PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4529799

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KABUSHIKI KAISHA TOSHIBA	07/06/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 48

Property Type	Number
Application Number:	14175553
Application Number:	14325256
Application Number:	14458614
Application Number:	14571070
Application Number:	14657321
Application Number:	14675457
Application Number:	14674721
Application Number:	14702560
Application Number:	14751444
Application Number:	14836107
Application Number:	14866087
Application Number:	14871124
Application Number:	14976674
Application Number:	14976793
Application Number:	14757458
Application Number:	14757469
Application Number:	14757468
Application Number:	15136471
Application Number:	15454992
Application Number:	15454852

PATENT REEL: 043397 FRAME: 0380

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Property Type	Number
Application Number:	15455695
Application Number:	13339413
Application Number:	14298492
Application Number:	14550829
Application Number:	14712315
Application Number:	14867157
Application Number:	14195375
Application Number:	15142937
Application Number:	15173945
Application Number:	15173931
Application Number:	15205248
Application Number:	15259825
Application Number:	15262434
Application Number:	15262668
Application Number:	15383569
Application Number:	15434916
Application Number:	15454665
Application Number:	15454974
Application Number:	15454768
Application Number:	15456346
Application Number:	15456138
Application Number:	15455736
Application Number:	15456280
Application Number:	15456375
Application Number:	15455993
Application Number:	15455467
Application Number:	15456308
Application Number:	15455570

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: 202-626-3600

Email: toshibapatents@whitecase.com

Correspondent Name: WHITE & CASE LLP
Address Line 1: 701 13TH STREET NW
Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER: 1283810-0001_TIPRS

PATENT REEL: 043397 FRAME: 0381

NAME OF SUBMITTER:	DAVID M. TENNANT
SIGNATURE:	/David M. Tennant/
DATE SIGNED:	08/01/2017
Total Attachments: 5	
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PATENT REEL: 043397 FRAME: 0382

PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (the "Agreement"), dated as of April 1, 2017 (the "Effective Date"), is made by Kabushiki Kaisha Toshiba, a corporation duly organized and existing under the laws of Japan, with offices at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 ("Assignor"), and Toshiba Memory Corporation, a corporation duly organized and existing under the laws of Japan, with offices at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 ("Assignee").

WHEREAS, Assignor is the sole owner of the patents and patent applications listed in Exhibit A attached to this Agreement;

WHEREAS, Assignor has agreed to sell, assign, transfer, and convey to Assignee all right, title, and interest in and to the patents and patent applications listed in <u>Exhibit A.</u> including the related rights described below;

WHEREAS, Assignee desires to acquire all right, title, and interest in and to the patents and patent applications listed in <u>Exhibit A</u>, including the related rights described below; and

WHEREAS, Assignor will therefore deliver this Agreement and any other intellectual property assignment agreements, for recording with the United States Patent and Trademark Office and corresponding entities or agencies in any applicable jurisdictions.

NOW THEREFORE, Assignor and Assignee agree as follows:

- 1. <u>Assignment.</u> For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby does and agrees to (and to the extent applicable, confirms that it already has done the following) irrevocably sell, assign, transfer and convey to Assignee and its successors and assigns, all right, title and interest that may exist today and in the future in and to any and all:
 - (a) the patents and patent applications listed in Exhibit A attached to this Agreement;
 - (b) patents and patent applications to which any of the patents or patent applications listed in Exhibit A directly or indirectly claim, or forms the basis for, priority anywhere in the world, including the right of priority;
 - (c) reissues, reexaminations, extensions, continuations, continuations-in-part, continuing prosecution applications and divisions of any of the items under (a) or
 (b) of Section 1 of this Agreement;
 - (d) foreign counterparts to any of the items under (a), (b) or (c) of Section 1 of this Agreement, including utility models, inventors' certificates, industrial design protection and any other form of governmental grants or issuances for the protection of inventions, designs or discoveries;

