

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT6960925

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ROMAN KRIS	11/18/2019
ROI MEIR	02/25/2020
SAHAR LEVIN	11/24/2019
ISHAI SCHWARZBAND	11/18/2019
GRIGORY KLEBANOV	11/18/2019
SHIMON LEVI	10/22/2020
EFRAT NOIFELD	11/19/2019
HIROSHI MIROKU	08/12/2020
TAKU YOSHIZAWA	12/07/2020
KASTURI SAHA	02/25/2020
SHARON DUVDEVANI-BAR	11/19/2019
VADIM VERESCHAGIN	11/18/2019
RECEIVING PARTY DATA	
Name:	APPLIED MATERIALS ISRAEL LTD.
Street Address:	9 OPPENHEIMER STREET
Internal Address:	PARK RABIN
City:	REHOVOT
State/Country:	ISRAEL
Postal Code:	7670109
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17281948
CORRESPONDENCE DATA	
Fax Number:	(650)328-2799
<i>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.</i>	
Phone:	650-433-5800
Email:	escaletta@lowenstein.com
Correspondent Name:	LOWENSTEIN SANDLER LLP
Address Line 1:	ONE LOWENSTEIN DRIVE

PATENT

Address Line 4: ROSELAND, NEW JERSEY 07068

ATTORNEY DOCKET NUMBER: 08090.518 (L0518US)

NAME OF SUBMITTER: MARINA PORTNOVA

SIGNATURE: /Marina Portnova/

DATE SIGNED: 10/08/2021

Total Attachments: 13

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ASSIGNMENT

I (we), Inventor(s)

Full Name of Inventor: Roman KRIS
 Citizenship: Israeli
 Post Office Address: 5/11 Mavo Ha-Asara Street, Jerusalem 9787608
 Israel

Full Name of Inventor: Roi MEIR
 Citizenship: Israeli
 Post Office Address: 24 Itzhak Rabin Street,
 Kiryat-Ono 5551029
 Israel

Full Name of Inventor: Sahar LEVIN
 Citizenship: Israeli
 Post Office Address: 5/55 Moshe Dayan 5 Street, Or-Yehuda 6040106
 Israel

Full Name of Inventor: Ishai SCHWARZBAND
 Citizenship: Israeli
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Full Name of Inventor: Grigory KLEBANOV
 Citizenship: Israeli
 Post Office Address: 102b Nordau Street, Rishon-LeZion 7526054
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Full Name of Inventor: Shimon LEVI
 Citizenship: Israeli
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 Israel

Full Name of Inventor: Efrat NOIFELD
 Citizenship: Israeli
 Post Office Address: 16/6 Haomarim Street, Nes Ziona 7405483
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Full Name of Inventor: Hiroshi MIROKU
 Citizenship: Japanese
 Post Office Address: 555-5 Nagai Komono Mie 5101311
 Japan

Full Name of Inventor: Taku YOSHIZAW
 Citizenship: Japanese
 Post Office Address: Midbuilding Yokkaichi 7F 2-10-26 Yasujima, Yokkaichi, Mie 510-0075
 Japan

Full Name of Inventor: Katsuri SAHA
 Citizenship: Indian
 Post Office Address: 110, Spectrum Ambara Apartment, Prasanth Layout, Whitefield, Bangalore
 India

Full Name of Inventor: Sharon DUVDEVANI-BAR
 Citizenship: Israeli
 Post Office Address: 8 Igal Alon Street, Mazkeret-Batya 7685208
 Israel

78-0182684565

Full Name of Inventor: Vadim VERESCHAGIN
 Citizenship: Israeli
 Post Office Address: 42 Levin Gotal Street,
 Haifa 3292237
 Israel

(collectively, herein, the "Inventor(s)").

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the undersigned agree(s) to assign, and hereby do (does) assign¹, transfer and set over to

Name of Assignee: Applied Materials Israel Ltd.
 Israeli Company, of
 Address of Assignee: 9 Oppenheimer Street
 Park Rabin
 Rehovot 7670109
 Israel

(hereinafter designated as the "Assignee") all of any right, title and interest that may be presently held by the Inventor(s) throughout the world, in the invention, and all applications for patent and any Letters Patent, which may be granted therefor throughout the world (hereinafter referred to as the "Patents"), including the right to claim damages for past infringement of the Patents, as well as the right, if presently held by the Inventor(s) to claim priority from the first application filed for the invention known as

Title: **METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR 3D-NAND CBSEM METROLOGY**

(hereinafter referred to as the "Invention") for which a patent application was filed in Patent Cooperation Treaty, on October 31, 2019 and accorded serial number PCT/IL2019/051188. In executing this Assignment the Inventor(s) agree(s):

1) To execute all papers necessary in connection with the Patents and any continuing or divisional or reissue applications thereof and also to execute separate assignments in connection with such Patents as the Assignee may deem necessary or expedient or essential to its full protection and title in and to the Invention and to obtain the grant of valid patents;

2) To execute all papers necessary in connection with any legal proceedings in connection with the Patents which may be declared concerning the Patents (including, without limitation, opposition, post grant review, inter partes proceedings and infringement) and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with legal proceedings;

3) To perform all affirmative acts which may be necessary to obtain a grant of valid patents to the Assignee;

4) To communicate to the Assignee or representatives thereof any facts known to me (us) respecting the Invention and improvements thereof, and will, upon request, but without expense to me (us), testify in any legal proceedings regarding the Invention or the Patents;

5) To authorize(s) and request(s) the competent patent authority to issue any and all Letters Patents on any application for the Invention to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith;

6) That all existing rights and future rights relating to the Invention and the Patents are hereby assigned; and

7) That this Assignment shall be binding upon my (our) heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors and/or assigns of the Assignee.

