504448018 07/08/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4494719

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KABUSHIKI KAISHA TOSHIBA	06/15/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 13

Property Type	Number
Application Number:	13788216
Application Number:	14844863
Application Number:	14808494
Application Number:	14607521
Application Number:	15245752
Application Number:	15257064
Application Number:	15062379
Application Number:	15064760
Application Number:	15378604
Application Number:	15378571
Application Number:	15450422
Application Number:	14843050
Application Number:	15064735

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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: (703) 413-3000

Email: assignments@oblon.com

Correspondent Name: OBLON, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: 503913US

NAME OF SUBMITTER: JENICA ROBERTS

SIGNATURE: /Jenica Roberts/

DATE SIGNED: 07/08/2017

Total Attachments: 3

source=503913USAssn_TMC#page1.tif

source=503913USAssn_TMC#page2.tif

source=503913USAssn_TMC#page3.tif

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, 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 15, 2017

Name: Ikuko SHIMOGA WARA

Title: General Manager

Intellectual Property Division

APPENDIX(ES)

APPLICATIONS

Application Number	Filing Date
13/788,216	March 7, 2013
14/844,863	September 3, 2015
14/808,494	July 24, 2015
14/607,521	January 28, 2015
15/245,752	August 24, 2016
15/257,064	September 6, 2016
15/062,379	March 7, 2016
15/064,760	March 9, 2016
15/378,604	December 14, 2016
15/378,571	December 14, 2016
15/450,422	March 6, 2017
14/843,050	September 2, 2015
15/064,735	March 9, 2016

PATENT REEL: 043129 FRAME: 0299

RECORDED: 07/08/2017