507126784 02/14/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7173624

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KIOXIA AMERICA, INC.	01/06/2022

RECEIVING PARTY DATA

Name:	KIOXIA CORPORATION
Street Address:	1-1, SHIBAURA 1-CHOME
City: MINATO-KU, TOKYO	
State/Country:	JAPAN
Postal Code:	105-8001

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	17020158	

CORRESPONDENCE DATA

Fax Number: (202)672-5399

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: 2026725300

Email: IPDocketing@foley.com
Correspondent Name: FOLEY & LARDNER

Address Line 1: 3000 K STREET, N.W., SUITE 600 Address Line 4: WASHINGTON, D.C. 20007-5109

ATTORNEY DOCKET NUMBER:	117441-0176
NAME OF SUBMITTER:	MARK J. DANIELSON
SIGNATURE:	/Mark J. Danielson/
DATE SIGNED:	02/14/2022

Total Attachments: 4

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507126784 PATENT REEL: 058997 FRAME: 0926

ASSIGNMENT

WHEREAS, the undersigned inventor(s) desires to transfer all right, title and interest in and to the inventions disclosed in the following Invention Disclosure Form(s):

 "A Method to Efficiently Achieve Parity based Failure Protection for Non Volatile Memory Devices" submitted on May 28, 2020, by Yaron Klein, Krishna R. Malakapalli, Jeremy Werner (collectively, the "INVENTORS"):

And such inventions which if now or hereafter are disclosed in the patent application(s):

	U.S. patent application executed on DDS FOR PARITY-BASED FAILURE I		_ and entitled, "S ON FOR STOR	
(b) 🛛	U.S. application no. <u>17/020,158</u>	filed on09)-14-2020	······
(c) 🗌	International (e.g., PCT, JP) application no.	***************************************	_ filed on	,,
(collectively	/, the "INVENTIONS");			

WHEREAS, Kioxia Israel Limited ("KIOXIA ISRAEL"), an Israel corporation with its principal place of business at 24 Raul Wallenberg Street, Tel Aviv, 69719, Israel, desires to acquire all of the right, title and interest of Yaron Klein (hereinafter referred to as "KIOXIA ISRAEL INVENTOR(S)") in, to and under the INVENTIONS and KIOXIA ISRAEL further desires to transfer all such right, title and interest to Kioxia America, Inc., (hereinafter referred to as "KAI") organized and existing under the laws of the United States, having a place for the transaction of business at 5231 California Avenue, Irvine, CA 92617.

WHEREAS, Krishna R. Malakapalli and Jeremy Werner, (hereinafter referred to as "KAI INVENTOR(S)") desire(s) to transfer to Kioxia America, Inc., (hereinafter referred to as "KAI") organized and existing under the laws of the United States, having a place for the transaction of business at 5231 California Avenue, Irvine, CA 92617, all right, title and interest in and to the INVENTIONS.

WHEREAS, KAI desires to acquire all of the right, title and interest of KIOXIA ISRAEL, and KAI INVENTOR(S) in, to and under the INVENTIONS and KAI further desires to transfer all such right, title and interest to KIOXIA Corporation (hereinafter referred to as "KC") a corporation duly organized and existing under the laws of Japan, with offices at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001;

Now, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, KIOXIA ISRAEL INVENTORS hereby sell(s), assign(s) and transfer(s) to KIOXIA ISRAEL, and KAI INVENTOR(S) hereby sell(s), assign(s) and transfer(s) to KAI the entire right, title and interest for the United States and its territorial possessions, and in all foreign countries, in and to the INVENTIONS and any and all improvements thereon which are the subject of the INVENTIONS, and in and to any U.S. or foreign patent application for such INVENTIONS and improvements and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to any division, continuation or continuation-in-part, renewal or substitute thereof, and in and to all resulting Letters Patents or any reissue, reexamination certificate, supplemental examination certificate, post grant review certificate, inter partes review certificate, or otherwise, thereof, to have and to hold the same to the full end of the term or terms for which any and all of said Letters Patent may be granted (collectively, the "ASSIGNED INVENTIONS");

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PATENT REEL: 058997 FRAME: 0927 THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, KIOXIA ISRAEL hereby sells, assigns and transfers to KAI the entire right, title and interest to the ASSIGNED INVENTIONS:

KIOXIA ISRAEL INVENTOR(S), KIOXIA ISRAEL, and KAI INVENTOR(S) hereby covenant that KIOXIA ISRAEL INVENTOR(S), KIOXIA ISRAEL, and KAI INVENTOR(S), respectively, has/have the full power to make this assignment, and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

Without further payment or compensation by KIOXIA ISRAEL, or KAI or their successors and assigns, KIOXIA ISRAEL INVENTOR(S), and KAI INVENTOR(S), respectively, further covenant(s) and agree(s) to communicate to KIOXIA ISRAEL, KAI, their representatives, agents, their successors or their assigns, or to subsequent assignees of the ASSIGNED INVENTIONS, any facts relating to the ASSIGNED INVENTIONS including evidence for purposes of interference or derivation proceedings or other administrative or legal proceedings whenever requested; to testify in any interference derivation, legal or administrative proceedings whenever requested; to execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and to do everything possible to aid KIOXIA ISRAEL, KAI, their successors, assigns, nominees, or to subsequent assignees of the ASSIGNED INVENTIONS in this or any foreign country.

