10/12/2017 504591731

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4638443

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROI KIRSHENBAUM	09/10/2017
KARIN INBAR	09/11/2017
IDAN GOLDENBERG	10/01/2017
NIAN NILES YANG	09/08/2017
RAMI ROM	09/17/2017
ALEXANDER BAZARSKY	09/14/2017
ARIEL NAVON	10/01/2017
PHILIP REUSSWIG	09/12/2017

RECEIVING PARTY DATA

Name:	WESTERN DIGITAL TECHNOLOGIES, INC.
Street Address:	3355 MICHELSON DRIVE
Internal Address:	SUITE 100
City:	IRVINE
State/Country:	CALIFORNIA
Postal Code:	92612

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15640356

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: SILSP.330A2 VLADISLAV Z. TEPLITSKIY NAME OF SUBMITTER:

SIGNATURE:	/Vladislav Z. Teplitskiy/
DATE SIGNED:	10/12/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 9	•
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COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: SILSP.330A2 Page 1 of 9

Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES

Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rami Rom, Alexander

Bazarsky, Ariel Navon, Philip Phil Reusswig

Declaration

This Declaration is directed to the application identified above that:

Was filed **June 30**, **2017** as U.S. or International Application No. **15**/**640356** and incorporating any amendments made thereto prior to the signature date of this Declaration.

As a named inventor, I declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

Assignment from Inventors

WHEREAS, **above-identified inventors** (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application").

AND WHEREAS, **Western Digital Technologies**, **Inc.**, with its principal place of business at 3355 Michelson Drive, Suite 100, Irvine, CA 92612 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all Patent Properties filed or issued upon the Application and the Work; where "Patent Properties" include, but are not limited to:

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned Patent Properties, and authorizes and requests the Commissioner of Patents of the United States, and any

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: SILSP.330A2 Page 2 of 9

Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES

Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rami Rom, Alexander Bazarsky, Arlei Navon, Philip Phil Reusswig

Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, authorize the filling of and execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

Legal Name of invent	or: Rol Kirshenbaum REOF, I hereunto set my han	d and seal this 10 day of _	9
20 A Signature:	£	1/1	
Gigitature	Signature before a Notary presence of a Notary, please	desirable but not required	d. When signed in accumentation.

PATENT REEL: S049853 FRAME: 0449°

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently	
Docket No.: SILSP.330A2	Page 3 of 9
Tille: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES	
Inventors Roll Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rami Rom, Ale Bazarsky, Ariel Navon, Philip Phil Reusswig	exander
Legal Name of Inventor: Karin Inbar	iligina, populario ante a
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this Who day of Left	»
Signature: Kany	***************************************
Signature before a Notary is desirable but not required. Whe presence of a Notary, please attach the appropriate notarial document	en signed in tation.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently Docket No.: SILSP.330A2 Page 4 of 9 Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rami Rom, Alexander Bazarsky, Ariel Navon, Philip Phil Reusswig Legal Name of Inventor: Idan Goldenberg IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 4 day of 24666.

Signature:

Signature before a Notary is desirable but not required. When signed in presence of a Notary, please affach the appropriate notarial documentation.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently

Docket No.: SILSP.330A2			Page 5 of 9
Title: OPERATING PARAMETER OFFSI	ETS IN SOLID STATE M	IEMORY DEVICES	
Inventors: Roi Kirshenbaum, Karin Inbar, Bazarsky, Ariel Navon, Philip Phil		Niles Yang, Rami R	om, Alexander
Legal Name of Inventor: Nian Niles Yar	173 00 00 00 00 00 00 00 00 00 00 00 00 00		
IN TESTIMONY WHEREOF, I hereunto		his 844 day of _	SepAluber,
Signature:	Me	NEW CONTRACTOR OF THE PARTY OF	

Signature before a Notary is desirable but not required. When signed in presence of a Notary, please attach the appropriate notarial documentation.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet lited previously or concurrently Docket No.: SILSP.330A2 Page 6 of 9 Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Nifes Yang, Ramil Rom, Alexander Bazarsky, Ariel Navon, Philip Phil Reusswig Legal Name of Inventor: Ramil Rom IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 17 day of 50 fm.

Signature betwee a Notary is desirable but not required. When signed in presence of a Notary, please attach the appropriate notarial documentation.

	Application Data Sheet filed previously or concurr	rently
Docket No.: SiLSi	P.330A2	Page 7 of 9
Title: OPERATIN	IG PARAMETER OFFSETS IN SOLID STATE MEMORY.	DEVICES
	rshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yan r, Ariel Navon, Philip Phil Reusswig	ig, Rami Rom, Alexander
Secretary Control Secretary		
	nventor: Alexander Bazersky	
IN TESTIMONY 1 20_[7]	WHEREOF, I hereunto set my hand and seal this $\frac{14^{-6}}{1}$	day of September
Signatu	78 <u> </u>	

Signature before a Notary is desirable but not required. When signed in presence of a Notary, please affach the appropriate notarial documentation.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

COMBINED DECLARATION & ASSIGNMENT (37 CFF Application Data Sheet filed previously or concurrently	1.63(e))
Docket No.: SILSP.330A2	Page 8 of 9
Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVIC	IES
Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rai Bazarsky, Anel Navon, Philip Phil Reusswig	mi Rom, Alexander
Legal Name of Inventor: Ariel Navon IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day 20	or <u>OCE'</u>
Signature: <u>//// / // / / / / / / / / / / / / / /</u>	
Signature before a Notary is desirable but not red presence of a Notary, please altach the appropriate notari	uired. When signed in al documentation.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: SILSP.330A2 Page 9 of 9

Title: OPERATING PARAMETER OFFSETS IN SOLID STATE MEMORY DEVICES

Inventors: Roi Kirshenbaum, Karin Inbar, Idan Goldenberg, Nian Niles Yang, Rami Rom, Alexander

Bazarsky, Ariel Navon, Philip Phil Reusswig

Legal Name of Inventor: Philip PHI Reusswig

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 12 day of September 2017.

Signature: Pul Rem

Signature before a Notary is desirable but not required. When signed in presence of a Notary, please attach the appropriate notarial documentation.

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RECORDED: 10/12/2017