# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Fu-Chang Hsu	01/31/2025

## **RECEIVING PARTY DATA**

Company Name:	NEO Semiconductor, Inc.	
Street Address:	1871 The Alameda Suite 250	
City:	San Jose	
State/Country:	CALIFORNIA	
Postal Code:	95126	

# **PROPERTY NUMBERS Total: 15**

Property Type	Number	
Application Number:	18489842	
Application Number:	18489844	
Application Number:	18492625	
Application Number:	18499432	
Application Number:	18597866	
Application Number:	17209109	
Application Number:	15355733	
Application Number:	15348869	
Patent Number:	10553293	
PCT Number:	US2277444	
PCT Number:	US2377238	
PCT Number:	US2377239	
PCT Number:	US2377563	
PCT Number:	US2378307	
PCT Number:	US2418751	

#### **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.

**Phone:** 4082868933

PATENT REEL: 070185 FRAME: 0268

509022634

Email:pt\_docket@iplg.comCorrespondent Name:Alexaray Martinez Baca

Address Line 1: 1871 The Alameda Suite 250
Address Line 4: San Jose, CALIFORNIA 95126

ATTORNEY DOCKET NUMBER:	SIONS	
NAME OF SUBMITTER:	AlexaRay Martinez	
SIGNATURE:	/AlexaRay Martinez/	
DATE SIGNED:	02/11/2025	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 2** 

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> PATENT REEL: 070185 FRAME: 0269

#### ASSIGNMENT

- WHEREAS, I, Fu-Chang Hsu (hereinafter referred to as "ASSIGNOR"), am the inventor and owner of the following United States Letters Patent and patent applications:
  - U.S. Patent Application No. 18/489,842, filed on October 18, 2023 for the invention entitled "3D CELLS AND ARRAY STRUCTURES AND PROCESSES",
  - U.S. Patent Application No. 18/489,844, filed on October 18, 2023 for the invention entitled "3D MEMORY CELLS AND ARRAY STRUCTURES",
  - U.S. Patent Application No. 18/492,625, filed on October 23, 2023 for the invention entitled "3D ARRAY STRUCTURES AND PROCESSES",
  - U.S. Patent Application No. 18/499,432, filed on November 01, 2023 for the invention entitled "3D CELLS AND ARRAY STRUCTURES",
  - U.S. Patent Application No. 18/597,866, filed on March 06, 2024 for the invention entitled "3D CELL AND ARRAY STRUCTURES WITH PARALLEL BIT LINES AND SOURCE LINES",
  - U.S. Patent Application No. 17/209,109 filed on March 22, 2021 for the invention entitled "THREE DIMENSIONAL DOUBLE-DENSITY MEMORY ARRAY",
  - U.S. Patent Application No. <u>15/355,733</u> filed on <u>November 18, 2016</u> for the invention entitled "METHODS AND APPARATUS FOR A 3D ARRAY INSIDE A SUBSTRATE TRENCH",
  - U.S. Patent Application No. <u>15/348,869</u> filed on <u>November 10, 2016</u> for the invention entitled "3D NAND ARRAY WITH DIVIDED STRING ARCHITECTURE",

United States Letters Patent No. 10,553,293, issued on February 04, 2020 for the invention entitled "3D NAND ARRAY WITH DIVIDED STRING ARCHITECTURE",

International Application No. PCT/US2022/077444, filed on September 30, 2022 for the invention entitled "3D MEMORY CELLS AND ARRAY ARCHITECTURES",

International Application No. PCT/US2023/077238, filed on October 18, 2023 for the invention entitled "3D CELLS AND ARRAY STRUCTURES AND PROCESSES",

International Application No. PCT/US2023/077239, filed on October 18, 2023 for the invention entitled "3D MEMORY CELLS AND ARRAY STRUCTURES",

International Application No. PCT/US2023/077563, filed on October 23, 2023 for the invention entitled "3D ARRAY STRUCTURES AND PROCESSES",

International Application No. PCT/US2023/078307, filed on November 01, 2023 for the invention entitled "3D CELLS AND ARRAY STRUCTURES",

International Application No. PCT/US2024/018751, filed on March 06, 2024 for the invention entitled "3D CELL AND ARRAY STRUCTURES WITH PARALLEL BIT LINES AND SOURCE LINES";

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WHEREAS, NEO Semiconductor, Inc., a corporation organized and existing under the laws of the State of Delaware, having an address of 1871 The Alameda, Suite 250, San Jose, CA 95126 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and to the inventions, said Letters Patent and patent applications;

**NOW THEREFORE**, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, said ASSIGNOR, has sold, assigned and set over, and by these presents does hereby sell, assign and set over unto the said ASSIGNEE, its legal representatives, successors and assigns, its entire rights, title and interest in and to said United States Letters Patent, the patent applications, and the inventions disclosed, described or claimed in said Letters Patent and patent applications, together with all divisions, reissues, continuations and extensions thereof including foreign applications filed claiming the benefit of said Letters Patent and the patent applications; the right to file any nonprovisional patent applications and otherwise seek any patent claiming priority to the applications; and any and all rights of recovery for past infringement of said Letters Patent and the patent applications.

ASSIGNOR also hereby sells and assigns to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the inventions disclosed in said patent(s) and any applications throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said inventions in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said inventions and all rights to register said inventions in appropriate registries; and

ASSIGNOR further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNOR hereby further agrees that ASSIGNOR will communicate to said ASSIGNEE, or its successors, assigns and legal representatives, any facts known to ASSIGNOR respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said inventions in all countries.

January 31, 2025 Date:	Signature:	Flun
	Name: Fi	u-Chang Hsu

**PATENT** REEL: 070185 FRAME: 0271

RECORDED: 02/11/2025