

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7069465

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
XIN LOU	12/10/2021
QIANG LI	12/10/2021
FRED C. LEE	12/10/2021
RECEIVING PARTY DATA	
Name:	VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Street Address:	301 BURRUSS HALL
City:	BLACKSBURG
State/Country:	VIRGINIA
Postal Code:	24061
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17511753
CORRESPONDENCE DATA	
Fax Number:	(770)951-0933
<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>	
Phone:	7709339500
Email:	claudia.lorenz@thomashorstemeyer.com
Correspondent Name:	THOMAS HORSTEMEYER, LLP
Address Line 1:	3200 WINDY HILL ROAD, SE
Address Line 2:	SUITE 1600E
Address Line 4:	ATLANTA, GEORGIA 30339
ATTORNEY DOCKET NUMBER:	222204-1670
NAME OF SUBMITTER:	DANIEL C. OSBORNE
SIGNATURE:	/Daniel C. Osborne/
DATE SIGNED:	12/13/2021
Total Attachments: 3	
source=2021-12-13_21-129_222204-1670_ExecutedAssignment#page1.tif	
source=2021-12-13_21-129_222204-1670_ExecutedAssignment#page2.tif	
source=2021-12-13_21-129_222204-1670_ExecutedAssignment#page3.tif	

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, Xin Lou ("Inventor"), having a residence in Blacksburg, VA, has invented or contributed to the inventions described in the following listed patent application(s) that has/have been or will be filed in the patent office(s) of the following identified country(ies):

Title	VTIP No.	Country	Patent App. No.	Filing Date
HIGH CURRENT DC-DC CONVERTER WITH INTEGRATED MATRIX TRANSFORMER AND MULTIPHASE CURRENT DOUBLER RECTIFIER	21-129	US	17/511,753	Oct. 27, 2021

WHEREAS, for the purposes of this Assignment, "Patent Application" means, individually and collectively, any and all (a) patent application(s) listed above, (b) patent application(s) filed anywhere in the world that claim the benefit of priority, whose benefit of priority is claimed, or share a claim of priority with, such application(s), including any foreign counterpart, continuation, continuation-in-part, divisional, reissue, reexamination or substitute application thereof, and (c) inventions described in, and patents issuing from, any patent application(s) described in clauses "(a)" or "(b)" of this paragraph; and "including" means "including, by way of example and not limitation"; and

WHEREAS, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNEE), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at 301 Burruss Hall, Blacksburg, Virginia, 24061, wishes to obtain all of Inventor's rights in the Patent Application.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Inventor confirms that, to the extent Inventor has not already assigned all right, title and interest in the Patent Application to Assignee, Inventor hereby assigns and agrees as follows.

Inventor agrees to assign and hereby does assign the entire right, title and interest in the Patent Application to Assignee, including all rights and privileges and all forms of protection that may be granted anywhere in the world arising out of the filing, publication or grant of the Patent Application, including the right to seek and collect past damages. Inventor authorizes Assignee (or Assignee's designated successor(s) or assign(s) of the Patent Application) to make application for and obtain such protection in its own name and maintain such protection anywhere in the world, and to invoke and claim for any application for patent or other form of protection for the Patent Application, without further authorization from Inventor, including any right to claim the benefit of priority provided by any treaty, convention or agreement. Inventor requests that all patents issuing from the Patent Application be issued to Assignee or its successors or assigns.

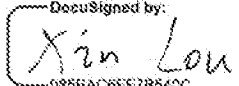
Inventor hereby consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for the Patent Application (including inventions described therein) and to claim the benefit of the right to priority.

Inventor shall, without charge to Assignee but at its expense with respect to Inventor's reasonable out-of-pocket costs (to which Assignee must consent in advance), sign and take all rightful oaths, and do all acts that Assignee deems necessary or may reasonably request, in connection with the Patent Application or other forms of protection of the inventions described therein, and for the defense and protection thereof if challenged in a court of law or equity. Unless prohibited by law, Inventor agrees not to challenge the validity or patent eligibility of any claim currently or later appearing in the Patent Application.

Inventor authorizes Assignee or its agents to insert above, on Inventor's behalf, the filing date and/or application number of the identified application(s) if not known or listed above as of the date of execution of this document. Inventor further authorizes Assignee to confirm its acceptance of this Assignment by adding Assignee's name and authorized signature below.

This Assignment, including any questions relating to its validity, shall be governed by federal laws of the United States and the state laws of Virginia, as applicable, without regard to a jurisdiction's conflicts of law rules.

IN WITNESS WHEREOF, this agreement is executed and agreed to by Inventor, being signed by Inventor on the date below.

Signature:  _____

Name: Xin Lou

Date: December 10, 2021

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, Qiang Li ("Inventor"), having a residence in Blacksburg, VA, has invented or contributed to the inventions described in the following listed patent application(s) that has/have been or will be filed in the patent office(s) of the following identified country(ies):

Title	VTIP No.	Country	Patent App. No.	Filing Date
HIGH CURRENT DC-DC CONVERTER WITH INTEGRATED MATRIX TRANSFORMER AND MULTIPHASE CURRENT DOUBLER RECTIFIER	21-129	US	17/511,753	Oct. 27, 2021

WHEREAS, for the purposes of this Assignment, "Patent Application" means, individually and collectively, any and all (a) patent application(s) listed above, (b) patent application(s) filed anywhere in the world that claim the benefit of priority, whose benefit of priority is claimed, or share a claim of priority with, such application(s), including any foreign counterpart, continuation, continuation-in-part, divisional, reissue, reexamination or substitute application thereof, and (c) inventions described in, and patents issuing from, any patent application(s) described in clauses "(a)" or "(b)" of this paragraph; and "including" means "including, by way of example and not limitation"; and

WHEREAS, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNEE), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at 301 Burruss Hall, Blacksburg, Virginia, 24061, wishes to obtain all of Inventor's rights in the Patent Application.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Inventor confirms that, to the extent Inventor has not already assigned all right, title and interest in the Patent Application to Assignee, Inventor hereby assigns and agrees as follows.

