506408014 12/16/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

UBMISSION TYPE: NEW ASSIGNMENT

EPAS ID: PAT6454770

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VINH Q. DIEP	12/14/2020
CHING-HUANG LU	12/14/2020
YINGDA DONG	12/09/2020

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:	17247576

CORRESPONDENCE DATA

Fax Number:

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.

Email: smacdonald@lowenstein.com
Correspondent Name: LOWENSTEIN SANDLER LLP
Address Line 1: ONE LOWENSTEIN DRIVE

Address Line 4: ROSELAND, NEW JERSEY 07068

ATTORNEY DOCKET NUMBER:	34300.617 (L0617)
NAME OF SUBMITTER:	PAUL M. KRUEGER, REG. 64,944
SIGNATURE:	/Paul M. Krueger/
DATE SIGNED:	12/16/2020

Total Attachments: 6

source=34300-617-L0617 Assignment Filed 12-16-2020#page1.tif source=34300-617-L0617 Assignment Filed 12-16-2020#page2.tif source=34300-617-L0617 Assignment Filed 12-16-2020#page3.tif source=34300-617-L0617 Assignment Filed 12-16-2020#page4.tif source=34300-617-L0617 Assignment Filed 12-16-2020#page5.tif

PATENT 506408014 REEL: 054673 FRAME: 0656

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PATENT REEL: 054673 FRAME: 0657

Client Ref. No. 2020-0991.00/US	Attorney Docket No.: 34300,617 (L0617
ASSIGNMENT OF PATENT APPLICATION	N
For good and valuable consideration, the rec	e ipt and sufficiency of which is hereby
acknowledged, I/we, the undersigned, Vinh Q. Diep	Ching-Huang Lu, and Yingda Dong
hereby sell, assign, and transfer to <u>Micron Techno</u>	ology, Inc.
a corporation (Type of Assignee: e.g., corporation, company, partnership, uni	of <u>Delaware</u>
	• • • • •
having a principal place of business at <u>8000 South</u>	Federal Way, Boise, Idaho 83716-9632,
("Assignee"), and its successors, assigns, and legal for the United States and all foreign countries, in and are disclosed in the application (provisional or non-p have a declaration executed by the undersigned prin	I to any and all inventions or improvements that revisional) for the United States patent which may
ENHANCED GRADIENT SEEDING OPERATION IN A ME	
said patent application also identified as follows (wh	en known):
[I/we hereby authorize an attorney or agent to number and filing date of said patent application	or said Assignee to insert below the application tion when known.]
United States Patent Application Number <u>17/247</u> ,	576 filed December 16, 2020
and in and to said application (provisional or non-proprovisional applications, utility applications, design a applications, continued prosecution applications, cor applications, renewal applications, reissue application patent applications that have been or shall be filed in of said inventions or improvements; and in and to all certificates, and extensions, that have been or shall countries on said inventions or improvements; and ir of said United States application and all rights to clair	pplications, divisional applications, continuation trinuations, repart applications, substitute ms, reexaminations, extensions, and all other to the United States and all foreign countries on any original patents, reissued patents, reexamination be issued in the United States and all foreign and to all rights of priority resulting from the filling
agree that said Assignee may apply for and improvements in its own name; and that, when required Assignee its succession and the said Assignee.	eceive a patent or patents for said inventions or ested, 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, conti nuation-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

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:

12/14/2020	Quel-
Date	Vinh Q. Diep
Date	Ching-Huang Lu
Date	Yingda Dong

Client Ref. No. 2020-0991.00/US Attorney Docket No.: 34300.617 (L0617)

ASSIGNMENT OF PATENT APPLICATION

SSIGNIVIENT OF PATEINT APPLICATION	<u> </u>
For good and valuable consideration, the rec	eipt and sufficiency of which is hereby
acknowledged, I/we, the undersigned, Vinh Q. Diep	, Ching-Huang Lu, and Yingda Dong ,
hereby sell, assign, and transfer to <u>Micron Techno</u>	ology, Inc.
a <u>corporation</u> (Type of Assignee: e.g., corporation, company, partnership, uni	of <u>Delaware</u> , versity, etc.)
having a principal place of business at 8000 South	ı Federal Way, Boise, Idaho 83716-9632,
("Assignee"), and its successors, assigns, and legal for the United States and all foreign countries, in and are disclosed in the application (provisional or non-p have a declaration executed by the undersigned price	d to any and all inventions or improvements that rovisional) for the United States patent which may

ENHANCED GRADIENT SEEDING SCHEME DURING A PROGRAM OPERATION IN 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	17/247,576	filed December 16, 2020
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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 legal representatives; and

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	Vinh Q. Diep	
	12/14/2020 Date	Ching Humg Lu Ching-Huang Lu	
	Date	Yingda Dong	

Client Ref. No.: 2020-0991,00/US	Attorney Docket No.: 34300.617 (L0617)
ASSIGNMENT OF PATENT APPLICATION	ON
For good and valuable consideration, the	receipt and sufficiency of which is hereby
acknowledged, I/we, the undersigned, Vinh Q. D	iep, Ching-Huang Lu, and Yingda Dong
hereby sell, assign, and transfer to <u>Micron Tec</u>	hnology, Inc.
a corporation	of Delaware ,
(Type of Assignee: e.g., corporation, company, partnership,	university, etc.)
having a principal place of business at 8000 So	uth Federal Way, Boise, Idaho 83716-9632,
for the United States and all foreign countries, in are disclosed in the application (provisional or no	gal representatives, the entire right, title, and interest and to any and all inventions or improvements that n-provisional) for the United States patent which may prior hereto or concurrently herewith and is entitled
	NG SCHEME DURING A PROGRAM IEMORY SUB-SYSTEM
said patent application also identified as follows (when known):
[I/we hereby authorize an attorney or age number and filing date of said patent appl	nt for said Assignee to insert below the application lication when known.]
United States Patent Application Number <u>17/24</u>	7,576 filed <u>December 16, 2020</u>
provisional applications, utility applications, desig applications, continued prosecution applications, applications, renewal applications, reissue applications patent applications that have been or shall be file of said inventions or improvements; and in and to certificates, and extensions, that have been or sh	ations, reexaminations, extensions, and all other d in the United States and all foreign countries on any all original patents, reissued patents, reexamination all be issued in the United States and all foreign ad in and to all rights of priority resulting from the filing
improvements in its own name; and that, when re	nd receive a patent or patents for said inventions or equested, without charge to, but at the expense of, 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

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: Pleas	e <u>Sign and Date</u> Below:	
 Date	Vinh Q. Diep	
Date	Ching-Huang Lu	
2 /q/2020 Date	Yingda Dong	