¹The Inventor(s) make this assignment in abundance of caution, to facilitate administrative ease and without derogation from Assignee's rights to the Invention as a Service Invention under Israeli Law -- all, if applicable.

In witness whereof, executed by the undersigned Inventor(s) and Assignee on the date(s) opposite the undersigned name(s).

Inventor(s):

Full Name of Inventor: Roman KRIS

Inventor's Signature: _____

Date: _____

18/11/2019

Witness _____

Full Name of Inventor: Roi MEIR

Inventor's Signature: _____

Date: _____

Witness _____

Full Name of Inventor: Sahar LEVIN

Inventor's Signature: _____

Date: _____

Witness _____

Full Name of Inventor: Eilat SCHWARZBAND

Inventor's Signature: _____

Date: _____

Witness _____

Full Name of Inventor: Grigory KLEBANOV

Inventor's Signature: _____

Date: _____

18/11/2019

Witness _____

Full Name of Inventor: Shimon LEVI

Inventor's Signature: _____

Date: _____

Witness _____

Full Name of Inventor: Efrat NOIFELD

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Taku YOSHIKAWA

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Katsumi SAHA

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Sharon DUVDEVANI-BAR

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature:  _____ Date: 18.11.2019

Witness: _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title):
Signature: _____ Date: _____

Witness: _____

In witness whereof, executed by the undersigned Inventor(s) and Assignee on the date(s) opposite the undersigned name(s).

Inventor(s):

Full Name of Inventor: Roman KRIS

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Roi MEIR

Inventor's Signature: _____ Date: 25/2/20

Witness: YOHANAN AVITAN

Full Name of Inventor: Sahar LEVON

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Ishai SCHWARZBAND

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Grigory KLEBANOV

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Shimon LEVI

Inventor's Signature: _____ Date: _____

Witness: _____

In witness whereof, executed by the undersigned Inventor(s) and Assignee on the date(s) opposite the undersigned name(s).

Inventor(s):

Full Name of Inventor: Roman KRIS

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Roi MEIR

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Salar LEVIN

Inventor's Signature: *Salar* Date: 24-Nov-19

Witness:

Full Name of Inventor: Ishai SCHWARZBAND

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Grigory KLEBANOV

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Shimon LEVI

Inventor's Signature: Date:

Witness:

In witness whereof, executed by the undersigned Inventor(s) and Assignee on the date(s) opposite the undersigned name(s).

Inventor(s):

Full Name of Inventor: Roman KRIS

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Roi MEIR

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Sahar LEVIN

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Ishai SCHWARZBAND

Inventor's Signature:  _____ Date: 18.11.19

Witness: _____

Full Name of Inventor: Grigory KLEBANOV

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Shimon LEVI

Inventor's Signature: _____ Date: _____

Witness: _____

In witness whereof, executed by the undersigned Inventor(s) and Assignee on the date(s) opposite the undersigned name(s).

Inventor(s):

Full Name of Inventor: Roman KRIS

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Roi MEIR

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Salar LEVIN

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Ishai SCHWARZBAND

Inventor's Signature: Date:

Witness:

Full Name of Inventor: Grigory KLEBANOV

Inventor's Signature: Date:

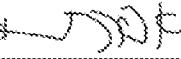
Witness:

Full Name of Inventor: Shimon LEVI

Inventor's Signature:  Date: 22.OCT.2020

Witness:

Full Name of Inventor: Efrat NOIFELD

Inventor's Signature: Efrat Noifeld  Date: 19Nov19

Witness _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Taku YOSHIKAWA

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Katsun SAHA

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Sharon DUVDEVANI-BAR

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature: _____ Date: _____

Witness _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title):

Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Eilat NOIFELD

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature:  _____ Date: 12.08.20

Witness _____

Full Name of Inventor: Taku YOSHIZAW

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Kasturi SAHA

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Sharon DUVDEVANI-BAR

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature: _____ Date: _____

Witness _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title):

Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Efrat NOIFELD

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Taku YOSHIZAWA

Inventor's Signature: Taku Yoshizawa Date: 2020/12/09

Witness Hiroshi Miroku

Full Name of Inventor: Kasturi SAHA

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Sharon DUVDEVANI-BAR

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature: _____ Date: _____

Witness _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title); Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Efrat NOIFELD

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Taku YOSHIKAWA

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Kastun SAHA

Inventor's Signature: *Kastun Saha* _____ Date: 25/02/2020

Witness _____

Full Name of Inventor: Sharon DUVDEVANI-BAR

Inventor's Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature: _____ Date: _____

Witness _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title):

Signature: _____ Date: _____

Witness _____

Full Name of Inventor: Efrat NOIFELD

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Hiroshi MIROKU

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Taku YOSHIKAWA

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Katsuri SAHA

Inventor's Signature: _____ Date: _____

Witness: _____

Full Name of Inventor: Sharon DUDOVANI-BAR

Inventor's Signature: *Sharon Dudovani Bar ml* Date: *19.11.2019*

Witness: _____

Full Name of Inventor: Vadim VERESCHAGIN

Inventor's Signature: *[Signature]* Date: *18.11.2019*

Witness: _____

Assignee:

Full Name of Assignee: Applied Materials Israel Ltd.

By (name and title):

Signature: _____ Date: _____

Witness: _____