1

- (e) inventions, invention disclosures, designs and discoveries claimed in the items under (a) through (d) of Section 1 of this Agreement;
- (f) patents that issue from any of the items under (a) through (e) of Section 1 of this Agreement (collectively the items listed in (a) through (f), the "Patents");
- (g) claims, causes of action and enforcement rights of any kind, whether currently pending, filed or otherwise, and whether known or unknown, under or arising from any of the items under (a) through (f) of Section 1 of this Agreement, including all rights to pursue and collect damages, costs, injunctive relief and other remedies for past, current, or future infringement of the Patents, and including rights afforded under 35 U.S.C. § 154(d);
- (h) royalties, income and other payments due as of the Effective Date or thereafter under or arising from any of the items under (a) through (g) of Section 1 of this Agreement; and
- (i) rights to apply for, file, register, maintain, extend and renew in any or all countries of the world patents, certificates of invention, utility models, industrial design protection, design patent protection and other governmental grants or issuances of any kind related to any of the items under (a) through (h) of Section I of this Agreement.
- 2. <u>Further Actions</u>. Assignor shall take such steps and actions, and provide such cooperation and assistance to Assignee and its successors, assigns and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as may be necessary to effect, evidence or perfect the assignment of the Patents contemplated hereby to Assignee, or any assignee or successor.
- 3. <u>Recordation.</u> Assignor hereby authorizes and requests the Commissioner for Patents in the United States Patent and Trademark Office and the officials in any of the corresponding patent offices in the applicable jurisdictions to issue any and all patents, utility models or other governmental grants or issuances pertaining to any of the items assigned hereunder in the name of Assignee.
- 4. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.
- 5. <u>Governing Law.</u> This Agreement will be deemed to be made and in all respects will be interpreted, construed and governed by and in accordance with the laws of Japan without regard to the conflicts of laws principles thereof.

2

6. <u>Successors and Assigns</u>. This Agreement will inure to the benefit of Assignee and its successors, assigns and other legal representatives and is binding upon Assignor and its successors, assigns, heirs and legal representatives.

IN WITNESS WHEREOF, Assignor has duly executed and delivered this Agreement as of the Effective Date.

DATE: July 6 , 2017

Kabushiki Kaisha Toshiba

By:

Ikuko SHIMOGAWARA

Title:

General Manager, Intellectual

Property Division

Signature

ACCEPTED:

DATE: July 6 .2013

Toshiba Memory Corporation

By:

Michihito HATSUMI

Title: General Manager, Intellectual

Property Division

Signature

Exhibit A

Application Number	Filing date	Country
05760508.1	2005/05/26	DE
05760508.1	2005/05/26	FR
05760508.1	2005/05/26	GB
14/175553	2014/02/07	US
14/325256	2014/07/07	US
14/458614	2014/08/13	US
14/571070	2014/12/15	US
14/657321	2015/03/13	US
14/675457	2015/03/31	US
14/674721	2015/03/31	US
14/702560	2015/05/01	US
14/751444	2015/06/26	US
14/836107	2015/08/26	US
14/866087	2015/09/25	US
14/871124	2015/09/30	US
14/976674	2015/12/21	US
14/976793	2015/12/21	US
14/757458	2015/12/23	US
14/757469	2015/12/23	US
14/757468	2015/12/23	US
15/136471	2016/04/22	US
15/454992	2017/03/09	US
15/454852	2017/03/09	US
15/455695	2017/03/10	US
13/339413	2011/12/29	US
14/298492	2014/06/06	US
14/550829	2014/11/21	US
14/712315	2015/05/14	US
14/867157	2015/09/28	US
14/195375	2014/03/03	US
94117251	2005/05/26	TW
15/142937	2016/04/29	US
15/173945	2016/06/06	US
15/173931	2016/06/06	US
15/205248	2016/07/08	US
15/259825	2016/09/08	US
15/262434	2016/09/12	US
15/262668	2016/09/12	US
15/383569	2016/12/19	US
15/434916	2017/02/16	US
15/454665	2017/03/09	US
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15/455993	2017/03/10	US
15/455467	2017/03/10	US
15/456308	2017/03/10	US
15/455570	2017/03/10	US