504207575 02/01/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4254252

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------------|----------------|
| NEIL RICHARD DARRAGH | 02/01/2017 |
| SERGEY ANATOLIEVICH GOROBETS | 02/01/2017 |
| LIAM MICHAEL PARKER | 02/01/2017 |

RECEIVING PARTY DATA

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|-------------------|--------------------------|
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| Postal Code: | 75024 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14977143 |

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 10519-2970 (SDA-2205-US)

NAME OF SUBMITTER: SCOTT A. TIMMERMAN, REG. NO. 55,678

SIGNATURE: /Scott A. Timmerman/

DATE SIGNED: 02/01/2017

Total Attachments: 2

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PATENT REEL: 041146 FRAME: 0006

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PATENT REEL: 041146 FRAME: 0007

ASSIGNMENT

WHEREAS, NEIL RICHARD DARRAGH, SERGEY ANATOLIEVICH GOROBETS, and LIAM MICHAEL PARKER, hereinafter called the "Assignor", have made the invention described in the United States patent application entitled MEASURING MEMORY WEAR AND DATA RETENTION INDIVIDUALLY BASED ON CELL VOLTAGE DISTRIBUTIONS, for a full description of which reference is here made to an application for Letters Patent of the United States filed on December 21, 2015, and assigned Application Serial No. 14/977,143:

WHEREAS, SanDisk Technologies LLC, a corporation organized and existing under the laws of the State of Texas, having a place of business at 6900 Dallas Parkway, Suite 325, Plano, Texas 75024, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent applications identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents issuing therefrom in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents. The

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Assignor hereby sells, assigns, and transfers the entire right, title and interest to the Assignee as of the day of filing the application identified above.

The Assignor hereby covenants and agrees, for the Assignor and the Assignor's legal representatives, that the Assignor will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignor has executed this agreement.

DATED: 2/1/7 // WEIL RICHARD DARRAGH

DATED: 1 Feb 2017 SERGEY ANATOLIEVICH GOROBETS

DATED: 2/1/17 LIAM MICHAEL PARKER

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