506347155 11/10/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6393909

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------|----------------|
| HUILONG ZHU | 03/19/2019 |

RECEIVING PARTY DATA

| Name: | INSTITUTE OF MICROELECTRONICS, CHINESE ACADEMY OF SCIENCES |
|-----------------|--|
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| State/Country: | CHINA |
| Postal Code: | 100029 |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 16338212 | |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 13496.0049USWO |
|-------------------------|----------------|
| NAME OF SUBMITTER: | RONG YANG |
| SIGNATURE: | /rongcyang/ |
| DATE SIGNED: | 11/10/2020 |

Total Attachments: 2

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PATENT 506347155 REEL: 054325 FRAME: 0528

Docket No. 13496.0049USWO

ASSIGNMENT OF PATENT APPLICATION

WHEREAS.

1. Huilong ZHU having an address of 93 Autumn Dr. Poughkeepsie, NY, 12603, USA

| (hereinafter c | alled "THE | UNDERSIG | NED") have m | ade an inventi | on and have execu | uted |
|----------------|-------------------|---------------|-----------------------|------------------|--------------------|-------|
| an application | a for Letters | Patent of the | United States: | for this inventi | on which was filed | i on |
| , e | ntitled me | mory device | e, method of | manufactur | ing the same, | and |
| electronic d | evice inclu | ding the sai | ne , and which | has been gi | ven application se | erial |
| number | 5 | | | | | |
| | | | | | | |

and

WHEREAS INSTITUTE OF MICROELECTRONICS, CHINESE ACADEMY OF SCIENCES (hereinafter "ASSIGNEE") a corporation organized under the laws of China and having an office and place of business at No.3 Beitucheng West Road, Chaoyang District, Beijing, 100029 China wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign, and transfer to the ASSIGNEE, its successors, legal representative and assigns, the entire right, title and interest for the United States in and to the invention disclosed in said application, and in and to said application, as well as to all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents of the United States to issue all Letters Patent for said invention to the ASSIGNEE of the entire right, title and interest in and to the same, in accordance with the terms of this instrument.

THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to the UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, it successors or assigns, the entire right, title and interest in and to the said invention, patent applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned and conveyed, or intended so to be.

PATENT REEL: 054325 FRAME: 0529 THE UNDERSIGNED represent and agree with said ASSIGNEE, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by the UNDERSIGNED.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.

RECORDED: 11/10/2020

PATENT REEL: 054325 FRAME: 0530