#### 09/13/2017 504546604

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4593312

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

#### **CONVEYING PARTY DATA**

| Name         | Execution Date |
|--------------|----------------|
| ZHAO YUAN    | 08/07/2017     |
| JUNJIA HE    | 08/07/2017     |
| YUAN PAN     | 08/07/2017     |
| HUI XU       | 08/07/2017     |
| WENTING ZHAO | 08/07/2017     |
| XIAOGEN YIN  | 08/07/2017     |

#### **RECEIVING PARTY DATA**

| Name:           | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY |
|-----------------|---|
| Street Address: | NO. 1037 LUOYU ROAD, HONGSHAN                 |
| City:           | WUHAN   |
| State/Country:  | CHINA   |
| Postal Code:    | 430074  |

#### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15703959 |

#### **CORRESPONDENCE DATA**

Fax Number: (888)259-9223

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.

Phone: 8882599211 X2330

USPTORECEIPT@GMAIL.COM Email:

**Correspondent Name:** MATTHIAS SCHOLL Address Line 1: 1321 UPLAND DR.

Address Line 2: **SUITE 1319** 

Address Line 4: HOUSTON, TEXAS 77043

| ATTORNEY DOCKET NUMBER: | WHHZ-06101-UUS |
|-------------------------|----------------|
| NAME OF SUBMITTER:      | LARRY CHEN     |
| SIGNATURE:              | /Larry Chen/   |
| DATE SIGNED:            | 09/13/2017     |

**PATENT** REEL: 043580 FRAME: 0963 504546604

### **Total Attachments: 6** source=WHHZ-06101-UUS\_Assignment#page1.tif source=WHHZ-06101-UUS\_Assignment#page2.tif source=WHHZ-06101-UUS\_Assignment#page3.tif source=WHHZ-06101-UUS\_Assignment#page4.tif

source=WHHZ-06101-UUS\_Assignment#page5.tif source=WHHZ-06101-UUS\_Assignment#page6.tif

**PATENT** REEL: 043580 FRAME: 0964

| Attorney<br>Docket<br>Number  | WHHZ-06101-UUS  |
|---|---|
| Title of Invention  | DIRECT CURRENT CIRCUIT BREAKER  |
|   | I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.   |
| WHEREAS   | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   |
| having a po   | No. 1037 Luoyu Road, Hongshan, Wuhan, Hubei, China, 430074  |
|   | as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  |
| ASSIGNOR<br>said inven<br>division, co  | W. THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged,<br>t, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to<br>tion and application throughout the United States of America, including any and all patents granted on any<br>ntinuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or<br>tal examination thereof.  |
| prosecution additional d further conscommunica ASSIGNOF be required encompass | SIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, and maintenance of said application or any other patent applications in the United States for said invention, including ocuments that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without sideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and te to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within it's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent ed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's utors, administrators and other legal representatives. |
| referred to<br>use and be<br>which such                                       | SIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole hoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment it been made.   |
|   | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same.   |
| LEGAL N   | AME OF ASSIGNOR   |
| Assignor  | Zhao YUAN Date: 08-07-201)  |
| Signature   | Zhan Yuan   |

PAGE 1 OF 6

| Attorney<br>Docket<br>Number   | WHHZ-06101-UUS  |  |
|--|---|--|
| Title of<br>Invention  | DIRECT CURRENT CIRCUIT BREAKER  |  |
|  | , I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.   |  |
| WHEREAS  | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   |  |
| having a po  | No. 1037 Luoyu Road, Hongshan, Wuhan, Hubei, China, 430074  |  |
| (referred to as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof.  ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.  ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole |   |  |
| use and behoof, and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.  |   |  |
|  | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same. |  |
| LEGAL N  | AME OF ASSIGNOR   |  |
| Assignor   | Junjia HE Date: 08-07-201)  |  |
| Signature  | Junjia He   |  |

PAGE 2 OF 6

| Attorney<br>Docket<br>Number  | WHHZ-06101-UUS  |  |
|---|---|--|
| Title of<br>Invention   | DIRECT CURRENT CIRCUIT BREAKER  |  |
|   | I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.   |  |
| WHEREAS   | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   |  |
| having a po   | No. 1037 Luoyu Road, Hongshan, Wuhan, Hubei, China, 430074  |  |
| (referred to  | as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  |  |
| NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof.  |   |  |
| ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. |   |  |
| ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.  |   |  |
|   | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same. |  |
| LEGAL N   | AME OF ASSIGNOR   |  |
| Assignor:   | Yuan PAN Date: 08-0)-201)   |  |
| Signature: Yuan Pan   |   |  |

PAGE 3 OF 6

| Attorney<br>Docket<br>Number  | WHHZ-06101-UUS  |  |
|---|---|--|
| Title of<br>Invention   | DIRECT CURRENT CIRCUIT BREAKER  |  |
|   | , I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.   |  |
| WHEREAS   | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   |  |
| having a po   | stal address of No. 1037 Luoyu Road, Hongshan, Wuhan, Hubel, China, 430074  |  |
|   | as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  |  |
| NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof.  |   |  |
| ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. |   |  |
| ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.  |   |  |
|   | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same. |  |
| LEGAL N   | AME OF ASSIGNOR   |  |
| Assignor:   | Hui XU Date: 08-0)-201)   |  |
| Signature: Hui XU   |   |  |

PAGE 4 OF 6

| Attorney<br>Docket<br>Number  | WHHZ-06101-UUS   |
|---|--|
| Title of Invention  | DIRECT CURRENT CIRCUIT BREAKER   |
|   | , I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.  |
| WHEREAS   | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY  |
| having a po   | No. 1037 Luoyu Road, Hongshan, Wuhan, Hubei, China, 430074   |
| [   | as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  W, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged. |
| ASSIGNOF<br>said inven<br>division, co  | t, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to   |
| ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. |  |
| ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.  |  |
|   | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same.                |
| LEGAL N   | AME OF ASSIGNOR  |
| Assignor:   | Wenting ZHAO Date: 08-0)-20)   |
| Signature   | Wenting Zhao   |

PAGE 5 OF 6

| Attorney<br>Docket<br>Number  | WHHZ-06101-UUS  |  |
|---|---|--|
| Title of<br>Invention   | DIRECT CURRENT CIRCUIT BREAKER  |  |
|   | I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed the application identified by the title above.   |  |
| WHEREAS   | HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   |  |
| having a po   | No. 1037 Luoyu Road, Hongshan, Wuhan, Hubei, China, 430074  |  |
|   | as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States;  |  |
| NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof.  |   |  |
| ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. |   |  |
| ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.  |   |  |
|   | SIGNOR authorizes Practitioners associated with the Customer Number 33,794 to insert or complete any information ment needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same. |  |
| LEGAL NAME OF ASSIGNOR  |   |  |
| Assignor:   | Xiaogen YIN Date: Of - 0 - 201  |  |
| Signature: Xiangen Yun  |   |  |

PAGE 6 OF 6

PATENT REEL: 043580 FRAME: 0970