And for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, KAI hereby sells, assigns and transfers to KC the entire right, title and interest to the ASSIGNED INVENTIONS;

INVENTOR(S), KIOXIA ISRAEL and KAI authorize and request the issuing authority to issue any and all patents on said application or applications to KC or its successors and assigns;

KAI hereby covenants that it has the full power to make this assignment, and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

Any attorney of record for KC, and its successors and assigns, at the direction of KC is authorized and requested by the execution of this assignment to insert into this assignment any further patent or patent application information in the blanks and check boxes above as necessary for recordation of this document.

IN WITNESS WHEREOF, the INVENTOR(S) has/have hereunto affixed his/her/their signatures on the date below written.

1)	(Signature)	Yaron Klein (Type or Print Name)		
	15 AKIUA	ST. RAAMANA	ISRAFL	
		(Residence Address)		
2)		Krishna R. Malakapalli	<u> </u>	
	(Signature)	(Type or Print Name)	(Date)	
		(Residence Address)		

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THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, KIOXIA ISRAEL hereby sells, assigns and transfers to KAI the entire right, title and interest to the ASSIGNED INVENTIONS:

KIOXIA ISRAEL INVENTOR(S), KIOXIA ISRAEL, and KAI INVENTOR(S) hereby covenant that KIOXIA ISRAEL INVENTOR(S), KIOXIA ISRAEL, and KAI INVENTOR(S), respectively, has/have the full power to make this assignment, and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

Without further payment or compensation by KIOXIA ISRAEL, or KAI or their successors and assigns, KIOXIA ISRAEL INVENTOR(S), and KAI INVENTOR(S), respectively, further covenant(s) and agree(s) to communicate to KIOXIA ISRAEL, KAI, their representatives, agents, their successors or their assigns, or to subsequent assignees of the ASSIGNED INVENTIONS, any facts relating to the ASSIGNED INVENTIONS including evidence for purposes of interference or derivation proceedings or other administrative or legal proceedings whenever requested; to testify in any interference derivation, legal or administrative proceedings whenever requested; to execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and to do everything possible to aid KIOXIA ISRAEL,KAI, their successors, assigns, nominees, or to subsequent assignees of the ASSIGNED INVENTIONS in this or any foreign country.

And for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, KAI hereby sells, assigns and transfers to KC the entire right, title and interest to the ASSIGNED INVENTIONS:

INVENTOR(S), KIOXIA ISRAEL and KAI authorize and request the issuing authority to issue any and all patents on said application or applications to KC or its successors and assigns;

KAI hereby covenants that it has the full power to make this assignment, and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

Any attorney of record for KC, and its successors and assigns, at the direction of KC is authorized and requested by the execution of this assignment to insert into this assignment any further patent or patent application information in the blanks and check boxes above as necessary for recordation of this document.

IN WITNESS WHEREOF, the INVENTOR(S) has/have hereunto affixed his/her/their signatures on the date below written.

1)	Yaron Klein				
	(Signature)	(Type or Print Name)	(Date)		
		(Residence Address)			
	(1100/401/30 / 1441/30)				
2)	knina Makalah	Krishna R. Malakapalli	09/09/2020		
,	(Signature)	(Type or Print Name)	(Date)		
	3401 Iron Point Drive, APT #491, San Jose, CA 95134				
		(Residence Address)			

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3) W	wy 1	limes -	Jeremy Wern		9/10/2020
7	Asignati	Y♥)	(Type or Print No	ame)	7 (Dbte)
	/6033	Monteverde	Dr. Son Jo esidence Address)	se. CA	95120
	WHEREOF,	a representative of I	es <i>idenc</i> e Address) GOXIA ISRAEL with a ure on the date below	uthorization to) make this
	Oded Oded				2/13/2022
	A95BCE	D87AB640F	Oded Ilan, Presi	dent	(Date)
		a representative of I	(A) with authorization to below written.	to make this a	ssignment has
	(Signati	re)	Rick Lin, IP Atto	mey	(Date)

(Signature)

4833-3987-1498.1

RECORDED: 02/14/2022

PATENT REEL: 058997 FRAME: 0930