Inventor agrees to assign and hereby does assign the entire right, title and interest in the Patent Application to Assignee, including all rights and privileges and all forms of protection that may be granted anywhere in the world arising out of the filing, publication or grant of the Patent Application, including the right to seek and collect past damages. Inventor authorizes Assignee (or Assignee's designated successor(s) or assign(s) of the Patent Application) to make application for and obtain such protection in its own name and maintain such protection anywhere in the world, and to invoke and claim for any application for patent or other form of protection for the Patent Application, without further authorization from Inventor, including any right to claim the benefit of priority provided by any treaty, convention or agreement. Inventor requests that all patents issuing from the Patent Application be issued to Assignee or its successors or assigns.

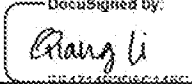
Inventor hereby consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for the Patent Application (including inventions described therein) and to claim the benefit of the right to priority.

Inventor shall, without charge to Assignee but at its expense with respect to Inventor's reasonable out-of-pocket costs (to which Assignee must consent in advance), sign and take all rightful oaths, and do all acts that Assignee deems necessary or may reasonably request, in connection with the Patent Application or other forms of protection of the inventions described therein, and for the defense and protection thereof if challenged in a court of law or equity. Unless prohibited by law, Inventor agrees not to challenge the validity or patent eligibility of any claim currently or later appearing in the Patent Application.

Inventor authorizes Assignee or its agents to insert above, on Inventor's behalf, the filing date and/or application number of the identified application(s) if not known or listed above as of the date of execution of this document. Inventor further authorizes Assignee to confirm its acceptance of this Assignment by adding Assignee's name and authorized signature below.

This Assignment, including any questions relating to its validity, shall be governed by federal laws of the United States and the state laws of Virginia, as applicable, without regard to a jurisdiction's conflicts of law rules.

IN WITNESS WHEREOF, this agreement is executed and agreed to by Inventor, being signed by Inventor on the date below.

Signature:  222204-1670

Name: Qiang Li

Date: December 10, 2021

222204-1670

PATENT
REEL: 058367 FRAME: 0931

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, Fred C. Lee ("Inventor"), having a residence in Blacksburg, VA, has invented or contributed to the inventions described in the following listed patent application(s) that has/have been or will be filed in the patent office(s) of the following identified country(ies):

Title	VTIP No.	Country	Patent App. No.	Filing Date
HIGH CURRENT DC-DC CONVERTER WITH INTEGRATED MATRIX TRANSFORMER AND MULTIPHASE CURRENT DOUBLER RECTIFIER	21-129	US	17/511,753	Oct. 27, 2021

WHEREAS, for the purposes of this Assignment, "Patent Application" means, individually and collectively, any and all (a) patent application(s) listed above, (b) patent application(s) filed anywhere in the world that claim the benefit of priority, whose benefit of priority is claimed, or share a claim of priority with, such application(s), including any foreign counterpart, continuation, continuation-in-part, divisional, reissue, reexamination or substitute application thereof, and (c) inventions described in, and patents issuing from, any patent application(s) described in clauses "(a)" or "(b)" of this paragraph; and "including" means "including, by way of example and not limitation"; and

WHEREAS, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNEE), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at 301 Burruss Hall, Blacksburg, Virginia, 24061, wishes to obtain all of Inventor's rights in the Patent Application.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Inventor confirms that, to the extent Inventor has not already assigned all right, title and interest in the Patent Application to Assignee, Inventor hereby assigns and agrees as follows.

Inventor agrees to assign and hereby does assign the entire right, title and interest in the Patent Application to Assignee, including all rights and privileges and all forms of protection that may be granted anywhere in the world arising out of the filing, publication or grant of the Patent Application, including the right to seek and collect past damages. Inventor authorizes Assignee (or Assignee's designated successor(s) or assign(s) of the Patent Application) to make application for and obtain such protection in its own name and maintain such protection anywhere in the world, and to invoke and claim for any application for patent or other form of protection for the Patent Application, without further authorization from Inventor, including any right to claim the benefit of priority provided by any treaty, convention or agreement. Inventor requests that all patents issuing from the Patent Application be issued to Assignee or its successors or assigns.

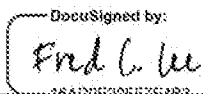
Inventor hereby consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for the Patent Application (including inventions described therein) and to claim the benefit of the right to priority.

Inventor shall, without charge to Assignee but at its expense with respect to Inventor's reasonable out-of-pocket costs (to which Assignee must consent in advance), sign and take all rightful oaths, and do all acts that Assignee deems necessary or may reasonably request, in connection with the Patent Application or other forms of protection of the inventions described therein, and for the defense and protection thereof if challenged in a court of law or equity. Unless prohibited by law, Inventor agrees not to challenge the validity or patent eligibility of any claim currently or later appearing in the Patent Application.

Inventor authorizes Assignee or its agents to insert above, on Inventor's behalf, the filing date and/or application number of the identified application(s) if not known or listed above as of the date of execution of this document. Inventor further authorizes Assignee to confirm its acceptance of this Assignment by adding Assignee's name and authorized signature below.

This Assignment, including any questions relating to its validity, shall be governed by federal laws of the United States and the state laws of Virginia, as applicable, without regard to a jurisdiction's conflicts of law rules.

IN WITNESS WHEREOF, this agreement is executed and agreed to by Inventor, being signed by Inventor on the date below.

Signature: 

Name: Fred C. Lee

Date: December 10, 2021