 Pembroke Road Dublin 4, Ireland (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the applications for United States Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, Patent Cooperation Treaty Application No. PCT/EP2020/025355 filed August 3, 2020, United States provisional Application No. 62/944,808 filed December 6, 2019 and all nonprovisional applications, divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of the above application, as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

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identified application, including any claims therein. I understand that I have a duty to disclose prior art to the US Patent and Trademark Office.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

Name: Guangqi Zhu  
Address: N30W23789 Green Rd. Apt. 11  
Pewaukee, MI 53072  
United States of America  
Citizenship: China

By: Guangqi Zhu  
Date: 5/13/2021

Witness  
Signature: Bing Rhl