

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
KABUSHIKI KAISHA TOSHIBA		06/30/2017
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	TOSHIBA MEMORY CORPORATION	
<b>Street Address:</b>	1-1, SHIBAURA 1-CHOME	
<b>Internal Address:</b>	MINATO-KU	
<b>City:</b>	TOKYO	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	105-0023	
<b>PROPERTY NUMBERS Total: 59</b>		
<b>Property Type</b>	<b>Number</b>	
Application Number:	14162062	
Application Number:	14183803	
Application Number:	14563128	
Application Number:	14573029	
Application Number:	14742173	
Application Number:	14747215	
Application Number:	15453215	
Application Number:	14825370	
Application Number:	14833280	
Application Number:	14840601	
Application Number:	14949078	
Application Number:	14948649	
Application Number:	15000627	
Application Number:	15000455	
Application Number:	15016818	
Application Number:	15040431	
Application Number:	15049224	
Application Number:	15049232	
Application Number:	15056238	

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Property Type	Number
Application Number:	15059749
Application Number:	15059785
Application Number:	15061433
Application Number:	15060825
Application Number:	15067958
Application Number:	15067826
Application Number:	15134969
Application Number:	15194788
Application Number:	15203977
Application Number:	15208725
Application Number:	15219705
Application Number:	15240033
Application Number:	15249924
Application Number:	15249968
Application Number:	15250011
Application Number:	15250215
Application Number:	15260962
Application Number:	15264119
Application Number:	15264075
Application Number:	15266798
Application Number:	15267734
Application Number:	15267718
Application Number:	15403331
Application Number:	15432364
Application Number:	15445230
Application Number:	15445147
Application Number:	15444990
Application Number:	15452178
Application Number:	15453016
Application Number:	15462150
Application Number:	15463750
Application Number:	15478309
Application Number:	13236734
Application Number:	13547567
Application Number:	13940331
Application Number:	14206315
Application Number:	14642083
Application Number:	14838535

Property Type	Number
Application Number:	14530906
Application Number:	15622191

  

**CORRESPONDENCE DATA**

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<b>ATTORNEY DOCKET NUMBER:</b>	503914US
<b>NAME OF SUBMITTER:</b>	JENICA ROBERTS
<b>SIGNATURE:</b>	/Jenica Roberts/
<b>DATE SIGNED:</b>	08/22/2017

**Total Attachments: 4**

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## ASSIGNMENT

WHEREAS, KABUSHIKI KAISHA TOSHIBA of 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 Japan, a corporation organized and existing under the laws of the Country of Japan, is the sole and exclusive owner, by assignment, of the Letters Patent and applications for letters patent of the United States of America listed on the attached appendix(es) (hereinafter referred to as "APPENDIX(ES)").

WHEREAS, TOSHIBA MEMORY CORPORATION of 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 Japan, a corporation organized and existing under the laws of the Country of Japan (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and to said Letters Patent and applications for letters patent and the inventions described therein as named in the APPENDIX(ES);

NOW, THEREFORE, after good and valuable consideration, the receipt of which is hereby acknowledge, KABUSHIKI KAISHA TOSHIBA by these presents do sell, assign, and transfer unto said ASSIGNEE the entire right, title and interest for the territory of the United States of America, in and to the aforesaid Letters Patent and in and to the aforesaid applications for letters patent and the inventions described therein and in and to any and all Letters Patent which may be granted therefor and in and to any and all divisions, continuations, substitutions and renewals thereof, and in and to any and all reissues of said Letters Patent to the full end of the term for which said Letters Patent have been granted or may be granted the same to be held and enjoyed by the ASSIGNEE for the use and behoof of said ASSIGNEE, and for the use and behoof of their successors, assigns or other legal representatives to the full end of the term for which said Letters Patent have been or may be granted, and for claims for

damage by reason of infringement past and present, as fully and entirely as the same would have been held by us had this Assignment and sale not been made.

KABUSHIKI KAISHA TOSHIBA further authorizes and requests the Patent Office Officials in the United States and its territorial possessions to issue any and all Letters Patent resulting from the aforesaid applications for letters patent or any divisions or continuations thereof, when granted, to ASSIGNEE as the assignee of the entire right, title and interest in and to the same.

IN TESTIMONY WHEREOF, KABUSHIKI KAISHA TOSHIBA, has caused these presents to be signed by its officer thereunto duly authorized.

KABUSHIKI KAISHA TOSHIBA

Date: June 30, 2017

By: Ikuko Shimogawara  
Name: Ikuko SHIMOAWARA  
Title: General Manager, Intellectual  
Property Division

No.	U.S. Patent Appl. No.	Filing Date	Patent No.	Grant Date
1	14/162062	2014/1/23		
2	14/183803	2014/2/19		
3	14/563128	2014/12/8		
4	14/573029	2014/12/17		
5	14/742173	2015/6/17		
6	14/747215	2015/6/23		
7	15/453215	2015/7/1		
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23	15/060825	2016/3/4		
24	15/067958	2016/3/11		
25	15/067826	2016/3/11		
26	15/134969	2016/4/21		
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31	15/240033	2016/8/18		
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33	15/249968	2016/8/29		
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51	15/478309	2017/4/4		
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