PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6449789

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| JUN XU | 12/07/2020 |
| VIOLANTE MOSCHIANO | 12/02/2020 |
| ERWIN E. YU | 11/30/2020 |

RECEIVING PARTY DATA

| Name: | MICRON TECHNOLOGY, INC. |
|-----------------|-------------------------|
| Street Address: | 8000 SOUTH FEDERAL WAY |
| City: | BOISE |
| State/Country: | IDAHO |
| Postal Code: | 83716-9632 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17115357 |

CORRESPONDENCE DATA

Fax Number: (973)422-6423

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: 973-597-2500

Email: dsierchio@lowenstein.com
Correspondent Name: DOCKET ADMINISTRATOR
Address Line 1: ONE LOWENSTEIN DRIVE
Address Line 2: LOWENSTEIN SANDLER LLP
Address Line 4: ROSELAND, NEW JERSEY 07068

| ATTORNEY DOCKET NUMBER: | 34300.518 (L0518) |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | DANIEL D. SIERCHIO |
| SIGNATURE: | /Daniel D. Sierchio/ |
| DATE SIGNED: | 12/14/2020 |

Total Attachments: 6

source=34300-518_L0518_Xu_ExecutedAssignment#page1.tif source=34300-518_L0518_Xu_ExecutedAssignment#page2.tif source=34300-518_L0518_Moschiano_ExecutedAssignment#page1.tif

PATENT 506403033 REEL: 054647 FRAME: 0057

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PATENT REEL: 054647 FRAME: 0058

| | Client Ref. No. 2020-0554.00/US Attorney Do | ocket No.: 34300.518 (L0518) |
|---|---|---|
| | ASSIGNMENT OF PATENT APPLICATION | |
| | For good and valuable consideration, the receipt and sufficie | ncy of which is hereby |
| ,,,,,,,,,, | acknowledged, I/we, the undersigned, <u>Jun Xu, Violante Moschiano.</u> | Erwin E. Yu |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | hereby sell, assign, and transfer to <u>Micron Technology, Inc.</u> | |
| ***** | ~ _ ~ | • |
| ***** | a <u>corporation</u> of (Type of Assignee: e.g., corporation, company, partnership, university, etc.) | Delaware |
| - | having a principal place of business at <u>8000 South Federal Way.</u> I | <u>3oise, Idaho 83716-9632,</u> |
| *************************************** | ("Assignee"), and its successors, assigns, and legal representatives for the United States and all foreign countries, in and to any and all are disclosed in the application (provisional or non-provisional) for the have a declaration executed by the undersigned prior hereto or con- | inventions or improvements that ne United States patent which may |
| *************************************** | MANAGING PROGRAMMING CONVERGENCE AS MEMORY CELLS OF A MEMORY SUB-S | |
| | said patent application also identified as follows (when known): | |
| | [I/we hereby authorize an attorney or agent for said Assigne number and filing date of said patent application when know | |
| | United States Patent Application Number $\underline{17/115,357}$ filed $\underline{\square}$ | December 8, 2020 |
| | and in and to said application (provisional or non-provisional) and al provisional applications, utility applications, design applications, divi applications, continued prosecution applications, continuation-in-par applications, renewal applications, reissue applications, reexaminati patent applications that have been or shall be filed in the United Sta of said inventions or improvements; and in and to all original patents certificates, and extensions, that have been or shall be issued in the countries on said inventions or improvements; and in and to all right of said United States application and all rights to claim priority to sai | sional applications, continuation t applications, substitute ons, extensions, and all other tes and all foreign countries on any s, reissued patents, reexamination United States and all foreign s of priority resulting from the filing |
| *************************************** | agree that said Assignee may apply for and receive a patent improvements in its own name; and that, when requested, without c said Assignee, its successors, assigns, and legal representatives, to and purpose of this Assignment, the undersigned will execute all proprovisional applications, utility applications, design applications, divi | harge to, but at the expense of, carry out in good faith the intent ovisional applications, non- |

applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

| Each Inventor: Please Sign and Date Below: | | • * 5 |
|--|--------------------|-------------|
| 12/7/2020 | Jan Xa | |
| Date | Jun Xu | |
| Date | Violante Moschiano | |
| Date | Erwin E. Yu | |
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Client Ref. No. 2020-0554.00/US

legal representatives; and

Attorney Docket No.: 34300.518 (L0518)

| ***** | ASSIGNMENT OF PATENT APPLICATION |
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| | For good and valuable consideration, the receipt and sufficiency of which is hereby |
| | acknowledged, I/we, the undersigned, Jun Xu. Violante Moschiano, Erwin E. Yu |
| | hereby sell, assign, and transfer to <u>Micron Technology, Irrc.</u> |
| - | |
| 2000000000 | a <u>corporation</u> of <u>Delaware</u> (Type of Assignee: e.g., corporation, company, partnership, university, etc.) |
| Contraction of the Contraction o | |
| * | having a principal place of business at 8000 South Federal Way, Boise, Idaho 83716-9632, |
| *************************************** | ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled |
| ************* | MANAGING PROGRAMMING CONVERGENCE ASSOCIATED WITH MEMORY CELLS OF A MEMORY SUB-SYSTEM |
| ********** | said patent application also identified as follows (when known): |
| *************************************** | [I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.] |
| | United States Patent Application Number 17/115,357 filed December 8, 2020 |
| | and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application and all rights to claim priority to said United States application; |
| | agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents |

and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and

| Each Inventor: Please | s <u>Sign and Date</u> Below: |
|-----------------------|-------------------------------|
| | |
| Date | Jun Xu A A |
| 12-02.2023 | Wolk Incl |
| Date | Violante Moschiano |
| · | |
| Date | Erwin E. Yu |
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ASSIGNMENT OF PATENT APPLICATION For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the undersigned, Jun Xu, Violante Moschiano, Erwin E. Yu hereby sell, assign, and transfer to Micron Technology, Inc. _ of <u>Delawa</u>re a corporation (Type of Assignee: e.g., corporation, company, partnership, university, etc.) having a principal place of business at 8000 South Federal Way, Boise, Idaho 83716-9632,

("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that

are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled

MANAGING PROGRAMMING CONVERGENCE ASSOCIATED WITH MEMORY CELLS OF A MEMORY SUB-SYSTEM

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

| United States Patent Application Num | ber 17/115,357 | filed December 8, 2020 | |
|--------------------------------------|----------------|------------------------|--|
| | | | |

and in and to said application (provisional or non-provisional) and all provisional applications, nonprovisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application and all rights to claim priority to said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, nonprovisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths. assignments, powers of attorney, and other papers; communicate to said Assignee, its successors. assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

> PATENT REEL: 054647 FRAME: 0063

Attorney Docket No.: 34300.518 (L0518)

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned. Each Inventor: Please Sign and Date Below: Date Jun Xu Violante Moschiano Date ///30/2020 /win & Julian & Date Erwin E. Yu